A STUDY ON THE COVERAGE AND IMPACT OF PUBLIC HEALTH CARE SCHEMES IN MIZORAM WITH SPECIAL REFERENCE TO AIBAWK RD BLOCK

A Dissertation submitted in partial fulfillment for the award of the degree of Master of Philosophy in Economics

By

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CERTIFICATE

This is to certify that Lalhriatpuii Ralte has worked under my supervision and guidance on a research topic entitled**, "A Study on the Coverage and Impact of Public Health Care Schemes in Mizoram with Special Referance to Aibawk R.D. Block"** for the degree of Master of Philosophy in Economics, Mizoram University, Aizawl. The work embodies a record of original investigations and no part of it has been submitted for any other degree in other universities.

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DECLARATION

I, Lalhriatpuii Ralte, declare that the subject matter of this dissertation is the record of work done by me, that the contents of this dissertation did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and that the dissertation has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the Mizoram University for the degree of Master of Philosophy in Economics.

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(LALHRIATPUII RALTE)

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
APL	Above Poverty Line
AYUSH	Ayurveda, Yoga, Unani, Siddha and Homeopathy
BCC	Banker, Charnes and Cooper
BPL	Below Poverty Line
CBR	Crude Birth Rate
CCU	Committee on the Consequences of Uninsurance
CEO	Chief Executive Officer
CGHS	Central Government Health Scheme
CHC	Community Health Centre
CHI	Community Health Insurance
CRR	Charnes, Cooper and Rhodes
CS Pro	Census Survey Processing
DEA	Data Envelopment Analysis
DMU	Decision Making Unit
DoL	Department of Labour
Dy. CEO	Deputy Chief Executive Officer
ECHS	Ex-servicemen Contributory Health Scheme
ENT	Ear, Nose, Throat
ESIS	Employees' State Insurance Scheme
FMU	Fiscal Management Unit

GDP	Gross Domestic Product
HP	Himachal Pradesh
IMR	Infant Mortality Rate
IRDA	Insurance Regulatory and Development Authority
Km	Kilometre
MIS	Management Information System
MMR	Maternal Mortality Rate
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoLE	Ministry of Labour and Employment
MPRMP	Mizoram Public Resource Management Project
MR	Medical Reimbursement
MSHCS	Mizoram State Health Care Scheme
MTC	Monthly Total Consumption
NGO	Non-Government Organisation
NHIS	National Health Insurance Scheme
NRHM	National Rural Health Mission
OoP	Out of Pocket
OPD	Out Patient Department
OSD	Officer on Special Duty
PHC	Primary Health Centre
PHE	Public Health Engineering
PHFI	Public Health Foundation of India
PPP	Probability Percentage to Size

RD Block	Rural Development Block
RE	Revised Estimate
RGICL	Reliance General Insurance Company Limited
RGJAY	Rajiv Gandhi Jeevandayee Arogya Yojana
RSBY	Rashtriya Swasthya Bima Jojana
SDH	Sub-District Hospital
SIS	Sub-Inspector of Statistics
SPSS	Statistical Package for the Social Sciences
SR	Subsidised Regime
TB	Tuber Culosis
TPA	Third Party Administrator
UHC	Urban Health Centre
UK	United Kingdom
WHO	World Health Organisation
YMA	Young Mizo Association

CHAPTER 1

Chapter-1

INTRODUCTION

1.1. Introduction

Health is a concept used to reflect a sense of well being in the society. The World Health Organisation defines health as "a state of complete physical, mental and social well being and not merely the absence of disease or infirmity". This is considered too wide and not amendable for any meaningful economic analysis or for any resource allocation. Rout and Nayak (2007) suggested that health be construed as a condition of well being free of disease or infirmity and basic human rights.

People in poor countries tend to have less access to health services than those in better-off countries, and within countries, the poor have less access to health services (Peters et al. 2008). Large portion of the population in the poor countries are deprived of institutional heath care because of acute poverty. As these people have to pay from their own pocket for their health expenditure, they remained shied away from entering into proper health care, institutional or non-institutional, and thereby, rate of hospitalisation is very low even for critical illness. Since these people have to pay all the medical expenses out of their pocket, they hardly pay attention to the care of their health especially when money is involved. Thus the rate of hospitalization is very low even for critical illness. In case of hospitalization, out of pocket payment causes financial catastrophe and impoverishment of vulnerable households. The major problems faced by workers in the unorganized sector, who constitute 93

percent of the total workforce in India, is the frequent incidence of illnesses and the need for medical care and hospitalization of such workers and their family members is intense. These workers of the informal sector do not have such kind of social security from their employee. They have to borrow, take loan or use their savings in such situations. The consequent effect is further poverty as a direct result of medical expenses in the event of hospitalization. Thus, one should consider that health care financing is not only a welfare measure, but also an effective means of poverty alleviation in developing countries like India (Thanga, 2013).

The role and relevance of tax or social health based intervention has come to occupy central stage in recent years in several countries that are undertaking measures to reform health system. A tax-based health financing mechanism, as in UK, Cuba, and Sri Lanka or a broad based social health insurance programmes as in Germany, France, Mexico, etc. are key instruments of health financing strategy. Thus, community health insurance (CHI) has emerged as a possible means of improving access to health care among the poor. There is a growing inclination of both Central Government and many State Governments, towards using health care scheme as a means of improving access to health care delivery for large vulnerable sections of the population (Thanga, 2013).

Health insurance is an important factor in reducing barriers to care (CCU, 2002). According to Ulrich Laaser, “The health care financing system has a direct impact on the accessibility of care for people in need. Poor access

to health services rapidly leads to poverty and smaller future chances for a decent standard of living". In many developing countries lack of adequate health care budgets is a severe problem. Raising health care tariffs is not an adequate response to the increasing costs of health care. Lower income groups such as rural residents, unlike medium and higher income groups, lack the ability to pay and are more sensitive to price changes in health care services. Developing risk-sharing mechanisms, such as the provision of health care insurance can shield rural households from some of the cost of health care. Health insurance plays an important role in reducing the influence of high costs of health care on the economic wellbeing of households because health insurance turns unpredictable health expenditures into predictable insurance payments. (Asgari et al., 2004)

Health insurance is insurance against the risk of incurring medical expenses among individual. The participants of health insurance include insurer, provider, beneficiary and a Third Party Administrator, if found necessary. The key sub-functions of insurance schemes include revenue collection, risk pooling and purchasing. The source of funds, mechanisms used to collect funds and the agency that pools funds together are collectively referred to as the 'Revenue collection' function. 'Pooling of funds' refers to the accumulation and management of funds to ensure that financial risk of having to pay for health care is borne by all and not by individuals who fall ill. The third function is 'Purchasing Care' which refers to paying for health care (PHFI, 2011). What is essential in that purchasing is its 'strategic' character.

Strategic purchasing is present when there is an active search for the best health services to purchase, the best providers to purchase from and the best payment methods and contracting arrangements (WHO, 2000).

One of the key determinants of achieving universal coverage is presence of Political Will. Recent experience among middle-income countries (such as, S.Korea, Mexico, Brazil,etc) and even in lower-middle income economies (such as, Thailand) demonstrates that political will is one of the key determinant of achieving universal coverage even among the low and middle-income economies. The level of subsidization of premiums can also be the contributing determinants in enrolment of insurance schemes especially to poor and informal sector workers.

Public health insurance may also have a deleterious effect on the participants. Wagstaff & Lindelow (2008) reports that insurance appears to encourage people to seek more care from the expensive tertiary care providers, sidetracking primary care providers in the process. Another policy challenges for the implementation of community health insurance is the rise of moral hazard. This moral hazard can be traced through both the beneficiaries and the service providers such as cases where beneficiaries avail additional health care after being insured or service providers charge higher prices and prescribe costlier medication for the same result. Community health insurance schemes are subject to inherent problems of information asymmetry or adverse selection on account of lack of inbuilt mechanism for Management Information System

resulting in the failure of the scheme to deliver its objectives of health care delivery to the poor.

1.2. Scenario of Public Health Care Infrastructures In Mizoram

With a population of 10,91,014 persons, the state of Mizoram is presently employing only 347 doctors (of both regular and contract) in the hospitals and other health dispensaries. Thus, the government doctor-population ratio is 1:3144 approximately. These doctors can be consulted at a minimal cost by just paying OPD fee in the Government Hospitals. On the other side, huge portions of the doctor's population are outside government service and they open up clinics and private hospitals. In addition, even the government employed doctors are compelled to open private clinics to meet the demand. They charge a higher rate. The BPL families and those informal sector workers do not afford these private institutes. Thus, they have to approach the government hospitals.

There are 11 hospitals that is administered by the Government of Mizoram. Four of the hospitals are in the district capital, Aizawl. They are Civil Hospital, Aizawl; Deputy Medical Superintendent, Falkawn; Deputy Medical Superintendent, Kulikawn; Mizoram State Cancer Institute, Zemabawk. One Civil Hospital is located at Lunglei. There is a District Medical Superintendent each in Saiha, Lawngtlai, Serchhip, Kolasib, Champhai and Mamit. There is a total of 59 Primary Health Centres in the

state. Champhai district has the most number of PHCs in the state. There are 11 Community Health Centres spreading in the state. The Urban Health Centres currently serve only in Aizawl. The TB Hospital, Aizawl; the Urban Primary Health Centre at Hrangchalkawn, Lunglei and Tlabung SDH constitute the 'Others' column of the table 1.1. There are 347 Medical doctors (inclusive of both regular and contract) under the Government. As much as 165 (47.55 percent) of the doctors are in Aizawl district. Lunglei district has the second most number of doctors followed by Champhai. Lawngtlai district has the lowest number of government doctors in the state.

Table 1.1: Healthcare infrastructure in Mizoram: District wise

Sl. No	District	Hospital	No. of PHC	No. of CHC	No. of UHC	Others	No. of Doctors
1	Aizawl	4	11	4	6	1	165
2	Lunglei	1	9	1	0	2	51
3	Saiha	1	4	0	0	0	25
4	Lawngtlai	1	6	1	0	0	15
5	Serchhip	1	5	1	0	0	20
6	Kolasib	1	5	1	0	0	22
7	Champhai	1	12	2	0	0	29
8	Mamit	1	7	1	0	0	20
Total		11	59	11	6	3	347

Source: 1) Directorate of Hospital and Medical Education,
2) Directorate of Health Services. Dated 5.11.2015.

1.3. Public Health Care Scheme In Mizoram

The Government of Mizoram is committed to providing health insurance cover to its population and had implemented for all its population, except government servants and their dependents, a Health Insurance Scheme

called the Mizoram State Health Care Scheme (MSHCS) since April 2008. A registered society named Mizoram State Health Care Society was formed to oversee and undertake the implementation of the scheme. The Chief Minister was the Chairman of this Governing Body. An Agreement was signed on 1st April 2008 between the Government of Mizoram and an insurance company called the Reliance General Insurance Company Limited (RGICL) for a period of one year where the former heavily subsidized the health insurance premium. Public and private hospitals recognized and approved by the State Government both inside and outside Mizoram were empanelled to provide cashless treatments to the beneficiaries. Any person who is a bonafide citizen of India and residing in Mizoram, with the head of his/her family being in the voters list, is eligible to be covered under the scheme, irrespective of age. The scheme was implemented till 2011, and it was implemented by the Health Care Society on self finance basis afterwards.

Rashtriya Swasthya Bima Yojana (RSBY), a BPL scheme for the unorganized sector under Ministry of Labour and Employment was implemented across the country by the Central Government since 2010. The RSBY was linked with Mizoram State Health Care Scheme on top up basis since 2011. In an attempt to increase the breadth of health care coverage, the RSBY facility was extended to all Job Card Holders of Mahatma Gandhi Rural Employment Guarantee Act (MNREGA) since January 2013. The RSBY presently covers inpatient care of BPL and APL MNREGA Job Card holders and street vendors upto Rs. 30,000 per family per annum.

As per the record of Economic Survey of Mizoram 2014-15, the number of families enrolled under RSBY and MSHCS were 45461 and 31938 respectively during 2011-12. As of now, the total enrolment under RSBY stood at 47339 families in Mizoram (http://www.rsby.gov.in).

The various stakeholders and their respective roles in the implementation of health care schemes in Mizoram may be outlined as follows:

a) **State Finance.** The State Government is the sole authority of the financial management of the health care scheme. Initially, the budgetary allocation of Rs. 50 crores was used for health insurance by employing RGICL. This however, could not turn out successfully as anticipated. The Finance Department established a Fiscal Management Unit (FMU) to facilitate various reforms and act as Programme Management Unit and be responsible for daily implementation of a program called the Mizoram Public Resource Management Programme (MPRMP). With approval of assistance from Asian Development Bank (ADB) under MPRMP, an amount of Rs. 117.80 crores was released by the government of India at 90 percent assistance and 10 percent loan. Keeping in view with the long term sustainability of the scheme, the Finance Department decided to invest the amount in trusted financial institutions of the state. The necessary amount of money for keeping the health insurance scheme dynamic is released from time to time by the finance department to the implementing agency. The department also give financial advice to the agency: such as to lessen

spending when the current spending style sounds unhealthy; to have more freedom in spending when the interest earned is more.

b) **Mizoram State Health Care Society.** The Mizoram State Health Care Society (MSHCS) is the project implementing agency of health care schemes under government of Mizoram. The key function of the Society are 1) management of fund/corpus received from the State Government and other sources, ii) capacity building to improve implementation of the scheme, iii) supervision of provider networks, iv) settlement of claims, and v) coordination of enrolments and premium collection and all other key logistics of the scheme. Presently, the Society office has 24 staffs: 3 Doctors (CEO, Dy.CEO & OSD), 9 district coordinators, 6 claims supervisors & processors, 2 data entry operators, SIS, data manager, account clerk and chowkidar.

c) **Service providers.** Both public and private health care providers which provide hospitalisation and day care services, with desired infrastructure would be eligible for inclusion under the Scheme, subject to such requirements for empanelment as accepted by the Mizoram State Health Care Society. All Government Hospitals (including Primary and Community Health Centers) are automatically eligible for empanelment under the Scheme. However, claims from beneficiaries taking treatment at Government Hospitals would only be allowed for expenses incurred by them on drugs, consumables, etc., purchased from the market (on production of Cash Memos/Bills) and on minimal investigation/laboratory

charges levied by the Government Hospitals (on production of Cash Memos/Bills/Receipts). Expenses such as Diet, Nursing, Bed Charges, Doctor Consultation, Surgical Charges and other expenses which the Government Hospitals provide free will not be payable under the Scheme.

d) **Health Care Staffs (health workers):** Health workers of the sub-centre in each village are appointed to undertake the enrolment process. Those villages that do not have their own sub-centre are covered by the health worker of the adjoining village. The workers maintain a register to list down the enrolled beneficiaries as well as a cash memo or a receipt to disburse against each payment received. Health workers and medical personnel in the PHCs and Sub-centres have a high responsibility in imparting information to the target population.

1.4. Significance of the Study

Though the public health care schemes being implemented in Mizoram (i.e. MSHCS and RSBY) are among the most universal health care schemes ever adopted in the country in terms of eligibility and coverage amount (Thanga, 2013), enrolments are still well below the target right from the beginning. As per the record of the Mizoram State Health Care Society, enrolments under RSBY were 17.19 percent and 21.65 percent of the total targeted number of families during 2010-11 and 2014-15 respectively. At the same time, enrolment under the state's own scheme (i.e. MSHCS) was only 8030 families during 2013-14. Further, the premiums are highly subsidized by

the government that it is only Rs.30 per family in case of RSBY, while it ranges between Rs.500 and Rs.1000 per family under MSHCS.

In fact, the state government has shown strong effort to bring all families, especially poor who are not covered under the Medical Attendance Rule of the state and central governments, through budgetary and logistical supports since 2008. As per the record of Economic Survey 2014-15, the rejected medical reimbursement bills under MSHCS was 4.24 percent only, while there is no rejected amount in case of RSBY (as it is done on cashless basis). This may be taken as the efficiency of the service provider to settle claims submitted by the beneficiaries.

However, as it is pointed by the low achievement rates in the enrolment, the scheme does not get strong response from its targeted families. This has indicated the needs to have systematic study on the coverage of the scheme and its impact on the beneficiaries. This would help in understanding the actual financial impact that the scheme has on the beneficiaries as well as the reasons for non-enrolment under the scheme. These are required to chalk out better and sustainable strategy for the existing public health care schemes in the State.

1.5. Objectives and Hypotheses

The main objectives set out for the conduct of this study are as follows:

1) To study the origin and progressive implementation of public health care scheme in Mizoram.

2) To evaluate the state government's position in funding of health care scheme and the trends of budgetary allocations.

3) To examine the enrolment trends under RSBY and Mizoram State Health Care Scheme.

4) To study the coverage of health care schemes in rural areas of Mizoram using Aibawk RD Block as case.

5) To examine the impact of the scheme on the reduction of out of pocket health care expenditure among beneficiaries

6) To examine the existing status of household health care seeking behavior in the study area.

Keeping in view the above objectives, the study attempted and tested the following research hypotheses:

1. Public health care scheme has significantly reduced the out-of-pocket payment for institutional health care among the beneficiaries.
2. There is direct relationship between poverty incidence and enrolment under public health care schemes.

1.6. Study Area

To make the study more focused and specific, one Rural Development (RD) Block, i.e. Aibawk RD Block, has been selected as case. Aibawk RD Block is located in the central part of the state and is located around 50 km south of the state capital, Aizawl. The area approximately lies between 23°20'15.51"N to 23°39'29.21"N Latitude and 92°41'04.00"E to 92°47'33.08"E Longitude and the area maps are given at the end of the chapter. Table 1.2 presents village wise demographic details and available health infrastructure in the study area.

The area comprises of 22 villages and the total number of household is 3,507 with a population of 17,128(8,758 male and 8,370 female) as per 2011 Population Census. Further, 83.32 percent of the total population is literate. Falkawn village has a State Referral Hospital. There are two Primary Health Centre (PHC) in this rural development Block located in Aibawk and Sialsuk Villages. At the same time, there are Health Sub-centres in 14 villages and 3 Sub-Centre Clinics (that functions under a Sub-Centre), while there is no any public health care office in two villages namely Chamring and Lungsei. Most of the health Sub-Centres are allotted with two health workers(male and female), however, villages such as Sailam, Hmuifang, Chawilung, Melriat and Hualngohmun has only one health workers each. Having a single worker is reported to have reduced the quality and the quantity of the work.

