# DEPARTMENT OF SOCIAL POLICY



# **SUMMATIVE COURSEWORK COVER SHEET**

CANDIDATE		ACADEMIC					
NUMBER 5	7 9 1 3	YEAR	2011/2012				
5 digit number – available via	LSEforYou						
COURSE CODE	S A 4 7 2						
COURSE TITLE	Dissertation:	Social Policy and Develo	ppment				
ASSIGNMENT TITLE	INTER -STATE VARIATIONS IN MATERNAL ASSIGNMENT TITLE MORTALITY INDIA: A POLITICAL REGIME PERSPECTIVE						
WORD COUNT	10,007	Excludes reference list (biblic SA499 students should disre the required 10 page (SA485)	egard this word count	t and adhere to			
DEPARTMENT USE ONLY	<b>'</b>						
Please tick this box if the External Examiner should be referred to the feedback prepared for the candidate. Any further comments can be entered below (or attached on a separate sheet if there is not sufficient space).							
MARKER 1 COMMENTS							
MARK			SUGGESTED				
MARKER 2 COMMENTS		,	0				
		_					
MARK		9	SUGGESTED				

MARK			AGREED %	
EXTERNAL EXAM	INER COMMEN	ITS		
FINAL MARK	% SI	GNATURE	DATE	

Awarded by External Examine

# The London School of Economics and Political Science DEPARTMENT OF SOCIAL POLICY

# INTER -STATE VARIATIONS IN MATERNAL MORTALITY, INDIA: A POLITICAL REGIME PERSPECTIVE

### **SA472**

Dissertation submitted in partial fulfilment of the requirement for the degree of MSc Social Policy and Development

> Candidate Number: 57913 Word Count: 10,007

# **TABLE OF CONTENTS**

List	of Tables and Figures	5
Ack	nowledgements	6
Abs	tract	7
Abb	previations	8
СН	APTER 1: INTRODUCTION	
1.1	Background	10
1.2	Relevance of the Topic	12
1.3	Research Question and Objective	13
1.4	Research Methodology	14
1.5	Structure of the Dissertation	15
СН	APTER 2: LITERATURE REVIEW	
2.1	Introduction	16
2.2	MDG 5 Phenomena: Comparative Analysis of Indian States	16
2.3	Underlying Reasons for Low Performance of Maternal Health	25
2.4	Linking Maternal Health Performance with Political Regime Interventions	27
2.5	Conceptual Framework	31
СН	APTER 3: CASE STUDY ANALYSIS	
3.1	Introduction	33
3.2	Tamil Nadu AIADMK: A Populist Interventionist Regime	34
3.2	Uttar Pradesh as BSP: An Identity Based Symbolic Regime	36
3.3	Key Findings and Discussion	39
CH	APTER 4: CONCLUSION AND POLICY IMPLICATIONS	41
REI	FERENCE	45
API	PENDICES	54

# **LIST OF TABLES**

Table 1	MDG India Target	17
Table 2	Maternal Mortality Ratios (MMR) 2004-2006 and 2007-2009	17
Table 3	Level of Maternal Mortality Ratio by Region. 1999-2009	19
Table 4	Key Selected Maternal Indicators	20
Table 5	Comparative Key Indicators, NFHS-III 2005-2006, NFHS-II 1998-2000, NFHS-I 1992-1993	21
Table 6	Key Maternal Indicators India and States (ANC), DLHS 3, 2007-2008	54
Table 7	Key Maternal Indicators India and States (Delivery Care), DLHS 3, 2007-2008	55
<b>TABLE</b>	OF FIGURES	
Figure 1	Pathways to Improve Maternal Health Outcome	26
Figure 2	Conceptual Framework	32

#### **ACKNOWLEDGEMENT**

I am grateful to Ford Foundation International Fellowships Program India, for the meritorious scholarship that provided me an opportunity to pursue Master's Degree in Social Policy and Development at the London School of Economics and Political Science. I express sincere gratitude to my Academic Advisor Dr.Sunil Kumar for the intellectual guidance and valuable inputs that enabled me to write the dissertation and overall support during the course.

I dedicate this dissertation to those vulnerable expectant mothers who die preventable deaths during child birth.

#### **ABSTRACT**

Attainment of the MDG 5 is as much a political challenge as it is a medical or technical challenge. This paper seeks to analyse the state level variations in maternal mortality in the Indian context focussing on the political regime capability to respond to MDG 5. I did this by demonstrating competing statistics on maternal health together with literature review. The conceptual framework then developed helped in understanding that political intervention as one of the key factors that potentially impacts maternal health. I further substantiate my argument through comparative analysis of two important Indian states Tamil Nadu and Uttar Pradesh. Though both have roots of low class ruling parties, the former has significantly contributed to reducing maternal health by performing policy oriented roles while the latter primarily remained confined to power seeking that resulted in negligible improvements. Policy implications and recommendations are highlighted and the potential role of political regimes in Indian states is discussed.

#### **ABBREVIATIONS**

ANC Antenatal check up

AIADMK All India Anna Dravida Munnetra Kazhagam

**AP** Andhra Pradesh

**AVS** Ambedkar Village Scheme

**AWC** Aganwadi Centre

**BJP** Bharatiya Janata Party

**BIMARU** Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh

**BSP** Bahujan Samaj Party

**CPI** (**M**) Communist Party of India, Marxist

**DLHS** District Level Household Survey

**EMOC** Emergency Obstetric Care

**EMRI** Emergency Management Research Initiative

**GOI** Government of India

**HDI** Human Development Indicator

**HR** Human Resource

**IFA** Iron and Folic Acid

**IIPS** International Institute of Populations Sciences

JSY Janani Suraksha Yojana

**LSG** Local Self Government

MDG Millennium Development Goal

MOHFW Ministry of Health and Family Welfare

MM Maternal Mortality

MMR Maternal Mortality Reduction

MP Madhya Pradesh

MCH Maternal and child Health

**NFHS** National Family Health Survey

NGO Non Governmental Organization

NRHM National Rural Health Mission

NREGA National Rural Employment Guarantee Act

**OBC** Other Backward Caste

**PHC** Primary Health Care

**PW** Pregnant Woman

**PPP** Public Private Partnership

**PRI** Panchayat Raj Institution

**RCH** Reproductive Child Health

**SP** Samajwadi Party

SSMY Saubhagyawati Surakshit Matretev Yojana

SRS Sample Registration System

**SBA** Skilled Birth Attendant

SC Sub Centre

SSA Sarva Shiksha Abhiyan

**TBA** Traditional Birth Attendant

TN Tamil Nadu

**TNMSC** Tamil Nadu Medical Service Corporation

**TT** Tetanus Toxide

UNRISD United Nations Research Institute of Social Development

**UP** Uttar Pradesh

**UPA** United Progressive Alliance

**UNICEF** United Nations Children Emergency Fund

**UNFPA** United Nations Population Fund

VHN Village Health Nurse

WHO World Health Organization

WB World Bank

#### 1. INTRODUCTION

#### 1.1 Background

Dreze and Sen (1995 and 2002) critically point out that the most interesting aspect of India's development record is its remarkable regional diversity in the elimination of basic deprivations. This dissertation thus emphasises one important component of deprivation, namely the MDG 5 maternal health, in the Indian context. In doing so, it further attempts to explore the important machinery of the Indian state, the ruling parties in formulating and implementing constructive policies for reduction of maternal mortality. There is a substantial amount of literature dealing extensively with maternal health issues relevant to the developing world and more specifically India. Among them recent authors such as Dasgupta (2011); Lim et al (2010); Ramarao et al (2001) and Vora et al, (2009) who significantly point out the current maternal health scenario in rural India as being far from satisfactory. The important reason being that maternal mortality (MM) in India is the highest in the world, reflecting sharp inequity in access to health care.

It is a challenging task for Indian policy makers to significantly reduce MM from 212 to 109 per 100,000 live births as per the MDG 5 target by 2015. Further the above authors demonstrate that 100,000 Indian women die annually from pregnancy and childbirth related causes. India's goal to lower maternal mortality is still far away despite its programmatic efforts and rapid economic progress over the past two decades. However this situation is not universal, because a cluster of southern states namely AP, Karnataka, Kerala and TN nearly achieved the target and far above the national average. In contrast the northern belt often called BIMARU states in addition to Orissa and Assam are far below the national average. The BIMARU states are mainly responsible for India's slow performance in MDG 5. Women from BIMARU states as well as poorer women and less literate women appear to be significantly disadvantaged.

While maternal deaths in India constitute about one fifth of all maternal deaths in the world the maternal deaths in UP alone contribute more than one fourth of all maternal deaths in the country (Pathak and Mohanty, 2011). Beyond global consensus the current level of MM is unacceptable. Recent resolutions of the United Nations Human Rights Council also recognizes that preventable MM is an issue of women's human rights. The human right to survive pregnancy and childbirth is predicted on the fact that the necessary information and technologies are available to prevent almost all maternal deaths yet maternal deaths continue to occur in their hundreds of thousands.

As put together by Pathak and Mohanty (2011), poor maternal health outcomes are influenced by the quality of services available, functions of women's poverty, education, location and many other socio- economic factors. Further, Jejeebhoy (1997) has argued the technical main causes of maternal mortality in rural India are abortion related deaths (12%), eclampsia and toxaemia (13%), bleeding in pregnancy and puerperium (23%), puerperal sepsis (13%) and anaemia (20%), which are preventable. They can be substantially reduced through two complementary services, good obstetric care (Maine et al, 1994) and family planning (Meacham and Rochat, 1988). Jejeebhoys's extensive review of maternal mortality in India reports three studies from different states (AP, UP and Maharashtra) which found that the chances of survival being higher among women is more having contact with the health system in the antenatal period. Data from recent national surveys (discussed in detail in succeeding chapters) in India indicate that the quality of maternal health services available in BIMARU states is not adequate for either routine or emergency maternal care. Thus the literature draws attention to the issue of MM in India as a significant global issue since the country has a disproportionate share of global maternal deaths that are preventable.

