

**THE CONTRIBUTION OF RISING MEDICAL
EXPENDITURES TO RURAL INDEBTEDNESS: A
REVIEW**

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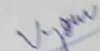
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DECLARATION

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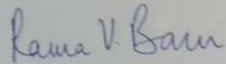
This is to certify that the dissertation titled "THE CONTRIBUTION OF RISING MEDICAL EXPENDITURES TO RURAL INDEBTEDNESS: A REVIEW" submitted by me under the guidance of Prof. Rama V. Baru in partial fulfilment for the award of the degree of MASTER OF PHILOSOPHY is my original work and has not been previously submitted for any other degree of this University or any other University.

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“It is a mystery why there is so much hatred among the good as there is love among the wicked. A scholar at the sight of another scholar, a holy man at the sight of another holy man, and a poet at the sight of another poet tend to sizzle with animosity...But if a thief sees a fellow thief in trouble, he always extend a helping hand. All men hate wickedness, so the wicked always love each other. The entire world praises virtue, so the virtuous are forever squabbling with each other. What does a thief gain by killing another thief? Contempt. What does a scholar gain by insulting another scholar? Fame” (Road to Salvation by Premchand cited in Dreze 2002: 819)

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Abbreviation

ANM	Auxiliary Nurse Midwife
AOD	Amount of Outstanding Debt
AVA	Average Value of Assets
BPL	Below Poverty Line
CGHS	Central Government Health Scheme
CSMCH	Centre of Social Medicine and Community Health
DALY	Disability Adjusted Life Years
DAR	Debt Asset Ratio
ESIS	Employees' State Insurance Scheme
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GIC	Group Insurance Commission
HCR	Head Count Ratio
HSC	Health Sub-centre
HSR	Health Sector Reform
IoI	Incidence of Indebtedness
JNU	Jawaharlal Nehru University
MoSPI	Ministry of Statistics and Programme Implementation
NAIS	National Agriculture Insurance Scheme
NHPS	National Health Protection Scheme

NSSO	National Sample Survey Office
OOPE	Out of Pocket Expenditure
PGR	Poverty Gap Ratio
PHC	Primary Health Centre
PMFBY	Pradhan Mantri Fasal Bima Yojna
RACHIS	Rajiv Aarogyasri Community Health Insurance Scheme
RAU	Reference Area Unit
RSBY	Rashtryia Swasthya Bima Yojna
STD	Sexually Transmitted Disease
TPA	Third Party Administrator
TPDS	Targeted Public Distribution System
UHC	Universal Health Coverage
UMPCE	Usual Monthly Per-Capita Income
WHO	World Health Organization
WHR	World Health Report

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Overview

This study looks into the lives of people living in acute distress in the rural areas to which indebtedness is one of the contributors. The practice of taking informal loans in the rural areas has been long, but with the advent of neo-liberal reforms, it has become more complex and dynamic. Introduction of agriculture technology and new markets have created tough competition for Indian farmers, specially the small and marginal ones. Not able to take loans from formal lending agencies, most of them resort to private money lenders, relatives, friends and rich peasants of the village. Apart from exorbitant interest rates charged, they have to face stress, anxiety, humiliation while living in the constant fear of losing face value in their community. Yet there is no guarantee that the income will be adequate enough from agriculture to repay the loans and fulfill other basic necessities of the household.

In this scenario, health care has become expensive more than ever. Health Sector Reforms, brought to India in the 1980s and 1990s has limited the role of state in secondary and tertiary sector and privatization and commercialization of health has left it on the mercy of markets. The aggressive expansion of corporate hospitals on the expense of subsidies provided by the government has limited health services only to those who can pay. For those who cannot pay the government proposes to provide health insurance at subsidised premiums. The outcome of this development is the horrific stories of huge medical bills, foregoing care and many a times the patient loses hope just because they can't afford adequate medical care on time. When indebtedness in rural areas is already causing much distress, rising household medical expenses call for attention.

The idea of looking rural indebtedness with respect to medical expenditure first came to me while doing fieldwork in Telangana. As part of the credited coursework, we went for fieldwork to Togurpalle and Nandikandi village of Kondapur *mandal*, Medak district in the last week of February, 2017. Dr M. Prakasamma hosted us. One of the alumni of Centre of Social Medicine and Community Health (CSMCH), Jawaharlal Nehru University (JNU), she practices public health beyond the conventional frame of biomedicine.

Through case vignettes from the fieldwork and secondary literature review this study attempts to bring out the holistic view of rural indebtedness with special focus on rising medical expenditure.

Outline of the study

The **first chapter** puts a synoptic view of the nature and extent of indebtedness in India. Using the NSSO 70th round report Key Indicators of Debt and Investment in India (January 2013 to December 2013) I have argued that indebtedness is more prevalent among low asset, non-cultivating households. To get a broad picture of rural indebtedness this chapter looks at the data on household asset holding and indebtedness, terms and rate of interest, and sources and purpose of borrowing. I have also outlined the common characteristics of states bearing higher burden of indebtedness. The second half of the chapter situates indebtedness in social context and its role in agrarian relations. Using the concept of social entrapment and individualization of agriculture (Vasavi 2012) indebtedness is located in the context of neo-liberal reforms and its impact on individual farmers followed by brief discussion on gender dimension of indebtedness. The last part discusses the conceptualization of the study, objectives and methods.

The **second chapter** captures the rising out of pocket medical expenditure in India. Using the NSSO 71st round report Social Consumption: Health (January 2014 to June 2014), the chapter briefly discusses the situation of morbidity, levels of care, cost of care and sources of finances with special reference to rural health care. The later section throws light on limitations of the methods used in estimating out of pocket expenditure on health followed by comparison of findings from studies using these methods. The last section is the case vignettes which has reflections of problems arising out of indebtedness. As part of the credited coursework we went for fieldwork in Togupally and Nandkandi villages of Kondapur block of Medak district, Telanagana. Families from these two villages inspired this dissertation. Our ten days stay in the field gave us insights into public health problems in rural India. This section attempts to connect these problems to the prevailing situation of Indebtedness in rural India.

The **third chapter** is discussion on the approach of policy towards indebtedness. It discusses the fundamental problems of targeting in social security schemes wherein

estimation and identification of the poor led to the exclusion of the real beneficiaries. The later section summarizes the core problems of insurance schemes specially focusing on health, followed by the analysis of Rashtriya Swasthya Bima Yojana (RSBY), Rajiv Aarogyasri Community Health Insurance Scheme (RACHIS) and Pradhan Matri Fasal Bima Yojana (PMFBY).

The **last chapter** concludes the study by arguing that rising medical expenditure is the part of the larger problem of rural indebtedness and a comprehensive policy is required to address this problem.

Chapter 1- Nature and Extent of Rural Indebtedness in India

Introduction

Indebtedness is beyond economic burden of cash, kind, or favour. It is a function of social relations where the borrower feels obligated to the lender (Ahuja 1976). It is a felt emotion, which is detrimental to the lives of families under debt. Day-to-day borrowing and exchanges bring social burden on the debtor, and extreme exploitation by the lender. Given the social location of the borrower and the lender, exploitative relations of caste and gender, compounded by the psychological distress, intensify.

Accompanied by distress and death, debt and usury are the central characters of the rural economy in India (Pani 1987; Vasavi 2012; Vasavi 2014). If the agrarian relations organise around landholding patterns, it is strengthened more by the credit relations shared among the tillers and the landholders (Bardhan and Rudra 1978). The flow of debts is biased in favour of landowners, having surplus money to lend, and adversely affects the peasants and landless farmers who, for most of the time, use these loans for consumption purposes.

1.1 Indebtedness among the Rural Households

Opening of Indian agriculture to the world market and promotion of HYV seeds have increased indebtedness over time (Action-Aid India 1998). However, it is difficult to find robust information on the national picture of indebtedness. Reserve Bank of India (RBI) conducted the first survey on indebtedness during November 1951 to August 1952, followed by another round in 1961-62 with a special focus on rural areas, popularly known as “All India Rural Debt and Investment Survey”. Later, National Sample Survey took charge of conducting the survey in its subsequent rounds, known as “All India Debt and Investment Survey”¹ (MoSPI 2014).

To estimate the extent and nature of indebtedness in the rural regions of India, NSSO uses the concepts of Incidence of Indebtedness (IoI), Average Value of Assets (AVA) and debt asset ratio (DAR). IoI is the percentage of indebted households on a particular date. Average value of the asset, physical as well as financial, per household is AVA.

¹NSSO took AIDIS in 26th round (1971-72), 37th round (1981-82), 48th round (1992), 59th round (2003) and 70th (2013)

And, DAR is the average amount of debt outstanding (AOD) on a given date for a group of household, expressed as a percentage of AVA owned by them on that day.

NSSO 70th round provides the latest estimates on indebtedness. The data was collected in January-December 2013, and the survey covered whole of Indian union and population with some exceptions (NSSO 2014). The following section will give a brief account of nature and extent of indebtedness in India, drawing mostly on the information from this report. But before beginning the analysis, understanding of indicators becomes necessary to make sense of the numbers presented in the report.

First, the social difference between the occupational classes of cultivating and non-cultivating household shows the organisation of agrarian relations in the villages. According to the report, the cultivator households operated on at least 0.002 hectares during the 365 days preceding the date of the survey, and non-cultivator households operated no land or less than 0.002 hectares of land (NSSO 2014).

Unequal landholding is already a fundamental problem further compounded by exploitative credit relations. Pani (1987) demonstrates the two extreme cases of agrarian relations one, organised only around credit relations, and other only around land relations. Pani (1987) further argues that agrarian societies where land is the organising unit, indebtedness contributed to the status quo, and, where credit relations are organising principle, land holding becomes complementary. Rudra and Bardhan(1984) in West Bengal found similar evidence where tenancy is the central organising principle and tenants depend on their landlords for loans (op cit).

Second, nature of formal lending is entirely different from informal lending which has more serious consequences. Most of the families taking informal loans are from the poorest groups because they do not have required mortgage for formal loans, their requirement is for consumption purposes, and loans become instantly available at the time of need (Tandon 1988; Jodhka 1995; Hardiman 1996).

1.1.1 Incidence of Indebtedness: occupational categories and source of borrowing

The incidence of indebtedness, according to the occupational categories of cultivator and non-cultivator households, shows the clear gradient of the burden of indebtedness falling more on the non-cultivator households.

Table 1.1- IoI, AVA, AOD and DAR per indebted households: rural, 2013

Occupational Categories	IoI (%)	AVA per indebted HH (Rs)	AOD per indebted HH (Rs)	DAR for indebted HH
Cultivator	35	1552914	110438	7.11
Non-cultivator	25.6	468078	87938	18.79
All	31.4	1216361	103457	8.51

Source: National Sample Survey Office 2014

Table 1.1 shows the incidence of indebtedness, the average value of the asset, the average amount of debt, and debt-asset ratio of indebted household in the rural sector. The IoI is higher among the cultivating household, 35 percent among the cultivators and 25.6 percent among the non-cultivators. But the debt-asset ratio for a non-cultivating household is double to that of cultivating households. Similarly, AVA and AOD are also higher among the cultivating households. A higher ratio of debt and assets among the non-cultivating households shows that despite fewer indebted households, the burden of debts is more severe among the non-cultivators.

The class gradient of indebtedness comes out more steeply among the non-cultivating households. Table 1.2 shows the occupation wise class gradient of indebtedness for the rural sector. For the cultivating households, the IoI in the poorest asset group is 2.04 percent, and the richest asset group is 17.43 percent. The trend is reversed for the non-cultivating households where the lowest asset group reporting the highest IoI of 15.58 percent, and the highest asset group reporting 3.62 percent of IoI. This phenomenon demarcates rural from urban regarding lending practices. Since most of the non-cultivating households are those who are landless, they depend on loans for consumption during seasons of economic distress.

In the urban sector, the NSSO has created the categories of self-employed and others as a similar occupational category. The document defines these categories as ‘persons engaged in the farm or non-farm enterprises of their households are self-employed workers’. In urban areas, a household was considered self-employed if the major source of its income during the 365 days preceding the date of the survey was self-employment of its members (NSSO 2014:10).

The IoI increases progressively in both these groups; though for the self-employed the slope is steeper, indicating that the burden of loans is increasing with increase in assets. For the self-employed households, least asset decile had 1.7 percent, and highest asset decile had 17.56 percent of a household having outstanding loans. For others, it was 5.83 percent and 12.4 percent in the least and highest decile, respectively (see table 1.2).

Table 1.2: Class gradient of the cultivator and non-cultivator household: all India, 2013

Decile class of HH asset holding	Rural				Urban			
	Cultivator (%)	Non-cultivator (%)	All (%)	Sample HH reporting cash loan	Self-employed (%)	Others (%)	All (%)	Sample HH reporting cash loans
1	2.04	15.58	6.24	1245	1.05	5.83	4.18	526
2	3.72	14.6	7.09	1543	5.07	7.32	6.54	996
3	5.95	14.48	8.6	1952	7.58	9.76	9	1539
4	7.54	11.44	8.75	2282	8.93	11.8	10.8	2102
5	8.95	11.82	9.84	2478	9.5	9.78	9.68	2205
6	10.34	10.84	0.49	2649	12.74	9.28	10.48	2433
7	12.16	6.49	0.4	2635	11.37	10.22	10.62	2405
8	14.45	6.15	1.88	2995	12.17	10.92	11.35	2669
9	17.42	4.98	3.56	3680	14.02	12.7	13.15	2742
10	17.43	3.62	3.15	3973	17.56	12.4	14.19	2629
All	100	100	100	25432	100	100	100	20246

Source- National Sample Survey Office, 2014

Similarly, regressive trends exist in credit from institutional and non-institutional sources, both in urban as well as rural sector. Institutional sources are Government, Banks, insurance companies, PFs, financial companies, Self Help Groups (SHG), among others. Non-institutional sources were landlords, agriculturalist, moneylenders, input suppliers, friends and relatives, doctor, lawyers, and other professionals (ibid).

However, the trends are not as regressive as it appears within the non-cultivating households in the tenth decile, with the most assets, largely depending on institutional sources (table 1.3). Both, in urban as well as rural, 26 percent of the households with highest asset holdings are borrowing from institutional sources. Whereas only 5.6 and 2.9 percent from the lowest asset group of urban and rural could participate in formal credit institution, respectively. These trends are uniform across household asset decile classes while borrowing from non-institutional sources. The only exception is across the rural urban divide. Only 7.6 percent of urban household participated in non-institutional borrowing, whereas 14.3 percent participated from rural areas.

Table 1.3 Class gradient of the cultivator and non-cultivator household according to institutional and non-institutional source: all India, 2013

Decile class of HH asset holding	Rural				Urban			
	Only institutional (%)	Only non-institutional (%)	Both (%)	All (%)	Only institutional	Only non-institutional	Both	All
1	5.6	11.6	2.4	19.6	2.9	5.9	0.5	9.3
2	5.2	15	2.1	22.3	4.5	8.4	1.7	14.6
3	8	16.3	2.8	27.1	8.3	9.6	2.3	20.2
4	9.2	15.2	3.1	27.5	9.8	11.7	2.7	24.2
5	9.1	17.8	4	30.9	9.1	9.6	3	21.7
6	11.4	16	5.6	33	10.7	9.4	3.3	23.4
7	13.4	13.6	5.7	32.7	12.2	8.1	3.5	23.8
8	15.8	15.1	6.4	37.3	15.4	6.5	3.5	25.4
9	20.5	13.4	8.7	42.6	22.3	3.8	3.3	29.4
10	26	8.7	6.6	41.3	26	2.7	3	31.7
All	12.4	14.3	4.7	31.4	12.1	7.6	2.7	22.4

Source: National Sample Survey Office, 2014

Crucially, the increasing coverage is yet to reach those in the most need. The incidence of indebtedness might not show the class gradient of non-institutional credit as the share of total outstanding cash loan shows the regressive trend². Households from the lowest four asset decile, for the rural sector, had more than seventy percent of their loans from non-institutional sources, whereas for the households from the top two asset decile, the same is shared by institutional sources. The inequality in credit from institutional sources is comparatively less in urban areas and overall ratio, too, is much better than the rural. In rural sector, the ratio of institutional and non-institutional was roughly 60:40, while for urban it was 85:15 (NSSO 2014).

1.1.2 Terms of Interest and Rates of Interest

Indian banks have become more inclusive over the years, yet large sections from the rural regions have the least access to institutional credit (GoI 2007). Inaccessibility results in exorbitant interest rates charged by moneylenders, pushing the family not only into chronic poverty trap but paves new ways for class, caste and gender oppression. Bollywood epic drama *Mother India* (1957) presents a classic case where the protagonist takes an informal loan from a moneylender for a marriage in the family. The marriage culminated into a successful union, but due to the very high rate of interest, the family runs into a vicious debt trap, which led to exploitation, sexual harassment, the death of the breadwinner of the family, and spiralling into new debts for survival.

NSSO also collected data on terms and rates of interest in its latest round of All India Debt and Investment Survey. These two components of any loan granted, by the formal or informal agency, show the nature and its debilitating effects. The survey categorically identifies four types of terms of interests: interest-free, simple interest, compound interest, and concessional interest. The actual rate of interests analysed alongside these categories will give a clear picture of indebtedness.