Table 1.2: Healthcare infrastructure in the Study Area - Village wise

Village	Total Household	Total Population	Literate Population	Literate Percent	PHC	Health Sub-Centre	Sub-Centre Clinic
Aibawk	310	1325	1138	85.89	1		1
Chamring	52	301	233	77.41			
Chawilung	89	371	316	85.18		1	
Falkawn	293	1339	1070	79.91			
Hmuifang	53	292	234	80.14		1	
Hualngohmun	161	693	599	86.44		1	
Kelsih	149	736	618	83.97			1
Lamchhip	143	709	597	84.20		1	
Lungsei	47	240	199	82.92			
Maubuang	123	651	536	82.33		1	
Melriat	199	997	815	81.75		1	
Muallungthu	256	1160	965	83.19		1	
Phulpui	198	1058	875	82.70		1	
Sailam	126	762	618	81.10		1	
Samlukhai	226	1278	1027	80.36		1	
Sateek	188	859	740	86.15		1	
Sialsuk	396	1881	1612	85.70	1	1	
Sumsuih	161	744	617	82.93		1	
Tachhip	197	983	839	85.35		1	
Thiak	140	749	623	83.18			1
Total	3507	17128	14271	83.32	2	14	3

Source: (1) Primary Abstract, Population Census, 2011, (2) Chief Medical Officer, Aizawl (West), 2015

A detailed working strength of the two Primary Health Centres (PHC) in the study area are presented in Table 1.3: There is one medical doctor each in the Primary Health Centres and both are assisted by five staff nurses. Both the PHCs also have Pharmacist, Lab Technician, X-Ray Technician, Fourth Grade, Accounts Clerk, and Driver. In addition, Sialsuk PHC has Opthalmic Assistant and a cook.

Table 1.3: Manpower in Primary Health Centres of the study area

Name of post	Aibawk PHC	Sialsuk PHC
Medical Officer	1	1
Pharmacist	1	1
Lab Technician	2	1
Staff Nurse	5	5
X-Ray Technician	1	1
Fourth Grade	5	6
Accounts Clerk	1	1
Clerk	1	0
Opthalmic Assistant	0	1
Driver	1	1
Cook	0	1

Source: Chief Medical Officer, Aizawl (W), 2015

1.7. Methodology

a) Data Sources: The study is based on both primary and secondary data. Primary data is obtained by conducting sample survey from the villages in Aibawk RD Block. Selection of samples is made in two stages, (i) selection of villages and (ii) selection of households (families**)**. Firstly, ten villages were randomly selected from the list of villages in Aibawk RD Block. Secondly, from each of the selected villages, the list of households enrolled under any public health care scheme (RSBY or MSHCS or both) was obtained from the Health Sub-Centres. To suit the need and objective of the study non-enrolled families as well as those who have availed the facility during the last one year were purposively selected. The list of beneficiaries who actually availed the facility was obtained from Synod Hospital, Durtlang. Thus, a total number of 100 households were covered in the study.

Secondary data are obtained from various published and un-published sources like the Directorate of Census Operation, Mizoram, various issues of Basic Statistics of Mizoram published from time to time by Directorate of Economics & Statistics; Economic Survey of Mizoram published annually by Planning & Programme Implementation Department, Government of Mizoram; the published and unpublished documents of the State's Health Department and Mizoram State Health Care Society; Directorate of Hospital and Medical Education; Directorate of Health Services; Chief Medical Officer(West); the state Finance Department, publication by state and central governments in their official websites; personal records; individual researches; etc.

b) Tools of Analysis. The data so collected from different sources is arranged and analyzed to suit the need of the study. Simple statistical tools like percentage, mean and standard deviation is used to explore the general trends and patterns, while t-statistic is employed to test the proposed hypothesis of the study.

1.8. Scheme of Chapterisation

The study is organized in five chapters as follows:

Chapter 1: **Introduction.** It introduces the study and describes the relevance, objectives, hypotheses and methodology of the study.

Chapter 2: **Review of Literature.** It presents a brief review of related research works undertaken in this field. The review is undertaken under three broad aspects such as the health care; health insurance and; functioning of RSBY scheme in India.

Chapter 3: **Implementation of public health care schemes in Mizoram.** It reflects through the genesis of the implementation of health care schemes to the present scenario; enrolment; funding; the claims and settlement profile of the health care schemes.

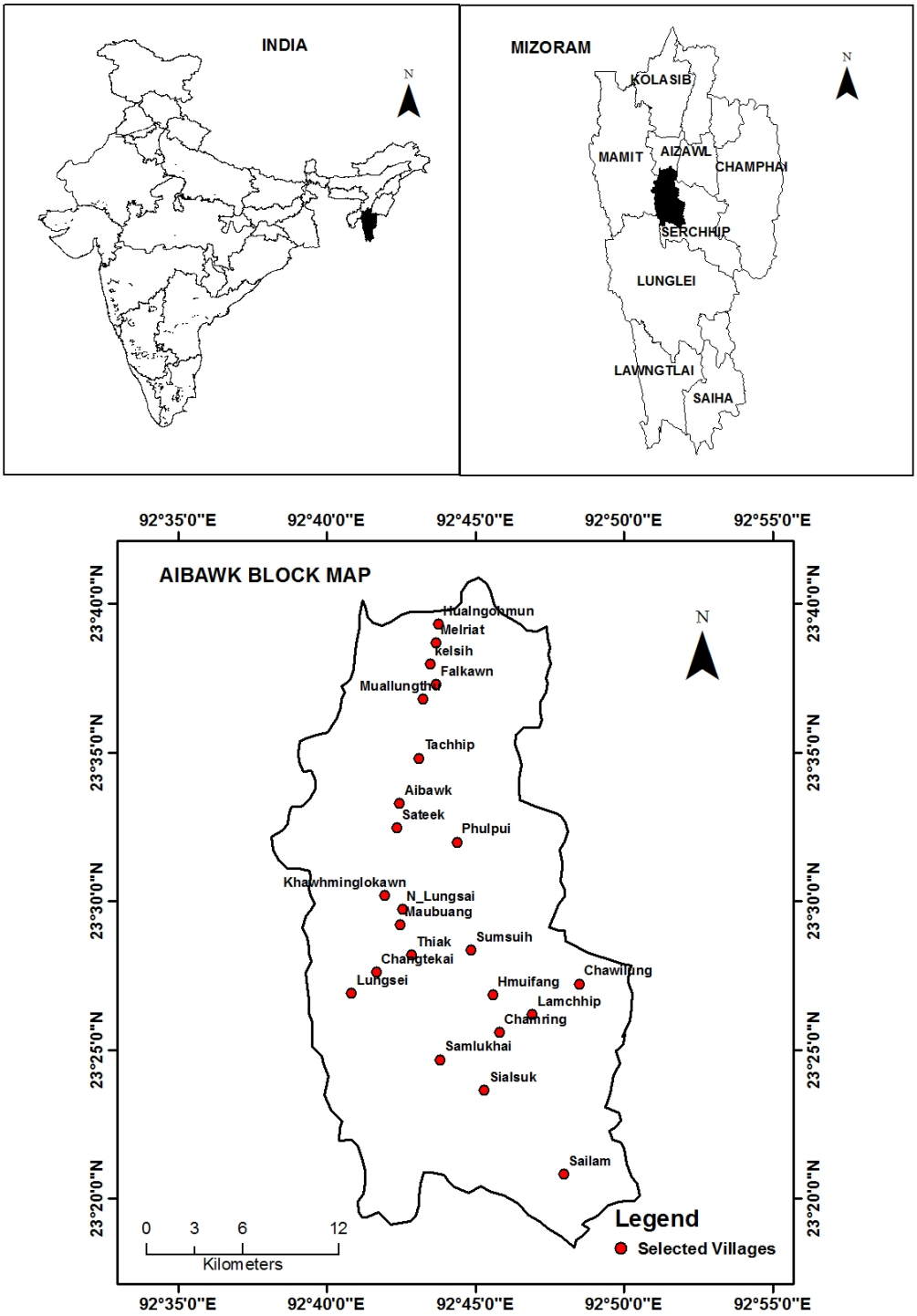
Chapter 4: **Analysis on the coverage and impact of public health care schemes.** This chapter presents the researcher's own work that analyses the coverage and the impact of public health care schemes in the study area.

Chapter 5: **Findings and Recommendations.** It gives major findings, conclusions and some policy recommendations.

In addition to the above five study chapters, a report of case study prepared from an interview of beneficiary and stakeholders of the scheme. The reports are presented in Annexure.

MAPS HIGHLIGHTING THE STUDY AREA

Map1.1. Map showing villages in the study area.



CHAPTER 2

Chapter-2

REVIEW OF LITERATURE

2.1. **Introduction**

Health Economics has become a dominant economic and political issue over the past 60 years. However, its official recognition as a discipline can be attributed to Kenneth Arrow's 1963 article, "Uncertainty and the Welfare Economics of Medical Care". Since then the study of health care occupies an important place in the economic, social and political realm of life. This chapter presents review of previous studies in respect to the public health care schemes which are basically implemented as health care insurance in most of the cases. Attempt will be made to give an overview of the existing literature of health care on broad perspective, micro-level studies and studies on the implementation and performance of Rashtriya Swasthya Bima Yojana (RSBY), the biggest public health care scheme in India.

2.2. Public Healthcare: A Broad View

Chow (2006) undertook an economic analysis of Health Care in China as statistical demand functions for health care. The paper applies demand analysis to explain the increase in healthcare expenditure and in the relative price of medical services as income increases and as supply is limited. The study observed the increasing ratio of healthcare expenditure to GDP with the pace of rapid economic development. While Chinese data are consistent with a

demand equation as indicated by theory of consumer demand for health care, the data on the quantity supplied suggest that aggregate supply during the sample period was determined by a government system of public supply of healthcare which did not respond to price increase. A rapid increase in demand led only to a rapid increase in price but not quantity supplied as the data show.

He regarded Chinese economic reform as a great success toward phenomenal economic growth. However, its failure to allow market forces to operate in the supply of healthcare should be one of the crucial areas where the economic reform failed. This has resulted in serious inequality between rural and urban areas of China in the supply of healthcare system. Many poor and uninsured farmers received less health care than under the Commune system because the increase in their incomes was not sufficient to pay for the same amount of health care now at much higher prices.

Rout and Nayak (2007) discussed the conceptual scope of health and showed that health has multifaceted concept having both narrow and broad definitions. The World Health Organisation's definition of health as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity” is considered too wide and not amendable for any meaningful economic analysis or for any resource allocation. But, the concept of health has to be defined from a practical point of view. They suggested that health be construed as a condition of well being free of disease or infirmity and basic human rights. This provides an intermediate concept linking the WHO’s ideas to the health and disease as measurable by appropriate indicators like

mortality, morbidity, and quality of life. Thus, improved health contributes to economic growth in four ways: it reduces production losses caused by worker illness; it permits the use of natural resources that had been totally or nearly inaccessible because of disease; it increases the enrolment of children in schools and makes them better able to learn; and it makes alternative uses of resources that would otherwise have to be spent on treatment.

Kumar et al (2011) examines the Indian health insurance market by empirically observing the provider's perceptions and its relationship with the insured, the insurers and the third party administrators (TPAs). The study tries to find out the awareness level among the insured population and their attitude towards treatment cost. It then examines the role of TPAs and the impact of cashless services on the cost of treatment by studying a few cost drivers. Apart from studying the provider's perception it also tries to look at some of the evidence of moral hazards and that of fraudulent activity. It has a huge growth potential both in terms of density and penetration. The level of awareness among the insured population is low with regard to policy terms and conditions. Most of the insured do not care for the treatment cost as they are covered under a health insurance policy. The TPA model has not been successful in bringing down the claim cost but has definitely helped in providing unbiased services to the insured population, which includes cashless benefits. The price structure of healthcare services are linked to the room rent category and most of the insured patients, who are more demanding, prefer staying in higher category rooms. It is quite evident that the final bill generated

for an insured patient is higher than that of a patient who pays out-of-pocket. One of the ways to bridge this cost gap is to move towards a 'package rate' agreement and to incorporate 'room rent capping'.

The Indian health insurance market is not immune to moral and morale hazards and the concept of cost-sharing by the insured will help tackle this issue to some degree. There exists an opportunity for the insurance companies to build long term relationships with the preferred health care providers by understanding each other's roles in serving the common client. The use of technology can help bridge the current service gap and will help in better service performance, more transparency and cost effectiveness. The insurance companies should build strategies keeping in mind the different market forces and anticipating the changes which the industry is bound to see.

Sundararaman *et. al.,* (2014) proposed a simple, reliable, feasible and useful method to periodically measure the extent of progress towards universal health coverage using a set of indicators that captures the essence of the factors to be considered in moving towards universalization. They present the rationale for the approach and demonstrate its use, based on the primary household survey carried out in Villupuram District of Tamil Nadu.

It was shown in this study that Tamil Nadu was relatively more industrialized and economically developed state, with well developed public healthcare system and a relatively good private health sector. It has one of the lowest IMR, maternal mortality rate (MMR), and crude birth rate (CBR) in the

nation. The study adopted Household Monthly Total Consumption (MTC) expenditure as the threshold for determination of financial hardship. The out of pocket expenses that reflect the financial burden is considered adequate for planning further steps to provide financial protection. The study found that the mean out-of-pocket expenses (financial burden) for those who used public facilities were significantly lower compared to those who used private facilities for all the three categories of services.

Gupta and Chowdhuri (2014) have done a study on how health coverage in India is financed through public resources. In order to have much speedier and successful health coverage, a higher quantum of spending by the government is necessary. The paper based its study of health insurance in India on the basis of government finances. Limitations cited for this study was related to lack of exhaustive and comparable information on government health finances available in the public domain. Another problem arises on the information aspect of public expenditure on health where there is definitional ambiguity which makes research on public finance of health a somewhat daunting task.

It was found that a minimal amount of only 18 percent of the total expenditure on health care was spent for health coverage. The remaining was spent on the operation and maintenance of the general health system. The government spending on health is only 1 percent of GDP. Of this, a very small percentage goes into supporting health coverage. This reflects the poor functioning of health care coverage system. Moreover participation of private

sector in the delivery of health care is too big to ignore, the issues of unregulated private providers and unevenness in price and quality require policy focus.

2.3. Public Healthcare Insurance

Dhingra (2001) explored the factors associated with the long-term success on non-profit community based insurance in providing preventive and curative health care services to the community in India. The involvement of NGOs in health insurance schemes is very much necessary in developing countries such as India. It is estimated that private expenditure accounts for roughly two-thirds of total health care spending in India and that whatever the services available to the people in India are of poor standards in quality. Moreover, the health insurance coverage in India was very limited particularly among those who work outside the formal sector. The government's combined expenditures, at the national, state and municipal levels accounted for only one-fifths of all health care spending in India. A disproportionate amount of government spending was on curative services in urban centres. This allocation inefficiency that is unlikely to be corrected is some of the contributing factors that require the intervention of non-profit NGOs.

A review of experiences of varied groups of insurance schemes for informal sector in selected countries provided a number of insights as follows: most of the schemes are rural based and voluntary in nature; Government run

and hospital based schemes explicitly cover both inpatient and outpatient services; majority of the community based and NGO schemes cover only outpatient care; most of the prepaid schemes have set a lower premium and provide limited services to the insurers; the coverage of target population was very low in most of the schemes with the exception of China, Korea and Japan; experiences of community based schemes revealed that a committed, decentralised management contributes to the success of the schemes; affordable premiums coupled with co-payment system could control the utilisation and cost of the insurance schemes.

Jutting (2003) showed that community based health insurance schemes are an important element and a valuable first step to improve poor people's access to health care. To analyze the impact of community based health insurance scheme in Senegal, he adopted two stage sampling design, viz. primary data from the beneficiaries and analysis of the primary data using suitable statistical tools; and quantitative suggestions and observations obtained through interview and discussions with key persons or experts. He observed that the community based health insurance has no doubt improved the existing conditions of the region and showed that it has reduced financial barrier to health care as it enabled a lesser OoP health expenditure by households.

The study covered Thies region of Senegal which is a densely populated area and a large majority of the population lived in rural areas. Poverty is widespread and the incidence of illness and health risks is high. Senegal has a relatively long tradition of mutual health insurance schemes. As much as

sixteen mutual health insurance schemes are operating in the area. The schemes are community based, membership is voluntary and the scheme is organized by a mutual health organization. Ninety percent of the schemes operate in rural areas. Moreover, there exists a contract between a nonprofit health care provider – a Catholic-run hospital, and the mutuals, which allows them to receive health care at a lower rate. Community health insurance is necessary especially in places where good quality health care is out of reach. They are basically designed for the poor community; however the poor of the poorest could not be reached as it is difficult for them to pay even the minimal amount of premium necessary to get enrolled. Suggestions arise as to the development of government subsidies or donations.

The analysis of the impact of the mutuals on access to health care has shown that members frequent the hospitals more often than non members and pay less for a visit. The results seem to confirm the hypothesis of the paper that community-financing through pre-payment and risk-sharing reduce financial barriers to health care, as is demonstrated by higher utilization but lower out-of-pocket expenditure. In addition, it shows that risk pooling and pre-payment, no matter how small-scaled, can improve financial protection for the poor. An important policy implication for this study is that it is critical to move away from resource mobilization instruments that are based on point-of-service payments. If pre-payment and risk-sharing can be encouraged, they are likely to have an immediate direct and indirect impact on poverty. The direct impact would be, by preventing impoverishment due to catastrophic health

expenditures. The indirect impact would be by ensuring access to health and thereby improving health, thus allowing the individual to take advantage of economic and social opportunities. To enlarge poor and rural population access to health care, community-based health insurance schemes can be an important element and a valuable first step. In order to overcome the existing limitations of the schemes, broader risk pools are required. In particular, the role of external financial support -such as government subsidies, donor funding, and reinsurance- in encouraging social inclusion needs to be further explored. An interesting option to be further tested would be to integrate health insurance into microfinance schemes.