#### 1.2 Relevance of Topic

What emerges from the above discussion is that women's reproductive health is a matter of vital concern which affects society at large. Dreze and Sen (1995 and 2002) convincingly argue that education and health is more valuable to the freedom of persons in at least five distinct ways: 'intrinsic importance', 'instrumental personal role', 'instrumental social role', 'instrumental process role', and 'empowerment and distributive role'. The authors reinforce these as fundamental areas of state involvement which have a high political visibility, receiving attention in electoral campaigns. Under the federal structure, health is a state subject in India and the implementation of health program depends largely on the political will of provincial government (Alam, 2011; Basu, 2005 and Prabhu, 2005).

This particular notion of political will and commitment figures prominently in all the literature reviewed in this dissertation. Among other factors, like historical roots, geographical characteristics, socio economic and cultural dynamics prevailing in Indian states that owe much to the regional contrast of HDI and particularly maternal mortality, the role of political will (the ruling party that forms the government) is not to be undermined.

This political will determines the public policy pursued in the respective states and in particular to dissimilar uses of public action to enhance the quality of life and expand social opportunities. The MM variations are a rich source of insights into Indian states in two ways first the states that have pursued reformist agendas in reducing MM and second those that have neglected and are responsible for India as a whole lagging behind the MDG 5. Kerala has gone beyond the constitutional requirement and initiated a visionary campaign of decentralized planning through PRI widely known as people's planning campaign in streamlining the health delivery system; Tamil Nadu's achievement is based on directly enhancing the health system; Gujarat has adopted an innovative PPP model, while WB and Assam opted for boat clinics in reaching out to expectant mothers (Planning Commission, GOI, 2011).

These deliberate political actions have succeeded in reducing MM in respective states. Thus there is a strong case of giving much greater attention to MM by the states in public policy and debate that have poor maternal health indicators. Achieving greater health equity in India depends crucially on political action and the practice of democracy. Post independence, the relative strength of political parties has been quite different in the different regions of India. The main theme of this work is the importance of the lessons to be learned by India from India and this can be just as important as learning from the achievements of other countries in MMR.

#### 1.3 Research Question and Objectives

Drawn from the above discussions, the eminent scholars trace out the extent of the maternal morbidity pattern in Indian states and its causes. They also point out the distinguishing state initiatives and political will. Having recognized the importance of political will in this case, the next issues that emerges is the regime functioning of Indian states that determines the political will for pursuing a set of policies amidst constraints and limitations. The most widely acknowledged regime analysis by Kohli (1987, 1990, 1997, 2010) dealt extensively in Indian states context followed by Crook and Sverrission (2003); Gent(1993); Harriss (1987, 2000, 2003) and Herring (2003). These authors trace out the performance of antipoverty programmes mainly income poverty based on nature and functioning of regime.

There is a need for such regime studies in health sector performance in general and more specifically in reproductive women's health as health is under the purview of state government. Further the importance of India to global maternal deaths also draws attention to the understanding of the state government roles in scaling up the programme in maternal health in India.

A study of this nature is under researched at the present moment. Such an analysis will help to reinforce the much needed MDG 5 attainments on the political agenda of Indian states which are currently lacking in states with low performing maternal indicators. These existing gaps helped in framing the research question, "How do political interventions leads to the differential maternal health outcomes in Indian states?". First I attempt to analyze maternal indicators from national surveys and marked state level variances. I then explore the state that have reduced MM, have interventionist regime characteristic as discussed by the above authors in contrast to non performing states. In doing so I make comparative analysis of one selected high performing state versus low performing state, and this proves that effective political intervention is one major reason among others for the reduction of MM and that the ruling parties have not played an active role in promoting maternal health in low performing states in India.

#### 1.4 Research Methodology

In an effort to understand both the potential and the limitations of Indian state regimes vis-à-vis maternal health performance, literature was examined from sources related to maternal and public health, development, political history of Indian states, poverty, state political parties and political development. Books, academic journal articles, online publications, survey data and government statistical reports were used to review the existing literature and to develop frameworks to be applied herein. Additionally, grey literature, including working papers and reports were referenced to gather additional information.

#### 1.5 Structure of Dissertation

This Paper has been structured as follows: Chapter 1 provides background information on the MM variations in the Indian states, their causes and remedies. Chapter 2 attempts comparative analysis of maternal health indicators of Indian states, and the conceptual debates within the area of regime intervention in response to prevailing maternal health. A conceptual framework is developed from the literature review. Chapter 3, the framework helps in outlining more specifically two Indian states (one better performing and one low performing) related to MM, based on their regime intervention. Tamil Nadu and Uttar Pradesh are chosen based on some commonalities and differences. By way of conclusion, Chapter 4 outlines important policy considerations, lessons learned and potential implications for the attainment of MDG 5 in Indian low performing states.

#### 2. LITERATURE REVIEW

#### 2.1 Introduction

The GOI's target to reach MMR 109 (as shown in Table 1, p8) from the current 212 per 100,000 live births, triggers the exploration of the possibilities of achieving the target in low performing states. In doing so, I attempt to analyze the national survey data of key maternal indicators, and complement with eminent authors views from recent literature to identify barriers and enable factors of MDG 5. What emerges from the analysis is that there are wide state level variations in maternal health indicators. Southern states perform better than the national average in contrast to the northern states that are far below the national figures. The key reasons are conceptualized through a pathway model which determines a range of multi sectoral factors and recognize challenge of political will and commitment for implementing successful RCH programme.

This political capability of ruling parties in the attainment of MDG 5 is my further investigation. I do this in understanding the political regime interventionist strategy of Indian states from the existing literature. In this aspect I particularly caution that the regime studies, I researched focused on the overall poverty alleviation (mainly income poverty in addition to health and basic education). This again points out that the regime studies corresponding to exceptionally maternal health in the Indian context is scarce and my research demonstrates the significant need for further studies in this area. Having said so, I try to explore the linkages with regime interventions and maternal health performance and finally the review concludes with developing a framework that forms the basis of the next chapter.

#### 2.2 MDG 5 Phenomena: Comparative Analysis of Indian States

The GOI (2010) ministry of health and family welfare department reiterates the GOI's commitment to the safe motherhood programme adopted in 2000 within the wider context of reproductive health.

Further empowering women for improved health and nutrition is one of the twelve strategic themes identified in the policy to be pursued either as stand alone programme or as an inter sectoral programme.

Table 1 MDG INDIA TARGET

Goal No.	Goals	Indicators	Targets by 2015
5	Improve Maternal Health	Maternal Mortality ratio	109

Source: (Planning Commission, GOI, 2008)

Gill (2009) in a primary evaluation of GOI's flagship health programme, NRHM ranks the performance of four states (AP, UP, Bihar and Rajasthan), in terms of service delivery as encouraging. The author argues that through NRHM, the UPA Government at the central level has put rural public health firmly on the agenda and is on the right track to achieve the target with the institutional changes it has introduced within the health system. While this claim may be valid, however, the national data demonstrate the reverse side of the argument. The present analysis contains data on MM for India and bigger states.

Table 2 Maternal Mortality Ratios<sup>1</sup> (MMR) 2004-2006 and 2007-2009

STATES	MMR	MMR
	2004-06	2007-09
Assam	480	390
West Bengal	141	145
Orissa	303	258

<sup>&</sup>lt;sup>1</sup> MMR measures number of women aged 15-49 years dying due to maternal causes per 1,00,000 live births

Bihar/Jharkhand	312	261
Madhya Pradesh	335	269
Rajasthan	388	318
Uttar Pradesh/Uttarakhand	440	359
Andhra Pradesh	154	134
Karnataka	213	178
Kerala	95	81
Tamil Nadu	111	97
Maharashtra	130	104
Gujarat	160	148
Haryana	186	153
Punjab	192	172
India	254	212

Source: (SRS, 2011)

States realizing the MDG target of 109 have gone up to three states with TN and Maharashtra (new entrants) joining Kerala. AP, WB, Gujarat and Haryana are in closer proximity to achieving the MDG target. On comparing data of both the years 2004-2006 and 2007-2009 all states have relatively reduced MMR; however if one looks at the BIMARU states particularly, they are far below the national average in both the time periods and the southern states are consistently above average (Table 3). What emerges from the data is the most difficult in achieving MDG 5 for India as a whole unless the BIMARU states contribute to a substantial reduction in MMR. These data forced me to understand what factors worked well in high performing states and what is lacking in low performing states.

Table 3 Levels of MMR by Regions, 1999-2009

Regions	1999-2001	2001-2003	2004-2006	2007-2009	Decline over
					the last ten
					years
Northern					
States,					
including	461	438	375	308	33%
Assam and					
Orissa					
India	327	301	254	212	35%
Southern	206	173	149	129	35%
States					
Gujarat,					
Haryana,	229	199	174	149	38%
Punjab, WB					
and other					
States					

Source: (SRS, 2011)

Further the UNICEF's (2010) exhaustive report on the coverage evaluation survey on key maternal indicators in India and its States (Table 4, p20) also compliments the above findings of MMR. These critical data also reflect that the southern states perform far better than northern BIMARU states in addition to Orissa and Assam. The 3ANC coverage is least in Bihar, i.e. almost 3 times less, followed by MP and UP which are twice less than the national average of 26% in contrast to AP and TN which are almost double the national figure with Kerala of exceptional record.