Table 1.4 shows the terms and rates of interest per Rs 1000 outstanding amount of cash loans, and per thousand households. Despite the popular belief that simple interest (SI) is less than the compound interest, the SI for rural regions, between 20 to 25 percent, amounts equal to the compound interest charged by any commercial bank. And rising SI

² These are households which took loan for both institutional as well as non-institutional sources.

also points to the problem of informal lending, because simple interest is charged mostly by the informal money lenders. However, compound interest is more prevalent in urban than the rural region.

Table 1.4- HH reporting outstanding cash loan and per Rs 1000 breakup according to terms and nature of interest: all India, 2013

nature of interest	rate of interest	Rural		Urban	
		per 1000 no of HH with cash outstanding	per Rs 1000 of outstanding cash	per 1000 no of HH with cash outstanding	per Rs 1000 of outstanding cash
Interest free	Nil	65	84	44	45
	< 6	20	33	5	6
	6 to 10	37	83	18	60
	10 to 12	14	39	21	135
	12 to 15	40	132	43	178
	15 to 20	12	44	13	44
	20 to 25	50	143	28	47
	25 to 30	2	3	2	2
	≥ 30	64	131	29	45
	Simple	All	203	608	134
< 6		5	10	2	6
6 to 10		18	46	11	61
10 to 12		8	35	19	216
12 to 15		17	122	20	122
15 to 20		4	22	5	15
20 to 25		7	18	3	6
25 to 30		0	0	0	0
≥ 30		9	23	3	4
Compound		All	63	277	59
	< 6	4	7	3	2
	6 to 10	7	18	1	3
	10 to 12	0	2	0	1
	12 to 15	1	3	1	1
	15 to 20	0	0	0	0
	20 to 25	0	0	0	0
	25 to 30	0	0	0	0
	≥ 30	1	1	0	0
	Concessional	All	13	31	5
Nil		65	85	44	45
< 6		29	50	10	14
6 to 10		61	147	30	124
10 to 12		22	75	40	353
12 to 15		58	257	63	300
15 to 20		16	66	18	59
20 to 25		57	161	32	53
25 to 30		2	3	2	2
≥ 30		74	156	32	50
All	All	314	1000	224	1000

Source: National Sample Survey Office, 2014

Another important category is interest-free loans and concessional, the former being paid in the form of free labour and most of the cases leading to social bondage. The sources of interest-free loans are various personal contacts, like friends and relatives, neighbours, employers and raw material providers. Once these loans are obtained, they create social pressure on the borrowers regarding obligations and open multiple opportunities for exploitation

1.1.3 Debt According to Purpose

The worst situation in life is to borrow for one's survival. Not only it is a situation of economic distress, but also our existence in society as a dignified human being is threatened (Sen 2000). In other words, if the loan is for any productive purpose, it has positive effects, but if taken for consumption purposes it has cascading effects in terms of vicious debt cycle and impoverishment. Table 1.5 shows the loan taken according to business and non-business purposes.

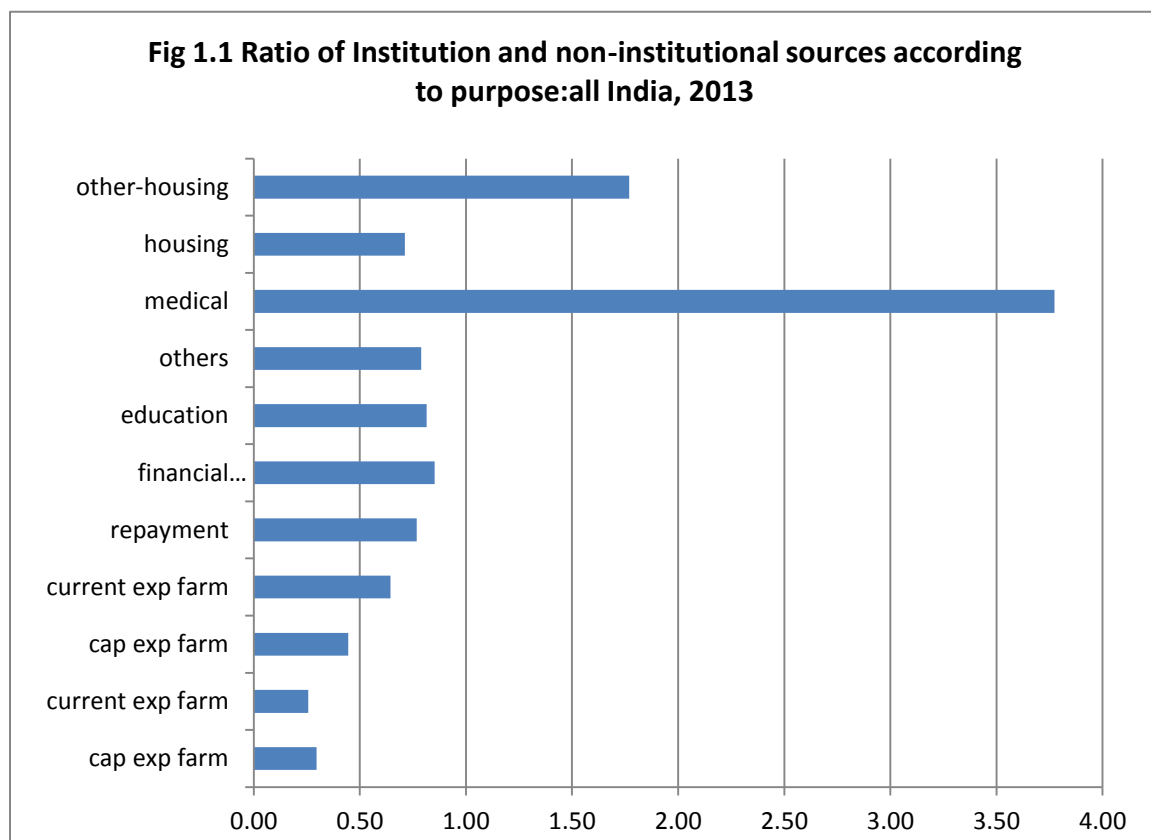
Table 1.5- Percentage share of debt by the broad purpose of loan for each asset holding class: all India, 2013

Decile class of HH asset holding	Rural			% share of debt in non-business	Urban			% share of debt in non-business
	% share of debt in business		All		% share of debt in business			
	farm	non-farm	All		farm	non-farm	all	
1	9.4	6	15.4	84.6	0.1	1.1	1.2	98.8
2	7.7	3.7	11.4	88.6	0.2	6.8	8	92
3	8.1	5.5	13.6	86.4	0.4	18.8	9.2	80.8
4	13.2	4.6	17.8	82.2	2.9	10.7	3.6	86.4
5	16.7	6.1	22.8	77.2	2.6	18.4	21	79
6	20.2	7.4	27.6	72.4	2.8	13.6	6.4	83.6
7	32.6	5.8	38.4	61.6	0.4	11.5	4.9	85.1
8	31.1	5.6	36.7	63.3	0	12.8	5.8	84.2
9	37.2	7.4	44.6	55.4	0.6	7.4	9	91
10	34.3	21.2	55.5	44.5	2.1	21.9	24	76
All	28.6	11.4	40	60	2.2	16.1	8.3	81.7

Source- National Sample Survey Office, 2014

For the families falling in the least asset quintile, the share of non-business consumption in rural sector is highest. The share gradually declines as we move upward to the asset quintile. For urban sector, the slope of decline is less steep from least to the highest asset class. The most severely affected are the households with least assets in rural sector where more than 60 percent of loans are used for non-business purposes.

The higher shares of non-business loans are spent mostly for consumption purposes. The institutional and non-institutional break-up of the purpose of loans show that higher share of non-institutional loans is utilised for consumption purposes by the poorest households. For business and other consumption purposes, the ratio of institutional and non-institutional sources is less than a unit except for medical and other housing expenses. Non-institutional loan for medical expenditure formed 3.7 times of institutional loans, highest in all the categories of purposes of loans followed by 1.7 times of institutional loans for other housing categories. These ratios were least in business expenditures indicating that most of the loans were used for consumption purposes (see Fig 2.1)



Source- National Sample Survey Office, 2014

1.1.4 State wise Households' Indebtedness

State wise household indebtedness is taken for twenty most populated states, which include both, states with commercialised agriculture mainly growing cash crops, and food crops for export and states where agriculture continues for subsistence purpose. Maharashtra, Tamil Nadu, Haryana, Karnataka, Telangana, Andhra Pradesh and Punjab are the states directly affected by General Agreement on Tariffs and Trade (GATT), part of structural adjustment program which had opened their market for international trade and introduced technological intervention in agriculture. These states focused mostly on cash crop and food crop for export. The rest of the states, Jharkhand, Chhattisgarh, Odisha, West Bengal, Bihar, Uttar Pradesh, and Madhya Pradesh were spared from GATT, and thus, these states used less agriculture technology. These are the states doing subsistence agriculture. Table 1.6 shows average outstanding debt (AOD), the average value of the asset (AVA), and debt asset ratio for these states.

Table 1.6 State wise indebtedness, 2013

State	AOD (Rs)	AVA (Rs)	DAR
Jharkhand	7004	605382	1.2
Chhattisgarh	11677	735873	1.6
Odisha	12480	317146	3.9
Jammu & Kash	12613	2240648	0.6
West Bengal	14848	539357	2.8
Bihar	19672	764171	2.6
Uttar Pradesh	25805	1255775	2.1
Madhya Prades	26255	1333840	2
Maharashtra	43129	1702425	2.5
Tamil Nadu	64298	1163732	5.5
Haryana	64926	7246039	0.9
Karnataka	66127	1106032	6
Telangana	68028	968388	7
Andhra Pradesh	87777	683492	12.8
Punjab	120889	8851079	1.4
Kerala	171581	3552723	4.8
all-India	38655	1385632	2.8

Source: National Sample Survey Office, 2014

The average outstanding debt is highest in Kerala followed by Punjab, Andhra Pradesh, Telangana, Karnataka, Haryana, Tamil Nadu and Maharashtra; all of them are above national average. The states forming the forefront of the reports on “backwardness” have average outstanding debt below all India average. The average value of assets reported reflects the pattern of average outstanding debt except for Telangana, Andhra Pradesh, Tamil Nadu, and Odisha. For these states, the average value of the asset is far less than the average outstanding debt, thus making indebtedness more troublesome (see figure 1.1).

DAR indicates the burden of debts among the indebted households. Higher DAR indicates that household having less asset has borrowed more, creating a situation of distress. States has higher AOD, and lower AVA suffers from higher DAR. DAR is higher in Andhra Pradesh, Telangana, Karnataka, Tamil Nadu. For Punjab and Haryana, average outstanding debt is high, but the average value of the asset is much higher which explains lower DAR. Also, more food crops, and fewer cash crops, are grown in Punjab and Haryana compared to other states with higher DAR.

The data show that states with the most exposures to agricultural technology are the most indebted ones. All of them share certain common characteristics, which amplify the effects of indebtedness and ends up in a distressed situation, in some cases suicides. Vasavi (2012: 41) calls them “suicide hotspots” as these states have reported the highest number of farmer suicides. In the next section, our analysis will be focused on Punjab, Maharashtra, Karnataka, and Andhra Pradesh because these are the states where indebtedness has become one of the many prominent causes of the distressed situation, and in many cases has manifested into suicides.

Vasavi (2012) outlines commonalities among states practising commercial agriculture. First, they are ecologically fragile with large stretches of semi-arid tracts, making marginal farmers prone to crop failure due to climatic conditions. Second, the government in these states promoted economic liberalisation in agriculture aggressively. It took away whatever safety net was available with the small and marginal farmers. Besides, the states promoted crops demanded by multi-national companies, altering the land use pattern. Malwa region of Punjab, northern Karnataka, and Idukki and Wayanad

of Kerala shifted from food crop to high-value non-food crop grain. Consequently, these crops required higher than national average input leading to higher levels of indebtedness in these regions. Since not all farmers go to formal lending institutions, more private money lenders entered the credit market contributing to the vicious cycles of debt. Lastly, integration of these regions into commercial agriculture created a condition of distress. As Vasavi notes:

“In the altered societies, economies and ecologies, within which marginalised cultivators seek new economic enterprises and social mobility, lies the very contradiction of these emerging ruralities. Those very structures (state support and stable market) that were enabling for a previous generation of cultivators are both unavailable and unpredictable for the new and marginalised cultivators. Hence, what we have in the remaking of India’s rurality are the entry of marginalised cultivators into the models of commercial agriculture production which are no longer sustainable of the household economy, the local ecological conditions, and the cultivators themselves” (Vasavi 2012: 64-65)

The next sections will put NSSO figures in the context of changing agrarian relations, how much they have contributed to production relations in the villages, and how their nature has changed over the period. The discussion will then move to understanding how indebtedness is not only an economic transaction but also a social entrapment, leading to humiliation and suicides. Finally, indebtedness will be looked from a gender lens, wherein effects of on the woman of the household be will be discussed.

1.2 Indebtedness and Organization of Labour Relations in Agriculture

Credit plays an important role in organising agrarian relations (Bhaduri 1973; Brass 1990). Often, the un-freedom between owner and sharecropper is not restricted to land, but affects credit too (see Bardhan and Rudra 1978). The practices of debt and usury have changed over time as the agrarian relations and forces of production are changing. Attached labour in rural areas has always depended on their employer for consumption and emergency loans. Therefore, it becomes necessary to draw a landscape of changing nature of attached labour in Agriculture.

There has been a lot of confusion over the definition of terms in agrarian economics. Agriculture in India is so diverse that a uniform categorisation of the labour force may not be suitable for all regions. However, the first and the second Agriculture Labour

Enquiry have classified all the labourers under two categories- attached and casual labour. The commission defines agriculture workers as, “all those who work in the field of wages”. General Family Survey provides an elaborate definition, “a person who reports that he or she is engaged in agricultural operation as hired labour for a wage for 50 percent or more of the total number of days worked by him or her during the previous year”. An agriculture labour family is “one in which head of the family or 50 percent or more earners report agricultural labour as their main occupation”(cited in Thorner 1956:759). On the other hand, casual labourers are those who are paid wages as per the market rates with no compulsion to work with the same employer.

The most basic distinguishable feature, which separated attached labour from the casual, was loans advanced to the attached labor. Examples from Bihar, Orissa (now Odisha), and Uttar Pradesh show that loans advanced to attached labourers were with the hope that they will be available whenever required.

“An attached worker was usually advanced a sum of Rs 50 to Rs 100 at the beginning of the year, and unless and until he returned the sum he was not permitted to leave his employer. In the Mayurbhanj district of Orissa, employers were able by means of an interest free advance to ensure that labourers would work for them any day required by the employers with the understanding that they would be paid on a par with casual labourers for the days on which they worked. In Uttar Pradesh it is noted that the workers usually remain attached to the same employers for successive years the reason being that employers generally advance loans varying from Rs 200 to Rs 400 per annum to the attached worker and also gave them plot of land (generally two bighas) either on a nominal basis or free of rent”. -(Agriculture Wage in India, cited in Thorner 1956:760)

The debate over defining labour categories continues. Bardhan and Rudra (1980:1478) introduced a third category of “semi-attached” labour, which are attached to an employer for one part of the year but for the major part of the year, they are free to work wherever they want. However, the nature of attached labour and role of credit largely depend on relation and forces of production. For attached labour, Bardhan and Rudra (1978) argue that the element of “unfreedom” in labour-employer relation is changing to less severe forms. But with technological changes in agriculture, the attached labour has become more impoverished (Bhaduri 1973; Brass 1990; Jodhka 1994 and Jodhka 1995).

Bhaduri (1973) surveyed 26 villages of West Bengal to study the influence of improved agriculture technology on production relations. The study attempts to explain the agricultural backwardness in east India. In the sampled villages, the traditional role of landlords and usury were the main reasons behind the exploitation of attached labours. Since the farmers always fall short of consumption, the demand for loans remains throughout the year. The only easy access to credit for consumption is from the landlord. Thus, increased output due to technology is of no help here. No landlord would want surplus grain with their tenants. Debts consolidate unfreedom of contract for sharecroppers (ibid).

However, Bardhan and Rudra (1978) contest the claim of unfreedom in a larger survey of 275 villages, in 1975, in West Bengal, Bihar and Uttar Pradesh. The survey revealed that tenancy and attached labour do not exhibit the features of feudalism, and enterprising farmers now adopt sharecropping institution. Though, longer duration of contract did not always mean extra-economic coercion. In fact, as claimed through the survey, Haryana's attached labour arrangement benefitted both the employee and the employer. The employer got labour as and when required and the employees had job security.

Brass (1990) challenges the very conceptualisation of attached labour, and proposes two types of theorisation. In the theorisation of attached labour, proposed by Bardhan and Rudra (1978), it argues that the labour contract hides the characteristics of un-freedom. Thus, the relation appears to be freer than it is. Findings from another round of surveys in Haryana shows the continuation of un-freedom in attached labour arrangement where debt plays a central role. Then bondage due to debt is for both attached as well as casual labours. The socio-economic characteristics of the households in the survey villages showed the presence and dislike towards attached labour among the respondents.