Devadasan *et. al.* (2004) studied twelve health schemes in India and describe the context in which they are operational, their design and management, the administrative challenges faced by them, and their impact. They observed that most insurance programmes started as a reaction to the high health care costs and the failure of the government machinery to provide good quality care. It was observed that lack of techno-managerial expertise, presence of adverse selection and moral hazards are the major witnesses of Community Health Insurance (CHIs). The participation of these CHIs range from tribal populations, farmers, women from self help groups and poor self-employed women. The basic designs can be presented, depending on who is the insurer:

1) In Type I, the hospital plays the dual role of providing health care and running the insurance programme;

2) In Type II, the voluntary organisation is the insurer, while purchasing care from independent providers; and

3) In Type III, the voluntary organisation plays the role of an agent, purchasing care from providers and insurance companies.

As most of these programmes serve the rural poor, the premiums also have been low; in the range of Rs.20 to Rs.60 per person per year. The premium is usually paid as a cash contribution once a year during a definite collection period. At most of the schemes, the unit of enrolment is the individual and membership is voluntary. While some of the CHI schemes limited the benefit package to only ambulatory care, the twelve studied in the paper all provided inpatient care. Some also provide outpatient care as well as outreach services. In Type I CHIs, there is a cashless system of reimbursement. However, in the other two types, usually it is a fixed indemnity with patients having to settle bills and then getting it reimbursed 2-6 months later from the NGO. Most of the providers are from private sector – either for profit or not-for-profit hospitals.

The community health insurance programmes in India offer valuable lessons for policy-makers and the practitioners of health care. While many state that the poor in India cannot understand the complexities of health insurance and will not accept any insurance product, the paper highlights some of the conditions that have allowed these schemes to succeed. They are:

- An effective and credible community based organization. This is absolutely necessary as it is the foundation on which health insurance can be built.

- An affordable premium. This is significant, and needs to be taken into account by the insurers if they want their products to penetrate the rural market.

- A comprehensive benefit package is necessary to convince the community of the benefits of health insurance.

- A credible insurer is imperative for people to have faith in the product. Insurance companies need to learn from this important lesson and would need to approach the rural sector keeping this in mind.

- The administration load of the scheme on the community should be minimal. Unnecessary documentation leads to frustration.

One of the main lessons from these case studies is the fact that a good community based organization can help develop an effective community health insurance programme. And India is teeming with such organizations – be it the trade movement, or the cooperative movement. However, caution should be taken in finding appropriate provider. The other issue that needs to be addressed is that of financial sustainability.

Vellakkal et al (2010) studied healthcare delivery and stakehloder's satisfaction under social health insurance schemes in India. A survey is done

across 12 selected Indian cities among CGHS and ECHS beneficiaries, private healthcare providers and officials of CGHS and ECHS. The study evaluates both CGHS and ECHS schemes with special reference to service delivery as well as with issues pertaining to contracts with private healthcare providers. The study also examined the recent proposals to replace these contributory schemes with health insurance. Various satisfaction indices have been constructed for the study in terms of accessibility, environment, behavior of doctors and behavior of staff for measuring the level of satisfaction of patients with healthcare services in CGHS dispensaries – ECHS polyclinics as well as with the services in empanelled private healthcare facilities.

It was found that patients were relatively more satisfied with private healthcare services than with dispensaries-polyclinics. CGHS beneficiaries are found to be less satisfied than ECHS beneficiaries across the polyclinic-dispensaries services. One reason for such an outcome could be that ECHS was established more recently in 2003 while the CGHS was established in 1954 and, hence, has new infrastructure. The renovation of the infrastructure at CGHS dispensaries is necessary to ensure better healthcare delivery under the scheme. There is no difference regarding satisfaction in the case of services by private healthcare providers. It is also found that though both schemes are said to offer uncapped and comprehensive healthcare services, beneficiaries have been incurring out-of-pocket health expenditure.

This study also observed the willingness of the beneficiaries to pay for better service quality and a larger proportion of CGHS beneficiaries are willing

to pay more as compared to ECHS beneficiaries. Since the beneficiaries are willing to contribute more for better quality of care, the 'financial contribution' from the beneficiaries towards the schemes should be increased substantially so that the long-term, financial sustainability of the schemes can be ensured. Although beneficiaries are relatively more satisfied with the services of private healthcare providers than of CGHS dispensaries and ECHS polyclinics, private healthcare providers themselves are not satisfied with the terms and conditions of empanelment under the CGHS and ECHS. Their main concern is centred on the low prices for their services as well as delays in reimbursement, dissatisfaction in exit fees and bank guarantee clauses.

Dalinjong and Laar (2012) examined the perceptions and experiences of providers and clients of the National Health Insurance Scheme (NHIS) in two Districts of Ghana, purposively selected to reflect urban and rural setting. Patient exit interviews were used in the quantitative methods while qualitative information was obtained through in-depth interviews and focus group discussions with important persons related in this field. The study found that the National Health Insurance Scheme made health care services accessible to the insured without any payment at the point of consumption. It also increased the frequency of visits to health care providers. However most of the insured clients had reported long waiting times, verbal abuse, not being physically examined and discrimination. Providers perceived that the insured were abusing their services and generating lots of workload for them.

The study took place in Bolgatanga (urban) and Builsa (rural) districts in Ghana. Data was collected through exit survey with 200 insured and uninsured clients, 15 in-depth interviews with health care providers and health insurance managers, and 8 focus group discussions with insured and uninsured community members. The paper assesses the views of providers, insurance managers, and insured and uninsured clients. The perceived opportunistic behavior of the insured by providers was responsible for the difference in the behavior of providers favoring the uninsured. Besides, the delay in reimbursement also accounted for provider's negative attitude towards the insured.

The NHIS was seen by all participants of the study to be beneficial. It led to an increase in the utilization of health care services for the insured and mobilized health resources for facilities. The insured and uninsured were satisfied with the care given them, according to the survey. However, most insured clients reported verbal abuse, long waiting times, not being physically examined and discrimination in favour of the uninsured and the rich. Providers also think that the insured were abusing their services by frequenting the facilities, and sometimes faking illness to collect drugs for their uninsured relatives. This had affected significantly the behavior of providers towards the insured.

However, one of the biggest challenges was the delay in reimbursement. Managers and providers agreed that the NHIA had not reimbursed providers for almost six months. As a result, providers were not able to purchase drugs

and non-drug supplies and hence were prescribing drug for the insured especially, to purchase outside the facilities. The delay also affected provider's ability to pay their casual employees who were not on government's payroll. This again, influenced the behavior of providers where some of them preferred clients who would make instant payments for care. There is urgent need to address these issues in order to promote confidence in the NHIS, as well as its sustainability for the achievement of universal health insurance coverage.

Miller et al (2013) studied the role of Columbia's *Regimen Subsidiado* or Subsidized Regime (SR) in protecting the poor against financial risk, influencing their use of health services, and ultimately affecting their health status. An unexpected medical care spending imposes considerable financial risk on developing country households. Based on managed care models of health insurance in wealthy countries, Columbia's *Regimen Subsidiado* is a publicly financed insurance program targeted to the poor, aiming both to provide risk protection and to promote allocative efficiency in the use of medical care. This is traditionally found only in wealthy countries. However there is evidence that the SR provides some protection against financial risk and is associated with greater use of preventive services having positive externalities as well as with measurable health gains among children.

In their study on the mechanism of insurance program they observed that preventive services are generally free regardless of insurance status. However there is an incremental case of prevention and this is connected to SR's high-powered supply-side incentives. Another potentially important

channel is patient substitution from public to private sector providers contracting with insurance plans under the SR (if private providers were more likely to supply preventive care). Individuals feeling more comfortable going to the doctor when insured and provision of insurance making the universal entitlement to preventive care more salient are also worth studying under the subsidized regime.

The paper find evidence that by the mid-2000s, the SR succeeded in protecting poor Colombians from financial risk associated with the medical costs of unexpected illness. In particular, SR enrollment appears to have reduced the variability of out-of-pocket spending for inpatient care. Despite this reduction in risk, there is little evidence of meaningful portfolio choice effects- perhaps because the SR falls short of providing full insurance. SR enrolment is also associated with large increases in the use of traditionally underutilized preventive services – some of which nearly doubled. There is also evidence of health improvement under the SR as well. Since the SR is complex and multifaceted, it is important to know that firm inferences cannot be drawn.

Thanga (2013) undertook an evaluation of Health Care Schemes in Mizoram taking the analysis of the various aspects of the implementation of Mizoram State Health Care Scheme (MSHCS) as the central objective of the study. The study was based on primary data collected through quantitative and qualitative methods. It was noted in this study that the state government has implemented a health care scheme (MSHCS) in the state since April, 2008.

With onset of centrally sponsored RSBY scheme, the existing state's scheme was linked with this new scheme on top up basis since 2010.

A notable observation of the study is the increased expenditure on tertiary health care after enrolment under the scheme. This can be taken in two-ways: firstly, moral hazard on the part of the patients and care providers, and secondly, poor access to institutional health care before joining the scheme. The study suggested better Management Information System (MIS) to cope with the problems that are arising out of asymmetric information, MIS report covering all key attributes of the scheme should be demanded on regular basis.

This study also reveals an unfavourable health care seeking behaviour among the beneficiaries of the scheme. Out of the 582 enrolled families covered in the study only five percent said they have regular medical check up. Analysis of the beneficiaries' perception showed that low level of awareness, impressive performance of care providers (Hospitals), and the scheme has positive impact upon the lives of the beneficiary that most of them admitted that the scheme have enhanced their health care access and significantly reduced family expenditure burden on illness.

Grover (2014) showed the existence of mismanagement and misuse of CGHS both by service providers and health care providers, and suggested urgent reformation on the scheme. The Central Government Health Scheme (CGHS) was started in 1954. It provides healthcare services to more than three million central government employees, pensioners and their dependents across

25 cities covered under it. The package of services is generous and covers inpatient and outpatient care, including preventive care and ayurveda, yoga, naturopathy, unani, siddha and homeopathy (AYUSH) system of medicine. There are no exclusions for preexisting diseases or any cap or limit on the coverage. Regardless of the fast-growing expenditures of this health benefit package, there is widespread dissatisfaction among beneficiaries. Experts have questioned the attitude of the CGHS medical officers. There is improper adherence to drug list, and irrational drug combinations are commonly prescribed. Most patients are treated or referred without a proper clinical examination. Doctor's clarification of their referrals to other hospitals relate to the excessive load of patients whom they can devote a very little time to each one. Moreover there is no cap/co-payment and thus there is double sized moral hazard which may be both demand side and supply side moral hazard.

This study suggested a comprehensive reform in the orientation, service delivery and quality management system of the scheme. The suggestions include upgradation of CGHS wellness clinics. The level of services provided by the CGHS wellness clinics must be upgraded so that it is well above that of the primary health centres situated in the remote rural areas. Suggestion also includes frequent transfer of medical officers, preferably at the time of each promotion to broaden their outlook. Under the proposed Central Government Insurance Scheme, the cap of Rs. 5 Lakhs per annum per family may do very little to control moral hazard because it will target only the extreme expensive procedures. Rather cost sharing measures can be introduced where the insured

will share a certain percentage of costs with the CGHS for the outsourced services, especially those with poor cost-effectiveness. To remain sustainable the CGHS must immediately focus on quality of service delivery in its wellness clinics as well as empanelled hospitals. Suggestion also includes reorientation of the focus on CGHS from expensive curative care to cost effective preventive care through evidence-based interventions.

2.4. Studies Related to RSBY in India

Amicus (2010) carried out a study of various aspects of the RSBY scheme in Jaunpur to understand the workability of the scheme. It addresses the utilisation of the scheme and the awareness levels, in addition to ascertaining the socio-economic profile and health seeking behaviour of the targeted population. The study area, Jaunpur is selected from all the districts of Uttar Pradesh as it had enrolled the largest number of beneficiaries and had a substantial number of claims reported at that time.

The study included both quantitative and qualitative methods of data collection. The quantitative method includes household interviews using structured questionnaire at household level with enrolled members (users as well as non users) and non enrolled households. The qualitative methods used include in depth interviews with other stakeholders including hospital staff, insurance company staff and Government officials. 10 villages were selected using systematic random sampling approach by arranging the villages in

ascending order on the basis of number of households enrolled .In each village, 20 households (10 enrolled and 10 non enrolled households) were selected. The users of RSBY were selected from the list of RSBY users provided by client.

The socio-economic profile of the study area shows that more than half of the enrolees are illiterate. The living condition of the population is relatively backward where 44 percent of enrolees are labourers. More than half of the enrolees have monthly household income ranging from Rs. 1,001 to Rs.2,000. The mean monthly household expenditure of enrolees is Rs. 2,173 of which 10 percent is spent for healthcare.

The health seeking behaviour of the population as reflected through a structured interview reveals that 57 percent of enrolees reported sickness in family in last 12 months. Cold, cough, fever, respiratory infection, diarrhoea and typhoid appear as common ailments. Male enrolees reported more instances of sickness as compared to females. 18 percent of enrolees reported hospitalisation where most of the enrolees prefer private hospitals over the public ones.

Swarup and Jain (2010) in their study provided a brief and clear picture of RSBY undertakings in India since its inception. A meaningful social security arrangement is very much crucial not only for individual worker, but also for the economy and the society. The Government of India recognised inequities in its health care delivery and financing infrastructure and introduced various measures to overcome it. Most of the demand side financing

mechanisms that has already been established in the country have had several problems.

The national Government felt that there was a need for a national level Health Insurance scheme in the country for providing financial security to the vulnerable sections of the society. Learning from the experiences of other health insurance schemes in India it launched RSBY counting Below Poverty Line population (BPL) as the first target. The objectives of the scheme is set keeping in mind the characteristics of the target group such as

1) The targeted beneficiaries were poor

2) The beneficiary was largely illiterate

3) Some of the target population was migratory in nature.

The objectives, features, funding, process flow and technology employed of RSBY shows a very comprehensive and idealistic layout while defining the scheme that meets the need of the target population. The roles of each of the six stakeholders such as the central government, the state government, state nodal agency, insurance company, hospitals and NGOs are clearly defined in the scheme.

The study provided the trends of RSBY enrolment after every one month starting from February 2008 till April 2010. A continuous rising picture of RSBY enrolment can be observed from the study. The beneficiaries are found to be satisfied with the treatment they received. Beneficiaries'

satisfaction level at the hospital is also very high. This paper also mentioned the challenges faced by the scheme such as getting buy-in of the stakeholders, supply of necessary hardware and software, development of key management system, improving the enrolment and hospitalisation, lack of capacities at different levels. The authors propose that there are such success factors which are responsible for the effective and smooth implementation of the scheme. The success factors include partnership approach, standardisation, flexible approach and the need for attention to the minute details.

Amicus Advisory (2011) evaluates RSBY in two districts of Himachal Pradesh. They found that RSBY is a huge success in HP among those who have availed of the benefits under the scheme most of whom not only desire to draw repeat benefits under the scheme but also to recommend the same to the others. The study suggests a revision in terms of effort to improve the insurers/TPA in providing users-literature and creating awareness about RSBY and the benefits afforded there under as also operational guidelines to be followed by the provider organisations. There is a need for a greater awareness, especially among those who are eligible-but-not-enrolled and enrolled-but-not-yet-benefited so as to ensure maximisation of enrolments and enhance the level of utilisation of benefits.

The study was based on 1.5 percent of the non-enrolled household and 2.5 percent of the enrolled households. Of the total enrolee sample, 60 percent sample was against the member/household who had utilised the benefits under the scheme while the balance 40 percent households were enrolled but had not

utilised the benefits. The sample is thus categorised as Category-A1, Category-A2, and Category-B, which is distributed equally across the villages. The selection of households was carried out following a two stage sampling procedure. In the first stage the villages were selected by PPS (Probability Percentage to Size) sampling. For selection of villages a district wise sampling frame was prepared for both the districts separately. In the second stage the household selection was done at village level. Two separate lists of households are prepared for Category-A1 and Category-A2 households. Using the lists, proposed number of households was selected through systematic random sampling. Category-B households were selected randomly representing the entire village in terms of geographical coverage. The questionnaire was developed in consultation with the RSBY Cell of Himachal Pradesh. Recruitment of interviewers and a thorough training was done to the field survey teams. Data entry was done in CS pro (Census Survey Processing) and the statistical analysis done by the help of SPSS package.

Detailed information was obtained regarding household headship, household size and sex ratio, age group structure, occupational status, house type, toilet, drainage type, land property, drinking water, water purification. RBSY status of the targeted households was also taken into consideration. More than half of the households (52 percent) are reported under the RSBY-hospitalized category, 35 percent reported under RSBY-non hospitalized category while rest of the households are reported under the non-RSBY category.

The study also examines the extent of awareness about RSBY Scheme where overall 51percent of households surveyed were aware about RSBY. A greater percentage of the population were correct in their perception regarding the eligibility for enrolment, premium cost, free treatment, limit of members eligible for the scheme. However the study suggests educating enrolled households on the benefits of the scheme and how to obtain the same and to bring the un-enrolled population in the fold of RSBY. There is an extensive use of RSBY cards. ENT, Accidents and Gastro account for nearly 52 percent of hospitalisations. Major reasons to opt health facility for hospitalization were good reputation and closeness to home among respondents. More than one-third of patients continued treatment after getting discharged from the health facility.

A vast majority of the respondents stated that the helpdesk staffs were very helpful and polite. Also, majority of patients received food on their stay at the health facility. The patients reported that their health has improved. About one-fourth responses were in favour of excellent service provided, while majority (more than 70 percent) of responses stated that very good services were provided and they are satisfied. Overall, it can be noted that majority of the hospitalized households were satisfied from the services and interested to avail the facility again in future. These findings indicate towards excellent healthcare delivery under RSBY in the state.

Giz (2012) conducted a study to assess the implementation process of RSBY in three selected districts of the states of Bihar, Uttarakhand and

Karnataka. The key processes that have been focused upon are pre-enrolment, enrolment, utilisation of health services, out-of-pocket expenditure on hospitalisation and satisfaction levels of beneficiaries. A cross sectional research design consisting of quantitative and qualitative approaches were adopted.

It was observed that the process of implementation was broadly quite smooth and more than 95 percent of the beneficiaries did not have to pay anything additional other than Rs.30 to get the smart card. Guidelines of the scheme prescribe that smart cards shall be issued at the enrolment station in the village itself and it was found that both in Bihar and Uttarakhand, more than 94 percent of beneficiaries had to travel less than 2 kilometers to get the smart card. Though general awareness about the scheme was high at more than 95 percent, detailed information about the scheme was lacking amongst the beneficiaries. A positive finding of the study was that 90 percent of the beneficiaries did not have to spend any money from their pocket to get treatment under RSBY at the hospitals.