Table 4 Key Selected Maternal Health Indicators

Table 4 Key Selected Maternal Health Indicators						
States	At least 1 ANC	3 ANC	Full ANC <sup>2</sup>	Institutional Delivery	SBA <sup>3</sup>	
Andhra Pradesh	99.5	97.0	46.2	94.3	95.6	
Kerala	97.4	90.8	77.9	99.9	99.9	
Tamil Nadu	98.5	92.6	44.1	98.4	98.6	
Karnataka	97.5	91.3	40.2	86.4	88.4	
Assam	89.6	66.4	21.3	64.4	65.5	
West Bengal	99.0	83.2	17.4	69.5	72.6	
Orissa	98.0	77.0	37.5	75.5	79.1	
Gujarat	94.8	83.2	45.7	78.1	85.2	
Maharashtra	97.3	82.6	27.0	81.9	85.5	
Haryana	89.4	68.6	42.9	63.3	69.3	
Punjab	95.3	73.4	29.4	60.3	66.7	
Bihar	84.3	33.8	4.5	48.3	53.2	
Madhya Pradesh	92.3	60.0	11.1	81.0	82.9	
Rajasthan	86.8	55.2	14.6	70.4	75.8	
Uttar Pradesh	71.6	38.2	12.4	62.1	64.2	
India	89.6	68.7	26.5	72.9	76.2	

Source: (UNICEF, 2010) (all figures are in percentage)

<sup>&</sup>lt;sup>2</sup> Women who receive 3ANC checkups, TT injection and consumed 100+IFA tablets. <sup>3</sup> Delivery by doctor/ANM/ Nurse/LHV

Table 5 presents India and States wise data of three rounds of NFHS on critical maternal health indicators, necessary for health policy making. It features five important indicators whose performance impacts MMR. Though the data presented is from major Indian states, however, my analysis is based on the worst performing states particularly the BIMARU and more specifically UP. In 3ANC the performance of UP and Bihar is the least almost half less than national figure. In terms of 90+ IFA consumption, India's figure is dismal and the performance of UP and Bihar is the worst. The trend is similar in other corresponding indicators, namely births assisted by health professionals, institutional delivery and PNC.

#### Comparative Key Indicators-NFHS III 2005-06, NFHS II 1998-1999 and NHFS I 1992-1993 3years preceding the survey

Table 5

Major State (population more >20 million)/India	NFHS	Maternity care (for births in the last 3years)					
		Mothers who had at least 3ANC visits for their last births (%)	Mothers who consumed 90+IFA when they were pregnant with their last child (%)	Birth assisted by health profession al (%)	Institutional Births (%)	Mothers who PNC within 48hours of their last birth (%)	
India	NFHS III NFHS II NFHS I	50.7 44.2 43.9	22.3 na <sup>4</sup> na	48.2 42.4 33.0	40.7 33.6 26.1	36.4 Na Na	
Andhra Pradesh	NFHS III NFHS II NFHS I	86.0 80.2 75.3	39.3 Na Na	74.2 65.2 48.9	68.6 49.8 34.3	69.8 Na Na	
Kerala	NFHS III NFHS II NFHS I	93.9 98.6 95.4	77.3 Na Na	99.7 94.1 90.2	99.5 92.9 88.9	87.7 Na Na	

<sup>4</sup> na implies data not available for the mentioned period

-

Karnataka	NFHS III	79.3	40.0	71.3	66.9	61.0
	NFHS II	72.4	Na	59.1	51.1	Na
	NFHS I	73.5	Na	46.6	38.5	Na
Tamil Nadu	NFHS III	96.5	43.2	93.2	90.4	89.6
	NFHS II	90.9	Na	83.7	79.3	Na
	NFHS I	88.4	Na	69.3	64.3	Na
West Bengal	NFHS III	62.4	24.3	45.7	43.1	37.8
C	NFHS II	57.4	Na	44.2	40.1	Na
	NFHS I	50.3	Na	33.9	32.0	Na
Orissa	NFHS III	60.9	32.8	46.4	38.7	38.3
	NFHS II	48.0	Na	33.4	22.6	Na
	NFHS I	34.9	Na	19.0	14.1	Na
	NFHS III	75.3	30.5	70.7	66.1	58.8
Maharashtra	NFHS II	66.2	Na	59.4	52.6	Na
	NFHS I	63.3	Na	53.1	44.5	Na
	NFHS III	64.9	35.7	64.7	54.6	54.0
Gujarat	NFHS II	61.2	Na	53.5	46.3	Na
	NFHS I	61.3	Na	43.4	36.8	Na
	NFHS III	72.5	26.1	68.6	52.5	55.3
Punjab	NFHS II	58.4	Na	62.6	37.5	Na
	NFHS I	62.2	Na	47.3	24.8	Na
	NFHS III	58.8	28.3	54.2	39.4	40.6
Haryana	NFHS II	38.2	Na	42.1	22.4	Na
	NFHS I	45.8	Na	31.5	17.4	Na
	NFHS III	41.2	12.8	43.2	32.2	28.9
Rajasthan	NFHS II	23.6	Na	35.8	21.5	Na
	NFHS I	18.1	Na	19.3	12.0	Na
	NFHS III	26.3	8.7	29.2	22.0	14.2
<b>Uttar Pradesh</b>	NFHS II	14.6	20.7	21.8	15.2	Na
	NFHS I	Na	Na	Na	na	Na
Bihar	NFHS III	16.9	9.7	30.9	22.0	15.3
	NFHS II	15.9	Na	24.8	14.8	Na
	NFHS I	Na	Na	Na	na	Na
Jharkhand	NFHS III	36.1	14.6	28.7	19.2	17.0

	NFHS II	24.5	Na	17.5	13.9	Na
	NFHS I	Na	Na	Na	na	Na
Chhattisgarh	NFHS III	54.7	21.8	44.3	15.7	25.3
	NFHS II	33.2	Na	32.3	13.8	Na
	NFHS I	Na	Na	Na	na	Na

Source: (NFHS, 2009)

Note: author's compilation based on key maternal health indicators from all the three

round of surveys, NFHS-I, II and III.

Further, for the purpose of more meaningful insight, I have compiled and analysed the DLHS-3, 2007-2008 key Maternal Indicators of India and states on ANC and delivery care from (11PS, 2010) ( refer Appendix, Table 6 and 7). These data demonstrate the low level of use of the modern health sector for ANC or delivery services. In all the three surveys (IIPS,2010; NFHS, 2009 and UNICEF, 2010) utilization of ANC check-up varies across states which ranges from as low as 26% in UP to as high as 96% in TN. The analyzing of states differential performances in MMR is crucial in policy implication of attainment of MDG 5 in India. The proportion of women who have received full ANC is better (more than 40%) in all the southern states.

WHO (1999b) suggests that SBA is the most important factor in preventing maternal deaths in detecting and managing obstetric complications, backed with the tools for effective management. Following this guideline central government's NRHM programme implemented in states to encourage delivery under proper hygienic condition and under the supervision of SBA. The proportions of safe deliveries and institutional deliveries are low in UP and Bihar as compared to more than 60% in southern states. This reflects that the SBA component of maternal health is fragile in UP and Bihar.

Authors such as Bhagat (2009); Mehrotra (2008); MOHFW GOI (2010); Verma et al (2010); and the World Bank (2010) have done extensive reports mainly in UP's dismal maternal health performance. My research of these authors narrowed down to UP the reason being that UP is the largest state of India and the changes in its demographic and health situation are the most significant contributor to the over all performance at the national level.

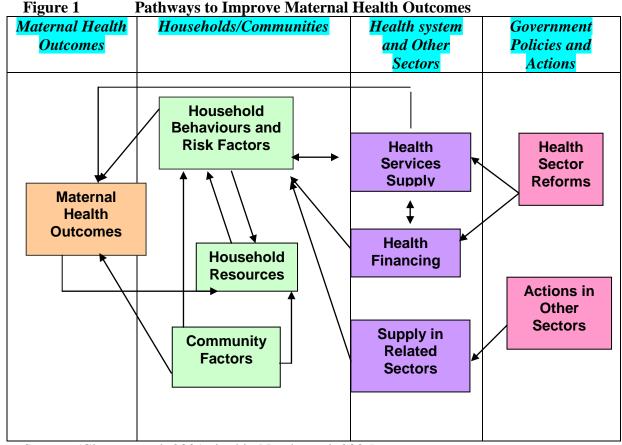
The findings of these authors strengthen my own analysis. I give a brief observation of the authors' view as follows. First, the fact that barely 22% of UP's mothers delivered children in institutions and home delivery without an SBA continues to be the dominant practice in rural UP. Second, In part of the service delivery, the AWC's in the entire country have been ineffective in providing the ANC and the condition of UP is worse. Third, doctors and paramedical staff absenteeism from duty is endemic in UP more than in other states. Fourth, of all, SC in UP, 59% lack infrastructure in terms of water supply, electricity, and have no all weather approach road. Fifth, none of the PHCs had a labor room as of September 2005, none had operation theatres and information about 24 hour delivery facilities was not available. In most other states all these bare minimum facilities are available.

This shows that demand for family planning and reproductive health services from the UP government sources is not high. The statistics and the literature reviews reflect the inability of the public health system to reach out to the target beneficiaries (expectant mothers). Despite the emphasis on three ANC visits about half of pregnant women still do not complete 3ANC visit and a quarter do not receive tetanus prophylaxis. With a higher percentage of anaemia and more women receiving IFA tablets, the poor quality of ANC is reflected, as well as the poor nutritional status of women and their poor compliance with taking IFA.

#### 2.3 Underlying Reasons for Low Performance in Maternal Health

The pathways model (Figure 1 p26) shows range of factors (household/communities, health system, other sectors and government policies) that impede or enhance maternal health outcome. It helps to identify risk factors and interventions at different levels of the system all of which affect maternal health outcome. Recognizing the importance of individuals and HH in generating good or poor reproductive health outcomes leads policy makers to focus on the constraints faced by vulnerable HH. Community factors such as gender norms and practices, fatalistic attitudes, social cohesion, access to community services and cultural practices have direct impact on maternal health and are often not within the health sector.