“Accordingly, not only were interest-bearing loans incurred by both attached and casual workers for subsistence and/or ceremonial purposes, but these were repaid to a creditor-employer in the form of debt-servicing labour contributions, the subjects of which forwent the right to sell their own labour-power so long as cash or kind loans remained unpaid. Any undischarged debts left when an attached or casual labourer died, or was unable to continue working due to illness or old age, were automatically inherited by his domestic kinsfolk, a liability which committed the latter to clearing such loans with personal labour in the fields of the

credit or employer (the existence of already-established prior socio-economic obligations notwithstanding). The methods of debt servicing labour obligation were in all cases the same: pre-emptive socio-economic pressure was exerted on an actual (or potential) defaulter, either by fellow caste members, generally, or by two or three of the latter in their formal capacity as panchayat officers. This system of compulsion was itself necessitated by the strong dislike of attachment on the parts of both the subject of the relation and casual workers” (ibid: 52).

1.3 Indebtedness and Social Entrapment

Drawing from Vasavi’s (2012, 2014) conception of debt as social entrapment, this section will look at indebtedness through changes in agriculture economy and rural society. Individualization of agriculture has put farmers, especially the marginal ones, under multiple risks. Moreover, the social and cultural individualisation of agricultural families, where aspiration is exceeding the opportunities of income, and social rituals are commercialised. The feeling of shame and humiliation due to non-repayment of debts is the final blow on already vulnerable households, leading to suicide.

Vasavi (1999) coins the term individualisation of agriculture during her fieldwork in suicide-prone Vidarbha region, followed by Ulrich Beck and Elizabeth Beck-Gernsheim. As the economy was transforming in the neo-liberal regime and Indian agriculture markets were open to the world, the techniques of agriculture were becoming more individualistic. At the same time, the individual farmer was head of the family and had to conform to all the social and cultural traditions on an agrarian society. It had a double impact on the family under debt. First, the individual had to seek credit and access markets on their own. Therefore they were trapped into a larger web of risk which otherwise was less risky when agriculture was rooted in local cultural practices. Second, the traditional roles and responsibility derived from their social location did not change, and they had had to fulfil all the requirement of the community to remain a part of it.

The worst part is yet to come when a family fails to pay the debt. The humiliation and shame faced in the village society is the last blow to the indebted family that, in some cases, leads to suicide. P Sainath in the documentary, *Nero’s Guest* (2009), captures these emotions in Marathwada and Vidharb region of Maharashtra. A story from Punjab shows how indebtedness had caused humiliation leading to suicide. Balwinder Singh, a *jat*, from Punjab had taken a loan from agriculture commission agent and cloth merchant to set up

tube-well and fix a water pump in his land. The return from the market was not as much as he had expected which resulted in the failed repayment of loan on promised time. Balwinder could not take the humiliation and consumed pesticide (Iyer and Manick 2000 cited in Vasavi 2014: 26-27).

Similarly, Vasavi (2014) found another case in Karnataka. Thammaiah, 55, switched his occupation to agriculture from toddy tapping. For this, he took a loan and purchased land but the due to drought in 2003 and a receding water table, the crops failed. The loan he took for digging a well in his field started compounding. He took more loans for his son's and daughter's weddings. For repayment, he tried other business, but that was of no use. At a stage, it became difficult to face his creditors, and Thimmaiah spent most of his time in the fields, seldom coming home. On September 9th, 2003 he committed suicide (Vasavi 2014:).

To summarise, as Vasavi (2014: 28-29) observes:

In the larger cultural framework in which economic modernization is absorbed along with an intensification of traditionalization the individual bears the burden of both the words: risk and isolation at the economic level, social pressure to prescribe to common desires and expectations, and stigma at the violation of these social norms and standards at the social level. The result is intense stress which is manifested in many ways. (ibid: 28-29)

Though, the male heads of the family commit suicides because they have to bear the patriarchal burden of “family responsibility”, what happens to the women of the family is not adequately explored. Most of the studies are limited to the institution of microfinance and its impact on women autonomy, and these can provide only a glimpse of what debt does to the women of the household. The next section will look into the gendered aspect of debts.

1.4 Gender and Debt

For a long time, economists considered households as a single unit of analysis, where there is no favourite while distributing resources. Seldom gender inequality is taken into account while studying the household in an economy. In India, where patriarchy is an important cause of oppression, looking at gender dimension of debts becomes indispensable. Moreover, the role and responsibility of women in repaying the household

debt becomes important. Women have to manage the available household resources to take care of the household needs and also pay back the loans. Studies on intra-household gender inequality have been done in Norway, Sweden and Australia (Mader and Schneebaum 2013:1).

However, few studies have evaluated the impact of microfinance institutions on enhancing the agency of women in the family in India. Guirin (2014) provides an anthropological account of debts in rural South India where she notes that caste, class and gender strongly regulate the debt relations. Caste and class are important for inequality among groups, but gender holds more significance within the family because it is the family where gender discrimination begins. Women have to always sort the emergency and consumption loans because they are the one responsible for managing day-to-day household activity.

Garikipati et al. (2016) conducted a household survey in rural Tamil Nadu to study the effects of sources of loans on financial decision-making power of women within the family. It was found that loans were categorised into two categories- planned and instant. Planned loans were those which were taken from the village elite or the formal sources for investment purposes and instant loans comprised of day-to-day borrowing from shopkeepers, neighbours and relatives. Instant loans are helpful in income smoothening and small emergencies, thus giving women more bargaining power in these loans. In an FGD during the survey, one of the male participants observed: "...women are best at sorting out these little annoyances" (ibid: 706). In fact, men consider it as a matter of pride and honour to ask for such petty loans. For Dalit women, borrowing from ambulant traders was more degrading. Borrowing sources are beyond their access because of their caste status, and the only option left was ambulant lenders. These are easily accessible and provide loans without any collateral but at very high-interest rates. But more than interest rates, the exploitation faced by Dalit women on the hands of these lenders force them to stop seeking loans and look for "safe lending" alternatives, in some cases from the family members.

1.5 Conceptualization

Rural indebtedness is not just agriculture credit. Families are also in debt due to consumption loans, wedding-funeral, and health care (NSSO 2014). Due to privatisation and commercialisation of the health sector, expense on medical care has been on the rise across income quintiles (Baru 2016). Families suffering multiple crises end up borrowing from many sources, and relief from one debt may not relieve them of the distress from indebtedness. Government's loan waver programs target bad loans related to agriculture, and health insurance programs are limited only to BPL families identified by the government.

This study was conceptualised during the fieldwork in Togurpally village of Sangareddy district, Telangana. It was part of credited coursework of Centre for Social Medicine and Community Health, JNU. It was found that the families in this village were under acute distress with loans from multiple sources. Every house had a diseased young male member and expense on their care was many times more than their income. Stress and anxiety among women were a common complaint. They were sharing more responsibility than usual without any support system. Most of the time, they were preoccupied with repayment of these debts when the breadwinner of the family was not healthy enough to earn. Government health insurance scheme was not of much help, and they ended up taking more loans for seeking private treatment.

Against this backdrop, the study attempts to probe the contribution of rising medical expenditure to the problem of rural indebtedness. During the fieldwork, it was found that even as families were in severe debt and they took loans from informal and formal sources for a wide range of purposes, the nature of expenditure in health was different from the others. The freedom to choose, the asymmetry of information between the patient and the care providers, the power relation between the physician and the patient are some of its characteristics that separates the health expense from other household expenses (Arrow 1963). These make the nature of loans taken for health more complex, which one avoids only when life is less precious than money.

As none of these families could benefit from the state government's health insurance scheme, and some of them were not even "eligible" for the scheme because they were not

counted as BPL category. The futility of targeted insurance schemes to save families from financial catastrophe was apparent. For some, who were eligible for the scheme and successfully registered under a hospital, treatment were denied because the condition was too complex to handle or beyond the capacity of the hospital. Families that had successfully availed this scheme, the condition was not much better than those who could not benefit from the scheme. It was because if not loans for health, then some other loan was always a burden.

These observations of the fieldwork substantiated that rural indebtedness and medical expenditure are connected. This study aims to explore that connection.

1.6 Objectives

The broad objective is to view the problem of rural indebtedness holistically when medical debts are rising. Through this study, I will move beyond agriculture debts and bring out the medical expenditure aspect of indebtedness. I will also analyse the policy dealing with health and indebtedness and how far they are successful in understanding and responding to the problem of indebtedness.

The specific objectives are: -

1. To examine the landscape of rural indebtedness
2. To examine the trends of rising out of pocket expenditure and medical indebtedness
3. To examine the recent policies on rising medical expenditure and rural indebtedness

1.7 Methods

The study is the secondary literature review of books, journal articles and reports. Secondary data from NSS 70th round (Key Indicators of Debt and Investment in India) was used to assess the situation of indebtedness. NSS 71st round (Key Indicators of Social Consumption: Health) was used for medical indebtedness.

1.7.1 Secondary Literature

To examine the landscape of rural indebtedness, secondary literature was surveyed using generic search engines like Google, Jstore and PubMed. For more studies related to rural indebtedness, specific journals like Economic and Political Weekly, Social Scientist, Economic Development and Cultural Change were searched. Drawing from Vasavi (2012) I have used the concepts of individualization of agriculture and social entrapment to understand the complexities around agricultural debts. Key word search was used for surveying literature. Since the digitization of the research content, keyword search has required relevance for surveying literature. For surveying literature across the disciplines, keyword search becomes handy.

Table 1.7 Combination of keywords searched on the search engines (adopted from Jstore tutorial on keyword search)

Concept-	Connector	Concept	Concept	Connector	Concept
Indebtedness [all fields]	AND	Healthcare [all fields]	OOPE	AND	Impoverishment
Distress [all fields]	AND	Public spending [all fields]	Catastrophic expenditure	AND	foregone care
Agrarian relations [all fields]	AND	Debts [all fields]	Medical debt [all field]	AND	Rural [all fields]
Household expenditure [all fields]	AND	Medical debts [all fields]	Poverty [all fields]	AND	Coping mechanism [all fields]
Labour bondage (all fields)	AND	Health inequality [all fields]	Debt trap [all field]	AND	Suicides

To look at studies done by independent researchers and activists, health reports of Jan Swasthya Abhiyan was consulted. Apart from this, Oxford Journals and World Bank Publication also provided literature on indebtedness and medical debts.

To survey the empirical studies on medical debts, a frame was prepared with following answers from the literature-

1. What was the study about?
2. What problem does it address?
3. What are the methods used?
4. What are the main findings?
5. Why is this study important?

All the empirical works on medical debts were passed through this survey form to assess their varying methodology of estimating debts. It also helped in organising literature around themes, and such methods are useful irrespective of the areas of study.

1.7.2 Secondary data analysis-

Secondary data for health expenditure was taken from the latest round of National Sample Survey Office. For information on health and morbidity, NSS published data in Social Consumption in India: Health, 71st round (2015). Data was collected to produce basic quantitative estimates on the health sector. NSSO took the herculean task of estimating the prevalence of diseases between different age-sex groups. Apart from this, NSSO also collected information on the extent of use of health care provided by the government, episodes of hospitalisation, expense per episode, and expense per episode of non-hospitalized care. It also recorded the sources of these expenses and break-up of these expenses according to the sources. The tables are drawn from the data provided in the key indicator report.

For secondary data on rural indebtedness, Key Indicator of Debt and Investment in India published by NSS 70th round (2014) was used. Through this survey, NSSO produced estimates on Average Value of Assets (AVA), Incidence of Indebtedness (IoI) and Debt-Asset Ratio (DAR). The survey was more about agricultural loans, but the question on purpose of borrowing brought out the other usage.

Chapter 2 - Rising Household Medical Expenditure: Rural-Urban trends

Introduction

Household medical expenses are rising more than ever (Wagstaff and Doorslear 2003; Garg and Karan 2005; Ghosh 2011). The public expenditure on health is at its all-time low, and private health sector has grown aggressively during the past few decades (Baru 2016). Health Sector Reforms, which were introduced to tackle inefficiencies in the health care system by limiting the role of the state, excluded those who were needy (Sen et al. 2002). Consequently, the already dilapidated public health system became more fragile creating a huge void to be filled by the private players. Not only did the private sector made exponential profits by entering health sector, but it has also had catastrophic effects on families who could not afford them. Incidents from around the country narrating stories of negligence, discrimination and denial of care testify this. According to the NSSO estimates (2006, 2015), more people are falling into poverty trap due to health expenses. Based on the estimates from NSS 60th round, more than 10 million families were pushed below poverty line (Berman 2010).

The global community of public health foregrounds the idea of Universal Health Coverage for accessible and affordable health care for all (World Health Report 2008, 2010, 2013). There are innovations going on across developing countries, but no clarity on how UHC is going to be delivered (Qadeer and Chakravarthi 2010). However, this idea is taking shape by inviting civil society organisations and profit and non-profit health agencies to deliver health care and reducing the state to the strategic purchaser of the health care services for extending health care to the last person (Sengupta 2013). At the same time, health insurance is projected as the solution to accessibility and affordability of healthcare services. Multilateral and bilateral agencies are pushing developing and least developed nations to device health insurance schemes which can take care of the poor. But, despite the series of experiments done, UHC in its full-fledged form is not yet realised.

In response to the growing crisis in health care, the government of India launched Rashtriya Swasthya Bima Yojna. RSBY targets BPL families by providing yearly

insurance of INR 30,000 per family through private clinics, hospitals and government hospitals (Swaroop and Jain 2010). Studies have demonstrated that patients availing facilities under this scheme ended up spending more in private hospitals than those who availed services in public hospitals (Selvaraj and Karan 2012; Karan Yip and Mahal 2017). The real beneficiaries of this scheme were private clinics and hospitals, as more people were pushed into their system. Even before debating its outcome, the government is launching Ayushman Bharat to add one million more families. Experiences of such schemes in other parts of the world, however, show their debilitating effects on families and health care system, causing financial catastrophe and denial of care (Sicko 2007, Dreze and Sen 2013).

In the next section, I present the background of the Universal Health Coverage. I then move on to the rural-urban dynamics of out of pocket health expenditure through the analysis of the NSSO 71st round, along with critically looking at the methodology used in deriving these estimates.

2.1 Universal Health Coverage

Universal Health Coverage was thought to make health care accessible to everyone irrespective of their financial status. However, it is incorporating private sector. World Development Report, 1993 limits the role of the state as “manager” of the health care system instead that of the provider and reduced health to cost-benefit analysis.

The Alma-Ata declaration of 1978, proposing the idea of appropriate technology, opposition to medical elitism and concept of health as a tool for socio-economic development, never took off (Cueto 2004). However, immediately it was replaced by Selective Primary Health Care (Qadeer, 1994; Walsh and Warren, 1980). Consequently, the focus came back to population control programs with new terminologies replacing the old one. The much-dreaded family planning program turned into maternal and child health. The World Development Report, 1993, further aggravated this.

The report consolidated these towards privatisation of health by introducing the elements of cost-benefit analysis. Health, which was seen as a tool for socio-economic development, now became an avenue for investment, which is measured regarding returns it generated. The report says-

“In health, as in every other sector, customers want value for their money spent on such interventions whether they pay directly or indirectly, in their roles as taxpayers or as buyers of health insurance (WDR, 1993: 59)

For any given amount of total spending, taxpayers and, in some countries, donors want to see maximum health gain for the money spent. An important source of guidance for achieving value for money in health spending is a measure of the cost-effectiveness of different health intervention and medical procedures that is, the ratio of cost to health benefit” (ibid: 5)

The very language of the report when it calls health as a ‘sector’ and the people as ‘customers’ shows that whatever social touch it had was now completely done away with. It was in strong favour of selective primary health care and recommended that the investment should be made in such a way that its gain is visible through DALY (Duggal, 2005: 35). In other words, the focus shifted to tracking investment and profit maximisation than the health of the people. While examining the legal and policy documents³, Qadeer (2013a) and Qadeer (2013b) could find a clear reflection of neo-liberal agenda pinned with UHC to reduce health care to a profitable avenue for investment.

The idea of universalisation was first proposed in the Alma Atta declaration of 1978 when developing and developed countries were going through a health care crisis. Few third world countries had better solutions to offer. With examples of barefoot doctors from China, the declaration upheld the principles of equity, universalism, and comprehensiveness and government responsibility to provide finances, community participation and relevant technology (Cueto 2004; Bisht 2013).

These principles were subsequently diluted over the period with the change in the discourse of meaning of the UHC and changing international and national contexts. The idea of “universalism” was already in its different forms in different countries, but the opponents of Alma Atta claimed that ‘Health for All’ was not viable only through state financing and only a few essential health care services can be looked after by the state,

³ Draft National Health Bill (2009), Report of Steering Committee for 12th FYP, 10th FYP (2002), 11th FYP (2008), HLEG report for Universal Health Coverage for India

paved the way for its neo-liberal interpretations. The documents on health policy in India examined by Qadeer (2013a), Qadeer and Chakravarthi (2013) in the post-economic reform period are showing the same trends where the idea of universalism is central to the discussion, but the interpretations are misleading and can be detrimental to the health of the people.