The beneficiary satisfaction with RSBY was almost 90 percent which could probably be the highest for any government funded scheme in India. Main reasons for this high level of satisfaction were cashless nature of the scheme, friendly and polite behavior of the staff and shorter waiting time at the hospitals. This shows that not only are hospitalization services being utilized by the beneficiaries, they are being given better services because of the smart card of RSBY. It was also found that there is marginal increase in the percentage of

persons going to private hospitals for RSBY enrolled beneficiaries in comparison to the non-enrolled beneficiaries. The findings of the study show that the poor and marginalized section of society consider the scheme to be beneficial.

Gothoskar (2014) commented on the Maharashtra Government on its decision to scrap RSBY and implement a scheme that is wider in scope – the Rajiv Gandhi Jeevandayee Arogya Yojana. The shifting of one scheme to another would have added to the miseries of the newly added sectors to RSBY such as Rickshaw pullers, rag-pickers, mineworkers, sanitation workers, etc. Taking the issues of waste pickers more deeply, the study confirms that waste pickers majority of them women are the most vulnerable section of the society be it in terms of health and money. They should be all the more provided much concern to the care of their health. The government's intention of shifting away from the centre's flagship scheme is difficult to understand.

The state may be lured with the RGJAY scheme that provides for a host of lists which is very much greater than what RSBY is providing. Greater coverage (only BPL families in RSBY) and a much larger amount of Rs 1,50,000 in RGJAY (Rs. 30,000 in RSBY) may be contributing factors in the decision making process. Although tertiary health care is very much necessary as it can wipe out the entire savings and whatever assets the family is having. Primary and secondary healthcare is not of lesser priority as it is the more frequently occurring problem of the 1-2 million waste pickers and other informal workers. It is noted that there is difference in the schemes coverage

between RSBY and RGJAY. The paper reveals the importance of both the insurance programmes. It suggests that instead of the government scrapping the centre's programme, there can be ways to merge it with the state-funded so-called insurance scheme.

Seth and Patel (2014) evaluate the performance of RSBY in different districts of Uttar Pradesh using Data Envelopment Analysis. Data Envelopment Analysis or DEA is employed in finding out the efficiency of Decision Making Units whose efficiency has to be measured. It focuses on the performance evaluation of the RSBY to find out how the scheme is performing and the possible reasons for its success or poor performance. The DEA study depends a lot on the choice of inputs and outputs. Hospital have been taken as input as the insurance company wants it to be genuine and minimum. Premiums are the cost for the government or the policy makers as they are being paid by them to the insurance companies which should be as low as possible. So, premiums are taken as an input. More the number of claims more will be the number of people using the scheme which is a good sign for policy makers and the success of the scheme. So, the number of claims is being taken as output. Number of people enrolled also indicates the level of awareness about the scheme which is very crucial for the success of the scheme. Hence, number of families enrolled is being taken as output.

The descriptive statistics of all inputs and outputs selected for the study shows that skewness of all the variables are positive and hence the data is right skewed. Kurtosis score for all the variables except the premium amount is

positive which shows that the data is peaked but for the premium amounts, data is distributed flat. The descriptive statistics of CRR efficiency also shows that data is right skewed and kurtosis score shows that data is more flat. After finding the efficiencies of the DMUs using CCR and BCC models of DEA, slack-based forecasting is applied to optimise the decision making units. The study found that as much as 19 districts are relatively efficient. The study also test and shows that there is no violation in the homogeneity. It also shows that the scheme is implemented homogeneously across all the regions without any discrimination.

Ghosh (2014) evaluated the effectiveness of the targeting approach in the Rashtriya Swasthya Bima Yojana. The study examines the determinants of enrolment, hospitalisation and financial protection for the BPL households. A large-scale survey was conducted in Maharashtra in 2012-13 for this study. A final sample of 29,858 individuals was collected. Information was collected from the BPL households on their monthly consumption expenditure. Logistic regression was used to determine the factors influencing the household's enrolment in RSBY and the same was employed to identify the determinants of hospitalisation among the poor. In assessing the financial protection effect of RSBY, an analysis of catastrophic expenditure was carried out using the World Health Organisation's approach for measuring catastrophic payments for health care.

The analysis reveals that only 12 percent of the BPL households are currently enrolled in the scheme in 2012-13 and the enrolment rate varied

substantially across regions. As observed in case of ever enrolment, the current RSBY enrolment rate of the BPL households was higher in rural areas (14 percent) compared to urban areas (8 percent). Several reasons that could possibly explain the causes of low enrolment include first, the BPL list, second, the low quality information, education and communication campaigns, third, the TPAs left many areas without completely enrolling the target population as they do not receive the expected profit, finally lack of administrative support at the village or ward level by the DoL.

The study points out to some major concerns with regard to the success of RSBY in Maharashtra not only in targeting and enrolling BPL households, but also in improving access to healthcare and providing financial protection from the cost of hospital care. First, it was found that there are serious issues with the current BPL lists as it significantly excluded poor households, thereby depriving them of the benefits of welfare schemes such as RSBY. Second, awareness about the scheme seems to be strongly associated with enrolment in RSBY. This means that there should be more emphasis on educating the BPL families about the programme. Third, it was seen that by not setting any incentives for enrolling maximum members from each family and keeping the five-member ceiling has worked to the advantage of insurance companies as that led to exclusion of many eligible persons from RSBY. Therefore, the restriction of five members should be withdrawn to prevent intra-household exclusions. Finally, financial protection against cost of illness for BPL households remain a challenge as the effect of RSBY in reducing the risk of

experiencing catastrophic expenditure for hospital care is not seen. Studies found that lack of outpatient services either refrained RSBY patients from seeking services or forced them to consult informal providers and the focus on only hospitalisation in the scheme provided an adverse incentive to providers for substituting outpatient care with costlier hospitalisations.

2.5. Concluding Remarks

Attempt is made in this chapter to give an overview of the existing literature on public healthcare studies. The significant observations that have come up in the process of literature review may be summarized as follows: Firstly, it is observed that Community Based Health Insurance have achieved commendable success in improving the existing health conditions of the poor and reduced the burden of out-of-pocket payment for health expenditure (Dhingra, 2001; Jutting, 2003; Devedasan, et. al, 2004).

Secondly, the systematic analysis of healthcare demand function in China showed positive relationship between health care demand and GDP and healthcare demand follows the pattern of classical law of demand, while supply was determined purely by government and does not response to price (Chow, 2006). Kumar et.al (2011) found the failure of Third Party Administrator (TPA) Model due to information asymmetry. At the same time, Seth and Patel (2014) proposed Data Envelope Analysis Model to improve efficiency in the implementation of healthcare scheme.

Thirdly, as the RSBY scheme is targeted to the poor and workers of unorganized sector of the economy (Swarup and Jain, 2010), the beneficiaries are mostly poor and illiterate having high health risk (Amicus, 2010). The success of the scheme may be judged from the fact that 90 percent of the beneficiaries did not have to incur out-of-pocket payment for hospitalized health care (Giz, 2012). At the same time, the main problem facing the scheme is the problem of preparing BPL List and low quality of information among the target population (Ghosh, 2014).

Fourthly, by evaluating the contributory state health schemes like Central Government Health Scheme (CGHS) and Employees Central Health Scheme (ECHS), Vellakkal et. al (2010) and Grover (2014) showed that beneficiaries were willing to contribute more for better quality care. Lastly, it was observed that there are some states in India which have expanded the scope of the RSBY by implementing their own health care scheme. Sujata Gothoskar (2014) showed the decision of the state government of Maharashtra to scrap RSBY by implementing their own scheme named Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY). Meanwhile, the state of Mizoram has linked its own scheme, named Mizoram State Health Care Scheme, with the RSBY on top up basis to enhance the coverage and benefits of public healthcare scheme (Thanga, 2013).

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CHAPTER 3

Chapter-3

IMPLEMENTATION OF PUBLIC HEALTH CARE SCHEMES IN MIZORAM

3.1. Introduction

Unexpected medical care spending imposes considerable financial risk on developing country households (Miller et. al., 2013). Because the poor lack the resources to pay for health care, they are far more likely to avoid going for care, or to become indebted or impoverished trying to pay for it (Devadasan et. al., 2004). Health insurance is emerging as an important financing tool in meeting the health care needs of the poor (Ahuja 2004). Therefore, several health care schemes have come up at the national and State level to reduce financial risk. This also tends to increase access to health care, which is an important step towards improving the health status of households.

3.2. Public Health Care Scheme in India: Overview

In India the programme for health insurance dates back to the late 1940s and early 1950s when the civil servants (Central Government Health Scheme-CGHS) and formal sector workers (Employees' State Insurance Scheme-ESIS) were enrolled in a contributory but heavily subsidised health insurance programmes. However, these programmes, especially the former were confined to only a small segment of the society. After over half a century of experience, CGHS (3 million) and ESIS (55.5 million) put together currently cover an

estimated 58.5 million beneficiaries, roughly about 5 percent of India's population.

As part of liberalisation of the economy since the early 1990s, the government opened up the insurance sector (including health insurance) to private sector participation in the year 1999 with the passing of the Insurance Regulatory and Development Authority (IRDA) by the Parliament. This development had thrown open the possibility for higher income groups to access quality care from private tertiary care facilities.

Since 2007, India has witnessed a plethora of new initiatives, both by the central government and a host of state governments entered the bandwagon of health insurance. One of the reasons for initiating such programmes can be traced to the commitment that the governments in India have made to scale up public spending in health care. Given the commitment to upscale government expenditure on health (central and state governments put together) from the present 1 percent to 2-3 percent of GDP, the central and state governments were devising designs to spend the additional resources through innovative schemes. Among others, these include enhanced access and availability of essential health care services, protecting households from financial risk through schemes such as, National Rural Health Mission (NRHM), and Rashtriya Swasthya Bima Yojana (RSBY).

In addition to these central health programmes at the national level, several states have undertaken state specific health care insurance scheme.

Some of the major health care schemes in the country are presented in Table 3.1.

Table 3.1.: Scheme-Wise Insurance Coverage (Govt. Sponsored Schemes)

Scheme	Level	Unit of Enrolment	No. of Families (Million)	No. of Beneficiaries (Million)
CGHS	National	Family	0.87	3
ESIS	National	Family	14.3	55.4
RSBY	National	Family	22.7	79.45
Ravij Aarogyasri Scheme	Andhra Pradesh	Family	22.4	70
Kalaignar	Tamil Nadu	Family	13.6	35
Vajapayee Arogyasri Scheme	Karnataka	Family	0.95	1.4
Yeshasvini	Karnataka	Individual	NA	3
Total				247.25

Source: Public Health Foundation of India, Critical Assessment of the Existing Health Insurance Models in India, 2011.

3.3. Evolution of Public Health Care Schemes in Mizoram

The Government of Mizoram, in line with the Central Government shift the thinking on healthcare from provision of healthcare to financing it since the latter part of the 2000's. This change can be seen from the tendency of the Government towards using health insurance as a means of improving access to healthcare delivery for large vulnerable sections of the population. Thus, it introduced the public health insurance scheme named, Mizoram State Health Care Scheme (MSHCS) in April 2008 with an objective of removing financial barriers and improving access of its residents, including the poor, to quality medical care; of providing financial protection against high medical expenses. To start with, a sum of Rs.50 Crore was allocated from the state plan-fund. The scheme was merged with the Rashhtriya Swasthya Bima Yojana (RSBY) on

top up basis from 2010-11 till date and the state's own scheme (i.e. MSHCS) was implemented on self-finance basis since 2011-12.

A registered society called The Mizoram State Health Care Society was constituted as the project implementation agency of the scheme. Initially, an agreement was signed between the Government of Mizoram and the Reliance General Insurance Company Limited (RGICL). An arrangement was made with public and private hospitals recognised and approved by the State Government in and outside Mizoram to provide cashless treatment to the beneficiaries.

3.4. Salient Features of Public Health Care Schemes in Mizoram

Any person who is a bonafide citizen of India and residing in Mizoram, with the head of his family being in the voters list, is eligible to be covered under the scheme, irrespective of age. All employees and dependents of Central Government, State Government and public sector are excluded from coverage under the scheme.

The Scheme provides coverage for meeting expenses of hospitalization and surgical procedures of BPL beneficiary members up to Rs. 70,000 per family per year subject to limits, in any of the network hospitals, after having exhausted RSBY cover of Rs. 30,000 only. The cover is on family floater basis. A buffer floater amounting to Rs. 2,00,000 over and above the normal cover can be availed of individually or collectively, by members of the BPL family

suffering from the category of critical illness that has already been defined by the authority. APL families will avail benefits only under this critical illness cover within a sum insured of Rs. 3,00,000. This buffer floater will be made available for beneficiaries with identified critical illness.

The required premium payable for a family of 5 members under the scheme ranged from Rs.500 for sum assured amount of Rs.70,000 to Rs.1000 for assured amount of Rs.2,70,000 and additional amount of Rs.100 and Rs.300 respectively for each additional member. At the same time, RSBY families, including RSBY-BPL and RSBY APL (MNREGA & Street Vendors) have to pay only Rs.30 as registration fee which cover assured amount of Rs.30,000. But, they can join MSHCS by paying the required premium mentioned above. RSBY beneficiaries are provided the cashless facility for treatment in the empanelled hospitals, while MSHCS facility can be availed on re-imbursement.

For RSBY beneficiaries, an electronic list of eligible BPL households is provided to the insurer according to a pre-specified format. The list is posted in each village prior to the enrolment and the date and location is publicized in advance. Mobile stations are set up at local centres (e.g., public schools). These stations are equipped with the hardware required to collect biometric information (fingerprints) of the members of the household covered and to print smart cards with a photo. The smart card along with an information pamphlet describing the scheme and the list of hospitals is provided on the spot once the beneficiary has paid the 30 rupees fee. The process takes less than ten minutes.

In an attempt to increase the breadth of health care coverage, the RSBY facility was extended to all Job Card holders of Mahatma Gandhi Rural Employment Guarantee Act (MGNREGA) households; and households of unorganized workers (i.e., Domestic Workers, Beedi Workers, Building and other Construction Workers, Street Vendors, Postmen, Licensed Railway Porters, Vendors, Hawkers, Cycle Rickshaw Pullers, Mine Workers, Rag Pickers, Safai Karmacharis, Auto and Taxi Drivers) and any other category of households notified by the MoLE from the fiscal year of 2013-14 and hence, it is expected that about 1.5 lakhs Job Card holders (families) in rural areas would be covered by benefits of health insurance in the near future.

3.5. Enrolment under Public Health Care Scheme in Mizoram

Table 3.2 presents the trend of enrolment under RSBY scheme since its inception in 2010-11. It may, however, be noted that we could not obtain data for uniform reference period and thus, they are not comparable. The first year (2010-11) covers September 2010 to August 2011, the second year (2011-12) covers September 2011 to December 2012 and the third year (2013-14) covers the period of January 2013 to March 2014. The fourth year (2014-15) covers the period of April 2014 to March 2015 which has subsequently been adjusted in correspondence to the fiscal year.

It is observed that the scheme has seen significant improvement in enrolment each year. It has increased from 11,591 families in 2010-11 to 46,789 in 2011-12. In 2014-15 the enrolment has significantly jumped to

1,52,983 families. Meanwhile the annual enrolments for the scheme were well below the target that the achievement rates were only 17.19 percent in 2010-11, 63.59 percent in 2011-12, 43.09 percent in 2013-14 and 44.7 in 2014-15. The scheme did not cover the entire state in the first phase. Districts such as Mamit, Aizawl, Champhai, Lunglei and Lawngtlai were covered. The other districts were covered in the succeeding phases.

Table 3.2. Status of Enrolment under RSBY Scheme in Mizoram

	2010-11		2011-12		2013-14		2014-15	
	Sept,2010-Aug,2011		Sept,2011-Dec,2012		Jan,2013-Mar,2014		Apr,2014-Mar,2015	
District	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Mamit	6502	1026	7172	3920	20368	7784	-	11775
Kolasib	6511	-	6511	4665	23286	10990	-	15633
Aizawl	19076	7828	22830	15840	50179	23973	-	44638
Champhai	8972	1159	9061	6343	38846	16407	-	23228
Serchhip	3068	-	3068	2360	18744	7337	-	11370
Lunglei	10259	1125	11354	7269	45388	17963	-	27042
Lawngtlai	7910	453	8184	3670	22733	9244	-	9250
Saiha	5120	-	5433	2722	20748	9849	-	10047
MIZORAM	67418	11591	73613	46789	240292	103547	212572	152983

Source: 1) An evaluation of Mizoram State Health Care Scheme, 2013, FMU, Govt. of Mizoram
2) Mizoram State Health Care Society Dt.10.03.2015

The enrolment status of Mizoram State Health Care Scheme (MSHCS) has been presented in Table 3.3. The total enrolment in 2010-11 was 28811 families which have drastically reduced to 5398 families in the next year. The total enrolment during 2013-14 is marked by a remarkable improvement with 32,938 families getting enrolled this year. This upward trend continues with

66,037 families enrolled in 2014-15. The main reason behind the reduction in enrolment for the second period is due to the failure of the insurance company to gather public confidence. There were many criticisms charged against this insurance company over deficiency in servicing such as delayed payment of bills and unexpected deductions of charges from claim amounts. However, the enrolment has increased from the policy period 2013-14 where the scheme has already been run by the Society on self-finance basis. The enrolment in 2013-14 is more than six times it was in the previous policy period which again increased to more than double in the succeeding period. This reveals that there is a growing confidence of the public on the scheme when it is managed and implemented by the Society.

Table 3.3. Status of Enrolment under Mizoram State Health Care Scheme

District	Sept. 2010-Aug. 2011	Sept.2011-Dec.2012	Jan.2013-Mar.2014	Apr.2014-Mar.2015
Mamit	655	148	240	NA
Kolasib	3090	468	468	409
Aizawl	15018	3318	5718	10740
Champhai	800	403	359	632
Serchhip	1410	187	286	592
Lunglei	3536	475	653	728
Lawngtlai	2772	336	67	432
Saiha	1530	63	239	261
MIZORAM	28811	5398	8030	13794

Source: Mizoram State Health Care Society, dated 10.03.2015

3.6. Funding of Health Care Scheme

To have an overview on the status of Mizoram State government to provide health care facilities to its citizens, the trends in budgetary allocation for it has been presented in Table 3.4 and Figure 3.1. It is observed that the total expenditure on health has consistently increased from Rs. 66.34 Crores in 2003-04 to Rs.444.24 Crores in 2014-15, which is more than 6 times it was before. The plan expenditure that is meant for developmental funding has increased more than 6 times indicating that there is significant increase in health care facilities within a span of 12 years.