An overlooked area is the management of reproductive health commodities, human resources, referral systems, health education and out reach services. Government policies impact health outcomes and these include health reforms, health financing mechanisms, factors that improve health sector performance and PPP. The model recognizes the synergies of the different factors inside and outside the health sector and how they are linked to the desired outcomes of improved maternal health.



Source: (Claeson et al, 2001 cited in Nanda et al, 2005)

The model recognizes that the major challenge in achieving the MDG 5 is mobilizing political commitment and creating an enabling and supportive policy environment to effectively implement interventions at all three levels of pathway model.

Analysing the government policy and action component of above model, Planning commission, GOI (2009) outline that the main reason for low performance is due to the pattern of expenditure on health and family welfare. In terms of per capita expenditure on medical and public health across the states, UP has the lowest figures much below the national average, and well performing states like TN and Kerala have the highest per capita expenditure, more than twice the level in UP.

The expenditure analysis also helps in understanding, the different degrees of political commitment of ruling parties to welfare programs. From the above discussion it is safe to argue that states with low expenditure on health programs correspond to low performance in maternal indicators.

The most important reason is that health services are governed at state level that depends on state leadership and management skills (Bhagat, 2009; Kumar et al, 2010 and Vora et al, 2009). In their analysis Mavalankar et al (2009) also point out that the reasons for the slow progress include lack of 'political will', 'poor management capacity' and 'poor implementation of policies'. I now move the discussion towards political regime influences in MM.

#### 2.4 Linking Maternal Health Performance with Political Regime Intervention

Regime types in India closely reflect the nature of the ruling political party. Harriss (2003) observes India as a laboratory for the study of political factors that influence the development and implementation of pro-poor policies. For Harriss, the combination of differences and commonality in Indian states makes possible a comparative analysis to identify political factors that have significantly reduced poverty reduction in India. I extend the author's argument in understanding how different sub national regimes in Indian states have been instrumental in MMR.

In a comparative study of poverty alleviation programmes in three Indian states, WB, Karnataka and UP, Kohli (1987) notes that political regime created by parties are the most important variables explaining the different degrees in the efficacy of poverty alleviation programmes. He argues that a tightly organized ideological party can operate the rural society without being co-opted by the propertied groups as in the case of WB, CPI (M). According to Kohli such a party regime has the following critical characteristic: 'coherent leadership', 'ideological and organization commitment', 'pragmatic attitude' and an 'organizational arrangement'.

Conversely he found that regimes with loose organization and diffuse ideology are not successful in reformist intervention. Kohli argues emphatically therefore that politics does make a difference. Variations in the nature of political rule at the state level can lead to differential effectiveness in the pursuit of anti poverty programs.

Others perhaps disagree. Vyas and Bhargava's (1995) findings of comparative studies of public intervention and rural poverty reduction in nine states suggests that success in poverty alleviation efforts was not significantly affected at least by the professed political factors of the ruling parties in different states. Extending Kohli's work Harriss (2003) argue that there are other types of regimes beyond left of centre ones of WB and Kerala that have been relatively successful in poverty reduction.

Harriss moves the analysis forward by defining the nature of the party system (based on the presence of leftist parties, relatively institutionalized populist parties and others) and the balance of caste and class power. He identifies variations in poverty reduction performance of 13 major states and looks at how differences in regime types influence policies, expenditure pattern and poverty outcomes. He concludes that regime types do have an impact on poverty reduction. Regimes with well organized left of centre parties (WB and Kerala) and relatively well institutionalized populist parties (TN and AP) have been able to deliver pro poor policies.

Barrientos and Pellissery(2012) examining the significance of politics in the rise of social assistance programmes in developing countries in the last decades also find that politics is crucial in the adoption design and implementation of social assistance programmes. They argue that social assistance is shaped by political process and that demonstrate social protection and assistance have risen in importance in political and policy discourse and debate.

For example Lula's re-election in 2006 is credited by many to the success of Bolsa Familia. In India the re-election of UPA is largely credited to the introduction of NREGA, SSA and NRHM in their first term. Adding to this UNRISD (2010) identifies political capacities as fundamental in gauging the developmental and welfare promoting capacities of states.

Mooij's (2007) investigation in two Indian social policy processes(food and primary education) relates to the fact that social policies are important for regime legitimacy but nevertheless suffer from a lack of political commitment. The author discusses on the adverse impact of polity on pro poor programmes and concludes that policies are not the logical outcomes of rational selection procedures of the best policy alternative; rather they are formulated and implemented in particular social and historical contexts and these contexts matter for which issues are put on the policy agenda for the kind of policies that are developed. Mooij's analysis holds true mainly in the UP context under the BSP regime which will be discussed later.

Similarly Hassan (2010) defines regime as the "agencies and mechanisms through which power is organized and exercised in democracy", (p 241). The author critically discusses that regimes have undergone transformation from policy oriented to office seeking parties. Regime shifts their ideologies in forming coalitions in the exchange of mutual benefits and compulsion of power. Government policies and elected politicians help to shape cleavages around which political mobilization occurs.

Also in same trend McCartney (2009) and Weiner (2001) critically examine that identities, ethnic and caste conflicts are seen principally as the product of political entrepreneurs appealing to group identities to enhance their own quest for political power. The incorporation into the political system of backward caste elites and members of SC has apparently done little to reduce the enormous social and economic disparities.

The authors draws attention to the fact that TN governed by AIADMK have witnessed the political rise of the lower caste and spend no more of their state budget than do Gujarat and Maharashtra on welfare. In UP particularly the BSP invested state resources on constructing statues of dalit leaders but did little to promote social development. Thus the authors argue that lower caste and class parties have little impact on public policy.

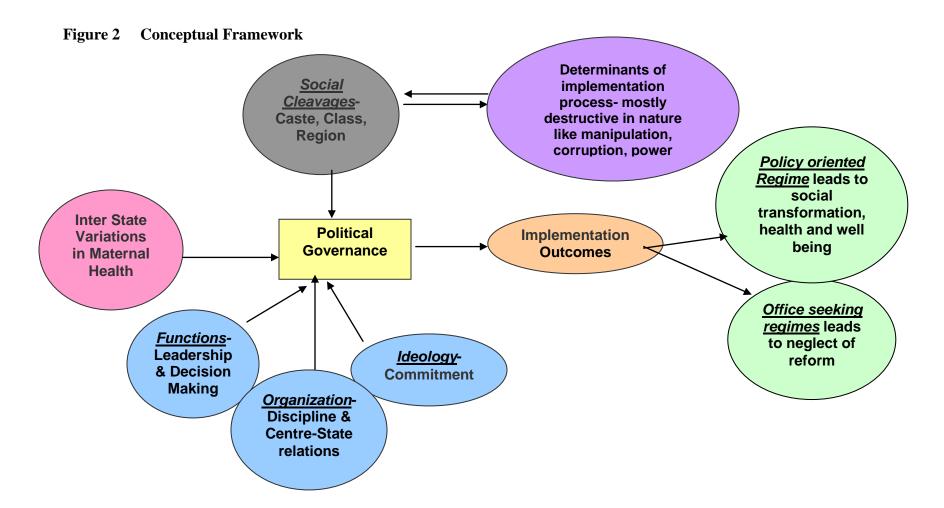
In contrasts Kohli's (2010) provides useful insight into the southern states and the nature of regime interventions (Kerala.AP,TN and Karnataka) significantly leads among the top half of the states in poverty reduction while the BIMARU state are among the bottom half of the states in which poverty has come down the least. As I previously mentioned in my earlier analysis it is the BIMARU states where maternal indicators are significantly low in contrast to high performing southern states. This helps me develop logic that southern regimes may have been instrumental in MMR. The case analysis chapter will further unpack this logic. The quality of state level bureaucracy in the south has generally been superior and has invested more heavily than hindi heartland states due to populist leaders. In northern states main mode of politics is narrow with patron client ties as the key defining unit of political society. Factional bickering among patrons was the core traits of state politics that further detracted from any constructive use of state power in pursuit of social development programmes.

Mehrotra (2008) critically discusses the effectiveness of the services depending on the seriousness of the political commitment to improving the public health delivery and is evident in states that have strengthened JSY (maternity schemes) by initiatives in reducing MMR (noted ones are TN, Kerala and Gujarat). Further, Dasgupta (2011) in the UP context analyses that three successive political formations which have ruled UP since 2000 and have paid more attention to consolidating vote banks along caste and religious lines with none of them taking up the states poor health indicators as a political priority. Finally Vaidyanathan (1995) from the experience of Karnataka and WB suggest that developmental changes will not take place without considerable political effort.

The above discussions of political regimes draws three key issues; first there are authors that convincingly claim regime effectiveness on developmental programmes. Second, other authors reject this claim and argue that political factors have least influence in poverty outcomes. Third, some authors defend adverse policy outcomes are the results of political failures. Based on my research, I agree on the first and the third point. I argue in important way welfare regimes in India could be classified as clientelist or populist that impact development programme.

#### 2.5 Conceptual Framework

The proposed framework is drawn from the above literature review. It outlines the wide inter state variation in MM from the political intervention perspective. The interventionist role may take different form under different types of regimes. Social Cleavages mainly class (Harriss, 2010) and caste (Jodhka, 2010 and Pai, 2002) tend to structure regimes, their leadership and programmes. The framework helps in analyzing how important is political regime capability that directs state intervention for social policy. In this context the political actors are considered a potential significant force capable of health sector reforming from above. In using the framework the specific political conditions under which reforms do or do not succeed are highlighted by a comparative analysis of two important Indian states in the next chapter. The pattern of state intervention is largely determined by the ideology, organization and functions of the regime that controls state power.