The analysis of 11th FYP, Draft National Health Bill (2009), HLEG report for Universal Health Coverage for India shows that there is lack of clarity in definitions and some key concepts are missing altogether. Terms like “standard” and “life of dignity” was not defined and “accessibility” equates with “affordability”, that is one’s ability to pay for healthcare than availability and free use. In fact the term “affordability”, as maintained in these documents, meant “those who cannot pay” meaning that state was responsible for prioritising health for the most vulnerable thus invoking the targeted approach of UHC (ibid). The idea of UHC also reduces the role of the state from provider to that of “stewardship”, which means the diversion of resources to providers catering more patients, which in most of the cases are private players.

The promises of UHC might be genuine, but there is no clear pathway to materialise these claims. Among all the claims made by the UHC proponents, reducing out of pocket expenditure on health calls for attention. In a country like India where more than 70 percent health finances come from peoples pocket, where poverty is rampant, and public health institutions are in sahambles it becomes necessary to examine the landscape of medical expenses, its rural-urban dynamics vis-à-vis indebtedness due to other purposes, and review of methods used to arrive at impoverishment due to health expenses.

2.2 Health among Rural and Urban Households

National Sample Survey Office (NSSO) in its 71st round, Key Indicators of Social Consumption in India: Health, collected data on morbidity, access and utilisation of public health services, and cost of healthcare across the public and private sector. It surveyed a total of 65,932 household and 3,33,104 persons. These samples are from 4,577 villages (36,480 households sampled), and 3,720 urban blocks (29,542 households sampled). In the 7th round (1953-March 1954) NSS collected information on health for the first time followed in the subsequent rounds (from 11th to the 13th round, then pilot

survey during the 17th round). All were, however, exploratory. It is in the 28th round (October 1973 to June 1974) that NSSO started a full-scale survey on morbidity and health, later 42nd round (July 1986 to June 1987), and 52nd round (July 1996 to June 1997) provided information on the public distribution system, health services, education and ageing.

Self-reported morbidities, however, have less reliability. It can under-estimate latent and chronic illness, and perception of illness is dependent on cultural factors, health awareness and access to care (Sundaraman and Muraleedharan 2015: 17-18). The case of Kerala and Bihar well illustrates this point. Kerala, which tops on almost all indicators of health, reports higher morbidity compared to Bihar which has one of the worst public health systems in the country. However, given the lack of other reliable sources, NSS survey on morbidity stands unique (ibid).

2.2.1 Distribution of Health Care- Rural and Urban

By all means, health care is biased towards urban sector. While preparing the roadmap of Indian health care system, Bhore Committee expressed this apprehension and recommended for, at least, one medical doctor at each primary health centre. However, this recommendation remains on the paper to this day, and rural health care system remains in precarious condition in most parts of India. Favouring urban health care over the rural is an expression of the socio-economic inequality in the health care system, and medical education itself (Qadeer 1988). Students studying medical sciences are higher caste men aspiring for an affluent life and avoiding rural postings. Further, they occupy a central position in planning for health care, and devoid of their understanding of field realities propose ideas which hardly find a place in the villages (ibid).

In NSS 71st round, out of 1000 persons, 89 reported ailment in rural areas and 118 in urban areas, in last 15 days. Similarly, for hospitalisation cases more urban people were admitted (44 out of 1000) than the rural (35 out of 1000). However, this doesn't mean that people are healthier in rural areas. Perception of health care varies with cultural context, health awareness and access to care (Sundaraman and Muraleedhara 2015: 18).

2.2.2 Morbidity and Level of Care

Less rural people are seeking medical advice. In table 2.1, showing percentage distribution of treated ailment without medical advice, 15.2 percent resorted to self-care because no medical facility was available in the neighbourhood. But only 2.1 percent of urban sample resorted to self-care due to this reason. It is due to the financial constraint that most of the people are not seeking any medical advice: 57.4 percent in rural and 68.3 in urban areas, respectively.

Table 2.1- Percentage distribution of treated ailment without medical advice, by reason for not seeking medical advice: all India, 2014

Reason for treatment of medical ailment without medical advice	% spell of ailment by reason for treatment without medical					
	Rural			Urban		
	male	female	all	male	female	all
no med facility in neighborhood	17.7	13.5	15.4	2	0.8	1.3
facility of satisfactory quality missing	3.4	3.9	3.7	2.4	2.1	2.2
facility of satisfactory quality too expensive	8.7	3.9	3.7	3.1	7.2	5.3
satisfactory quality involves long waiting	2.9	3.7	3.3	1	3.3	2.3
financial constraints	55.4	59.9	57.4	75	62.8	68.3
Others	11.9	15.8	14	16.6	23.9	20.6
All	100	100	100	100	100	100

Source- National Sample Survey Office 2015

2.2.3 Levels of Care

Sir Joseph Bhore, invited by the government of British-India to prepare the roadmap of health care system, proposed for a three-tier health care system where primary level care will play a pivotal role in managing the health of the rural population. The committee recommended, “an integrated curative and preventive health care to the rural population with emphasis on a preventive and promotive aspect of health care” (IPHS 2006: 5). But even after so many years these recommendations never took off. Half of the people, among ill person sample reporting shorter periods of the ailment, are going to private

doctors, both in rural and urban areas. 11.2 percent in the rural areas are going to health sub-centre (HSC) and primary health centre (PHC). And only 3.9 percent in urban areas are using these facilities (see table 2.2).

While people are managing shorter ailments through self-care and public health centres, cases of hospitalisation are more complex and worrisome for a family.

Table 2.2- Percentage distribution of spell of ailment treated during last 15 days: all India, 2014

Level of care	Percentage of a spell of ailment					
	Rural			Urban		
	Male	Female	All	Male	Female	All
HSC, PHC & others	10.6	12.3	11.5	3.5	4.2	3.9
Public hospital	15.9	17.5	16.8	17.4	17.3	17.3
Private doctor/clinic	52.7	48.9	50.7	48.9	50.8	50
private hospital	20.8	21.3	21	30.2	27.7	28.8
All	100	100	100	100	100	100

Source- National Sample Survey Office 2015

2.2.4 Hospitalization

Rural households are relying more on public hospitals. In the sample, cases where hospitalisation is required, public-private hospitalisation divide is increasing as income of the families are going up. The division is stark in urban areas.

Persons in the first income quintile, the poorest in the rural areas, 57.5 percent went to the public hospital and 42.5 per cent to a private hospital. But as we move to the richer households in the fifth income quintile, the gap increases. Only 28.9 percent in this group went to the public hospital, whereas 71.1 per cent is going to private hospitals. This gap increases more in urban areas. Only 18 percent of the richest people in the sample living in urban areas are going to public hospital and rest go to the private (see Table 2.3). In the 52nd (July 1995 to June 1996) and 60th (Jan to June 2004) round the gap in public and private hospitals in the urban areas was comparatively less (NSSO 2015: 17).

Table 2.3 Percentage distribution of hospitalised cases by public and private for each quintile class of UMPCE: all India, 2014

Quintile class of UMPCE	percentage of hospitalised cases					
	Rural			Urban		
	public hospital	private hospital	all	public hospital	private hospital	all
1	57.5	42.5	100	48	52	100
2	52.9	47.1	100	43.5	56.5	100
3	47.1	52.9	100	32.7	67.3	100
4	42.8	57.2	100	28.3	71.7	100
5	28.9	71.1	100	18.7	81.3	100
All	41.9	58.1	100	32	68	100

Source- National Sample Survey Office 2015

2.2.5 Cost of Care

Irrespective of region, families are spending more on health care than ever. An expenditure made by low-income families in rural areas may not reflect in this table. They had to forgo medical care due to lack of finances or couldn't access medical care due to non-availability. However, the expenses captured in this survey show that expenses on hospitalisation care are more for persons in the richest income quintile. On an average per hospitalisation cases, people in urban areas are spending almost double than those in rural areas for hospitalisation care in all the income quintile classes, except for the poorest. For expenses other than medical care, like transportation, staying cost, both urban and rural people are at the same level of spending (see table 2.4). Rural and Urban families are spending almost the same on non-hospitalised care (NSSO 2015: 24). These are only the average figures of expenses. Reports of individual cases show expenses of large magnitude leading to deaths in the absence of proper care.

This difference is wider in childbirth. On an average, someone from rural area has to pay Rs 1587 for childbirth in public institution and Rs 14778 in private hospital. Similarly, in urban areas, the average cost of child birth in public institution is estimated to be Rs

2117, and in private clinic nursing home it is Rs 20328. The difference between public and private hospital is almost ten times than the public (NSSO 2014).

Table 2.4 Average medical and other related non-medical per hospitalisation case for each quintile class of UMPCE: all India, 2014

quintile class of UMPCE	Average medical expenditure during a stay at the hospital (Rs)					
	Medical		Other		Total	
	Rural	Urban	Rural	Urban	Rural	Urban
1	10146	11199	1658	1317	11805	12516
2	11276	14533	1791	1620	13067	16153
3	10326	17926	1766	1772	12092	19697
4	13482	24776	1879	2131	15361	26907
5	21293	42675	2458	2743	23752	45418
All	14935	24436	2021	2019	16956	26455

Source- National Sample Survey Office 2015

2.2.6 Source of Borrowing

How are these medical expenses financed? NSS identifies six sources to finance medical care. Household income/savings, borrowings, the sale of physical assets, the contribution of friends and relatives, and others. It turns out that rural families depend more on borrowings, even those in higher income quintiles. In the rural sample, 24.9 per cent are borrowing, and 67.8 percent are managing through income and savings. However in urban areas, except for low-income families, borrowing is not so prevalent as the rural. Only 18.2 percent borrowed for hospitalisation while 74.9 percent managed the expenditure through savings and income (see table 2.5).

However, very few had to sell their physical assets (land and house) to finance their medical expenses. Only 0.8 percent of the sample in the rural areas and 0.4 percent in the urban areas.

I had discussed in the previous chapter about the characteristics of borrowing in rural areas. Informal loans from moneylenders, friends and relatives and other sources are a burden on rural families. Apart from higher rate of interests, these borrowings had social

implication regarding dignity, stigma, anxiety leading to unbearable distress in the household, and suicide

Table 2.5 - Major source of finance for hospitalisation expenditure for households in different quintile classes of UMPCE: all India, 2014

Quintile class of UMPCE	% of household reporting for a household in different quintile classes of UMPCE					
	hh income/savings	borrowings	sale of physical assets	the contribution of friends and relatives	others	all
Rural						
1	65.6	65.6	1.1	5.3	0.5	100
2	67.1	67.1	1.4	4.8	0.5	100
3	68.1	68.1	0.6	5.1	0.5	100
4	68.8	68.8	0.4	3.8	0.8	100
5	68.1	68.1	0.9	6.9	0.7	100
All	67.8	67.8	0.8	5.4	0.7	100
Urban						
1	68.4	21.7	0.4	6.4	2.7	100
2	71.8	21.9	0.4	4.5	1.1	100
3	74.1	20.7	0.3	3.9	0.7	100
4	74.9	16.1	0.3	6.9	1.6	100
5	80.9	13.7	0.4	3.7	1	100
All	74.9	18.2	0.4	5	1.3	100

Source- National Sample Survey Office 2015

2.2.7 Coverage of Financial Protection

The idea of financial protection is the main theme of Universal Health Care. No family should be impoverished, and access should not be denied because of lack of money (Dye, Reader and Terry 2013). It is argued that health care should be put away from the state and put into the hands of private players and provisions should be made so that care shouldn't be denied for low-income families (World Development Report 1993).

However, coverage of financial protection is dismal in India. A large section of the population (85 percent in rural and 82 percent in urban) is not covered under any financial protection scheme. Government-funded health insurance is covering only 13.2 percent in rural and 12 percent in urban areas. Since employer insurance (other than the government) is for organised sector, which is not more than 7 percent in India and that

too concentrated in urban areas, the coverage is abysmally low. Only 2.4 percent in urban and 0.6 percent in rural are covered under employer insurance (see table 2.6).

Table 2.6- Percentage distribution of persons by coverage of health expenditure support for each quintile class of UMPCE: all India, 2014

quintile class of UMPCE	not covered	govt. funded insurance scheme	employer (other than government) insurance	insurance privately arranged by hh	others	all
Rural						
1	89.1	10.1	0.7	0	0	100
2	88.8	10.7	0.4	0.1	0	100
3	87.4	11.9	0.6	0.1	0	100
4	83.3	15.9	0.5	0.1	0.1	100
5	81.1	17	0.8	0.9	0.2	100
All	85.9	13.1	0.6	0.3	0.1	100
Urban						
1	91.4	7.7	0.6	0	0.2	100
2	87.5	10.6	1.3	0.5	0.2	100
3	84.7	12.9	1.3	1	0.1	100
4	79.7	13.5	3.3	3.4	0.1	100
5	66.6	15.1	5.6	12.4	0.3	100
All	82	12	2.4	3.5	0.2	100

Source- National Sample Survey Office 2015

Thus the report by NSSO, Key Indicators of Social Consumption in India, Health (2014), summarizes statistics on rural and urban health care on- morbidity, level of care and cost of illness. In the rural regions people are reporting less morbidity, using public health facilities, and spending less on hospitalization when compared to their urban counterparts. However, this nowhere mean that people are healthy, have better access to public health care and paying less for health services. The varying perception of health, cultural contexts and less access to care have led to less reporting of morbidity and foregone medical care. Richer families are making larger out of pocket health expenses, but regarding health outcomes, it is the low-income families who are facing the consequences. Morbidity may be reported less, but adult mortality is concentrated in some of the poorest regions of India. In such situations, how come the cost born by such

families are not getting any attention? Health economist has used a variety of techniques to solve this problem. How many families are impoverished due to medical expenditure, how are they coping in such situations, how much they are compromising on other basic needs to finance health care, have been probed to a great extent. In the following section, I will attempt to review the methods used in these studies.

2.3 Methods of estimating Out of Pocket Expenditure in health

Estimates of **Out of Pocket Expenditure (OOPE)** vary across different studies, but all of them agree that it has increased. Structural Adjustment Programs have moved health from a public institution to private players causing much distress to those who cannot afford. Sen et al. (2002: 1348) analyse NSS data from pre and post-reform period and conclude that between 1986-87 and 1995-96 the cost of illness per episode increased by 142 percent in private and 77 percent in public sector. In the more recent estimates, Ghosh (2011: 68) finds that catastrophic headcount⁴ increased to 4 percent in 2004-05 from 2.77 percent in 1993-94.

Garg and Karan (2005)⁵ found that burden of OOPE is more in rural areas, but more families are pushed below poverty in urban areas⁶. However, Berman, Ahuja and Bhandari (2010) argue that introducing financial coping mechanisms such as dis-savings, borrowing, and contribution from friends and relatives may overestimate the impoverishing effects of OOPE. But the aggregate figures of headcount remain quite high. It is based on the idea that health expenditures are not similar to other consumption expenditure, and in its absence, the overall household consumption expenditure will be less (ibid: 65 and Russell, 1996).

The estimates of OOPE may vary with time and place but its variation across classes and regions is not explored in depth. Russell (1996) had put forth a case where an estimate of OOPE doesn't give correct information when calculated for families below subsistence income. Most of the methods deployed for estimation of poverty due to catastrophic health expenditure are drawn from the earlier poverty estimates which uses concepts of

⁴ Number of families occurring health expenses which are more than 25% of their non-food expenditure

⁵ Estimated from 55th round of NSS

⁶ Head count ratio of families pushed below poverty line is 3.5 percent for urban and 2.5 percent of rural areas for the year 1999-2000

Head Count Ratio (HCR) and Poverty Gap Ratio (PGR) (Wagstaff, 2008). Other methodological problems raised were levels of disaggregation and recall period which affected the final estimates (Lu, 2009). How these factors affect estimates in subsequent rounds of NSSO and how will the income gradient of OOPE look if subsistence income is factored in, is discussed in the next section.

2.3.1 Comparison across different studies

Health Economists have extensively worked on impoverishment due to health expenditure. This section will survey some of this literature followed by critical review of the methods used in these studies.

Doorslear et al.. (2007) studied data from 14 countries, home to 80 percent population of Asia's population, to find out how high out of pocket expenditure is curtailing living standards. Using secondary sources, the study found that in at least 10 percent of households in Bangladesh, Nepal, India, China and Vietnam more than 25 percent of income is spent on health care after deducting for food. However, families in high-income countries are spending less from their pockets than low-income countries. And in low-income countries, rich people are spending more because the public health services are in the dismal state.

However, among other low-income countries Malaysia, Philippines, Sri Lanka and Thailand are spending comparatively less money on health from their pockets and rest are spending more than average. The reason is public spending on health is higher in these four countries letting families with meagre income use public health services for free.

Another study conducted by Wagstaff and Doorslear (2003) in Vietnam used threshold method to know that how much a family is spending on health other than food, and, inequality method to count how many of them are pushed below the poverty line, also known as Head Count Ratio. Using data from Vietnam Living Standard Survey from 1993 to 1998, it concludes that incidence and intensity of catastrophic health expenditure have reduced and so has reduced the impoverishing effects of such expenditures. But families below the poverty line are becoming poorer due to spending on non-hospitalised care. However, the study also acknowledges that the opportunity cost of families forgoing other necessities could not be captured anyhow.