The priority given to public health by the state government could be seen from the increasing budgetary allocation for Health and Medical Services. During 2014-15, Health and Medical Services constituted 5.14 percent of the total budgetary expenditure, which increased from 3.60 percent during 2013-2014. With this increasing effort shown by the state government, the need for the introduction of public health care scheme was felt automatically, and separate budgetary allocation was made since the financial year 2008-09.

Figure 3.1: Trends of Total Budgetary Allocation for Health & Medical Services in Mizoram (Rs.in crores)

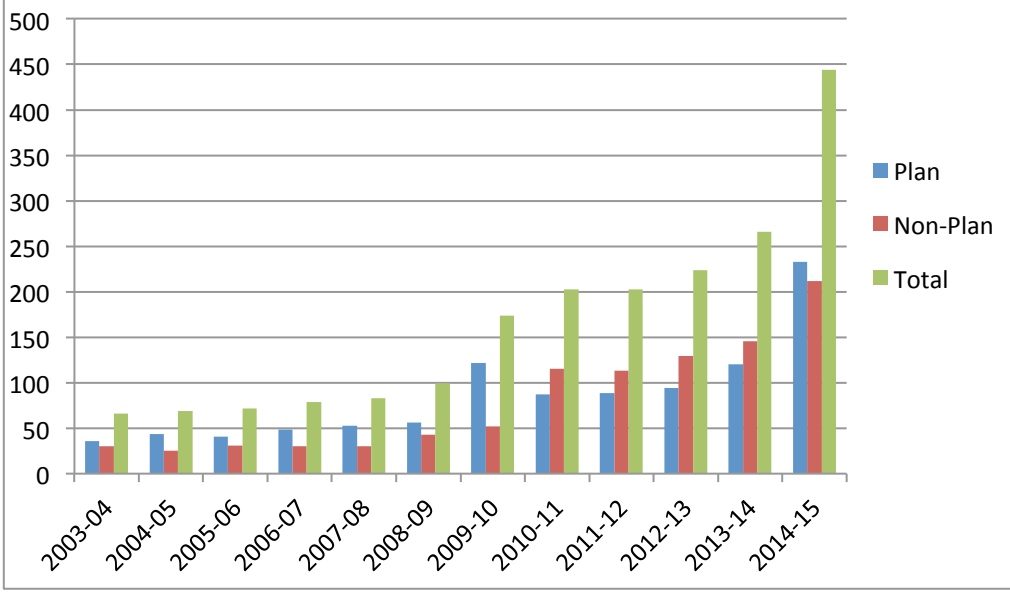


Table 3.4: Growth of Budgetary Expenditure on Health & Medical Services in Mizoram

Rs. In Crores

Year	Plan	Non-Plan	Total	Budgetary Share (%)
2003-04	36.11	30.23	66.34	3.60
2004-05	43.70	25.35	69.05	4.48
2005-06	40.67	31.06	71.73	3.98
2006-07	48.30	30.25	78.55	3.86
2007-08	52.82	30.05	82.86	3.57
2008-09	55.92	42.86	98.78	3.76
2009-10	121.88	52.10	173.98	5.43
2010-11	86.89	115.36	202.25	5.44
2011-12	88.91	113.34	202.25	4.63
2012-13	93.95	129.46	223.41	3.66
2013-14	120.04	145.83	265.87	3.42
2014-15	232.71	211.53	444.24	5.14

Source: State Budget Documents & Economic Survey of Mizoram (Various Issues)

As noted earlier, the beginning of Public Health Care Scheme was seen in 2008 with the State Government's budgetary allocation for its implementation. However the scheme was discontinued from 31.03.2009 when there is a loss of confidence upon the insurer, the Reliance General Insurance Company Ltd. by the beneficiaries as well as the facilitator resulting in a backlog between the insurance company and the government. Meanwhile, the scheme was revamped towards the end of 2009 with approval of assistance received from Asian Development Bank (ADB) under Mizoram Public Resource Management Programme (MPRMP).

An amount of Rs 117.80 Crores was released by Government of India at 90 percent grants and the remaining 10 percent as loan during November-December 2009 for Health Insurance Corpus, and the same was drawn in the later part of March 2010. The amount was kept in the custody of the State Finance Department for investment and sustenance of the scheme. In order to maintain long-term sustainability of the scheme, the Finance Department has decided to invest the fund in six financial institutions that are considered to be the most trusted in the state. The interests accrued to these investments are released to the Mizoram State Health Care Society on regular basis for payment and settlement of medical claims under the scheme. The details of bank investment of health corpus as on 4th August, 2015 is given in Table 3.5.

Table 3.5. Investment of Health Care Corpus Fund in six Financial Institutions

Sl. No	Financial Institutions	Amount (Rs. In Lakhs)	Quarterly Interest (Rs. in lakhs)
1	Mizoram Rural Bank, Chanmari	552	13
2	Mizoram Rural Bank, Khatla	9501	220
3	Mizoram Urban Co-operative Bank	200	5
4	APEX Bank	2700	64
5	Industrial Development Bank of India	2187	51
6	State Bank of India	500	10
TOTAL		15640	363

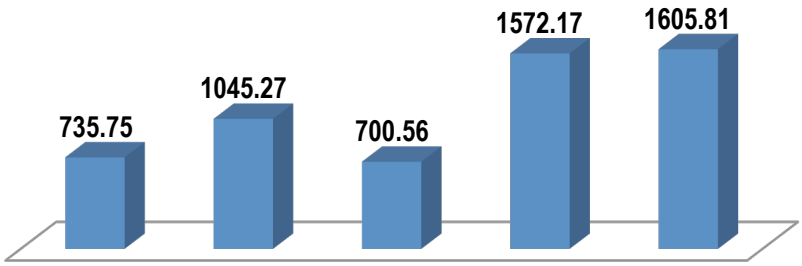
Source: Finance Department, Government of Mizoram. August 4, 2015.

Table 3.5 shows that a sum of Rs 15640 Lakhs has been invested in six financial institutions in the current period. The initial health care corpus fund has been reinvested for years and thus the total amount of money that is currently invested is well above the initial health care corpus fund received from the central government. The table shows the interest earned per quarter amounted to Rs.363 lakhs. That is the total annual income earned from the interest of these investments is more than Rs.1452 lakhs, which is considered substantial for the sustenance of the scheme at current rate of claims received and settlement.

The total interest revenue earned by the state government since 2010-11 till 2014-15 from the investment of Health Corpus fund has amounted to Rs.56.596 Crores. The income has been released to the implementing society of Mizoram State Health Care Schemes. The year wise break-up of the interest revenue is presented in Figure 3.2. It is observed that the income received has

increased from Rs.735.75 lakhs in 2010-11 to Rs.1605.81 lakhs in 2014-15. It may thus be concluded that the state is earning substantial income from the investment of health corpus fund received from ADB and this may be taken as the crucial indicator for the sustainability of the public health care schemes in the long run.

Figure 3.2: Year Wise Interest Income from Investment of Health Corpus Fund by Mizoram State Government (Rs. in lakhs)



At the same time, the scheme of RSBY has been funded mainly by the Central Government, while the state government has to pay for relatively lower contribution to fund the implementation of the scheme. As per RSBY Guidelines, the scheme has to be funded by the centre and the state in the ratio of 90:10. Table 3.6 presents the funding position of the RSBY in Mizoram. It may be noted that the Mizoram State Health Care Society is implementing both MSHCS and RSBY, and the two are merged on top up basis. Since this is the case, the income received by this society included the registration fee of RSBY (i.e. Rs.30 per household) and the premium payment by the beneficiaries of

MSHCS. The two (Registration and Premium) are clubbed under the head of Beneficiary Contribution.

Table 3.6. Funding of RSBY Scheme in Mizoram

Rs. in lakhs

Sl. No	Funding Source	2010-11	2011-12	2013-14	2014-15
1	Central Share	49.23	412.68	860.06	1034.93
2	State Share	1.71	28.7	88.66	104.79
3	Beneficiary Contribution	3.59	14.04	62.13	45.89
	Total	54.53	455.42	1010.85	1185.61

Source: Mizoram State Health Care Society, Dated 10.03.2015

It is observed that a total expenditure of Rs.2706.41 lakhs has been spent for the implementation of RSBY scheme in Mizoram since its inception in 2010-11. The total expenditure has significantly increased from a mere Rs.54.53 lakhs in 2010-11 to Rs.1185.61 lakhs in 2014-15. This trend should be construed as the significant progress of the state in the implementation of RSBY scheme. While the Central Share increased from Rs.49.23 lakh in 2010 to Rs.1034.93 lakhs in 2014-15, the state's share has also increased significantly from Rs.1.71 lakh to Rs.104.79 lakhs during the same period.

At the same time, the beneficiaries' contributions have also increased from Rs.3.59 lakhs in 2010-11 to Rs.62.13 lakh in 2013-14 and to Rs.45.89 lakhs in 2014-15. It was reported during the field survey that this component is separately devoted for the administrative expenses in the form of capacity development, registration expenses, office maintenance, staff salary, etc.

3.7. Claims and Settlement Profile

One of the crucial areas for the study of any public health care scheme should be the performance of the implementing agency to settle the medical re-imbursement claims received from the beneficiaries. Table 3.6 presents the year wise details of re-imbursement claims received by the implementing Society under MSHCS.

During the first year (i.e., 2010-11) 8494 medical reimbursement claims were received and out of which 8092 were accepted; 6266 bills were paid which is 73.77 percent of the total bills received while the remaining 402 and 1826 stood rejected and pending respectively. The total claim amount during this period was Rs.1053.97 lakhs and the average size of the claim amount was Rs. 12,408 per patient. The accepted claim amount was Rs. 868.52 lakhs of which Rs. 186.58 were kept as pending bills. Thus, the accepted bills accounted for 64.7 percent of the total claim amount.

In 2011-12, the total number of claims in MSHCS has drastically reduced to 4205 which is lesser than half of the total number of claims in the previous year and 3843 (91.39 percent) claims were accepted amounting to Rs. 770.29 lakhs with average claim size of Rs. 19,489 per patient. The status of claims in 2013-14 showed an overall increment in almost all the entries as compared to the data of the previous year. The total number of claims in MSHCS was 5811 of which 5596 claims were accepted which has amounted to an aggregate of Rs. 927.74 lakhs as the accepted claims amount. With the

claims frequency of 17.64 percent of the total enrolment, the average claims size was Rs. 19,650 which is Rs. 161 more than it were in the previous year.

Table 3.6. Performance of the Government to Settlement Medical Claims under MSHCS

Particulars	Sept.2010-Aug.2011		Sept.2011-Dec.2012		Jan.2013-Mar.2014		April2014-Mar.2015	
	Claims (no)	Amount (Rs. In Lakhs)	Claims (no)	Amount (Rs. in Lakhs)	Claims (no)	Amount (Rs. In Lakhs)	Claims (no)	Amount (Rs. In Lakhs)
MR Bills Received	8494	1053.97	4205	819.5	5811	1141.91	7094	1260.86
MR Bills Accepted	8092	868.52	3843	770.29	5596	927.74	4927	789.9
Bills Paid	6266	681.93	3797	597.5	5596	927.74	4927	789.9
Paid Percent	73.77	64.7	90.3	72.91	96.3	81.24	69.45	62.65
Bills Rejected	402	185.45	362	49.21	215	36.02	194	30.75
Reject Percent	4.73	17.6	8.61	6	3.7	3.15	2.73	2.44
Bills Pending	1826	186.58	46	172.78	-	-	1973	385.69
Pending Percent	21.5	17.7	1.09	21.08	-	-	27.81	30.59
Average Claims Size (Rs)	-	12408	-	19489	-	19650	-	17774
Claims Frequency	29.48	-	77.89	-	17.64	-	10.74	-

Claims Frequency: Number of claims received as a percentage of total enrolment
Source: Mizoram State Health Care Society, dated 10.03.2015

During 2014-15, MSHCS received 7094 medical reimbursement claims and out of this 4927 were accepted and paid; while 194 were rejected. The reject percent is 2.73 of the total bills received which have been the lowest reject percent for all the four years. 1973 were kept as pending bills or still in processing. The average size of claims turned out to be Rs. 17,774 per patient.

A notable trend in the claim settlement is the declining percentage of rejected medical claims. Initially, 4.73 percent of the total number of claim received was rejected, but it was later decreased to 2.73 percent during 2014-15. Similarly, the rejected amount also decreased significantly from 17.6 percent in 2010-11 to 3.15 percent and 2.44 percent in 2013-14 and 2014-15

respectively. The declining percentage of rejected claims can be interpreted as the increasing awareness on the part of the beneficiaries as well as the service providers regarding the coverage and benefit package of the scheme.

However, no significant improvement in the percentage of pending bills is observed during the study period. It is 27.81 percent and 30.59 percent of the total claims received and claimed amount respectively during 2014-15. It can be concluded that while the significant progress is observed in the implementation of public health care scheme in terms of fund allocation and enrolment, there is no improvement in administrative efficiency worth mentioning to settle medical claims received from the beneficiaries.

Table 3.7 presents the progressive performance of the State Health Society in the settlement of medical re-imbursement claims under RSBY Scheme. During the first period, i.e. 2010-2011, the total claim in RSBY was 966 out of which 931 bills were accepted while 35 bills were rejected. It is remarkable to note that only 3.62 percent of the total bills received are rejected. The total claim amount was Rs. 50.18 lakhs of which Rs. 46.08 lakhs was accepted. The average claim size in RSBY during 2010-11 was only Rs. 5,195 and the claims frequency has turned out to be a meagre 8.33 percent of the total enrolment.

Table 3.7. Status of claims received under RSBY Scheme

Particulars	Sept.2010-Aug.2011		Sept.2011-Dec2012		Jan.2013-Mar.2014		April2014-Mar.2015	
	Claims (no)	Amount (Rs. in lakhs)	Claims (no)	Amount (Rs. in lakhs)	Claims (no)	Amount (Rs. in lakhs)	Claims (no)	Amount (Rs. in lakhs)
MR Bills Received	966	50.18	9073	557.51	24012	1248.37	24892	1370.76
MR Bills Accepted	931	46.08	7222	477.17	21503	1155.1	17119	912.5
Bills Paid	784	38.31	6525	436.88	21503	1155.1	17119	912.5
Paid Percent	81.16	76.35	71.92	78.36	89.55	92.53	68.77	66.57
Bills Rejected	35	7.49	1851	80.33	2509	93.27	1513	94.12
Reject Percent	3.62	14.93	20.4	14.41	10.45	7.47	6.08	6.87
Bills Pending	147	7.77	697	40.29	-	-	6260	340.96
Pending Percent	15.22	15.48	7.68	7.23	-	-	25.15	24.87
Average Claims Size (Rs)	-	5195	-	6145	-	5199	-	5507
Claims Frequency	8.33	-	19.39	-	23.19	-	16.27	-

Claims Frequency: Number of claims received as a percentage of total enrolment
Source: Mizoram State Health Care Society, 10.03.2015

During 2011-2012, number of claims in case of RSBY has increased from 966 to 9073 and of these 7222 (79.6 percent) claims were accepted. The total accepted amount was Rs. 477.17 lakhs (85.6 percent) and the average claim size was Rs. 6145. In 2013-14, claims in RSBY have shown even much greater improvement in the utilisation of the health insurance scheme. The total number of claims is 24,012, more than twice as it was in the previous year. Of this, 21,503 claims were accepted and the total accepted claim amount was Rs. 1,155.10 lakhs where the average claims size turns out to be Rs. 5,199 which is a little less than it was in the previous year. No bills was kept pending for this policy period. At the succeeding policy period i.e., 2014-2015, there were 24,892 medical reimbursement claims under RSBY scheme of which 17,119 were accepted and the total accepted claim amount was Rs. 912.50 lakhs. The

number of rejected bills was 1513 and 6260 bills were still in the process and is kept as pending bills. Claims frequency was 16.27 of the total enrolment and the average claims size was Rs. 5,507 per patient.

The rejected number of medical bills under RSBY scheme has increased from 3.62 percent in 2010-11 to 20.4 percent in 2011-12 and decreased to 6.08 percent during 2014-15. At the same time, the rejected amount has decreased from 14.93 percent in 2010-11 to 6.87 percent in 2014-15. Meanwhile, the pending claims remains around 25 percent.

3.8. Concluding Remarks

It can be concluded that the efforts of the State Government in implementing health care schemes in Mizoram is praiseworthy. The enrolment pattern shows an upward trend since the commencement of the schemes especially in RSBY, and even in MSHCS though there has been a decline in enrolment during 2011-12 which however started rising subsequently. High praise would be given to the implementing agency, the Mizoram State Health Care Society that has done a commendable effort in running two schemes side by side.

Management of funds for the state Health Care that has seen years of reinvestment in financial institutions ensures sustainability. During the selection process of investment destination, utmost importance is given to security; the level of profit that it earns come the next. However, it looks more

appropriate to handle the investment section into the hands of an expert investment manager who would be ready to invest in capital markets that can earn a more attractive amount of interest. The growing effort of the State Government to provide health care facilities to all its citizens, especially to those who are not entitled under medical attendance rules of government or other bodies is reflected through the ability of the state to raise its matching share contribution towards RSBY since 2010.

If we compare the working performance of the two public health care schemes – MSHCS and RSBY, we find a relatively more efficient working of the former than the latter in terms of rejected and pending bills. Further, MSHCS show higher performance in terms of claim frequency as well as average claim size per patient than RSBY. It may, thus, be concluded that improvement in administrative efficiency on the part of the implementing agency and increasing awareness about the scheme on the part of the patient and the service provider are the key challenge for the successful implementation of RSBY in achieving its goal of enhancing health care access to the poor.