#### 3. REGIME INTERVENTIONS IMPEDE /ENHANCE MATERNAL MORTALITY

#### 3.1 Introduction

The WHO (1996) defines elements of good quality maternal health services in term of 'promotion and protection of health', 'accessibility and availability of services', 'acceptability of services', 'technical competence of health care providers', 'essential supplies and equipment', 'quality of client service interaction', 'information and counselling for the client', 'involvement of clients in decision making', 'comprehensiveness of care and linkages to other reproductive health services' and 'continuity of care and follow up'. This ambitious task as defined by WHO can only be achievable under the regime that is largely policy oriented (mentioned in the conceptual framework). In contrast the regime that fails to initiate any reformist agenda and remains confined to social cleavages may be judged as a power seeking regime that tends to neglect reform as in the case of UP. States regimes that have successfully improved maternal health outcomes generally had strong political commitments and enabling polices that supported women's education, voting and employment and had health programmes that specifically target maternal mortality reduction.

The aim of this section is to draw a distinction between two major Indian states namely TN an UP, in the context of MMR. In TN, the focus is on key interventions by AIADMK regime that naturally corresponds to the three aspects of regime characteristics (strong and capable leadership, disciplined organization and populist ideology). This characteristic made the regime possible to overcome constraint of social cleavages and pursue policy oriented reforms. In UP, I focus on the reverse, analysing the BSP regime functioning (authoritative style of leadership, goal shifting and diffuse ideology, capturing power and narrow political base.) This highly volatile nature of regime with ultimate dependence on social cleavages results in power seeking policy.

TN was chosen because like UP it experienced large scale mobilization of lower caste though in an earlier part of the last century, with remarkable results in terms of HDI. In other words TN like Kerala offers a remarkable example of what a massive mobilization of the lower caste could potentially achieve and what in the political process made it possible. In addition to mobilization there is a general difference in the quality of governance between TN and UP. The TN case is based on the extensive work on comparison of UP and TN in the context of health system performance (Mehrotra, 2006); exhaustive dealings of TN structural transformation of health system (Vora et al, 2009 and Padmanaban et al, 2009). Though UP had a movement to mobilize dalits and OBC of the state however UP lower caste had, before the mobilization began, and still have the worst social indicators in the state and in the country.

I conclude that TN has triggered innovative approaches in states with populist appeal and operationalised HR strategies within health systems to improve maternal health. This demonstrates the highest political commitment and game changing initiatives to address this priority which at the moment is a necessity for UP to significantly reduce MM.

### 3.2 Tamil Nadu AIADMK- A Populist Interventionist Regime

TN provides a good role model for other states to bring reformist institutional change for the attainment of MDG 5. It has complemented the implementation of NRHM with its own innovation to improve maternal health through structural transformation of human capital (Krupp and Madhivanan, 2009). The AIADMK regime in TN has successfully applied HR strategies in uniquely different contexts to the challenges of achieving MDG5 in contrasts to Gujarat's PPP model under BJP regime. The most aggressive experimentation with HR strategies has enabled TN to be the top performers in reducing maternal and neonatal mortality in India. Re-aligning resources through thoughtful use of public private transfer, task shifting, and position enhancement has offered the best opportunity for MMR.

Vora et al (2009) and Padmanaban et al (2009) have demonstrated key structural interventions in TN for MMR are as follows:-

- Strengthening the infrastructure of SC and PHC for conducting ANC, deliveries, immunization services and treatment for minor ailments and provision for birth spacing, provision for equipment and posting of female doctors for increased use of services by rural women.
- Regular skill building training program for VHN. For promotion of ANC and institutional delivery incentive packages were introduced since 1996 and have mandated at least 3ANC visits for each mother. Data of NFHS (2009) discussed earlier showed that ANC is nearly universal in TN.
- Innovations like surveillance and verbal autopsy of maternal deaths (community based maternal death review), continuum care for the community to the first referral health facility, round the clock quality EMOC facilities at the first referral units, birth companion programmes to improve social support during delivery, conducting maternity picnics for PW to reduce the apprehension of birth in hospital on selected days at PHC and CHC and social ceremonies for PW. These deliberate attempts make hospitals a welcoming and familiar place for mothers.
- The outcomes of the maternal death verbal autopsy system are greater accountability of services providers; advanced information to referral centres; better coordination between referring and referral institutions and a feedback mechanism.
- Scaling of evidence based intervention models posting of 'three staff nurses model' in rural areas of 24hour PHC.
- Outsourcing of services like EMRI as PPP with NGO for state wide sophisticated ambulance service.
- Establishment of comprehensive emergency obstetrician and newborn care centres with round the clock emergency obstetric and new born services.
- Establishment of TNMSC to strengthen the logistic management of health care.

 Recruitment of medical officers- a major social change introduced in TN with 50% of the post graduate seats in all branches of medicine are reserved for doctors who complete 3 years of service in the PHC.

While the technical interventions for the health in TN populations are the reasons for level of human development in the state the real explanation for heath in addition to education and nutrition also lies in the deeper social movements that have characterized TN. These movements can be credited with social achievements characteristics of three southern states namely Kerala, TN and Karnataka. The social mobilisation in TN has been continuing for much longer than in UP, is more inclusive and thus has benefited all. The Dravidian movement, the base of AIADMK regime in the TN, provided socio-political and cultural space for the deprived sections to assert themselves. While it is undeniable that it is largely the middle class who gain from these movements the assertion by the deprived is hardly to be divorced form the movement. (Viswanathan, 2005).

#### 3.2 Uttar Pradesh BSP- An Identity Based Symbolic Regime

The emergence of the BSP, a lower caste based party has been one of the most significant developments in the society polity for UP since the early 1980s. Many scholars hailed it as a revolutionary movement whose goal was to break the caste system and introduce social transformation. However my analysis proves this notion of social transformation was merely a utopian concept for BSP failing to deliver health sector reforms. In UP from 1980 onwards the politics of human development became much more prominent as observed by Singh and Kumar (2012). Caste and identity politics dominated important calculations in the state for policies in human development.

The SP and BSP two major political parties of UP have been major proponents of the caste politics. The social bases of the political parties determined the nature of public policy making. The BSP regime as analyzed by Pai (2002) has used for short term electoral gain and capture of power for a brief period rather than for more substantial long term gains, such as lower class upliftment or social transformation.

BSP's ideology and goal appeal to only a segment of the populations among the lower class, and met the aspirations of new upwardly mobile lower caste but missed an opportunity to emerge as a party for the poor and down trodden. Unlike AIADMK the BSP lacked the political capability of programmatic changes through progressive social policy. Randall (2007) argues that particular regimes make a very limited contribution to the emergence of new democratic developmental states, in terms of democracy, building or policy making, recruitment, ensuring accountability or policy implementation. Reasons include weak institutionalization and the prevalence of clientelism. While his analysis may not be valid in case the of TN, it may be true in the case of UP. There is less and rather negligible literature that I researched that would critically discuss the RCH initiatives of UP, during BSP regime apart from implementing national NRHM programme. It did initiate SSMY for maternal care but it remains largely undocumented.

The BSP representing the dalits, the most oppressed and deprived sections of the society aims at the social transformation and economic emancipation of the lower caste population. Authors such as Basu (2005); Jeffery et al (2007); Paul et al (2011); Pai (2002); Singh and Kumar (2012) and Teltumbde (2010) have critiqued the overall functioning capability of the BSP regime and its total neglect of health sector reform. However there is an exception in Kumar, (2003) who credited the BSP with initiating structural changes (land reform and AVS) that have enhanced qualitative improvement in the lives of the dalit.

The real reasons for the differences in well being of the populations of UP and TN lies in the programmatic weakness of the mass mobilizations of dalits and OBCs that have occurred in UP since the end of the 1980s. These programmes have been described well by others for example Pai (2004) and Verma (2012). The least valuable programme of activities of the dalit party in power was constructing memorials dedicated to lower caste leaders all of which absorbed very significant sums of state funds in a state where the treasury was essentially bankrupt.

These symbolic action corresponded problems with leakage and governance that have characterized the last 15years of government. It miserably lacked the well planned technical interventions as in contrasts to TN discussed above. Other than that both the rhetoric and reality of the program in UP was largely about capturing power, as though capturing power was an end in itself rather than the means to a larger end.

Singh (2010) identifies existing maternal health security schemes (JSY) in UP and confirm that only 9% of the states population actually make use of the public health facilities. This indicates that large number of poor PW do not get the benefits from the government health services. BSP response to health situation has not been very satisfactory. Among the existing measures of health security most of the schemes have been initiated and financed by the central government under the umbrella of the NRHM.

The number of PHC per lakh population in UP was 20.5 during 2007-2008 and post BSP rule 2007 onwards, had decreased to 1.67lakh. Basu (2005) critically points out that the lack of allocative efficiency in the social sector by the BSP in turn reflects the absence of strong and lasting political commitment which is the most important requisite for the development of the social sector in any country. Similarly Jeffery et al (2007) demonstrate that UP fails to ensure timely care for rural women experiencing obstetric emergencies at appropriate health care facilities. Use of unmonitored intrapartum injections of oxytocin is widespread in rural UP a contributing factor to high levels of maternal and neonatal deaths in rural UP.

This proves the weak management of the public health system, as compared to TN which has significantly established monitoring committees at all its CHC and PHC level and verbal autopsy at community level. Further, the states governance of the health and nutrition sector is much weaker and frequent changes occur at the top hierarchy. New incumbents at times undermine initiatives taken by their predecessors breaking continuity and demoralizing down stream implementers in meeting the challenge of reproductive health.

As observed by Teltumbde (2010), the BSP leaders could have used administrative prowess for improved basic services but instead earned the dubious epithet of being the most corrupt. The illusion of political power as the master key for lower caste emancipation has proved false mainly if one looks at the dismal health performance of UP during the BSP regime. The real emancipation lies in the radical policy reform as in the case of TN.

## 3.4 Key Findings and Discussion

My findings revealed due to political commitment and proactive administration, the indicators of maternal health have improved over the years in TN. Its efforts to improve maternal health improvement in availability of human resources, drugs, and supplies, improved management capacity, better monitoring of health services and analysis of maternal deaths have resulted in better quality of services as compared to UP that fails to demonstrate even a single technical component. The key lessons from TN are long term focus on maternal mortality through evidence based interventions on a smaller scale and then up scaling with a focus on the systematic implementation of interventions suited to local conditions to provide consistent higher quality service in rural areas.