Using the similar method, Ghosh (2011) analysed NSSO 50th round (1993-1994) and NSSO 61st round (2004-2005) to bring out changes during this period that led to rise in OOPE in health. The study is specifically bringing out (ibid: 64)

1. change in OOPE spending on health
2. change in the composition of health finances
3. the magnitude and distribution of OOPE payments relative to total household consumption expenditure across classes
4. the extent of catastrophic healthcare expenditure due to OOPE payments
5. change in magnitude and depth of impoverishment because of OOPE payments in healthcare

In the study, it was found that people are spending more share of their income in 2004-05 than they were doing in 1993-94. The mean household expenditure on health as a share of total expenditure rose from 4.39 percent to 5.31 percent. The share of drugs in household spending, however, declined from 81 percent in 1993-94 to 71.17 percent in 2004-04. In the same period, the expense of inpatient care increased to 2.5 times.

These figures vary regionally. Families from Odisha, Bihar, Uttar Pradesh and Assam are spending more share of their income on drugs (75 to 80 percent) than those from Maharashtra, Gujrat, Karnataka and Punjab (60 to 67 percent), given they are more economically prosperous than the previous. For inpatient care, families of these well-off states are spending more (15-23 percent) than their economically backward counterparts.

One of the probable reasons for this variation could be State's expenditure on public health. Taking the case of Karnataka and Uttar Pradesh, OOPE has a small share in Karnataka's health expense because state expenditure on health increased sharply between 1993-94 and 2004-05. In Uttar Pradesh, during the same period, the state spending on health declined by 1.54 percent annually. And Karnataka has better insurance coverage than Uttar Pradesh (ibid: 65).

Families spending more than 10 percent of their consumption expenditure increased to 15.54 percent in 2004-05 to 13.1 percent in 1993-94. That is catastrophic health expenditure has increased. Families spending more than 25 percent of their monthly consumption expenditure have doubled in this period.

These families have to cope with this financial burden of health care. However, coping mechanism has different meanings in different circumstances. The coping mechanism in a particular socio-cultural setting, may not hold true for others. For example, borrowing in rural India has strong social bearings (Hardiman 1996), but economists view it as a coping mechanism (see Flores et al. 2008, Berman et al. 2010). However, they have agreed that it has long-term consequences for the family facing debt.

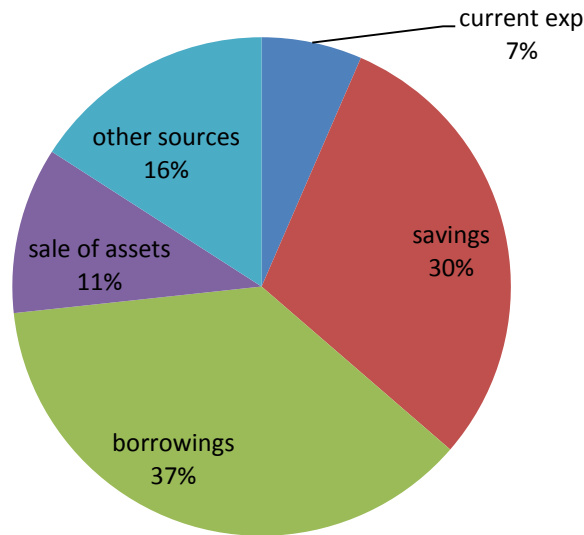
2.3.2 Financial Coping Mechanisms

Coping strategies are action protects the household from economic shocks, such as illness. Coping mechanisms captured by NSSO are savings, borrowings, sale of assets Flores et al. (2008) argues that coping strategies may be relieving for short term, but in the long term the effects are substantial. In its calculation of a hypothetical family, Flores (2008: 1396) demonstrates that while they had average Annual Per-capita Consumption Expenditure Rs. 6866 it had spent Rs 2760 on health. This is 40 percent of APCE of that family. They are in great trouble. However, disaggregating Rs 2760 according to the sources of finance, only Rs 180 came from the current income, which is not more than 7.8 percent of average annual household expenditure of the family. The rest is coming from savings, borrowings and sale of assets, which would not have been spent had there been no medical care requirement. Figure 3.1 shows that breakup of household expenditure.

Berman et al. (2010) estimate 63.22 million individuals and 11 million households pushed below poverty line when accounted for coping mechanisms. Otherwise, the figures are 73.9 and 13.9 million, respectively.

How much coping strategies works in distressed situation? In India, where poverty is rampant, incidence of hunger and malnutrition persists and condition of public healthcare system is worsening with more reforms, spending on health from our own pocket is always a burden. The following section will review the methods used to arrive at financial catastrophe and its impoverishing effects.

**Fig 2.1 Break-up of in-patient expense according to sources of finance
(Flores et al. 2008: 1396)**



2.3.3 Methods of OOPE estimates

The idea of Head Count Ratio (HCR) and Poverty Gap Ratio (PGR) is obsolete and much debated in the literature of poverty estimation (Sen, 1976). It has been deployed across various studies to estimate the number of low-income families.

HCR, according to Sen (1976:219), has two fundamental problems. First, *Monotonic Axioms* that is when the income of a person below the poverty line is reduced it should increase the poverty measure. In other words, even if incomes of the persons below the poverty line are reduced to zero, the headcount remains the same. Second, the Transfer Axiom that is if income is transferred from the person below the poverty line to the person above the poverty line the poverty measure should increase. However, if all the income is transferred from persons below the poverty line to those above it, the count remains unchanged. To understand in simpler terms, it doesn't address the question of inequality.

The Poverty Gap Ratio (PGR) is slightly more advanced than HCR. Only difference is that the PGI also measures the average depth of the household from the poverty line. However, PGI satisfies the monotonic axiom but fails at transfer axiom. That is to say, if

everything remains constant, reduction of income of person below the poverty line will increase the poverty measure, but transfer of income from poorer to poor household will not affect it.

PGR and HCR are the most popular methods for examining the effects of OOPE on household poverty (Wagstaff, 2008). However, it could never capture the severity of such expenditures. First and the foremost problem is the availability of robust national level data which could give a clear picture of what is going on. Though there have been attempts made by individual studies to provide an estimate, the variance caused by different social settings, items included, recall period is too large to draw any conclusion (Lu, 2009).

Moreover, it is popularly argued that not all health expenditure cause harm, only the catastrophic health expenditure. It is simple and easy to calculate, whereby, a certain threshold, let's say 25 percent of the income is spent on health is termed as catastrophic expenditure. Xu et al (2003) demonstrate that 1 percent increase in OOPE share of health finances leads to 2.2% household occurring catastrophic payments. However, according to Russels (1996), this method misses a large section of population that is the households with income less than the minimum income required for sustaining basic necessities of life. In such cases even if the family has to spend any amount on health, it has to forgo basic necessities of life such as food, clothing or children's education. Thus, threshold method may not hold true for the societies which have abject poverty and in many cases leads to underestimation of the problem.

However, the ratio approach for calculating catastrophic health expenditure doesn't give us the entire picture of the situation. The households which had to incur huge health expenses not only had to bear the cost of the illness but it changed the entire consumption pattern, from cutting back on other basic needs to the vicious cycles of debt. Russel (1996) proposes the same when it argues that ratio measure of catastrophic health expenditure is problematic, practically as well as conceptually.

There are two practical problems in the ratio method of calculating catastrophic health expenditure. First, in India employment is seasonal in nature and income is inconsistent, assigning a percent for health expenditure will be laden with inaccuracies. Even if

monthly expenditure is taken as proxy it may not hold true for entire year. Second, the use of the average estimates. The frequency and severity of illness are the determining factors in expenditure on health by the household, the average figures of health expenditure hide these important factors (Russel 1996: 222).

The conceptual problem is least discussed. Any form of expenditure is not assessed by how much it cost, but what one had to let go to make that expenditure that is the opportunity cost. Similar is the case with catastrophic health expenditure, its severity will not be known unless we know what the household had to let go to bear the cost. A well off household can let go unnecessary expenses while a poor household may have to compromise on expenditure on other basic items. Thus, the question of opportunity cost is unanswered by the ratio approach (ibid).

Opportunity cost leads to another problem of minimum basic needs. Nowhere in the “threshold approach” there is discussion on basic minimum needs which can’t be compromised. It is to say that even if a household is earning Rs 100 a month and we take 5 percent as the threshold for catastrophic health expenditure, the family spending Rs 4, according to the ratio approach, will not incur catastrophic health expenditure. One can imagine with the ratio approach the whole point of minimum basic need is eluded, earning Rs 100 a month is itself a question of enquiry any expense made on health, in this case would be catastrophic for the family.

2.4 Case Vignettes from Togurpally and Nandikandi villages of Medak district in Telangana⁷

Families from Togurpally and Nandikandi village of Telanagana inspired this dissertation. Our ten days stay as a part of a conducted field study in these villages gave us insights into public health problems in rural areas. Togurpalle and Nandikandi lie at the highway of outskirts of Hyderabad. Along with practising agriculture, residents of these villages often migrate to the city in search of employment in sleek seasons. Those practising agriculture are growing sugar and cotton for commercial purposes. The next

⁷ This section is based on the data of fieldwork report of students of 2016-18 M.Phil batch of CSMCH- Lakshita Sagar, Sarita Kumari, Sreekumar N.C, K Ranju Anthony, Dr Dinesh Kumar, Asrarul Haq Jeelani and Sonu Pandey. I am grateful to them for their help.

most grown crop is *tur dal*. Located on the national highway, road accidents and alcoholism are prevalent among the young men in the village. Every other household had a deceased member. Most of them were young men who lost their lives or were disabled due to road accidents. Families often complained about the men being involved in brawls after getting drunk. The ANM facilitating our visit to these villages had just lost one of her sons a few days ago in one of these drunken brawls. When the last Census was done, in 2011, Telangana was still in the imagination of the political movements struggling for a separate state. The new state was formed in 2014. Even as the census data is dated, it still gives an idea of the village demography. District census handbook of Medak District (2011: 6) reports that Nandikandi was upgraded to town, and was merged with Sadasivpet urban agglomerate. The demographic profile of Nandikandi was not available, but consultations with gram panchayat office revealed that Nandikandi has 3744 people living in 742 houses. Of these, 1891 are men and 1853 females. The village is spread across 1325 hectare. Table 4.1 shows the demographic profile of Togurpalle village.

Table 2.7- Village Profile, Togurpally, 2017

Census profile of Togurpalle	Togurpalle
Total area of the village (hectare)	930
Population	3478
Households	754
Net sown area	365.1
Total irrigated land area	165.9
Total unirrigated land area	613.2

Source- District Census Handbook: Medak, 2011

A large part of the village agricultural land is unirrigated, showing the acute crisis of water.. Farmers growing commercial crops like sugar and cotton are taking huge risks because, in water-scarce areas which are ecologically fragile, chances of crop failures are high (Vasavi 2012). These commercial crops also require costly input mostly purchased out of loans. If it fails to grow, the farmer's family will be in huge debt.

Like many of India's villages, caste organizes the social structure of Togurpalle and Nandikandi. Reddys are dominant caste owning maximum assets in terms of land and cattle. The Mallas the Scheduled Caste category are the next largest jati to own land. ... The intermediaries include the Gollas, Gaur and Padmashali castes. Gollas and Gaurs traditionally practised cattle rearing, but now they can choose their occupation, some of them were employed in government services. The lowest in the socioeconomic hierarchy are the Muslims. Discriminatory practices, though not explicit, were widely prevalent. Nandikandi's village has a Pochamma temple, which was constructed by a Gond. Pochamma was seen as a protecting deity against smallpox. This temple was restricted for entry by dalits. The sarpanch, a Reddy, did not allow an accompanying ASHA into his house. Muslims were discriminated against not only by the Reddys but Madigas and Mallas too.

2.4.1 Vicious cycle of medical expenditure and indebtedness: case vignettes

Bharathamma lost her daughter in law and her younger son in two different incidents. Just when she was coping with the trauma of losing half of her family, she was under a huge debt. Bharathamma's son was 22 when he committed suicide. He was running a small *kirana* shop. It has been 15 years since then. Later it was revealed that it was not a family feud but debt from an informal source. The loan was invested in leased agricultural land which was against the will of his elder brother. A few years later, in 2012, her daughter in law from the elder son got stuck into a high voltage electric wire. They rushed her to the government hospital in Sangareddy, but the doctors gave up and advised them to take her to the private hospital.

The mourning was not yet over, and a debt of seven lakhs was waiting to be repaid. Anjayanelu, the elder son of Bharathamma who works as a tailor in Sangareddy, had taken this loan from relatives and friends at the interest rate of Rs 3 per hundred per months (36 percent per annum) for expenses occurred at the private hospital. Those 45 days in the ICU were still vivid in front of his eyes, "*...no one ate in the family. Every other day we had to arrange for 50 to 70 thousand rupees so that the treatment continues. Relatives started demanding money for lunch which they provided us. For a*

moment I thought of giving up, but my daughters would allege me for not being honest with their mother. I did everything which the doctors advised but couldn't save her".

Once the families are in debt, they spend rest of their lives in repaying the loans by cutting other priorities.

Fatima struggled to repay the debt she took for her alcoholic husband's treatment. Fathima's husband, Mohammad Jaleel, drives auto-rickshaw for a living. Due to drinking illicit liquor he was diagnosed with liver cirrhosis. It had paralysed the right side of his body. Jaleel is the only earning member in the family of four sons and his wife.

No one was there to help Fatima when Jaleel was bedridden, *"I had to run to the hospital every day for reports and medicines. Some relatives had advised seeing the local healer. I did that too. The only wish was that he starts walking again."* Fathima had sent her kids to the relatives and took charge of the house, *"I had to bath and feed him before going to the fields. At times he would spoil the bed which I would clean after coming from a tiring day. I had no relief except in the late nights when I would sit alone and cry my heart out"*.

Jaleel can walk now, but his right hand is not fully functional. He has resumed his work and did not drink alcohol anymore. However, Fathima is haunted by the debt trap. The treatment was going on in KIMS hospitals, a private hospital in Kondapur block. She could recall spending four to five lakh rupees during the stay at the hospital including the cost of medicines. The sum was arranged through loans from relatives. She was also the part of a local self-help group, known as *dakri*, which had lent her a lakh rupee. What worried her most was her dignity in the community if she fails to repay, because, according to Fatima, the poor have no money but self-esteem. When asked about the one thing she would like to change to lead a happy life, she said, *"a lakh of rupees is still to be repaid. It has caused me a lot of stress. I am not able to eat and sleep since last six months. The doctor advised me to worry less. How can I worry less?"*

Not only catastrophic health expenditure has pushed families into debt, but it has also strained social relations too. Asgar Ali, another auto-rickshaw driver from the village, had lost his arm in a road accident in 2007. Though he didn't take a loan, he had to spend his father's entire savings on his treatment. His brothers called him a curse, born to ruin

the family, for Asgar had left nothing for his brothers to inherit. Asgar has now set-up a kirana vending stall in the village which will soon be uprooted as a water pipeline is being laid.

In the same hamlet lived Zaibun Nisha. Her mother died of cancer, but she doesn't want to discuss anything. She had only one explanation at hand, "*bhagwanbhi gareeb ko hi satata hai*" (even god exploits the poor). Another family suffered a similar fate. Sudhakar was the head of the family, worked as government electrician. He died while working. To get a job at his place, his son filed a case which cost him lakh rupees. Again, the loan was arranged through informal sources. The family was beneficiary of state government health scheme, but no one in the family could benefit.

Barathamma sold her land to repay the loan. Fathima suffered from depression. Her children are with relatives now. Asgar got separated from his family and lives alone. Anjayanelu had only one last task ahead, to fulfil her daughters' dream of pursuing a medical education. For that, he was prepared for another round of debts.

Debts, bad health, anxiety, trauma, stress dominated the lives of residents of Nandikndi and Togupalle village. In an ecologically fragile zone where water is scarce, they are cultivating cotton and sugar. At the same time, crop failures led them to diversify their income, looking for employment in the city. Laden with debt due to agriculture and social rituals, life is between repaying loans and praying that another calamity does not occur. Men of the village are resorting to alcohol to deal with the trauma of their lives. Women are doing multiple jobs to support the family, and children are compromising their education.

No families received any assistance from the government even after being eligible for the scheme. Those who received, it was in the fragmented form. Rajeev Arogyashree, state government health scheme, at most can save them from medical debts. Still, loans for other purposes are at their head. The vicious cycle continues.

2.5 Conclusion

Universal Health Care is proposed as a solution for making quality health care accessible and affordable for all. But it has done nothing substantial until now. In fact, there is no

clear picture how it would operate with the presence of large private sector and how it will provide affordable health care for all. The urban bias in health care still persists. Since perception of good health vary culturally, morbidity figures are reported more from the urban areas and lack access to quality care puts more stress on the rural. They are borrowing more than their urban counterparts for health. On the other hand, research on household medical expenses is only focusing on financial aspect of health spending and discounting other financial stresses which these families face while paying for health. Given rampant poverty, malnourishment and extreme social and economic inequality in India, a holistic understanding of medical expenses is required.

Chapter 3- Policy Response: Fragmented or Comprehensive?