CHAPTER 4

Chapter-4

ANALYSIS ON THE COVERAGE AND IMPACT OF PUBLIC HEALTH CARE SCHEMES

4.1. Introduction

The preceding chapter presented a brief outline on the progressive implementation of public health care schemes in Mizoram in terms of fund allocation and enrolment under it. To have a better view on the existing situation, this chapter attempts to examine the coverage and impact of public health care scheme taking the case of Aibawk Rural Development (RD) Block by collecting primary data from the sample households using a structured interview schedule. There are 22 villages in this RD Block (i.e. the study area) and most of the villages have public health facility in the form of Health Clinic, Health Sub-Centre, and Primary Health Centre. In addition, there is State Referral Hospital at Falkawn.

The stakeholders in the process of data collection are as follows: First, sample households (respondent households) who are the beneficiaries of the public health scheme. Second, village level health staffs like Health Workers working in the Health Sub-Centres and Health Clinic. These personnel are the village level stakeholders in the implementation of state's health care schemes and they are responsible for the conduct of registration of beneficiaries under the scheme. Lastly, the government hospitals (PHCs), which are the service provider as well as supervisory authority in the implementation of the scheme,

were approached to collect data on the registration and medical reimbursement status in their respective jurisdiction. Further, the Primary Abstract of the Population Census 2011 was used for the village wise population size.

The rest of the chapter is organized in three major sections such as the coverage of the scheme in terms of enrolment, the socio-economic status of the beneficiaries, household health care expenditure, impact analysis of RSBY scheme, factors responsible for enrolment under the scheme, perception of beneficiaries, family health care seeking behaviour and conclusion.

4.2. Coverage of Health Care Schemes

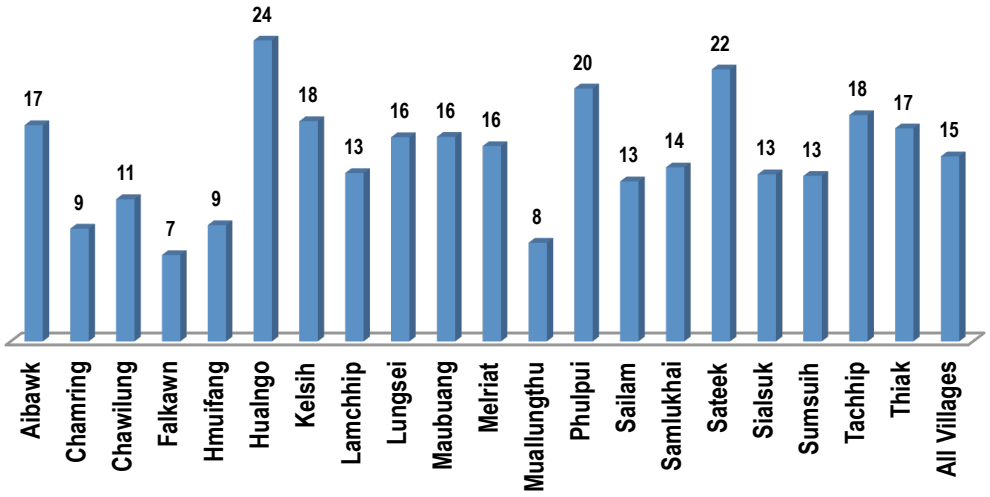
In spite of the significant progress of the state in the implementation of health care scheme since 2010-11 as noted in the preceding chapter, the enrolment status is quite low. Of the total population of 17,128 in the study area, only 2522 persons are enrolled under the health care scheme. This indicates that only around 15 percent of the total population are enrolled under the health care scheme. The village of Hualngo having a total population of 693 has the highest enrolment at 24 percent, followed by Sateek (22 percent); while the enrolment percent is lowest in Falkawn village (7 percent). The calculated enrolment ratios for all the villages within Aibawk RD Blocks are presented in Table 4.1 and Figure 4.1.

Table 4.1: Enrolment under Health Care Schemes in Aibawk RD Block, Mizoram

Sl. No	Village	Total Population	Persons Enrolled	Enrolment Ratio (%)
1	Aibawk	1325	228	17.21
2	Chamring	301	27	8.97
3	Chawilung	371	42	11.32
4	Falkawn	1339	92	6.87
5	Hmuifang	292	27	9.25
6	Hualngo	693	166	23.95
7	Kelsih	736	129	17.53
8	Lamchhip	709	95	13.40
9	Lungsei	240	39	16.25
10	Maubuang	651	106	16.28
11	Melriat	997	155	15.55
12	Muallungthu	1160	91	7.84
13	Phulpui	1058	213	20.13
14	Sailam	762	97	12.73
15	Samlukhai	1278	177	13.85
16	Sateek	859	186	21.65
17	Sialsuk	1881	250	13.29
18	Sumsuih	744	98	13.17
19	Tachhip	983	177	18.01
20	Thiak	749	127	16.96
	All Villages	17128	2522	14.72

Source: 1) Primary Abstract of Population Census 2011, 2) Field Survey, 2015

Figure-4.1: Enrolment under Public Health Care Schemes (RSBY & MSHCS) in Aibawk RD Block - *Percent*



It is interesting to note that the enrolment ratio does not have clear relationship with the availability of health infrastructure. This is shown by relatively low enrolment in Falkawn village where there is one of the most equipped state's hospitals (Referral Hospital), while Chamring village with no Health Sub-centre is also among the villages which have low enrolment ratio. As enrolment ratio is the most plausible indicator on the coverage health care scheme, it can be concluded that the availability of health infrastructure does not necessarily translate into improved health care coverage in the study area.

Further, the enrolment ratio or coverage of health care scheme is not found to be directly related to the population size of village. Hualngo which has the highest enrolment ratio is among the small villages in the study area, while village with largest population shows only 13 percent enrolments. Thus, it may be concluded that the population size and availability of public health care institution do not necessarily resulted in the increase in the coverage of public health care scheme.

Table 4.2 presents the distribution of the beneficiary scheme wise in the study area. It is to be noted that there are two major types of RSBY beneficiary, namely BPL and holder of MNREGS Job Card and both categories are given cashless facility for hospitalized treatment. At the same time, APL category is solely the beneficiaries under the state's own scheme of Mizoram State Health Care Scheme (MSHCS). It is clearly observed from this table that the enrolment under RSBY scheme (both types) contributes more than 96 percent of the total enrolment. Thus, it may be concluded that the coverage of RSBY

scheme is significantly higher than the state's own health care scheme in rural areas of Mizoram.

Table 4.2.: Distribution of Enrolment under Health Care Scheme in Aibawk RD Block - Scheme Wise

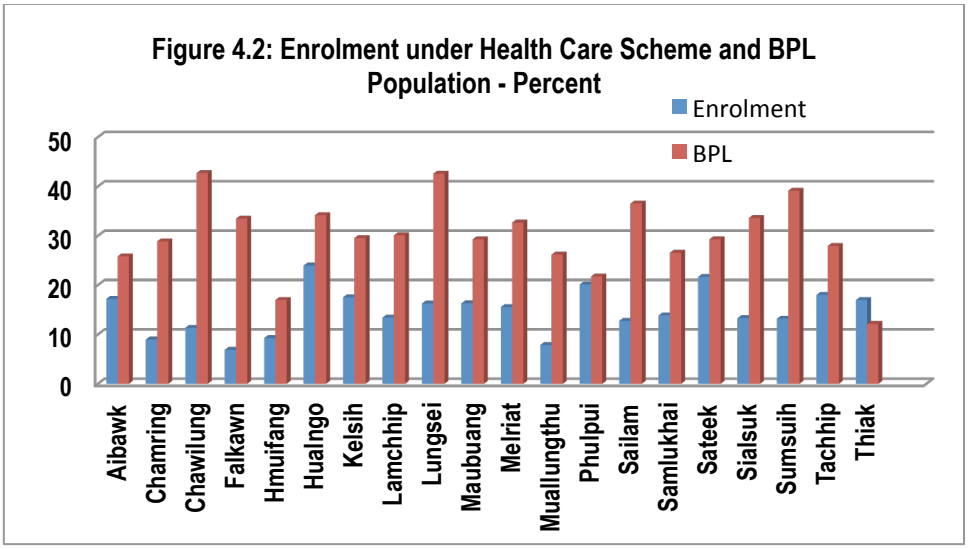
Sl. No	Village	No. of Persons Enrolled				Percent			
		RSBY BPL	RSBY MNREGS	APL	Total	RSBY BPL	RSBY MNREGS	APL	Total
1	Aibawk	141	64	23	228	61.84	28.07	10.09	100
2	Chamring and Hmuifang	40	6	7	53	75.47	11.32	13.21	100
3	Chawilung	42	0	0	42	100.00	0.00	0.00	100
4	Falkawn and Muallungthu	123	57	3	183	67.21	31.15	1.64	100
5	Hualngo	156	10	0	166	93.98	6.02	0.00	100
6	Kelsih	101	0	18	119	84.87	0.00	15.13	100
7	Lamchhip	88	7	0	95	92.63	7.37	0.00	100
8	Lungsei	38	0	1	39	97.44	0.00	2.56	100
9	Maubuang	98	3	5	106	92.45	2.83	4.72	100
10	Melriat	129	25	1	155	83.23	16.13	0.65	100
11	Phulpui	133	76	4	213	62.44	35.68	1.88	100
12	Sailam	93	1	3	97	95.88	1.03	3.09	100
13	Samlukhai	174	0	3	177	98.31	0.00	1.69	100
14	Sateek	151	33	2	186	81.18	17.74	1.08	100
15	Sialsuk	225	11	14	250	90.00	4.40	5.60	100
16	Sumsuih	89	1	8	98	90.82	1.02	8.16	100
17	Tachhip	106	66	5	177	59.89	37.29	2.82	100
18	Thiak	125	2	0	127	98.43	1.57	0.00	100
	TOTAL	2052	362	97	2511	81.72	14.42	3.86	100

Source: Field Survey, 2015

Another observation that is very clear from Table 4.2 is the dominance of RSBY-BPL scheme where its percentage contribution ranges from 59.89 percent in Tachhip village to 100 percent in Chawilung village. Even in the village where the contribution of RSBY BPL category is lowest, the contribution of RSBY MNRGES is found to be highest. Due to unavailability of separate data for Chamring, Hmuifang, Falkawn and Muallungthu, they are

combined together to suit the need of the study. MSHCS enrolment is found to be highest in Kelsih village (15.13 percent), while there are no enrolment in Chawilung, Hualngo, Lamchhip and Thiak villages.

Figure 4.2 presents the relationship between the poverty incidence as a percentage of BPL families and enrolment in the study area. It is observed that there is a mixed result from this Figure. While there is clear positive relationship between enrolment and BPL percentage in some villages, villages which have high BPL are showing very low enrolment like Chawilung, Lungsei, etc.



In fact, the target population of the RSBY scheme and the MSHCS is the poor who are working in the unorganized sector and are out of the purview of the state and central government medical attendance rule. Since this is the case, it is assumed that the schemes should result in the increasing coverage of poor families. There should be positive relationship between poverty incidence and enrolment under the scheme. However, the calculated correlation between

poverty ratios (BPL percent) and enrolment in these villages (i.e. 0.07) is insignificant. Thus, the result failed to justify our study hypothesis of direct relationship between poverty incidence and enrolment under public health care schemes.

4.3. Socio-economic Profiles of Healthcare Beneficiaries

The socio-economic conditions indicated by income level, educational status, age structure, etc has been the major determinant of health care (Adler and Newman, 2002). Attempt is made in this section to examine the socio-economic status of the health care beneficiaries in the study area who are enrolled under Public Health Care Schemes of Mizoram. Table 4.3 presents the basic socio-economic indicators of the beneficiaries in the study area.

It is observed from Table 4.3 that the average family size of the sample population is 5.15. Moderate level of housing condition is observed as the majority (90 percent) of the households stay in semi-pucca house, while a significant percentage of 9 percent are staying in katcha house. The average distance to the nearest hospital is 6.95 km. With respect to the source of drinking water, which is the basic requirement for ensuring public health, the study area depends on the public water supply provided by the State's Public Health Engineering (PHE) Department in majority of the cases. At the same time, almost one-third of the beneficiaries are depending on public well and rainwater as main source of drinking water.

Table 4.3: Socio-economic status of the study area.

Sl. No	Particulars	Value
1	Average family size *(No. of Persons)*	5.15
2	House type *(in percent)*	
	a) Pucca	1
	b) Semi-Pucca	90
	c) Katcha	9
3	Average distance of the nearest hospital *(in km)*	6.95
4	Source of drinking water *(in percent)*	
	a) PHE Supply	65
	b) Public Well	15
	c) Rainwater	14
	d) Others	6
5	Policy status of the enrolled respondents *(in percent)*	
	a) RSBY BPL	53.26
	b) RSBY APL (MNREGA and Street Vendors)	20.41
	c) APL	35.87

Source: Field Survey, 2015

In line with the observations in the preceding section, RSBY accounted for the majority of the beneficiaries. It is observed that 53.26 percent of the respondents were RSBY BPL and 20.41 percent are RSBY APL (MNEGA), while APL (MSHCS) accounted for 35.87 percent. Table 4.4 presents the income distribution of the respondent beneficiaries in the study area. It is shown that the estimated average monthly income turned out to be Rs.8135 and the standard deviation is Rs.7284 showing the presence of considerable degree of inequality in income in the area. Taking into account the average family size of 5, the per capita monthly income is estimated to be around Rs.1627. Though the per capita income is somehow quite high, the magnitude of the standard deviation suggests that substantial percentage of the respondents are having

very low per capita income, which would have ramifications in their inability to access proper health care.

Table 4.4.: Income distribution

Class interval	Percentage of family
below 5000	39
5000-10000	26
10000-15000	18
15000&above	17
Total	100
Average monthly income (in rupees)	8135.32
Standard Deviation (in rupees)	7284.08

It is observed that 39 percent of the population have monthly income below Rs.5000, while 26 percent of the population have income that ranges between Rs. 5,000 and 10,000. At the same time, 18 percent of the population have income between Rs. 10,000 and Rs. 15,000, while 17 percent have income of Rs.15000 and above.

Table 4.5 presents the major sources of income among the beneficiaries of health care schemes in the study area.

Table: 4.5. Source of income of the respondents

Source	Percentage of families
a) Agriculture and allied activities	44
b) Daily wages	26
c) Salary (under government)	11
d) Business	10
e) Salary (casual works under government)	3
f) Other	6

Source: Field Survey, 2015

Agriculture and allied activities constitute the main source of income with 44 percent of the population falls under this category. A substantial 26 percent of the households depend on daily wage work as their main source of income, while the contribution of salary from employment and business accounted for 11percent and 10 percent respectively. As the distribution of income sources among the beneficiaries shows the dominance of unorganized sector, it may be concluded that the facility of health care scheme in Mizoram is enjoyed by people working in unorganized sector.

4.4. Household Health Care Expenditure

The monthly household (family) health expenditure in the study area is presented in Table 4.6. It is observed that the average monthly medical expenditure of the respondents amounts to Rs 932.56. The monthly health care expenditure majority of the households (i.e. 61 percent) is found to be less than Rs.1000, while it is below Rs.500 for 23 percent of the households.

Table 4.6: Distribution of Monthly Health expenditure

Expenditure (in rupees)	Percentage of Families
below 500	23
500 -1000	38
1000 -1500	20
1500 & above	19
Total	100

Source: Field Survey, 2015

To examine the extent that the health cost could lead to the financial burden of the family, the percentage of health expenditure on family income across the different income groups have been estimated. This is presented in Figure 4.3 and Table 4.7. It is estimated that, on the average, the respondent households spent 11.46 percent of their monthly income on health expenditure.

Figure 4.3: Percentage of Health Care Expenses on Monthly Family Income among the different income groups - *percent*

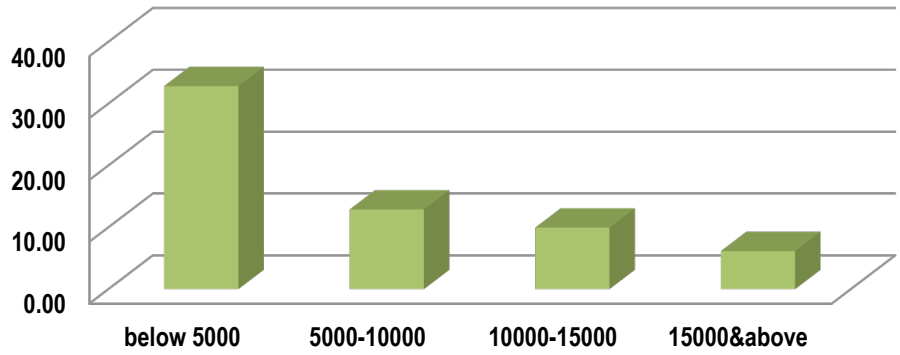


Table 4.7: Average Monthly Income and Household Health Care Expenditure in Aibawk RD Block - by different income groups

Income Group (Rs)	Ave. Monthly Health Care Expenditure (Rs)	Ave. Monthly Income (Rs)	Percentage of Monthly Health Expenditure
below 5000	792.92	2415.33	32.83
5000-10000	796.15	6179.5	12.88
10000-15000	1061.11	10666.67	9.95
15000&above	1325.41	21568.65	6.15
All Classes	932.56	8135.32	11.46

Source: Field Survey, 2015

Interestingly, the average percentage of health care expenditure on family income consistently declined from the lowest income bracket to the top income bracket from 32.83 percent to 6.15 percent respectively. This clearly

points out the fact that the health expenditure has been one of the biggest burdens for the family who are in the lower income bracket, while it costs only 6.15 percent of the income for those in the highest income group. Thus, it would be reasonable to conclude that it is the poor family who would be most benefitted from the facilities of the public health care schemes. The observation is justified by more or less stable average health expenditure that ranges between Rs.792.92 among the lowest income group to Rs.1325.41 in the highest group, while the average income of the latter is more than 8 times of the former.

4.5. Impact Analysis of RSBY Scheme

To have clear view on the impact of the health care scheme on relieving the financial burden of the family arising out of the health care expenditure, 22 beneficiaries who had actually availed the cashless facility of RSBY during the reference year were purposively selected. While conducting the survey, care was taken to include both the enrolled and non-enrolled households. Even within the enrolled households, we include those households that have utilised their Smart Card. The result is presented in Table 4.8.