Making higher investment such as posting three nurses to a PHC and providing cash incentive for institutional deliveries to poor women are measures that are far ahead of what UP is willing to do. In addition monitoring maternal deaths, analyzing medical and social causes, and taking action to improve the system are all largely possible of consistent and highly committed leadership. Despite JSY, the health institutions in UP do not guarantee quality of care to poor women and that is lack of established mechanism to ensure the degree of accountability. This gap of institutional capacity is huge.

The political class pays negligible attention to the women issue. UP under the BSP regime is a case of accountability failure within state institutions in the context of RCH. The dismal functioning of health services in UP also points out gender inequality and women's oppression. I extend the argument based on my analysis in defining UP as a failure in ensuring safe motherhood in the region. Just as southern states achievement illustrates what can be achieved through determined public action, BIMARU states mainly UP illustrates the penalties of inertia. This particular contrast is of major significance in understanding the divergent developmental performances of different Indian states and their practical implications.

The lesson of the social transformation from TN is that technical interventions are needed to transform the health sector. Those interventions are the responsibility of the regime that governs the state. Since health and education are state subjects, the state government is the one that account for nearly 90% of the total government expenditure on health and education.

The policy oriented reformist regime of TN offers an alternative scenario and a possible model for UP symbolic and power seeking regime. To succeed in the current politics for mobilization from symbolic gains UP will have to be substituted by mobilization for real gains in human capabilities, particularly health. Substantial improvements in the quality of services will require enormous political will as well as some amount of lateral thinking that has already been initiated and achieved by other state regimes.

## 4. CONCLUSIONS AND POLICY IMPLICATIONS

This section aims to synthesize the information discussed earlier around maternal mortality, its causes and consequences in wide inter state variations in the Indian context. In doing so it explores the significant political interventions in MMR in Indian states. I demonstrate key knowledge from the case of two important Indian states and will attempt to draw some broader conclusions and look at implications for the future.

This dissertation argued that MM is broadly the failure of political outcome of Indian states. It did this by examining various official statistics and literature. The findings raised fundamental question of political will and commitment for efficacy of maternal health programmes. I then developed a conceptual framework in understanding how political intervention is most likely to reduce MM and then applied this framework cautiously in TN and UP to find possible answers to my research question. This helped me in providing an impetus by showing what has been politically initiated in the Indian state in achieving MDG 5. This is a lesson learned for those states that are yet to reach the target so that the next generation of maternal health programmes reaches women more effectively and leads to real and sustained progress in improving maternal health outcomes and saving women's lives.

This dissertation further reinforces the urgent need for generating political priority for maternal mortality, at least in those states that have yet to achieve the MDG 5. The situation analysis of UP demonstrates in no uncertain terms that the public health system is not delivering; this implies that the public health system is not prioritized by policy. Having demonstrated the UP has among the worst health indicators in the country, it needs to be at the forefront of the efforts to improve health outcomes (Dreze and Gazdar, 2002).

This is especially important since reduction in MM in UP can significantly contribute to overall reduction in India's MM. NRHM if implemented successfully in UP, might address some of the infrastructure and human resource gaps that have long vitiated the emergence of an effective government health system. Focusing attention on the immediate issues arising out of the implementation of NRHM is clearly one priority of policy makers. In addition to strengthening service delivery, interventions at the community level (referring to the pathway model discussed earlier, p26) are required as the majority of births still occur at home. As 49% of reproductive aged women are anaemic in UP, IFA supplementation should continue to be a standard feature of the RCH programme. Finally life saving skills training, educating communities and building on existing antenatal efforts needs to be streamlined as in TN.

I also draw attention to Nanda et al's (2005) work and his understanding of achieving MDG 5, that it will remain elusive until there is political will and action to implement programmes that are based on proven and effective interventions. Addressing policy, programme priority and governance issue as suggested above need the political will and advocates for maternal deaths. Health needs to be a priority issue for politicians and maternal health in particular. Politicians must ensure that an adequate number of officers with technical competence are looking after maternal health consistently for longer periods. The findings of UP reflects the frequent transfer of senior health functionaries and its adverse impact on programme priorities. Top politicians at state level should periodically review MMR and maternal health services. Author such as Dasgupta (2011) have already documented extensive engagement of NGO namely SAHAYOG in UP that has raised issues of MM as discussed throughout in dissertation from the rights perspective but remains largely unsuccessful in their attempt to pursue state leaders for prioritising MM high in policy agenda. More women's NGOs need to take up high maternal mortality as an important issue to ensure that the government is focused in its efforts to reduce maternal deaths and to make safe motherhood strategies more successful mainly in BIMARU states.

Indian political parties should take a more active role by mobilizing the masses not only on economic issues but also around critical social issues like health and women's rights. Such a task can only be achieved if the policies have populist appeal. This is already in existence in south Indian states mainly TN that exemplified its policy oriented reforms in health systems and significantly reduced maternal mortality. However the transformation of development priorities and achievements in UP is a challenge; the agency of political intervention is obviously central to this transformation and the decisions of the state and the effectiveness of regime initiatives are themselves contingent on the nature and content of democratic politics. In the present political climate it would be naive to expect government to initiate a major reorientation of health priorities on its own.

As Sudhakar and Moss (2005) identified that ultimately the development of the social sector is the responsibility of Government. Hence overall BIMARU states and Orissa require political commitment in addition to larger transfer of resources from the centre to set up the expenditure proportion of the social sector and bring institutional reforms into the health system. The social cleavages indentified in the framework make it more difficult to bring human rights issues particularly the RCH within the scope of mainstream politics. As per Sen (2002) the radicalism that is needed can only be embraced with the positive duties of a responsible government to create an enabling environment in social sectors and more particularly in health.

The diverse states experience in achieving social progress and in this case MDG 5 is of interest not only for their direct role in raising well being and reducing human deprivation but also indirectly in the part they can play in enhancing the nature and quality of economic growth. I reinforce two key suggestions. First, Gopestake's (1992) convincing analysis that even within existing political and economic constraints it is not unrealistic to seek improvements in the health system performance through incremental reforms.

Second, Guhan's (1992) rational argument that the dominant thrust of the social security policy in India has to be promotional rather than protective. For instance, given the large proportion of unattended births in rural India, maternity care has to be further strengthening through SBA in addition to institutional facilities. It is true that all the specific historical circumstances and institutional factors that have generated a high degree of maternal health indicators in TN are not replicable, but the nature of institutional political parties (coherent and stable leadership with lower class ideology and populist appeal) that have also been found to be critical in generating equitable distribution in health services is amenable to change for achieving the same ends but through means that are likely to be different in specific socio-political contexts.

Further, this dissertation unpacks the possibility of further research to answer key questions. First, what are the barriers to political attention of health in Indian States? To answer this question I looked at two aspects of social cleavages namely class and caste as in the case of UP under BSP regime. Similarly gender is an important area of investigation that has the potential of drawing more sights into the maternal health issues. Second, how does a lack of political support affect the achievement of health? In answering this question I attempted also to analyze the case of UP. In a similar manner other BIMARU states including Orissa can be researched. This evidence based documentation will serve as a tool for broader advocacy in the corridors of potential stakeholders whose support is necessary for states accountability. Such measures are by no means new in the Indian context. Recent initiatives are right to food act and right to information act for generating states responsibility and accountability.

## REFERENCE

Alam, D (2011), "Problem of Regional Imbalances: An Analysis of Social Sector", in K. K. Bagchi (ed), **Regional Disparities in India's Socio-Economic Development**, New Delhi, New Century Publications.

Basu, A (2005), "Trends in Social Sector in Developing Countries", in R.K.Sen(ed), **Social Sector Development in India**, New Delhi, Elegant Printers.

Barrientos, A and Pellissery, S (2012), **Delivering Effective Social Assistance: Does Politics Matter?**, Effective States and Inclusive Development Research Centre (ESID), University of Manchester, Manchester, UK, Working Paper No. 09, ISBN 978-1-908749-02-4, accessed on 10 July, 2012 at

http://www.dfid.gov.uk/r4d/PDF/Outputs/ESID/esid\_wp09Barrientos-Pellissery.pdf

Bhagat, R.B (2009), "Health Care Functionaries and Clients Opinion about Family Welfare Programmes in Uttar Pradesh: A study of Six Selected Districts", **The Journal of Family Welfare**, Vol 55, No 1, pp 31-43.

Crook, C.R. and S.A.Sverrisson (2003), "Does Decentralization Contribute to Poverty Reduction?", in P.P.Houtzager and M, Moore (Eds), **Changing Paths**, United State of America, University of Michigan Press.

Dasgupta, J (2011), "Ten Years of negotiating rights around maternal health in Uttar Pradesh, India", **BMC International Health and Human Rights**, Vol,11, Supplementary Issue No 3, accessed on 14 July, 2012 at <a href="http://www.biomedcentral.com/1472-698X/11/53/54">http://www.biomedcentral.com/1472-698X/11/53/54</a>

Dreze, J and H.Gazdar (2002), "Uttar Pradesh: The Burden of Inertia", in J, Dreze and A.K.Sen (Eds), **India Development and Participation**, United States, Oxford University Press Inc, New York.

Dreze, J and A.K.Sen (1995), **Indian: Economic Development and Social Opportunity**. New Delhi, Oxford University Press.

Dreze, J and A.K.Sen (Eds) (2002), **India Development and Participation**, United States, Oxford University Press Inc, New York.

Gent-E.J (1993), **The State and the Poor**, California, University of California Press, Berkeley and Los Angeles.