Introduction

In the previous chapters, I have established that agriculture loans are burden on rural households. Besides they have to deal with rising medical expenditure. Crop failure, ill-health, natural calamities are frequent, causing death and destitution to already deprived families. The ever-rising Gross Domestic Product (GDP) fails to relieve the rural families' chronic deprivation and shocks. However, this is not so with the developed countries they have social security programmes for such situations. These social security programs are not 'gifts' from the government of those countries, but has a long history and tradition of social solidarity and welfare (The Spirit '45 2013). The nature of social security programs in developed and developing countries are entirely different. The former has institutions in place, a well-administered office of records and statistics and people being vocal for their entitlements, whereas in developing countries these factors are weekly developed (Burges and Stern 1999: 42).

There are a plethora of social schemes in India which addresses one issue or other. Some overlap, other exclude and some are by design faulty, excluding the one in need. William Beveridge in his report, submitted to the British Government in 1942, pointed out five giants on the road of reconstruction of society- want, disease, ignorance, squalor and idleness. Are social schemes addressing these five? We may have schemes addressing each separately, but the outcome might not be desirable. A life one values should be, at least, satisfactory on Beveridge's parameters of well-being. If any of this giant is dominant, one cannot realise their full potential.

India's social security programs are weak and lack a comprehensive approach. Dreze and Sen (2013) found health and education outcome is far below than its neighbouring countries with same or lower GDPs. Many from the well of class perceive employment guarantee schemes and Public Distribution System as a burden on the government. Social security schemes make people lazy is the popular perception. There are many families in tribal pockets of Odisha, Jharkhand and Chhattisgarh for whom these schemes are the saviour. This is not to say that their life is well off due to these schemes, but they are moments of respite when there is no employment or food, sometimes for the entire year.

Given the uncertainties people face and nature of social security schemes, how comprehensive are policies in addressing destitution and deprivation? In the following section, I have compared and contrasted good and bad of universal and targeted social schemes. Following is the analysis of health insurance and crop insurance schemes in India.

3.1 Targeted Social Security Programs

Before new economic reforms around the world in the 1980s, social policies in developing and developed countries were notionally universal. Keynes suggested that governments should buy from the market to keep the economy running. The social sector was a place where the government could spend money. Building schools, hospitals, road and other infrastructures so that more and more jobs are created which will keep the economy running. However, this logic started to lose its meaning when fiscal deficits of the governments started increasing. For the proponents of capitalism, it was a bad sign for any economy to grow (Kethineni 1991). From the 1980s onwards capitalist economies started pushing for aid to those countries where fiscal deficit had increased beyond control (see Williamson 1989). These were countries newly coming out from the colonial rule. The only criterion to receive these aids was to reduce spending on social sector. This is popularly known as Structural Adjustment Programs.

“Targeting” came out from the dictionary of SAP, proposed by the World Bank and International Monetary Fund (Jhabwala and Standing 2010). According to Sen (1998: 11) “target” is something which is static, has no value system, and something to be aimed at. But families targeted for any scheme are not like that. They are political agents who think, respond, act, and have agency. They are poor not because they only have inadequate income, but, due to a complex set of reason including social and political, they are not able to gather the means to live a fulfilling life (Sen 1992, Sen 2001). Also, let us not forget that these families have experience of surviving in the harsh circumstances.

In fact, the complex nature of targeting or selecting families has distorted the delivery mechanisms in a way that it cannot be corrected. Evidence from fieldwork in rural areas shows that real beneficiaries are left out just because they had names wrongly entered in

the record, or some family member was not present during the time of beneficiary selection (Sainath 1996). This is one such stage, beneficiaries have to cross many stages before they could receive the benefit and at each stage there are fair chances of exclusion (Jhabwala and Standing 2010). Therefore, the inclusion and exclusion debate of targeted programs are another set of problems of which increasing administrative burden is one. This shows that ever since targeting came whatever functioning these social schemes had are now hampered. In fact, the ideal situation of targeting, where benefits reach only the poor can never exist (Basley and Kanbur 1991).

Despite knowing all the shortcomings, targeting is the favorite area for policymakers. Targeting was attempted in Eighth Five Year Plan (1992) in India. To list the household in Below Poverty Line Category, the Government of India conducted a nationwide survey. It requires two steps to target beneficiaries of any anti-poverty scheme successfully. First, an estimation that is how many people are poor? Second, identification that is who are these poor families? Once these two exercises are successfully carried out, a list of eligible families is prepared.

However, the process of estimation and identification is not as easy as it appears. Estimation itself has a history of debate. For estimating the number of low-income families, a poverty line was needed. The idea was to derive a minimum income, families earning below that will be considered poor. Rath and Dandekar (1971) estimated minimum calories required for living in rural and urban areas. Using these estimates, Y K Alagh Committee (1979) recommended that any family unable to earn income to meet the minimum calorie of 2100 in urban and 2400 in rural area is poor. On the similar lines, Lakdawala Committee (1993) estimated another figure of minimum income. This time, they had recommended for updating separate poverty line for each state using consumer price index. It was the Tendulkar Committee (2005) which broke the practice of considering only minimum calorie requirement and incorporated household expenditure on health and education (PRS 2013).

While these committees were setting up criteria to estimate and identify the poor, the real task was at the hands of National Sample Survey Office. After the first survey conducted in 1992 to list out BPL families, next surveys were conducted in 1997 and 2002. In the

latter two surveys, income was dropped as sole criteria to identify low-income families and set of inclusion and exclusion criteria was defined. For example, those who had more than two hectares of land, a motor vehicle, *pucca* house and so on were excluded. However, these created a situation where families tend to hide their income and asset status to continue the benefits of BPL cards (Jhabwala and Standing 2010).

Later, the percentage estimates of poor households generated by NSSO by sampled household were imposed on the states. In a way, states were asked to list households which should not go beyond the estimates (ibid).

Meanwhile, Jodha (1988) illustrated a situation where families falling below the poverty line in two successive surveys had improved their living condition which deteriorated for those who were just above the poverty line. Before moving to the illustration, Jodha (1988: 2421) summarizes the fallacies of research in social sciences. The categories used to capture destitution in rural surveys are restricted to measurable variables only. For example, income is measured by the conventional method, but categories considered important by farmers like their perception of their families economic status is altogether missed out (ibid: 2422). Following the limitations of capturing complex indicators are the yardsticks devised by policymakers to assess poverty. For instance, a farmer reports farm manure regarding per cart, but the researcher assesses it regarding quintal (ibid: 2421). Similarly, the degree of precision of recording quantitative measures is often vague. Most of the time, income reported by respondents is in a range, say 15-20 thousand, but in the survey questionnaire, a precise figure is recorded.

Jodha (1988) resurveyed two villages in western Rajasthan in 1978. “Unconventional indicators” were developed after a prolonged stay in the village. These indicators were recorded and matched with the indicators preferred by the economists and policy makers (see table 4.1).

What had happened to the living condition of these villages after 20 years? Once the survey was done, these figures were compared with the 1964-66 survey data. Many appalling facts came out which could not have been captured otherwise. Though the average per capita income had increased, not much increase was found when inflation was factored. According to the survey, the income of 38 percent households declined by

more than 5 percent in the span of 20 years. However, according to the poverty line figures of that time, the number of poor households was only 23 percent.

Table 3.1- Indicators developed by farmers

Indicators by Farmers	Indicators by Economists
Reduced reliance of the poor on traditional patrons, landlords, and resourceful people for sustenance, employment, and income;	Indicators of enlarging opportunity sets and or increasing number of choices (e.g. Employment, borrowings, marketing)
Reduced dependence on low pay-off jobs/options	Indicators of consumption activities with high-income elasticity (e.g. travel, slack season purchases, length of maternity feeding of women)
Improved mobility and liquidity position	Indicators of investment in lumpy consumer durables
Shifts in consumption pattern/practices	
Acquisition of consumer durables	

Source- Drawn from Jodha (1988)

Qualitative indicators made the picture clearer. In 1964-66 all the household relying on day-to-day petty purchases of key provisions reduced to 51 percent. Earlier no household possessed more than Rs 200 as ready cash; now there was 26 percent such households. During non-crop season no household was consuming green vegetables, now all of them could afford. Households consuming rice in non-festive season also increased to 14 percent. Household where maternity feeding to women up to a month or more increased to 23 percent from 6 percent. However, due to the selling off more milk outside the village, the consumption came down.

3.1.1 Limitations of targeting

Sen (1980) looks at the theoretical contradictions in targeting, Swaminathan (2000) analyses the Targeted Public Distribution System (TPDS), and Jhabwala and Standing

(2010) in their primary survey, point out the limitations of targeting. In all the three following limitations of targeting was listed out.

Targeting, otherwise known to reduce cost (Rothstien 2001 cited in Jhabwala and Standing 2010) is costing more. Sen (1992: 12) points out response and social costs of targeting. First problem is of information distortion, where families are forced to hide their true economic status because their entitlements are based on their poor economic status. It is not the case of mere information distortion, but a system where cheating is rewarded and honesty are punished. Most of the time to weed out non-poor the poor restricted from accessing the benefits. In Sen's own words-

“The picture is, however, more complex than that. Some would object—not without reason—to having a system that rewards cheating and penalizes honesty. No less important, any policing system that tries to catch the cheats would make mistakes, leave out some bona fide cases, and discourage some who do qualify from applying for the benefits to which they are entitled. Given the asymmetry of information, it is not possible to eliminate cheating without putting some of the honest beneficiaries at considerable risk (on the general problems underlying asymmetric information, see Akerlof 1984). In trying to prevent the type II error of including the nonpoor among the poor, some type I errors of not including some real poor among the listed poor would undoubtedly occur.” (Sen 1992: 12-13).

Swaminathan (2000) observes that large programs have large Type II errors (inclusion of non-poor) and small Type I errors (exclusion of poor). But for narrowly targeted programs exclusion errors are high.

Also, targeted subsidy leads to change in economic behaviour. Sen (1992) argues that information distortion will not change the real economic situation of the households, but it may discourage the members to not engage in economic activity. Any improvement in their condition will rob them off their entitlements which are harmful to any economy.

The saddest part is the stigma attached to targeted schemes. To avail any benefit the family has to declare them as “poor and destitute”. Some schemes do categorical targeting where they look for “a single woman who is deserted”. For this, a woman has to come and declare herself as “disserted”. This will not only leave out that woman who is not “dissertated” but also not supported by her husband. It will attack the dignity of the

woman, and in a patriarchal society like ours, she will become more vulnerable (Jhabwala and Standing 2010).

Targeting also increased the administrative costs. Identification and enumeration of benefits, record keeping, updating and correcting wrong information is costly as well as time-consuming. The more precise the targeting more will be the administrative costs and bureaucratic delays. Along with these costs, the procedure becomes invasive. While scrutinising the application forms of the claimants, the official look into the personal details. Though it may not sound very surprising, disclosing sensitive details on income and disability and the kind of enquiry goes into this procedure attacks the dignity of the claimant (op cit).

Social security for the poor remains poor. Once a particular scheme is targeted for poor, it loses its political meaning. Low-income families in developing countries have the least influence on the political processes. They are a weak link in building pressure on the government. The budget allocation, too, is reduced over a period. As a result, these schemes become more of a populist measure used for gathering votes, and seldom serve the intended benefits (Sen 1998 and Swaminathan 2000).

This is not to suggest that quantitative measures hold no values, or the poverty estimates are futile. But an overemphasis on these measures distorts the real problem. Similar issues are faced in public health too. For example, the case of Disability Adjusted Life Years (DALY) when used for designing public health policy distorts the disease priority. The problems precisely listed out are three. First, diseases like Tuberculosis, fever, leprosy, STD, which Indian planners kept on priority until the eighties, moved down in the DALY rankings. The burden of communicable diseases was restricted to 56 percent as against 46 percent on non-communicable diseases. Second, the statistics used in calculating DALY neglects epidemiological specificities. Diarrheal diseases causing morbidity is placed at a 21st position, whereas in the All India datasets it occupies first or, at most, second position. Third, classification of categories of ill-health in all India datasets use classifications done by layperson which also captures social perception, but DALY is restricted to bio-medical categories. Fever as a category includes both “specific and non-specific” infection in the All India datasets, which causes more than 50 percent

deaths. This figure is equal to diarrheal deaths and three times of maternal deaths. But DALY doesn't count non-specific infection. This distortion leads to only promote disease-specific vertical programs (see table 9.2 and 9.3 in Ritupriya 2001: 162-164).

3.2 Health Insurance Schemes

Risks to health were always there, but health insurance is a new phenomenon. Earlier when medical technology could not achieve much and health was a private affair, insurers never entered in this domain. It was after the world war that health technology developed and health insurance came into the picture (Cutler and Zechauser 2000). Now, health insurance as a financial model for providing health care for the population is dominant in developed and developing nations. In doing so, it has altered the structure of health care provisioning (Sengupta 2013).

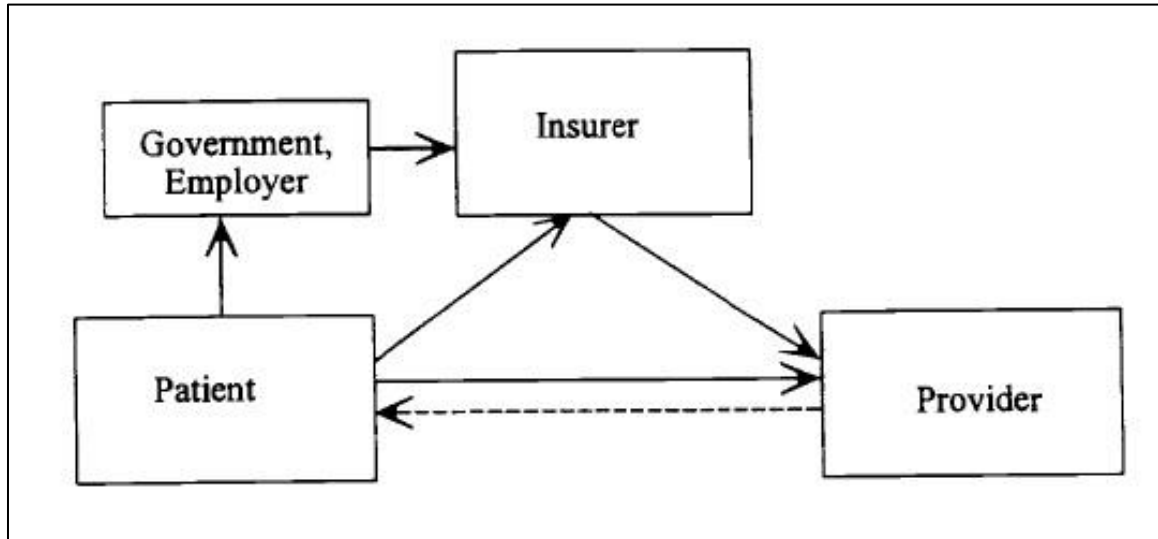
One of the most significant changes in health care system, after health sector reforms, is the role of government as “stewardship” instead of a provider of health care. The literal meaning of stewardship is conducting, supervising or managing something (Merriam Webster 2018). The government, which was earlier the provider and purchaser of health care, was now expected to only manage these activities (Selvaraj and Karan 2012). The providers will be the mix of public sector, the private sector and PPP mode. The purchaser will be the insurer which will purchase services for their customers from these entities. The government will pay only for targeted households insured through the publically funded health insurance scheme. However, this was not the case earlier. Before HSR, it was the government financed as well as provided health care. Figure 4.1 shows the medical triad (Cutler and Zeckhauser 2000), a simplified version of “stewardship”, showing the flow of money.

When the government assumes the role of manager and not the provider, the insurance companies and Third Party Administrators (TPA) becomes central to the health care system. Once they assume the central role, the problems relating to insurance model of health financing begins. Ghosh and Datta Gupta (2017) provide a synoptic view of problems of provisioning of health care through insurance.

In most countries, public and private health insurance exists together in two-tier system. Public insurance covers essential medical care. Private insurance is more into secondary

and tertiary care. However, both have to face the fundamental problems of moral hazard, adverse selection and supplier-induced demand.

Figure 3.1 Medical Triad



Source- Cutler and Zechauser (2000)

Moral hazard is a situation where the insured party tends to overuse the insurance. For example, one would not care enough to protect their property, if it is insured against theft. In the context of medical care Arrow argues-

“...in medical policies the cost of medical care is not completely determined by the illness suffered by the individual but depends on the choice of a doctor and his willingness to use medical services. It is frequently observed that widespread medical insurance increases the demand for medical care.” Arrow (1963: 961)

Here the physician and patients may lose their “morale”. The physician will not have any incentive in spending fewer resources. Neither the patient has an incentive in conservatively utilizing medical services. The cost of excess utilisation is borne by the insurance company (Cutler and Zechauser 2000).

Adverse selection happens when a high-risk individual chooses a moderate plan (those requiring less premium). Information asymmetry is at the heart of this problem. The insurers don't know about the individual and end up losing profit on the generous insurance plan. On the other hand, the insurance company would prefer those customers who have low health risks.

Cutler and Zeckhauser (1998) conducted a study on employees of Harvard University and Group Insurance Commission (GIC) of Massachusetts. Harvard contributed equally to the insurance of every employee. GIC subsidised 85 percent premium of every employee. Thus, chances of adverse selection were more among Harvard employees as the high-risk individuals were choosing the moderate plans. For the employees of the GIC, their insurance is proportionately subsidized by their employer, and thus they don't care much about the premium.