The table shows that 31.82 percent of those respondents who utilised their smart card billed an amount below Rs. 5000; meanwhile 27.27 percent spent between Rs. 5000 to Rs. 10,000 and 13.64 percent spent between Rs.10,000 to Rs.15,000 from their smart card. The average bill utilised from

each smart card is Rs. 10,206. An amount of more than Rs. 15,000 is utilised by 27.27 percent of the smart card users. This signifies that the smart card is very helpful for the beneficiaries.

It would be a deep burden to those families with an average monthly income of Rs. 8135 to pay their medical bills out of their pocket. Obviously, the beneficiaries are fortunate to utilise the benefits of smart cards. As seen in the case study report (given in the Annexure) of Mrs. Sangthuami, a Dinthar, Aizawl locality that had their family members getting hospitalised one after the other in a year, the health insurance is of immense importance. By getting enrolled in an insurance scheme, they could receive cashless medical treatment as long as the total billable amount of Rs. 30,000 in a year is exhausted.

Table 4.8: Amount Availed from Cashless Facility of RSBY through Smart Card during last one year

Spending (in rupees)	Frequency	Percent
Below 5000	7	31.82
5000 – 10000	6	27.27
10000 – 15000	3	13.64
15000 & above	6	27.27
Total	22	100

Overall Average Amount: Rs.8981.28 with SD=Rs.8681

Source: Field Survey, 2015

Table 4.9: Results of t-test for the impact of RSBY facility

Particulars	Value	Sig.
Average Monthly Health Expenditure through OoP (Rs)	949.2	-
Average Monthly Health Expenditure including Cashless Facility under RSBY (Rs)	1697.64	-
Number of Families	22	
t-statistic for difference of means	-5.17	0.000

Table 4.9 shows that the average requirement Out of Pocket (OoP) health care expenditure of these selected families could be increased by 78.85 percent from Rs.949.2 to Rs.1697.64 by including the cashless facility from RSBY. Meanwhile, the t-statistic for the mean difference turned out to be -5.17 which is significant at 1 percent level. Thus, it can be concluded that the public health care scheme being implemented in Mizoram has significantly reduced the requirement for OoP health care expenditure. This is in line with the research hypothesis of this study.

4.6. Factors Responsible for Enrolment Under the Scheme

There can be several factors that are assumed to be responsible for enrolments under the scheme. Table 4.10 presents the time that the sample households have come to know the implementation of RSBY scheme in Mizoram. As have mention in the earlier chapter, the RSBY has been introduced by the Central Government in 2010. More than half of the people reported that they have come to know RSBY since its inception in their village. 21.74 percent of the enrolled household said that they have come across RSBY three years back. However, more than twenty percent of the population have come to know the health care scheme just in the recent years.

Table 4.10: Years the respondents come to know the RSBY scheme for the first time

	Frequency	Percentage
One year back	5	5.43
Two years back	18	19.57
Three years back	20	21.74
Since it was started in my village	49	53.26
Total	92	100

Source: Field Survey, 2015

Table 4.11: Source of information on RSBY

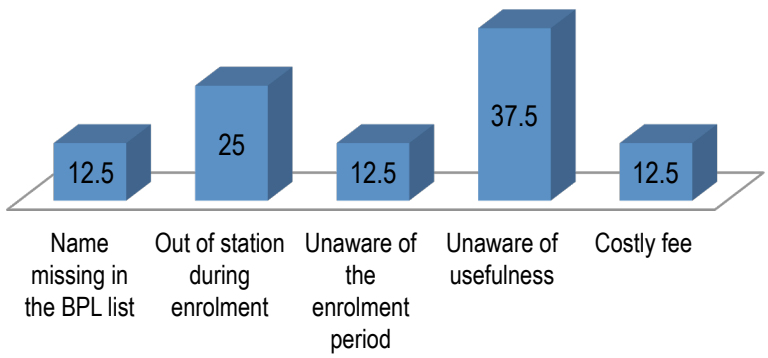
Source	No. of respondents	Percentage
Neighbours	1	1.09
Village Public Information System	34	36.96
Village heads	1	1.09
Health workers and hospital staff	56	60.87
TOTAL	92	100

Source: Field Survey, 2015

Table 4.11 shows the major sources of information about the RSBY scheme in the study area. It is observed that the most effective source of information is the health workers and the hospital staffs which constitute 60.78 percent of the total source. A substantial amount of contribution is made by the village information system (public announcement) which constitutes 36.96 percent while only one percent each of the information is passed through neighbours and the village heads.

To examine the reason for non-enrolment, some of the non-enrolled households are interviewed. The main factors for non-enrolment as obtained from these households are presented in Figure 4.4. Some of them admit that they are unaware of the scheme. There are also few households in the study area who are not entitled to the scheme as they are government salaried.

Figure 4.4: Reasons for non-enrolment (in percent households)



Having the biggest share, 37.5 percent of the non-enrolled households were unaware of the usefulness of the scheme. One fourth of the population did not get enrolment as they were out of station during enrolment period. Meanwhile, the name missing in the BPL list, unaware of the enrolment period and costly fee are the other excuses made by the non-enrolled households.

4.7. Perception of Beneficiaries on the Scheme

To know the success of its implementation, the perceptions of the beneficiaries need to be examined. The satisfactory level of the beneficiaries shows that as much as 93 percent population are satisfied with the scheme. However there is a little portion of the population who are not fully satisfied with the scheme. The people hardly know the entire framework of the scheme and that some are trying to bill those treatments that cannot be billed. This led to frustration with the health care scheme.

At the same time, it is revealed from an in-depth interview with various stakeholders that the beneficiaries are not very much aware of the structure and benefits of the scheme; they just know some of the aspects (Table 4.12). A significant portion of 94.57 percent of the beneficiaries claimed that they are clearly aware of the scheme. Meanwhile, 5.43 percent of the registered beneficiaries admit that they are not fully aware of the scheme.

Table 4.12: Whether clearly aware of the scheme

Perception	Percentage
Yes	94.57
No	5.43
Total	100.00

Source: Field Survey, 2015

Table 4.13 : Status of the beneficiary on whether they would enrol next time

Perception	Percentage
Yes	75
No	25

Source: Field Survey, 2015

More than half of the non-enrolled households said that they will get the family enrolled in the scheme (Ref. Table 4.13). On the other hand, one-fourth of this population are still reluctant to join the scheme even in the next enrolment period. A further interview of these respondent shows that they are those who never availed the facility and thus, do not know its implications on the unforeseen health emergency in the future. This may be, otherwise, taken as information asymmetry on the part of the beneficiaries towards the advantage of being insured or registered under the scheme.

4.8. Family Health Care Seeking Behaviour in the Study Area

It is of crucial importance to examine the health seeking behaviour of the people for the successful implementation of public health care scheme. Table 4.14 presents the existing practice of hospital visit in the study area at the time of illness. It is seen that people do not tended to visit hospital for every illness. This is justified by Table 4.15 that 93 percent of the beneficiaries are not going for regular medical check up.

Table 4.14 : Hospital Visit for Every Illness

Cases	Percent
Not very necessary	99
No need to visit	1
Total	100

Source: Field Survey

Table 4.15 : Frequency of Hospital Visit

Cases	Percent
Regular interval	7
No regular interval	93
Total	100

Status: Field Survey

Table 4.16: Sources of Medical Prescription at the time of normal illness

Source	Frequency
Pharmacist or medicine seller	98
Self prescribed	2
Total	100

Source: Field Survey

Table 4.17 clearly reveals the existing situation of attitude of the people to seek medical expert at the time of normal illness. In fact, almost all of them

approach doctors for serious illness. However, they hardly visit the doctors in the cases they think not serious. It is observed that 98 percent took the advice of medicine seller or pharmacy for normal illness, while 2 percent took own prescribed medicine. These observations may lead us to conclude that people do not have satisfactory health seeking behaviour, which adversely impacted the enrolment ratio under the health care scheme.

4.9. Conclusion

Based on the analysis undertaken in this chapter, the following points may be noted. First, the enrolment of the population under the health care scheme in the study area is unexpectedly low at 14.72 percent keeping in view the percentage of BPL families (29.71 percent) who are the target group of the scheme. In addition, there is no significant correlation between the poverty incidence and RSBY enrolment. Second, the poor scheme of RSBY has dominated the total enrolment, while the coverage of the state's own scheme (MSHCS) contributes only a negligible percentage of 3.86 percent in rural areas. Third, the study observed that the cashless facility of RSBY has significantly reduced the OoP expenditure requirement for hospitalized health care. Taking into account the significant health care expenditure burden of the bottom income group at around 32 percent of monthly income, the study projected significant improvement on access to institutional health care among the poor with the successful implementation of the scheme.

CHAPTER 5

Chapter-5

MAJOR FINDINGS AND CONCLUSIONS

5.1. Introduction

The study presents an empirical analysis that is undertaken taking examination on the coverage and impact of public health care schemes as the underlying objectives. This study selected Aibawk RD Block, which is located in the central part of the state and around 40 km from the state capital, as a case. Accordingly we have generated empirical data from three basic sources: (i) sample survey from Aibawk RD Block, (ii) Primary Abstract of Population Census, 2011 and (iii) secondary data from published and unpublished sources and the records of the various health care stakeholders.

5.2. Summary of the Research Findings

The major findings of the study are enumerated as follows:

1. There is progressive growth of enrolment under health care schemes in Mizoram. The enrolment under the central scheme of RSBY has increased significantly since its inception. The amount of enrolment counts from 11,591 families in 2010-11 to 1,52,983 families in 2014-15. At the same time, the state own scheme, the Mizoram State Health Care Scheme (MSHCS) has also seen significant improvement in terms of enrolment.

Greater performance was observed since when it was implemented by the state finance department and the health care society on self-finance basis.

2. The priority given to public health by the state government could be seen from the increasing budgetary allocation for Health and Medical Services. The total expenditure on health has consistently increased from Rs. 66.34 Crores in 2003-04 to Rs.444.24 Crores in 2014-15, more than 6 times. The plan expenditure that is meant for developmental funding has increased more than 6 times indicating that there is significant increase in health care facilities within a span of 12 years. The funds received for health insurance corpus has been invested in trusted financial institutions to maintain sustainability.

3. The state government of Mizoram has been implementing its own health care scheme MSHCS through the financial support of Asian Development Bank (ADB) for its initial investment requirement to the tune of Rs.150 crores under Mizoram Public Resource Management Project (MPRMP). Keeping in view the long term sustainability of the scheme, the fund is invested in six financial institutions and the state government has earned more than Rs.27 crores as interest from these investments till 2014-15. The same is released to the implementing Agency, Mizoram State Health Care Society on piece meal basis by the State Finance for settlement of medical reimbursement claims. Till date, the state government did not face financial problems in the implementation of MSHCS. In addition to MSHCS, the

state is also implementing the central scheme of RSBY which offer cashless hospitalized treatments to the beneficiaries.

4. It was observed that 15.29 percent of the total population, as per 2011 Census, are enrolled under public health care scheme (RSBY and MSHCS) in Mizoram presently. At the same time, the total enrolment ratio for the study area, i.e. Aibawk RD Block, worked out to be 14.72 percent which is approximately equal to the total enrolment of in the state. Thus, it may be concluded that in spite of it being implemented with impressive budgetary support by the government, a large majority of the population are yet to be covered under the scheme.
5. Of the 20 villages in Aibawk RD Block, Hualngo village has shown highest enrolment at 23.95 percent followed by Sateek (21.65 percent), while enrolment is lowest in Falkawn (6.87 percent) followed by Muallungthu (7.84 percent).
6. The enrolment trend being observed in this block shows that availability of health infrastructures (like Hospitals, medical staff, etc) does not necessarily translate into higher achievement for enrolment under health care scheme. It was observed that villages such as Falkawn, Aibawk and Sialsuk that are equipped with a relatively advanced physical infrastructure do not prove to have a higher enrolment percentage of the targeted population. Likewise, the increasing population size does not necessarily resulted in the increase in the coverage of public health care scheme.

7. Despite the existing health care schemes are primarily meant to increase health care access of the poor and vulnerable section of the society and who are out of the medical attendance rule of the central and state government employees, its coverage as implicated by enrolment percentage does not suggest clear relationship with the incidence of poverty. This is shown by the weak and insignificant correlation of enrolment percentage and the percentage of poor households (BPL families) in the study area. Thus, the result failed to justify our study hypothesis of direct relationship between poverty incidence and enrolment under public health care schemes (Hypothesis No.2).
8. The profile of sample respondents reveals that most of the households live in a semi-pucca house. That average family size is 5.15. The average distance to the nearest hospital is 6.95 km. The people depend on the public water supply provided by the State's Public Health Engineering (PHE) Department in majority of the cases. However, public well and rainwater also contributes a substantial amount with 30 percent.
9. A closer look of the enrolment profile shows that there is higher coverage of RSBY, with more than 90 percent, than the state own health care scheme (3.89 percent) in rural areas of Mizoram. It may be noted that all MNREGA Job Card holders, in rural areas, are eligible under the former without much requirement for enrolment fee (or premium), while households have to pay premium amounting to Rs.500 and above in the latter case. This is in support of the observations in the previous study

(Thanga, 2013). Thus, there is better scope of RSBY coverage in rural areas with the increasing awareness among the target population and increasing efficiency in its administration of enrolment and service delivery.

10. The study on the socio-economic conditions of the health care beneficiary shows that as much as 65 percent of the family monthly income is lesser than Rs.10,000. At the same time, agriculture and allied activities constitute the main source of income with 44 percent of the population falls under this category. A substantial portion of 26 percent of the households depend on daily wage work as their main source of income, while the contribution of salary from employment and business accounted for 11percent and 10 percent respectively.
11. The average monthly health care expenditure of the families in the study areas turned out to be Rs.932.56, which ranges from 792.92 among those whose monthly income is below Rs.5000, while it is Rs.1325.41 for those having monthly income of more than Rs.1500. If we look at its percentage share in the family income, it is highest in the lowest income bracket at 32.83 percent and lowest income bracket to the top income bracket at 6.15 percent only. Thus, the consistently declining percentage of health care expenses on family income from lowest to highest income group may be construed as the sensitivity of the poor to health care shock. The result suggests that it is the poor family who would be most benefitted from the facilities of the public health care schemes.

12. An impact analysis of health care scheme on out-of-pocket expenditure shows appealing observation. The average requirement Out of Pocket (OoP) health care expenditure of the 22 selected families could be increased by 78.85 percent from Rs.949.2 to Rs.1697.64 by including the cashless facility from RSBY. Moreover, the calculated t-statistic for mean difference is found to be significant at 1 percent level. Thus, it is concluded that the public health care scheme being implemented in Mizoram has significantly reduced the requirement for OoP health care expenditure. This is in support of our research hypothesis (Hypothesis No.1).
13. It is observed that majority (53 percent) of the respondents come to know the RSBY since it was started in their village. The most important source of information on health care schemes is health workers and hospital staff and the village information system. At the same time, an interview of non-enrolled household shows that the main reason for non-enrolment are unawareness of its usefulness and being out of station during enrolment period.
14. 93 percent of beneficiary population reported that they are satisfied with the scheme. However there is a little portion of the population who are not fully satisfied with the scheme. The people hardly know the entire framework of the scheme and that some are trying to bill those treatments that cannot be billed. This led to frustration with the health care scheme.
15. The respondents are showing poor health seeking behaviour. 99 percent of the people consider that it is not very necessary to visit hospital for every

illness. Again, as much as 93 percent do not maintain a regular interval of visiting hospital for medical consultation. A huge percentage of the population are getting medical prescription from medicine seller whose medical qualification is unknown. All these showed that people do not have satisfactory health seeking behaviour, which adversely impacted the enrolment ratio under the health care scheme.

5.3. Policy Recommendations

Based on the analysis undertaken in the study, it is proposed to make some policy recommendations for the success of health care schemes in Mizoram. They are enumerated as follows:

1. To expand the coverage of the scheme, effort may be chalk out to increase awareness levels of the target population on the nature and coverage of the scheme. The enrolment period should be decided taking into consideration the peak and lean working seasons in rural areas. Enrolment should be done during the lean working season of the rural work force.
2. The report of our case study shows that some patient could not receive cashless benefit because the person who gave the fingerprint at the time of enrolment was out of station when the patient was admitted in the hospital. Thus, it is recommended that finger print be given by all the members in the household at the time of enrolment. Further, it is

necessary to simplify the enrolment process and taking of finger prints in the enrolment process keeping in view the local environment.

3. To ensure enrolment of BPL families, it is necessary to institute automatic enrolment route of all BPL families in the village. They may give their finger print and submit their photo later on in their convenient time.
4. The study observed the village information system (PA System) operated by Young Mizo Association (YMA) to be the most important source of information about the scheme, in addition to the health staff. This points to the need that such community based organization as YMA be kept on board in the process of enrolment drive and awareness creation.
5. The extremely weak health seeking behaviour of the population should be a matter of concern. Effort should be made to inculcate among the people the benefits of having regular medical check up to avoid possible health problems in the future. This would indirectly reduce the burden of the state government in settlement of medical claims through health care scheme in the near future.

5.4. Conclusion

The Government of Mizoram is implementing two public health care schemes – RSBY and MSHCS successfully in terms of significantly growing enrolment side by side with increased funding support. It is observed that the health care access of the beneficiaries have been expanded significantly reducing the requirement for out-of-pocket payment for hospitalized treatments. Thus, the schemes have significant impact on health care access of those who are enrolled. However, the enrolment ratio is well below expected to a low of around 15 percent of the total population implying unsatisfactory coverage by these schemes. Even though the poor are real target of the scheme, the progress of enrolment is not found to have significant bearing on the poverty incidence in rural areas. This implicates the situation where many poor households (BPL families) are excluded from the benefit of public health care scheme being implemented in Mizoram. Thus, better strategy that ensures increased enrolment is the immediate requirement in the implementation of public health care schemes in Mizoram.

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APPENDICES

Appendix I

REPORT OF THE CASE STUDIES

Case-1: Civil Hospital, Aizawl

The Aizawl Civil Hospital is the largest hospital of the state. The Rashtriya Swasthya Bima Yojana (RSBY) and Mizoram State Health Care Scheme (MSHCS), a state health care scheme are operated side by side since 2010. A separate room/counter is spared for these health care schemes to operate in. The counter is opened for 24 hours. Currently there are five staff members in the counter out of which 3 (three) are permanent workers while the other 2 (two) are employed on contract basis. The workers do not receive specialised training for their work, but have a strong on-hand experience. They are now very fluent in the system. The staffs working in the counter are very friendly and able to cope with the difficulties faced by patients who came from all over the state and having little information regarding the scheme.