Gill, K (2009), A Primary Evaluation of Service Delivery Under The National Rural Health Mission (NRHM): Findings From A Study in Andhra Pradesh, Uttar Pradesh, Bihar and Rajasthan, Working Paper 1/2009-PEO, Planning Commission of India, accessed on 15 July, 2012 at <a href="http://environmentportal.in/files/wrkp\_1\_09.pdf">http://environmentportal.in/files/wrkp\_1\_09.pdf</a>

Gopestake, J. G (1992), "The Integrated Rural Development Plan: Performance During the Sixth Plan, Policy Response and Proposal For Reform", in B.Harriss, S. Guhan and R.H. Cassen (Eds.), **Poverty in India Research and Policy**, Oxford, Oxford University Press.

Guhan, S (1992), "Social Security in India: Looking One Step Ahead", in B. Harriss, S. Guhan and R.H.Cassen (Eds.), **Poverty in India Research and Policy**, Oxford, Oxford University Press.

Harriss, J (1987), "The State in Retreat? Why has India Experienced such Half Hearted Liberalization in the 1980s?" **IDS Bulletin**, Vol 18, No 4.

Harriss, J (2001), "Populism, Tamil Style. Is it really a success?" ,**Review of Development and Change**, Vol 5, No 2, pp 332-346.

Harris, J (2003), "Do Political Regimes Matter?: Poverty Reduction and Regime Differences across India", In P.P.Houtzager and M.Moore (Eds), **Changing Paths**, United State of America, University of Michigan Press.

Hassan, Z (2010), "Political parties", in N.G.Jayal and B.P.Mehta (Eds) in **The Oxford Companion to Politics in India**, New Delhi, Oxford University Press.

Herring, J.R (2003), "Beyond the Political Impossibility: Theory of Agrarian Reform", in P.P.Houtzager and M.Moore (Eds), **Changing Paths**, United State of America, University of Michigan Press

International Institute of Population Sciences (IIPS), (2010), **District Level Household and Facility Survey (DLHS-3), 2007-2008, Fact Sheets: India, States and Union Territories**, Mumbai: IIPS, accessed on 20 June 2012 at <a href="http://www.rchiips.org/pdf/Compendium India States.pdf">http://www.rchiips.org/pdf/Compendium India States.pdf</a>

Jeffery, P., Das, A., Dasgupta, J., and Jeffery, R (2007), "Unmonitored Intrapartum Oxytocin Use In Home Deliveries: Evidence From Uttar Pradesh, India", **Reproductive Health Matters**, Volume 15, No 30, pp 172-178.

Jejeebhoy, S (1997), "Maternal Mortality and Morbidity in India: Priorities for Social Science Research", **Journal of Family Welfare,** Vol 43, pp 31-52.

Jodhka.S.S (2010), "Caste and Politics", in N.G.Jayal and B.P.Mehta (Eds) in **The Oxford Companion to Politics in India**, New Delhi, Oxford University Press.

Kohli, A (1987), **The State and Poverty in India: The politics of Reform**, Cambridge, Cambridge University Press.

Kohli, A (1990), **Democracy and Discontent: India's Growing Crisis of Governability**, Cambridge, Cambridge University Press.

Kohli, A (1997), "From Break Down to Order: West Bengal", in P. Chatterjee (Ed), **State and Politics in India**, New Delhi, Oxford University Press.

Kohli, A (2010), "Politics and Redistribution", in N.G.Jayal and B.P.Mehta (Eds), in **The Oxford Companion to Politics in India**, New Delhi, Oxford University Press.

Krupp, K and Madhivanan, P (2009), "Leveraging Human Capital to Reduce maternal Mortality in India: Enhanced public Health System Or Public Private Partnership", **Human Resource For Health**, Vol 7, No 18.

Kumar, V (2003), "Uttar Pradesh: Politics of Change", **Economic and Political Weekly**, pp 3869-3871.

Kumar, K., Sankhe, L., Singh, P.K., Tomar, J., and Baijal, S (2010), "An Analysis of Utilisation of Health Services Under National Rural Health Mission: A Case Study of A Selected District Of Uttar Pradesh, India 2009", Working Paper Series, **Social Science Research Network**, accessed on 25 July, 2012 at <a href="http://papers.ssrn.com/so13/papers.cfm?abstract\_id=1565723">http://papers.ssrn.com/so13/papers.cfm?abstract\_id=1565723</a>

Lim, S.S., Dandona, L., Hoisington, A.J., James, L.S., Hogan, C.M., and Gakidou, E (2010), "India's Janani Suraksha Yojana, A Conditional Cash Transfer Programme to Increase Births in Health Facilities: An Impact Evaluation", **The Lancet**, Vol 375.

Maine, D., L. Freedman, F. Shaheed and S. Frautschi (1994), "Risk Reproduction and Rights: The Uses of Reproductive Health Data", in R.Cassen, D.A. Ahlburg, L.M.Bates, N.Birdsall, S.Frautschi, L.Freedman, K.Gulhati, A.C.Kelley, C.B.Lloyd, D.Maine, W.P.McGreevey, T.W.Merrick, T.Panayotou, F.Shaheed, S.S.Russell, M.S. Teitelbaum (Eds), **Population and Development: Old Debates, New Conclusions**. Washington, DC: Overseas Development Council.

Mavalankar, D., Singh, A., Patel, R.S., Desai, A., and Singh, V.P. (2009), "Saving Mothers and Newborns through an Innovative Partnership with Private Sector Obstetricians: Chiranjeevi Scheme of Gujarat, India", **International Journal of Gynecology and Obstetrics**, Vol 107, pp 271-276.

McCartney, M (2009), "India-The Political Economy of Growth, Stagnation and the State, 1951-2007", **Development and Change**, Vol 40, No 5, pp 991-993.

Measham, A.R and Rochat, R.W (1988), "Slowing the Stork: Better Health For Women Through Family Planning", PPR Working Paper Series, No. WPS 66, Washington, DC: World Bank.

Mehrotra, S (2006), "Well-Being and Caste in Uttar Pradesh: Why UP Is Not Like Tamil Nadu", **Economic and Political Weekly**, pp 4261- 4271.

Mehrotra, S (2008), "Public Health System In UP: What Can Be Done?", **Economic and Political Weekly**, pp 46-53.

Mooij, J (2007), "Is There An Indian Policy Process? An Investigation into Two Social Policy Process", **Social Policy and Administration**, Vol 41, No 4, pp 323-338.

MOHFW, GOI (2010), **Annual Report To The people On Health**, accessed on 18 July, 2012 at http://www.mohfw.nic.in/WriteReadData/1892s/9457038092AnnualReporthealth.pdf

Nanda, G., Switlick, K and Lule, E (2005), **Accelerating Progress Towards Achieving The MDG To Improve maternal Health: A collection of Promising Approaches**, Health, Nutrition and Population (HNP) Discussion Paper, The World Bank, Washington DC, accessed on 15 July, 2012 at <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources/28162</a> <a href="http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/28162">http://siteresources/28162</a> <a href="http://siteresources/28162">http://siteresources/28162</a> <a href="http://siteresources/28162">http://siteresou

NFHS (2009), NFHS-3Fact Sheet for Key Indicators Based on Final Data, India and 29 States, accessed on 30 July, 2012 at <a href="http://www.rchiips.org/NFHS/factsheets.shtml">http://www.rchiips.org/NFHS/factsheets.shtml</a>

Padmanaban, P., Raman, S.P., and Mavalankar, V.D (2009), "Innovations and Challenges in Reducing Maternal Mortality in Tamil Nadu, India", **Journal Human Population Nutrition,** Vol 27, No 2, pp 202-219.

Pai,S (2002), "Electoral Identity Politics In Uttar Pradesh", **Economic and Politics Weekly**, pp 1334-1341.

Pai, S, (2004), "Dalit Question and Political Response, Comparative Study of Uttar Pradesh and Madhya Pradesh", **Economic and Political Weekly**, pp 1141-1150.

Pathak, K.P. and Mohanty, K.S (2011), "Does The safe-Mother Programme Reach The Poor In Uttar Pradesh, India?", **Asian Population Studies**, Vol 6, No 2, pp 173-191.

Paul, K.V., Sachdev, S.H., Mavalankar, D., Ramachandran, P., Sankar, J.M., Bhandari, N., Sreenivas, V., Sundararaman, T., Govil, D., Osrin, D. and Kirkwood, B (2011), "India: Towards Universal Health Coverage 2, Reproductive Health, and Child Health and Nutrition in India: Meeting the Challenge", **The Lancet**, Vol 377, pp 332-349.

Prabhu, S.K (2005), "Social Sectors and Economic Development", in R.K.Sen (ed), **Social Sector Development in India,** New Delhi, Elegant Printers.

Planning Commission GOI (2008), **Five Year Plans**, accessed on 20 July, 2012 at <a href="http://www.planningcommission.nic.in/plans/planrel/index.php?state=planbody.htm">http://www.planningcommission.nic.in/plans/planrel/index.php?state=planbody.htm</a>

Planning Commission GOI (2009), **Uttar Pradesh: State Development Report**, accessed on 20 July, 2012 at <a href="http://planningcommission.gov.in/plans/stateplan/upsdr/vol-2/Chap">http://planningcommission.gov.in/plans/stateplan/upsdr/vol-2/Chap</a> b12.pdf

Planning Commission GOI (2011), **Mid-Term Appraisal Eleventh Five Year Plan 2007-2012**, accessed on 18 Jul, 2012 at

http://planningcommission.nic.in/plans/mta/chapterwise/chap7\_health.pdf

Ramaroa, S., Caleb, L., Khan, M., and Townsend, JW (2001), "Safer maternal Health in Rural Uttar Pradesh: Do primary Health Services Contribute", **Health Policy and Planning**, Vol 16, No 3, pp 256-263.

Randall, V (2007), "Political Parties and Democratic Development States", **Development Policy Review**, Vol 25, No 5, pp 633-652.