Supply-induced demand occurs when physicians unnecessarily prescribe procedures because the insurance companies will pay them. There are many cases where the unnecessary procedure was prescribed, and in some cases, the patient had to suffer. One such case is from Bihar, where 702 women got their uterus removed, without any reason, because that package was expensive under RSBY.

Theoretically, government as a single insurer could eliminate the problem of adverse selection, and market competition should bring down the price of insurance premiums. But, unlike Canada and France, where competition between public and private insurance has contained the prices, companies with RSBY in India made a huge profit because the claim ratio was very low. Where utilization is high, for example, Kerala, the premiums are expensive (Ghosh and Dutta Gupta 2017).

3.2.1 Publically Funded Health Insurance in India

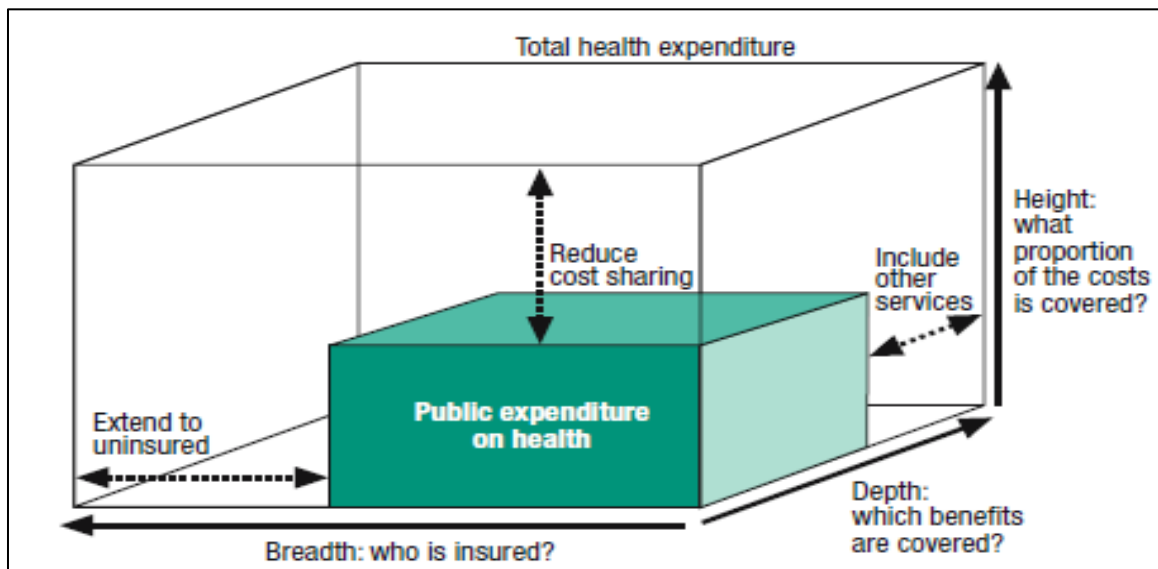
Central Government Health Insurance Scheme (CGHS) and Employees' State Insurance Scheme (ESIS) are one of the oldest health insurance schemes, started in the 1950s, but only limited to central, and state government employees. Health insurance for the poor in India was the outcome of health sector reforms in 1980s and 1990s (Baru 2015). It was after 2007 that plethora of health insurance schemes entered the scene.

To name a few, there are-

1. Rashtriya Swasthya Bima Yojana started, started in 2008 by the central government
2. Rajiv Aarogyasri Community Health Insurance Scheme, started in 2007 by Andhra Pradesh government.

The following section will analyse these schemes using the framework of depth, breadth and height of health insurance coverage (see figure 5.2). According to the World Health Report (2008), Universal Health Coverage is the answer to growing inequities. Though it might not address all the inequities, it provides a ground for doing so. Since health insurance is successful in tackling the inequities in health in developing countries, recommends the report, it should do the same in low and middle-income countries too. To gauge the coverage of health insurance WHR (1998) proposes a framework of breadth, height and depth on any insurance scheme. However, we should keep in mind that these are just the coverage of health care deemed necessary by WHO and other bilateral agencies. Whether it is translating into better health outcomes will be dealt with later.

Figure- 3.2 – Framework for Universal Health Coverage



Source- World Health Report (2008: 26)

Breadth of coverage- The report defines breadth as the proportion of the population covered under health insurance. And this should expand to the uninsured population. But the report nowhere suggests who should be the insurer, public or private. However, it acknowledges that the process will take time, and in that period, there should be safety nets for the vulnerable population.

Depth of coverage- The 'essential' packages of health insurance schemes are depth of coverage. The broader the definition of 'essential' care, the more its depth.

Height of coverage- To what proportion pooling and pre-payment mechanisms finance health. Lower the proportion of OOP, higher the height of health insurance scheme.

Using these three parameters the next section will assess the RSBY and Rajiv Arogyasree scheme.

3.2.2 Rashtriya Swasthya Bima Yojana

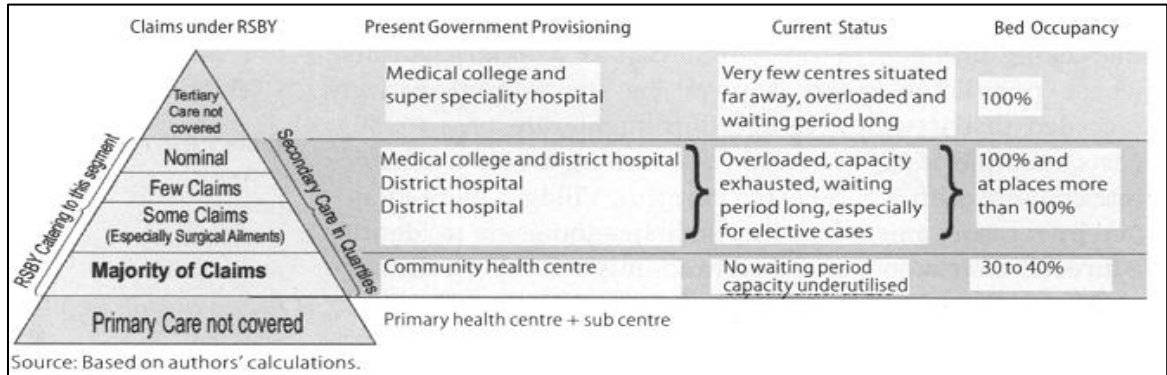
RSBY is a cashless health insurance program started in 2008-09 by the Government of India. The objective is to provide financial security to BPL families from hospitalisation and other related expenses, access to quality health care, expanding the choices of health care provider and transparency in accessing these services (Swaroop and Jain 2010).

Selvaraj and Karan (2012) attempted to find out the impact of RSBY in reducing out of pocket health expenditure. Using the case-control approach, data from NSSO 61st and 66th round of consumer and expenditure survey that was before and after RSBY was used. States with and without RSBY is compared using these datasets. In the period under study, the out of pocket expenditure on health had increased due to increased hospitalisation expense. OOPS is rising progressively while moving from poor to rich quintile. Again, this doesn't mean that poor are spending less, but have the least access to health care. In fact, catastrophic health expenses had marginally increased in this period (see table 4, *ibid*: 64).

The scheme itself depends on Below Poverty Line list available at village and block levels. As discussed earlier, these lists have problems of inclusion and exclusion. Even after obtaining a BPL card, chances are fair that a family is excluded from RSBY benefits. Conducting a primary survey in Amravati district in Maharashtra, Rathi et al (2012) explored the inclusion-exclusion in RSBY. It was found that only 39 percent of BPL families are enrolled in RSBY scheme. Among the families who missed enrollment, 60 percent were not present when TPA came to their village for registration. Those villages which had fewer household had better enrollments. Ghosh and Mladovsky

(2014) also find that there is better enrollment in Muslim dominated areas because the TPA could find many BPL household at one place.

Figure 3.3- Quartiles of Healthcare



Source- Rathi et al (2012: 60)

Better enrollment leads to more settlement of claims. In Amravati district, an average of Rs 5,334 was claimed by 8,225 families (op cit: 60). To disaggregate the data of claims, Rathi et al (2012) had prepared a disease quartile map. Dividing health services under the broad categories- primary, secondary and tertiary, RSBY is catering only secondary services. Based on their calculations on claims data, Rathi et al (2012) divides secondary care into four quartiles. The lowest quintile contains majority of claims, followed by some claim, few claim and nominal claims (see figure 3.3).

It was also observed that majority of the cases (58 percent) were for simple procedure, whereas emergency and semi-emergency accounted for only 12 and 13 percent, respectively. The reason behind the absence of emergency care, which is more costly, is poor access to hospitals and uncertainty in taking up complex procedures (ibid: 61).

Karan et al (2017) evaluated RSBY using three waves of NSSO data (1999-2000, 2004-05 and 2011-12) and administrative data from district level offices, for enrollment and out of pocket expenditure. The study found that by September 2016, 41 million health cards were issued covering 150 million people and 460 districts are participating. The enrollment ratio at national level is 57 percent but regionally it varies. In Kannauj and Kanpur *dehat* district the enrollment is 3 and 6 percent, respectively. It goes beyond 90 percent in many districts of Kerala and Chhattisgarh.

The coverage of the scheme is fair but the utilization is quite low. Out of 35.5 million families enrolled between 2008 and 2012, only 5.8 million hospitalisations were recorded. According to the estimates from Karan et al (2017: 90), NSS 71st round projects 0.4 per person in the BPL group and by this rate the total covered population should have experienced 50 million hospitalizations. It concludes that overall there was no effect on OOPE on health due to RSBY.

3.2.3 Rajiv Aarogyasri Community Health Insurance Scheme

Rajeev Aarogyasri Community Health Insurance Scheme (RACHIS) was started by Andhra Pradesh government even before RSBY, in 2007. The objective was to achieve “Health for all” by saving poor families from falling in debt through free insurance and improving overall health care infrastructure. The care will be provided through Public Private Partnership (PPP). A sum of Rs 150,000 is reserved for BPL families, and additional sum of Rs 50,000 is kept reserved for unexpected expenditure (GoI 2010).

Apart from providing free health care, RACHIS was used as political tool to gather votes for the Congress party in 2009 assembly elections. The scheme was widely studied to replicate this model in other states. In fact, RSBY was designed keeping RACHIS in mind (Prasad and Raghvendra 2012).

Prasad and Raghvendra (2012) analyzed RACHIS from political economy perspective and argued that RACHIS is feeding private hospitals on the expense of states. PPP, proposed as a model to propagate RACHIS, was initially implemented with Emergency Medical Relief Insurance (EMRI) and ambulatory services. Further, the medical technology is aggressively imposed on the poor. The medical neo-liberal discourse projects fancy hospitals as the choices poor families have. However, given their dire circumstances and the opportunity provided by RACHIS, they have no other option but to embrace medical technology (Prasad 2007).

While analyzing data from Aarogyasri Trust, Prasad and Raghavendra (2012) found that 35 percent of the surgeries were performed in Hyderabad alone, 34 percent in Vijayawada, Vishakhapatnam, Guntur and Kakinada. Remaining 24 percent of them were performed in Nellore, Warangal, Chittoor, Karimnaagar, Kurnool and Rajmundry. All of

them are big cities and urban centres. In the small cities where health infrastructure is poor, only 7 percent surgeries were performed.

Looking at the public-private distribution of surgery cases, 83 percent were performed in private sector hospitals and rest went to the government hospitals. District wise distribution shows that 90 percent of the surgeries were conducted in private/corporate hospitals in 17 of the 23 districts and in remaining 6 districts the ratio of public-private hospitals is 75:25(ibid). Interestingly, government hospitals have better utilized funds allotted to them by Aarogyasri trust. For example, in 2006 Gandhi Hospital, in budget of Rs 12 crore only, conducted 25,893 surgeries. On the other hand, by August 2008 private hospitals conducted 59, 846 surgeries in a huge budget of Rs 225.2 crore (Raja Reddy 2008 cited in Prasad and Raghvendra 2012). The per-capita utilization of Aarogyasri funds is more efficient in government hospitals.

Similar to RSBY, in RACHIS the private hospitals prefer cases which are more remunerative with least risks. Prasad and Raghvendra (2012) analysed data from 20 big private hospitals and 11 government hospitals and found that most of the high cost surgery was performed at private hospitals. On such instance was observed in Kondapur block of Medak districts-

“...when a patient named Sattemma, aged 35 years from Kondapur village of Anantsagar mandal in Medak district suffering from a tumour, approached a corporate hospital in Hyderabad, the neurosurgeon indicated that the surgery would cost about Rs 2 lakh and require longer post-operative care and immediately referred her to Osmania General Hospital...there were instances reported where private hospitals did not admit emergency cases related to critical care, polytrauma, etc, and patients were asked to approach government hospitals. Indeed, post operative care has been one of the grey areas in Aarogyasri where the sick-poor are discharged without adequate post operative care and any expense arising post-operative complications would have to be borne by them” (ibid: 123-124)

Apart from avoiding complex procedures requiring post-operative care, private hospitals also tend to perform unnecessary surgeries. Out of 30,090 cases in Warangal, 3,346 were related to hysterectomy, between August 2008 and August 2010 (ibid). Not only in Warangal but reports in the media are flooded with the cases where unnecessary surgeries are performed under RACHIS to make profits (Reddy and Mary 2013).

Narsimhan et al (2014), through in-depth qualitative assessment, highlights the non-financial barriers to RACHIS. The study revealed that irrespective of financial barriers the poor were taking loans for accessing quality health care. Also, most of the beneficiary families were not aware of the scheme. This was also found in the experimental study conducted by Das and Leino (2011) for RSBY. The procedures which are covered, government regulations, and other facilities like transport costs were not known to the beneficiary families. The families availing these benefits are not confident enough to enquire about their entitlements.

Apart from lack of awareness and confidence among the poor, mistreating patients, especially women from lower socio-economic background, is also common among health care providers. As Narsimhan (2014) notes in an ethnographic study of child birth practices-

“Van Hollen (2003) in her ethnography of childbirth practices in Tamil Nadu describes in detail the humiliating ways in which women from particularly lower socio-economic backgrounds are treated in health care facilities, not only by biomedical practitioners but also by paramedical staff. From being called “bad mothers” for refusing to give colostrum to new born babies (which conflicts with local cultural practices) to being taunted with sexual innuendos while undergoing sterilization procedures, women endure significant physical and verbal abuse in these hospitals, more so because they are seen as mere recipients of state largesse. Such experiences serve to intensify the feeling of mistrust and fear about public health care facilities. This feeling is widespread, and vested interests are able to exploit this to their advantage, particularly in rural areas” (ibid: 94)

In the field observation in Togurpally and Nandikandi villages of Medak district too, we came across families who, in spite of Aarogyasri Card, could not help but spend after taking loans from friends and relatives (see chapter 4).

Thus, RACHIS and RSBY could not stand the test of depth, height and breadth of coverage. It failed to reduce the household health expenditure as intended. All the “profitable” cases are handled by the private hospitals in the big cities. The poor families in the rural areas have to travel long distance to avail these services and they end up paying for transport and stay in the cities. There may be exhaustive lists of procedures, but RACHIS was effectively used by private hospitals only preferring procedures having least post-operative care. Lastly, focusing mainly on secondary and tertiary care may not

yield better health outcomes for the population because people living in rural areas are still facing burden of infectious diseases, which can be tackled only through a robust primary health care system.

3.3 Insurance in Agriculture

Insurance is a recent phenomenon while dealing with uncertainties in health. However, crop insurance for uncertainties in agriculture produce is deliberated upon since independence. In a country like India where majority of the farmers depend on monsoon for irrigation and crop failure is leading to indebtedness, stress and suicide, crop insurance is one of many strategies adopted by the government to tackle uncertainties in agriculture (Dandekar 1976, Shastri 1986). Interestingly, not many private insurance company take interest in agriculture insurance given the uncertainties and risks involved (Nair 2010).

Two major crop insurance schemes- Comprehensive Crop Insurance Schemes (1985-1999) and National Agriculture Insurance Scheme (1999-2015-16)- existed before coming of Pradhan Mantri Fasal Bima Yojana (ibid). Other crop insurance schemes are Modified National Agriculture Insurance Scheme (MNAIS), Weather Based Crop Insurance Scheme (WBCIS) and National Crop Insurance Program. Table 5.1 shows the glimpse of crop insurance in India.

Table 3.2- Glimpse of crop insurance: India

Total famers insured	36.9 crore
Total area insured	51.3 crore ha
Total primium collected	Rs 3,13,00 crore
Total claim paid	Rs 5,87,11 crore
Total farmers benefited	13.5 crore

Source- Bhushan and Kumar (2017)

Also, while analyzing the nature and extent of indebtedness in rural parts of India, it was observed that only well-of farmers are accessing formal sources of credit, while the small and marginal famers are relying more on informal sources (see table chapter two). Even fluctuating rainfall affects famers with small or no land holdings, differently (Alier 2002;

Vasavi 2012). When accessibility of formal credit is biased towards a certain section of farmers and climatic conditions are beyond the farmer's control, it becomes necessary to probe the role of crop insurance in relieving rural households from debt and distress.