There are some few points which can be called as a problem. The major problem lies in the failure to inform beneficiaries about the functioning of the smart card. The RSBY scheme requires the presence of the individual in the family who has given fingerprint for enjoying the scheme in empanelled hospitals. However, there are instances where some show up without the individual who gave his/her fingerprint at the time of enrolment. Some often failed to bring their smart card when they visit the hospital. Patients who come from far off rural areas faced difficulties in this regard where the scheme

requires that their card be shown at the time of hospital admission. Some patients are still not aware of any of the health care schemes ever before.

The problem with MSHCS is in relation with the coverage of the scheme. The counter staffs remain helpless to see poor section of the population who are not able to claim their medical bills as their ailments are not covered under the scheme. Those MNREGA Job Card holders who are automatically entitled to the RSBY facility could avail only upto Rs 30,000/- which is the maximum benefit of RSBY scheme. These people have to pay additional premium so that they are included in MSHCS. Failure of which they end up receiving treatment only under RSBY scheme.

Some few suggestions arise as to a more beneficial functioning of the scheme. Enhancement of awareness to the public which could reach even the most remote part of the state is advisable keeping in view the aforesaid problem faced by the counter. The problem can be partly solved with the help of the health workers in each village who are given the charge of conducting enrolment. They should be given a detailed and specialised training so that they impart clear information to the enrolees. A separate drive or team could also be established for the same purpose.

Malpractises or moral hazards are also borne by these type of schemes everywhere. The hospital is blessed with smart workers who could spot and stop such attempts. One of the several incidences happened when a patient tried to use her sister's smart card by using the sister's name at the time of

admission. However on being asked to produce medical history of the patient the wrongdoer was caught on the spot when the name of the patient did not match with the name written in the OPD card.

Considering the importance of health care schemes and the service given to the relatively poorer section of the population, the joint RSBY and MSHCS counter of the hospital need to be upgraded in terms of human resource as well as the facility. One of the working staff stated that there are days when the queue is long that keep the users standing outside waiting for the counter. The work could be run more efficiently if they are provided with an additional system operator.

Case-2: Urban Primary Health Centre, ITI.

Urban Health Centre (UHC) in ITI locality was established in 2004 under Reproductive and Child Health Programme. It is situated in the eastern part of Aizawl City. The population coverage by the UHC is around 28,535 with 5,829 households. The UHC covers 6 wards as per 2011 census which are Bethlehem Veng, Bethlehem Vengthlang, College Veng, ITI, Venghlui and Salem Veng. As approved by the Government of India, renovation of the building and upgradation of the UHC to Urban Primary Health Centre had been done during 2014-2015. ITI PHC has 8 beds in all (2 for maternity and 6 for general patients). The health centre is staffed by 1 Doctor, 4 Staff Nurses, 2 Health Workers, 4 Fourth Grades, 3 Lab Technicians, 1 Accounts Clerk and 1 Pharmacist.

The accounts clerk looks after RSBY help desk. Since the joining of her present post in August 2014, the accounts clerk has attended about 10 different trainings. Cashless treatment was given by the health centre to its patients at the initial period. However since the funds received from the implementing agency was slow, cashless treatment was stopped. The RSBY smart card users were then advised to submit all the cash memos each time they buy medicine out of their pocket. The accounts clerk helped them reimburse their medical expenses from the implementing society.

Since the introduction of RSBY in the health centre, 46 patients have been using RSBY smart card till August, 2015. Out of these, 18 patients have received funds through RSBY with a total amount of Rs. 16,600. Thus the average funds received per patient is Rs. 922.22. The total amount of claims processed from the health centre is Rs. 46,200 including Rs. 16,600 that has already been sanctioned.

It has been reported from the faculty that due to the slow pace of funds that is coming from the agency, problems occurred. As a consequence, RSBY beneficiaries could not receive cashless treatment and they have to pay out of their pocket which poses problem for the poor patients. Also, there are instances when patients are coming from villages or far off locality. Since they are not given cashless treatment anymore and that their reimbursement amount is received at the time they are already out of station, hardship could arise here too. The beneficiaries have to travel to the health centre once again just to receive the money reimbursed.

Case-3: Mr. J. Lalthawmliana, Cherhlun, Lunglei District.

Mr. J. Lalthawmliana, a sole breadwinner of a family of three members was registered as beneficiary of RSBY in 2015-16. His one year old son is suffering from pneumonia, septicaemia and impairment in bone development. They earned their living merely on subsistence jhumming cultivation which meets their survival needs and thus he is not in a position to save much for unforeseen expenses. They have been admitted in Civil Hospital, Aizawl for almost a month and still they are not getting discharged yet when the interview was conducted.

The interviewee believed that the scheme is a good one. He further stated that it is necessary for all those eligible in the scheme to get enrolled. People should not neglect to get their families registered during the enrolment season as the scheme does not welcome new registration at any time other than the enrolment period. He added that if they had not enrolled themselves in the scheme they would have faced financial hardships during the course of investigation and would not be in a position to take up further treatment when their meagre savings dry up in the process.

He responded with gladness considering the registration fee that has been paid at the beginning. The amount of fee they pay is taken not costly considering the benefit it brings about. He went on saying that a fee of Rupees 30 in RSBY or a premium of Rupees 500, 750 and 1000 as in Mizoram State Health Care Scheme that people paid is not painful even if they do not use it. He considered

that it is their luck and God's blessings with good health when people do not make use of their smart card in a year.

Although he admitted that he is not fully aware of the entire spectrum of the Scheme. Moreover he himself was unaware at the time of enrolment. It was one of the family members who initiate the scheme in the family. He however advocated the scheme to be a beneficial one. This would reduce the out-of-pocket burden in his poor son's long course of medical treatment. This clearly reflects the need of an effective awareness programme to reach the remotest part of the region. People should be made aware of the benefits and the security it provides which can be taken in terms of mental and financial benefit.

Case-4: Mrs. Sangthuami, Dinthar, Aizawl.

Mrs. Sangthuami, age 70 , is living with her son and granddaughter in Dinthar locality, Aizawl for more than 29 years. Her son worked as Muster roll in Public Works Department under Government of Mizoram which is their main source of income. Her husband, Mr. Suakthanga had passed away at the age of 73 due to Asthma. On the course of her husband's fight against the disease, Mrs Sangthuami had availed many times the opportunities provided in RSBY scheme. Not only this, there are several circumstances in which the RSBY scheme is benefited when the other members of the family got hospitalised and had availed the RSBY cashless treatment. However it is reported that they do not utilise the benefit up to the maximum amount each year since the beginning of their continuous enrolment in RSBY in 2010-2011.

The family opines that the scheme is very helpful for the BPL families in Mizoram and especially for their family. The members of the family falls sick one after another and thus have to go for medication often. At such circumstances, health insurance with a meagre contribution of Rs 30 that enables them to receive cashless treatment in empanelled hospitals is really a gospel for them.

The respondent neither hesitates to pay for the registration fee nor considers it costly. They also felt that the rest of the BPL population also benefited the scheme citing a case of their neighbour in one of their course of hospitalisation where the offered amount is utilised up to the maximum limit. It is also reported that there are cases where the travelling allowance of Rs 100 per hospitalisation is given by some hospitals while they do not receive cash as such from other hospitals.

On being asked their opinion on moral hazards and malpractices, the family is found very liberal. Cases such as using one's neighbours' card can be viewed from two sides. The respondent stated that it would be unfair to lend cards to those people who do not get themselves enrolled due to negligence. However, special consideration should be given for those poor families who were unable to get themselves enrolled in the scheme due to unavoidable circumstances such as being not in the BPL list, being out of station at the time of enrolment or emergence of problems in the process of fingerprint recognition due to cracks and cuts in the fingers.

It has been found that the family is well satisfied with the scheme and resolved to get enrolled in the years to come.

Case-5: Vanlalhluta, Durtlang / Vanlalthanga, Saron Veng, Aizawl.

Mr. Vanlalhluta, a bachelor who is staying independently in one of the sub-towns of Aizawl, the capital of Mizoram had availed RSBY facility too. However it is unfortunate to mention that he had passed away on 6th December, 2014 and left us for his heavenly abode. He was a subsistence farmer which harvested him crops just sufficient for his livelihood. Thus, there was hardly anything left for him in times of emergency. However he was fortunate to get himself enrolled in RSBY so as to cover some of his medical expenses that relieve his relatives who jointly contributed some amount of money to meet his medication needs.

The deceased, Mr. Vanlalhluta is reported to have been disturbed by multiple ailments such as jaundice, sciatica and scrub typhus. Due to absence of vacant bed at the nearest hospital, he was rushed to Urban Primary Health Centre at ITI locality where he stayed for three nights. He was referred to Civil Hospital, Aizawl, thereafter.

A close relative of his who took the sole responsibility of him until his last breathe was Mr. Vanlalthanga who resides in Saron Veng in the central part of the city. The respondent stated that RSBY card was not used during his stay at UPHC, ITI due to the innocence of his enrolment in RSBY. However, after his referral at the biggest hospital of the region, Aizawl Civil Hospital, RSBY card

was employed which can reduce their expenditure to the tune of Rs 700 a day. It is of great relief for them when they avail the cashless benefit of RSBY scheme especially in this case where the patient has no amount of money at his disposal.

On asking the respondent's opinion regarding the amount of registration fee of Rs 30 which is required to be paid at the time of enrolment, it was considered not costly. The enrolee would be lucky to take risk in involving Rs 30 in a national health insurance scheme that earned him substantial amount in his needs. It would be luckier to have been blessed with a good health so that no amount of money is claimed from the scheme.

The respondent also provided additional information that his family got enrolled in Mizoram State Health Care Scheme, a state health care scheme for the non-government employees. The respondent, who is the head of the family do not hesitate to pay Rs 700 for a year that will fetch him Rs 1 lakh for medication that goes in accordance to the rule of the scheme. Though the family had not availed the benefit of the scheme since their enrolment in 2010, the respondent stated that they would still register themselves in the coming years. They further stated that there would not be any difficulty in dealing with the billing process and information relating to coverage of the scheme as they are provided with a booklet/manual in the health sub-centre at the time of registration.

Appendix II

QUESTIONNAIRE

- Sample No. ☐

- *Tick (✓) at the appropriate place.*

RSBY card user	
RSBY card non-user	
RSBY non-enrolled	

SECTION A: FAMILY PROFILES

A1. Sample identification:

1. Date of identification		2. No. Of family members	
3. Phone No		4. House type (1=Pucca, 2=Semi-Pucca 3=Katcha)	
5. Name of village		6. Distance of nearest hospital (km)	
7. Nearest hospital (1=Govt, 2=Private, 3=NGO/Charity)		8. Source of drinking water (1=PHE Supply,2=Public Well 3=Water Pump,4=Stream, 5=Rain water, 6=Other)	

A2. Name of respondent (if permitted) : _____

A3. Status of policy joined by the family : _____

(Policy Status Code 1= BPL, 2= JOB CARD,3=APL)

SECTION B: INCOME AND EXPENDITURE (1st April 2014 to 31st March 2015)

1. Average monthly income: _____

2. Source of income: _____

(1-Salary (under Govt.) 2-Salary (casual works under Govt) 3-Daily wages 4-Agriculture and Allied activities 5-Business 6-Salary (private/NGO) 7-Other)

3. Average monthly medical expenditure: _____

SECTION C: HEALTH SEEKING BEHAVIOR

1. a) Where do you mainly go for medical checkup: _____

   (1.Private Clinic, 2.Govt Hospital, 3.Private Hospital, 4.NGO or Charity Hospital, 5.Other)

   b) How far is the place (km): _____

2. Has your family gone for medical check up regularly: _____

   a) If Yes, How often: _____

   (1-once in a month,2-once in two months, 3-once in three months, 4-once in six months,5-once a year)

   b) If No, when do you go for check up? _____

   (1- never, 2.whenever ill, 3.only on serious illness, 4. At the advice of others)

3. If you do not consult doctor, who prescribe you the medicine?_____

   (1. Relatives and friends, 2.Pharmacist or medicine seller, 3. Self prescribed)

SECTION D: IMPACT OF HEALTH INSURANCE

(For households with RSBY enrolment)

1. Any member of your family getting hospitalised one year back? _____
2. Equivalent amount of money used from RSBY card? _____
3. After joining the scheme, is the frequency of your visit to health institution increased:

   (Tick (✓) mark wherever appropriate)

Yes	
Indifferent	
No	

4. After joining the scheme, what is your perception on hospitalisation?

   (Tick (✓) mark wherever appropriate)

Getting hospitalised on every illness	
Getting hospitalised depending on seriousness	
No need of hospitalisation	

5. After joining the scheme, what is your perception on hospitalisation?

   (Tick (✓) mark wherever appropriate)

Getting hospitalised on every illness	
Getting hospitalised depending on seriousness	
No need of hospitalisation	

6. For every illness, visit of hospital is:

   (Tick (✓) mark wherever appropriate)

A must	
Not very necessary	
No need to visit	

For households without RSBY enrolment

7. Reason for non enrolment in RSBY?

   (Tick (✓) mark wherever appropriate.)

Being not in the BPL list	
Being out of station during enrolment period	
Unaware of the enrolment period	
Do not know the usefulness	
Costly fee	

SECTION E: PERCEPTION OF RSBY BENEFICIARIES

1. Since when do you become aware of RSBY scheme? _____

   (1-One year back, 2-Two years back, 3-Three years back,
   4- since its inception in the village)

2. Are you fully aware of the procedure and billable medication?_____

   (1-Yes,2-No)

3. Any rejection in your claim so far? _____

   (1-Yes,2-No)

4. Are you satisfied with the services of the scheme? _____

   (1-Yes,2-No)

5. Are you willing to get enrolled in the next season? _____

   (1-Yes,2-No)

6. From where do you receive information regarding RSBY?

   (Tick (✓) mark wherever appropriate.)

Neighbours	
Village Information mic	
Village heads	
Health Workers and hospital staff	
Other	

Appendix - III

MIZORAM AT A GLANCE: 2014

Sl. No.	Particulars	Unit	
1	**State Capital**		Aizawl
2	**Geographical Area**	Sq.Km	21,081
3	**Geographical Location**		
	(i) Longtitude	Degree	92°15' E to 93°29'E
	(ii) Latitude	Degree	21°58' N to 24°35' N
4	**Length**		
	(i) North to South	KM	277
	(ii) East to West	KM	
5	**International Borders**		
	(i) With Myanmar	KM	404
	(ii) With Bangladesh	KM	318
6	**Inter-State Borders**		
	(i) With Assam	KM	123
	(ii) With Tripura	KM	66
	(iii) With Manipur	KM	95
7	**Administrative set up**		
	(i) District	No.	8
	(ii) Autonomous District Council	No.	3
	(iii) Sub-Division	No.	23
	(iv) R.D. Blocks	No.	26
	(v) Total Villages (2011 Census)	No.	830
	(a) Inhabited	No.	704
	(b) Uninhabited	No.	126
8	**Population Features (As per 2011 Census)**		
	A.Population		
	(i) Persons	Nos.	10,97,206
	(ii) Male	Nos.	5,55,339
	(iii) Female	Nos.	5,41,867
	(iv) Rural	Nos.	5,25,435
	(v) Urban	Nos.	5,71,771
	B.Decadal Population Growth (1991-2011)		
	(i) Absolute	Nos.	2,08,633
	(ii) Percentage	%	23.48
	C.Population Density	Per Sq.Km	52
	D.Sex Ratio	Female per 1000 male	976
	E. 0-6 Population		
	(i) Persons	Nos.	1,68,531
	(ii) Males	Nos.	85,561
	(iii) Females	Nos.	82,970

Sl.No	Particulars	Unit	
	F.Literacy		
	(i) Persons	Nos.	8,48,175
	(ii) Males	Nos.	4,38,529
	(iii) Females	Nos.	4,09,646
	(iv) Total Percentage	%	91
	G Total Workers		
	(i) Main Workers	Nos.	4,15,030
	(ii) Marginal Workers	Nos.	71,675
	(iii) Total Workers	Nos.	4,86,705
	(iv) Percentage of total population	%	44
9	**State Income**		
	(i) GSDP at current prices during 2011-2012 (2004-05 series)	Rs. In Lakhs	6,88,975.00
	(ii) Per Capita Income at current prices during 2009-10 (2004-05 series)	In Rupees	53,624.00
10	**State Budget**		
	A. Total revenue receipt		
	(i) 2012 - 13 (Actual)	Rs. In Lakhs	4,53,674.30
	(ii) 2013 - 14 (R.E)	Rs. In Lakhs	5,54,534.15
	B. Total Revenue Expenditure		
	(i) 2012 - 13 (Actual)	Rs. In Lakhs	4,50,891.20
	(ii) 2013 - 14 (R.E)	Rs. In Lakhs	6,14,502.58
	C. Total Capital Receipt		
	(i) 2012 - 13 (Actual)	Rs. In Lakhs	44,976.23
	(ii) 2013 - 14 (R.E)	Rs. In Lakhs	78,793.50
	D. Capital Expenditure		
	(i) 2012 - 13 (Actual)	Rs. In Lakhs	92,384.67
	(ii) 2013 - 14 (R.E)	Rs. In Lakhs	1,63,218.29
11	**Plan Outlay**		
	(i) Annual Plan approved		
	(a) 2012 - 13	Rs. In Lakhs	2,30,000.00
	(b) 2013 - 14	Rs. In Lakhs	2,50,000.00
	(ii) Annual Plan actual expenditure		
	(a) 2012 - 13	Rs. In Lakhs	1,74,191.90
	(b) 2013 - 14	Rs. In Lakhs	1,76,261.24

Source: Statistical Handbook Mizoram 2014. Directorate of Economics and Statistics, Government of Mizoram.

Appendix IV

CURRICULUM VITAE

Name	:	Lalhriatpuii Ralte
Date of Birth	:	21.07.1989
Father's Name	:	Lalsanglura (L)
Mother's Name	:	Darremliani
Address	:	V-19, Ramhlun Sports Complex Aizawl, Mizoram. Pin 796012 Phone No: 0389-2348377 (R) 9862860357 (M)
Educational qualification	:	MA (Economics), NEHU, 2013 UGC-NET+JRF (June 2014)