Sen, A (2002), "Radical Needs and Moderate Reforms", in J, Dreze and A, Sen (Eds), **India Development and Participation**, United States, Oxford University Press Inc, New York.

Singh, S (2010), "Three Years of the BSP Government in Uttar Pradesh", **Economic and Political Weekly**, Vol XLV, No 38, pp 77-81.

Singh, S and Kumar, A.V (2012), "Politics and Public Policies: Politics of Human Development In Uttar Pradesh, India", Working Paper No 287, **The Institute for Social and Economic Change**, Bangalore, India.

SRS (2011), **Special Bulletin on Maternal Mortality in India 2007-2009**, accessed on 20 July, 2012 at <a href="http://www.censusindia.gov.in/vital\_statistics/SRS\_Bulletins/Final-MMR%20Bulletin-2007-09\_070711.pdf">http://www.censusindia.gov.in/vital\_statistics/SRS\_Bulletins/Final-MMR%20Bulletin-2007-09\_070711.pdf</a>

Sudhakar, S and Moss, A.G (2005), "Budgetary Expenditure On The Social Sectors", in R.K. Sen (ed), **Social Sector Development In India**, New Delhi, Elegant Printers.

Teltumbde, A (2012), "Maya and Dalits in Uttar Pradesh", **Economic and Political Weekly**, Vol XLVII, No 16, pp 10-11.

UNICEF (2010), 2009 **Coverage Evaluation Survey All India Report**, accessed on 22 July, 2012 at <a href="http://www.unicef.org/india/1\_-\_CES\_2009\_All\_India\_Report.pdf">http://www.unicef.org/india/1\_-\_CES\_2009\_All\_India\_Report.pdf</a>

UNRISD (2010), Combating Poverty and Inequality Structural Change Social Policy and Politics, United Nations Research Institute For Social development, Geneva, Switzerland.

Vaidhyanathan, A (1995), "The political Economy of the Evolution of Anti Poverty Programmes", in T.V. Sathyamurthy (ed), **Social Change and Political Discourse In India, Volume 2 -Industry and Agriculture In India Since Independence**, Oxford, Oxford University Press.

Verma, K.A (2005), "Why Did Mayawati Lose?", **Economic and Political Weekly**, Vol XLVII, No 18, pp 17-18.

Varma, S. D., Khan, E. M. and Hazra, A (2010), "Increasing Institutional Delivery and Access To Emergency Obstetric Care Services in Rural Uttar Pradesh", **The Journal of Family Welfare**, Vol 56, Special Issue, pp 23-30.

Viswanathan, S (2005), Dalits In Dravidian Land, Frontline Reports On Anti-Dalit Violence In Tamil Nadu, 1995-2004, Chennai, Navayana Publishing.

Vora, S.K., Mavalankar, D.V., Ramani, V.K., Upadhyaya, M., Sharma, B., Iyengar, S., Gupta, V. and Iyengar, K (2009), "Maternal Health Situation in India: A Case Study", **Journal Health Population Nutrition**, Vol 27, No 2, pp 184-201.

Vyas, V.S and Bhargava, P (1995), "Public Intervention for Poverty Alleviation: An Overview," **Economic and Political Weekly**, Vol 30, pp 41-42.

Weiner, M (2001), "The Struggle For Equality: Caste In Indian Politics", in A.Kohli (ed), **The Success of India's Democracy**, Cambridge, Cambridge University Press.

WHO (1996), **Mother** – **Baby Package: Implementing Safe Motherhood in Countries**, Geneva, World Health Organization.

WHO (1999b), Reduction of Maternal Mortality: A Joint WHO/UNFPA/UNICEF World Bank Statement, Geneva: World Health Organization.

World Bank (2010), Living Conditions And Human Development In Uttar Pradesh: A Regional Perspective, Washington DC, The World Bank, accessed on 16 July, 2012 at <a href="http://documents.worldbank.org/curated/en/2010/04/1627253living-conditions-human-development-uttar-pradesh-regional-perspective">http://documents.worldbank.org/curated/en/2010/04/1627253living-conditions-human-development-uttar-pradesh-regional-perspective</a>

## **APPENDICES**

Table 6 Key Maternal Health Indicator, India and States (ANC) DLHS-3, 2007-2008

	Key Maternal Health Indicator, India and States (ANC) DLHS-3, 2007-2008							
	DLHS 2007-2008							
India/State	Antenatal Care (based on women whose last pregnancy outcome was live/still							
	birth during the reference period)							
	Mothers Mothers Mothers Mothers Fu							
	who	who had	who had	at least	whose	who	ANC	
	received	ANC in	3 or	1TT (%)	BP	consumed	(%)	
		1 <sup>st</sup>		111 (70)		90+IFA	( /0)	
	iny ANC		more		taken			
	check up	Trimester	<b>ANC</b> (%)		(%)	<b>(%)</b>		
	<b>(%)</b>	<b>(%)</b>						
	75.2	45.0	49.8	73.4	45.7	46.6	18.8	
India								
Andhra	95.9	67.3	89.4	93.4	86.3	45.8	40.6	
Pradesh			-	-				
Kerala	99.8	95.6	95.3	98.5	98.5	74.3	72.3	
ixci ala	<i>)</i>	75.0	75.5	70.5	70.5	77.5	12.3	
Tamil Nadu	98.8	76.8	95.6	97.3	95.4	54.7	51.0	
Talliii Nadu	96.6	70.8	93.0	97.3	93.4	34.7	51.8	
				0.1.0				
Karnataka	90.2	71.8	81.3	86.9	78.9	64.1	51.1	
Maharashtra	91.8	61.6	74.5	89.6	74.0	45.7	33.9	
West Bengal	96.1	42.4	67.0	95.0	68.0	26.9	19.5	
Assam	74.8	39.4	45.2	69.3	36.2	36.9	7.9	
Assam	77.0	37.4	75.2	07.5	30.2	30.7	1.7	
TT	97.2	<i>EE</i> 1	<b>51</b> 0	06.1	42.9	20.0	12.2	
Haryana	87.3	55.1	51.9	86.1	42.8	29.0	13.3	
Uttar	64.4	25.1	21.9	62.9	11.4	41.6	3.3	
Pradesh								
Punjab	83.3	62.9	64.6	82.5	69.4	33.5	14.3	
Bihar	59.3	24.2	26.4	58.4	17.2	46.5	4.6	
Jharkhand	55.9	30.1	30.5	54.4	22.2	56.3	9.1	
Juai Milaliu	55.7	50.1	50.5	J7. <b>T</b>		50.5	7.1	
Madhya	61.8	33.8	34.2	60.4	30.1	49.9	8.6	
Madhya	01.8	33.8	34.4	00.4	30.1	47.7	0.0	
Pradesh	7.5.5	22.7	25.5	~ ~ ~	20. 7			
Rajasthan	56.6	32.7	27.7	55.0	29.5	53.5	6.6	
Orissa	84.1	47.5	54.6	82.4	41.9	47.9	23.3	

Gujarat	71.5	52.4	54.9	68.6	51.0	50.7	19.9
Chhattisgarh	79.6	38.6	51.2	78.0	39.1	37.9	13.7

Source: (International Institute of Population Sciences (IIPS), 2011) Note: authors own compilation.

Table 7 Key Maternal Indicators India and State (Delivery Care): DLHS 3 2007-2008

Table 7 Key Maternal Indicators India and State (Delivery Care): DLHS 3 2007-2008							
	DLHS 2007-2008						
India/State	Delivery Care (based on women whose last pregnancy outcome was live/still						
	birth during the reference period) figures are in %						
	Institutional	Delivery	Delivery	Safe	PNC	Received	
	Delivery	at Home	at home	delivery	within	<b>Financial</b>	
			by SBA		two	assistance	
					weeks of	under JSY	
					delivery		
India	47.0	52.3	5.7	52.7	49.7	13.3	
IIIdid	17.0	52.5	0.,	32.7	.,,,	15.5	
Andhra	71.8	27.7	3.8	75.6	79.5	22.1	
Pradesh	/1.0	27.7	3.0	75.0	17.5	<i>22.</i> 1	
Kerala	99.4	0.6	0.0	99.4	99.4	15.3	
IXCI ala	77. <del>4</del>	0.0	0.0	77. <del>4</del>	77. <del>4</del>	13.3	
Tamil Nadu	94.1	5.7	1.5	95.6	89.2	28.3	
I amm Nauu	74.1	3.7	1.3	93.0	09.4	20.3	
Vous - 4 - 1	<i>(5.1</i>	24.1	6.4	71.5	60.2	1.4.4	
Karnataka	65.1	34.1	6.4	71.5	69.2	14.4	
24.1	(2.6	25.0	5.0	60.5	70.7	0.2	
Maharashtra	63.6	35.8	5.9	69.5	79.7	8.3	
***	40.2	<b>7</b> 0.0	2.4	71.5	7.50	10.0	
West Bengal	49.2	50.0	2.4	51.6	56.9	19.0	
		_					
Assam	35.3	63.6	5.6	40.9	32.8	25.2	
Haryana	46.9	52.6	6.5	53.4	49.5	4.7	
Uttar	24.5	74.5	5.8	30.3	33.8	4.6	
Pradesh							
Punjab	63.3	36.4	13.8	77.1	78.9	2.7	
Bihar	27.7	71.5	4.2	31.9	26.2	9.7	
Jharkhand	17.8	81.8	7.2	25.0	30.9	2.8	
						, ,	
			l		l		

Madhya Pradesh	47.1	52.1	3.0	50.1	37.7	34.9
Rajasthan	45.5	53.7	7.2	52.7	38.2	31.9
Orissa	44.3	54.6	6.6	50.9	30.6	31.9
Gujarat	56.5	42.2	5.6	62.1	59.5	9.5
Chhattisgarh	18.1	81.6	11.5	29.6	41.6	9.3

Source: (International Institute of Population Sciences, (IIPS), 2010) Note: authors own compilation