3.3.1 Working of Crop Insurance

There are two types of crop insurance in India. Yield based insurance where indemnity is paid based on farm produce and weather based insurance where indemnity is paid based on the recorded rain fall. In 1976, Government of India constituted expert committee under V M Dandekar to look into the feasibility of yield based crop insurance in India. Dandekar (1976) highlights problems with yield based insurance approach.

First, since insurance intends to address uncertainties due to fluctuating crop outcomes, this would require assess each year the crop output of each insured farmers. Previous year of crop production will also be required to ascertain the 'normal' levels of output. However, defining the 'normal' levels of output entails a varied set of definitions which Dandekar summarizes as-

“To begin with the normal output of an insured farmer might be defined as high average output over the past few years, say five to ten years. It might then be duly revised as the data on his annual output from year to year becomes available. The 'normal' output might also be defined as his average output over the immediate past say five or ten years and hence might be revised every year. Alternatively, the normal output may be determined on the basis of certain norms cultivation appropriate to each farmer.” (Dandekar 1976: A62)

Following the problem of defining 'normal' and assessing current crop output is the calculation of premiums and indemnities. The rate of premium depends on terms of indemnities and year to year variation in crop output which will depend on sufficiently large enough statistical databases. For individual farmers, gathering such information is a herculean task and it will create much difficulty in determining the premium. Moreover, chances will be high of lower insurance officers exploiting the farmer.

Alternate to individual insurance Dandekar (1976) suggests insurance of group farmers, but with a condition, that payment of premiums should be made compulsory for each farmer. In this way, the problem of assessing output and deciding premium will be eliminated. However, if premiums are not made compulsory, groups with consistent crop

output will dropout from the insurance scheme. Over a period, premiums paid will exceed the indemnities received forcing the farmers to drop out of the scheme.

However, group based insurance and compulsory payment of premiums by farmers has the problem of adverse selection. Ifft (2001) while analyzing National Agriculture Insurance Scheme (NAIS) found that Punjab and Haryana never participated in the scheme. Given the high rates of agriculture produce in these states and provision of compulsory insurance NAIS they found the scheme as burden of less producing states. Also, while calculating the premiums based on the areas, only sample area is taken and premiums and indemnities are calculated (ibid).

Another form of insurance is monsoon based. Monsoon in India is uncertain and whether predictions are ambiguous, which is not the case in rest part of the world where agriculture is practiced (Chowdhary 2004). First whether based insurance in India was piloted for kharif crops in 2003 (AIC). Weather based insurance are area based too, but indemnities are paid in the event of adverse weather. Each area is compared with a 'reference area unit' (RAU) to assess the loss. RAUs are attached with Regional Weather Station where weather data is generated and claims are filed (ibid).

However, weather based insurance has its own problems. Nair (2010) points out that weather prediction are not accurate enough. More weather stations are required for accurate data. However, it will entail huge cost which will again push towards yield based model of insurance.

In addition, correlation between productivity and weather will define how better weather-based insurance is. The correlation is not directly between rainfall and crop, but multiple variables (temperature, relative humidity, wind speed, etc.) affect the crop production. If the weather index is poorly constructed, weather-based insurance will lose its sole purpose.

3.3.2 Pradhan Mantri Fasal Bima Yojana

Pradhan Mantri Fasal Bima Yojana (PMFBY) is the latest area based crop insurance scheme launched in April 2016 for kharif season crops. The scheme covers all farmers including share-croppers and tenet farmers growing notified crops in notified areas. It

covers food crop, oilseeds, and annual commercial/horticulture crops, beginning from the stage of sowing to post harvest losses. PMFBY has also a third party to assess losses of crop. Though it is not weather based insurance, it also protects farmers against extreme weathers. Actuarial rates will be followed while deciding the premium but farmers will be paying 2-5 percent of insured sum as per the crop.

Bhushan and Kumar (2017) in their analysis of PMFBY found that coverage of farmers, over kharif season 2015, has grown in 2016 for all the states except for Assam, Rajasthan, Tamil Nadu and West Bengal. However, average area insured per farmer has increased in West Bengal and Rajasthan, from 0.4 ha to 0.5 ha and 1.1 ha to 1.2 ha, respectively. However, farmers who are not borrowing money from the formal sources are not getting insured in this scheme. The study found that except for Maharashtra and West Bengal there was no increase in non-loanee farmers and there were not more than 5 percent non-loanee farmer in the scheme.

However, the fundamental problem with the scheme is that it assumes that the finance required to raise a crop per unit area is quite low. Even if large numbers of farmers are covered and indamines paid, it will not be of much help. Bhushan and Kumar notes in their case study-

“On the basis of cost of cultivation, the district-level technical committee (DLTC) in Bundi district, Rajasthan, had determined the scale of finance for soya bean, paddy, urad and maize crops respectively as Rs 50,000 per ha, Rs 65,000 per ha, Rs 30,000 per ha and Rs 40,000 per ha. However, the sum insured for soya bean, paddy, urad and maize was Rs 16,539 per ha, Rs 17,096 per ha, Rs 21,750 per ha and Rs 26,110 per ha, as per the Rajasthan State PMFBY Kharif 2016 Notification. This means that sum insured was just 33 per cent, 26 per cent, 72.5 per cent and 65 per cent of the scale of finance for soya bean, paddy, urad and maize crops respectively.” (Bhushan and Kumar 2017: 16)

Thus, PMGSY may also end up facing the problems of adverse selection where well of farmers will never engage and poor farmers will never benefit. Apart from this, very few states have assessed the crop loss after the implementation of the scheme which is causing delayed payment of indemnities.

3.4 Conclusion

The overall broad objective of health and crop insurance scheme was to protect rural households from financial uncertainties due to shocks. RSBY and RACHS are targeted in nature which has high chances of exclusion. Besides given its targeted nature, it entails administrative costs, corruption and exploitation at the hands of private hospitals. Targeting confines these schemes only to poor section of population, this makes them populist in nature for gathering votes. Because the low income families in India mostly landless and dalits who have least political agency to create pressure for entitlements. Long before RSBY and RACHS, Jodha (1988) demonstrated through fieldwork in two villages of Rajasthan how targeting was not successful in identifying families who really needed the benefits.

Moreover, health insurance schemes are benefiting private hospitals and nursing homes where cases are selected which has least post-operative care or has huge profit margins.

The crop insurance schemes face problems of assessment of premiums and indemnities. Given the regional inequalities in agriculture production, area based insurance further cause the problem of adverse selection. More than that, PMFBY is estimating lower prices of farmer produce based on that the indemnities which makes the scheme futile for the farmers.

Protection from debt induced distress in rural India requires a comprehensive policy. However, to deal with the problem of indebtedness the fragmented approach has left the rural household in utter state of despair. Different schemes in different ministries are excluding the real beneficiaries and unnecessary increasing the administrative tasks. In Togupally and Nandikandi village of Telangana, families are suffering from catastrophic health expense and agrarian crisis, are struggling for fulfilling the requirements of being identified as beneficiaries. Even if they are identified there is no guarantee that they will receive the entitlement. Fragmented policy approach to reduce distress is leading nowhere but creating further conditions of distress.

Chapter 4- Conclusion

4.1 Nature and Extent of rural indebtedness in India

Bharathamma from Togurpally village had multiple loans at her head. While a sum of seven lakh for her daughter in law's treatment at a private hospital was not over yet, her son was preparing for another loan for his daughter's education. Long before going in for these loans, younger son committed suicide over a large loan that he had taken for agriculture with interest at the rate of 36 per cent per annum. Lastly, Bharathamma was forced to sell her land to repay all her debts. The only source of income she depends on is the small shop in the village. Families like Bharathamma under multiple debts are many in the rural parts of India. NSS's 70th round shows the debilitating nature and vast extent of rural indebtedness in India.

The NSS 70th round report that average outstanding debts are highest in Kerala followed by Punjab, Andhra Pradesh, Telangana, Karnataka, Haryana, Tamil Nadu and Maharashtra. Also these are the states where green revolution has led to heavy dependence on agriculture technology and GATT exposed them to competition from developed parts of the world.

In these states, burden was more on non-cultivating households as the average amount they borrowed formed a large part of their assets (DAR). The cultivating household has higher incidence of debt but it is not that large a part of their assets (see table 1.1). Besides, incidence of indebtedness is more among non-cultivating low-asset households, and that among cultivator household is highest in families in top asset quintile. Moreover, non-cultivator households are the ones borrowing from non-institutional sources.

The bad part of non-institutional sources of borrowing is the arbitrary interest rates charged by the money lender. Among the families living in Togurpally and Nandikandi, one of them was paying 36 per cent per annum and those borrowed from friends and relatives also had to pay interest. In the samples of NSS 70th round a large number of rural household was paying simple interest, 203 per thousand households. This is a problem, because increasing simple interest would mean more private money lenders. Whereas compound interest was paid by only 63 per thousand households (see table 1.4). As for the purpose of loans are concerned most of the families in low asset holding

classes in the rural areas are borrowing for non-business purposes. Loans borrowed for non-productive purposes yields no value for the borrower and push them for further loans to repay the earlier loans. Borrowing for non-productive purposes pushes families in further distress.

However, the NSS 70th round survey makes more sense when the social aspects of indebtedness surfaces. Beginning from the social organisation of villages, credit plays a central role in agrarian relations. Despite the debate over classification of attached labours and the freedom they can enjoy while being in a contractual employment, informal credit from the landowners bars them from seeking employment elsewhere. The extra-economic coercion comes into play when an indebted farmer tries to seek mobility in employment.

Apart from influencing agrarian relations, agriculture debts are also influenced by agro-climatic conditions. States with highest number of farmer suicides are ecologically fragile with large tracts of arid and semi-arid lands, increasing the chances of crop failure. Climatic conditions are not in favour of commercial agriculture and technological inputs required to compensate for climate variations are restricted to large famers. Government's support against unfavourable climatic conditions is altogether missing except for loan weaver and crop insurance schemes. Moreover, commercialization of agriculture and linking it with the world market for open competition is the top priority of the government in these states.

Loans taken for agriculture and other purposes also affect the day-to-day relation in the village community. The transformation of economy into neo-liberal regime has affected the social fabric of the village society which has made farmers an individual entity fighting for survival. Vasavi (2012) terms it as "individualisation of agriculture". At one hand it increased the competition among famers for better income, raises their aspirations and hopes. One the other hand, it corroded the social bond among farmers, they became individual entities competing for their survival with no external support at the times of crisis. When the coping mechanisms for survival fails the indebted farmer, who is most of the time the male head of the family, has to face humiliation and commit suicide.

The women of the family have entire responsibility on their head when the large debts force them to take additional responsibility of maintaining a stable source of income for debt repayment. In Togurpally village the family of Fatima depicted the same situation when her husband was bedridden for six months and she had all the responsibility of the house on her head. Although only a small part of debt is left to repay, Fatima suffers from depression and anxiety as the episode of bad health of her husband and the following debt had revealed her vulnerable condition in front of her relatives and neighbours. Additionally, accessing debt for women is troublesome when the money lender is a man from the caste higher than that of women. Chances are high that they will be sexually exploited if re-payment is not done in time. Fatima herself didn't like borrowing from her relatives, but she had no other option left.

4.2 Rising Medical Expenditure

Adding to the burden of agrarian debts and its varied dimensions is the rising medical expenses among rural households. All the families we met during the fieldwork in Togurpally and Nandikandi village had huge medical expenses attached with other debts. With the growth of private hospitals in last two decades huge medical expenses has become common phenomenon in every household.

Health has become a sector where money is invested to make more money. This was evident in the World Health Report (1993) when it called for cost-benefit analysis for every health interventions made. The idea was quite opposite of Alma Ata's (1978) conceptualization of health as one of the foundations of development. With health sector reforms private sector was favoured on expense of public money. It was this period which saw the rise of multi-speciality corporate hospitals on government subsidies, most of the time under the guise of Public Private Partnership (PPP). The reason for collaboration with private sector was to tackle the huge burden of health care on the state. However, never the government expenditure on health has moved beyond 1.5 per cent of GDP which clearly indicates that health was never a burden at all. Indeed, terms such as "essential services" robe of the true spirit of "health for all" promised in the Alma Ata declaration (1978). The preceding decades saw exponential increase in hospitalization costs, drug prices, and outpatient care.

The outcomes of these changes are evident in NSSO 71st round. Families living in rural areas have least accessibility to health care. In the sample, 15 per cent of rural households have foregone medical care because no medical facility was available nearby. On the other hand, more people in rural areas are depending on primary health centre and sub-health centre in rural than the urban areas. Similarly, government hospitals are more frequented in rural areas. Thus, it is clear that private hospitals are not going to take care of rural population.

The report also finds that cost of care has increased, especially for hospitalised care. However in the report, the average cost of hospitalization is more in urban areas. This explains the problem of medical care foregone due to inaccessibility and rising medical care costs.

Most importantly, a large part of money for paying hospital bills are either from household's income/savings or borrowed from non-institutional sources. However, borrowing for medical expense is more among people in the rural areas. This should be read with the number of people in rural areas borrowing for non-productive purposes from non-institutional sources (see table 1.5).

What NSSO has reported is only a part of the problem of catastrophic health expenditure. Different studies have used NSSO 60th round and previous rounds to gauge the extent of impoverishment caused by catastrophic health expenses. No doubt, these studies show the rising incidence of catastrophic health expenses over the last two decades, but they have captured only aggregate level of health expenses. Only those families are captured which have been impoverished with respect to pre-decided poverty line by spending major share of their consumption/income on health. Methods like Head Count Ratio (HCR) and Poverty Gap Ratio (PGR) are already critiqued for being just an income indicator and missing out on other qualitative and quantitative aspect of standard of living. There has already been a long tussle for defining poor standard of living only as the function of low income.

In fact, all the families interviewed in Togurpally and Nandikandi could not have been captured studies estimating impoverishment due to medical expenditures. These families had debts not only for health but for other purposes like agriculture and education. These

families, except few who had RACHIS card, were neither below the poverty line nor well off. They are just earning enough to manage two square meals with breadwinner of the family struggling for daily wage employment in Hyderabad. For last many years Fatima and Bharathamma had loans on their head for hospitalization yet they were taking loans for education of their children. For them agriculture income is not enough for subsistence Russell (1996) argues, if families earning subsistence and below subsistence level income for spend anything on health they are cutting back on other priorities like children's education and food, which are necessary for descent standard of living. However, methods like arriving at a threshold expenditure, and expense beyond that threshold point should be treated as catastrophic expenditure, totally misses out this point. In India, where poverty is rampant and majority is engaged in agriculture with meagre or no income from farming chances are high that threshold method of assessing catastrophic health expenditure will miss out those families who struggle every day for food.

Case vignettes from Togurpally and Nandikandi of Telangana corroborates the problems of studying medical expenditure. Telangana is among one of the states with highest incidence of debt and famer suicides. Informal loans for agriculture are taken only for losing to the erratic climatic condition or to the fluctuating export markets. These very families when face huge medical expense they are in acute crisis. They had to forego their children's education. The health expense of other family members, especially women, is neglected. It also caused visible fall in standard of living, strained social relations, anxiety, depression and other mental health issues.

4.3 Policy Response

Policies for tackling the problem of rural indebtedness are fragmented in nature. Medical debt has augmented the overall rural debts and its consequences are no different, but worse. However, policies are dealing with indebtedness through vertical schemes who never speak to each other.

Secondly, the schemes are targeted in nature and have high chances of exclusion error due to poor techniques of estimation and identification of low-income families. Targeted schemes also cause unnecessary administrative burden without much cost savings. There

are ample evidences that suggest targeting based on income and identity also acts as barriers.

Thirdly, to tackle the problem of indebtedness, whether for agriculture or medical care, insurance is one of the dominant discourses these days. However, apart from fundamental problems of moral hazard and adverse selection, health and crop insurance has its own set of barriers which bars the real beneficiary. Health insurance schemes have become easy source of profit for private hospitals but it's the public hospitals which are better utilising the funds.

Fourthly, the Pradhan Mantri Fasal Bima Yojana (PMFBY) is not yet profitable for farmers because the financial value of the losses estimated are very low. Even if the coverage is high it won't solve the purpose of saving farmers from bad debts.

4.4 Way Forward

Given the complex situation of rural indebtedness compounded by medical debts targeted insurance approach is not going to tackle the problem of financial catastrophe in health. The of-late National Health Protection Scheme (NHPS) launched under Aayushman Bharat by the government of India in 2018 promises to cover ten crore vulnerable families by providing health insurance up to 5 lac rupees for secondary and tertiary care. However, like RSBY and RACHIS, NHPS is bound to face similar obstacles. Even if some families benefit, the other aspects of their lives which demand immediate financial attention remains unfulfilled. Apart from medical debts, families practicing agriculture has other loans to pay which are beyond any health insurance scheme to cover.

Thus, the way forward was long ago shown by William Beveridge in one of the three principles of recommendations made to the British Government in 1942-

“The second principle is that organisation of social insurance should be treated as one part only of a comprehensive policy of social progress. Social insurance fully developed may provide income security; it is an attack upon want. But want is one of the five giants on the road of reconstruction and in some ways easiest to attack. The others are Disease, Ignorance, Squalor and Idleness.” Beveridge (1942: 6)

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