

# National Rural Health Mission (NRHM) & Health Status of Odisha: An Economic Analysis

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## Abstract

To improve the prevailing situation, the Government of Odisha launched the National Rural Health Mission (NRHM) programme through the state on 17<sup>th</sup> June 2005. NRHM has completed its six years of journey in Odisha. It becomes necessary to assess the impact of NRHM on the health infrastructure and on the health indicators and to analyze the determinants of health status in the health development of Odisha. The study is only based on the secondary data. The collected data are analyzed with the help of MS-WORD and Excel. The study shows that the health status of study area is very poor and is gradually increasing as a result of the implementation of NRHM and the staple reasons for this tendency are: low income, illiteracy, shortage of doctors, unwillingness doctors to go to remote areas and lack of health care facilities and lack of production of laboratory technicians and radiographers.

**Key Words:** Health Infrastructure, Health Indicators, Health Status & NRHM

## 1. Introduction

From a social point of view, good health is a pre-requisite for human productivity and the development process. It is essential to economic and technological development. Individually, health is a man's greatest possession, for it lays a solid foundation for his happiness.

Improvement in health would make a positive impact on economic development. Better health can increase the number of potential man hours for production by reducing morbidity and disability as well as by reducing mortality. Better health may result in more productivity per man as well as more men available for work. Selma Muskin and Edward Devison have attempted to quantify the effects of reduction in mortality on the rate of economic growth in the United States. According to one of these estimates, decline in death rate accounted for

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Suresh Kumar Patra, L.Annam & Prof. M. Ramadass

305

National Rural Health Mission (NRHM) & Health Status of Odisha: An Economic Analysis

roughly 10 percent of the overall 3 percent growth rate in the economy for the period 1900-1960. Thus, there can be no two opinions that health is a basic input in national progress and in terms of resources for economic development; nothing could be of greater significance than the health of the people.

Therefore, promotion of good health must be a prime objective of every country's development programmes. It is a precursor to improve the quality of life for major portion of mankind. The preamble to the WHO constitution also states that the enjoyment of highest attainable standard of health is a fundamental right of every human being and those governments are responsible for the health of their people and that they can fulfill that responsibility of taking appropriate and social welfare measure. Health has found an important place in the constitutions of all nations of the world.

Therefore, both developed and developing countries have started paying adequate attention on improving the health status of people in the last three decades or so. A considerable portion of the Gross Domestic Product (GNP) has been earmarked for health promoting activities and health care represented by the number of medical institutions, medical personnel and availability of medicines. Governments everywhere formulated and implemented a variety of policies in the sphere of health promotion.

Taking into account the above factors, **National Rural Health Mission<sup>1</sup>** was launched by the Hon'ble Prime Minister Dr Manmohan Singh in New Delhi on 12<sup>th</sup> April 2005 in the country, with a special focus on 18 states including Odisha. It is the biggest ever health project in the health sector in the last 50 years. It recognizes the importance of health care in the process of economic and social development and improving the quality of lives of our citizens. It provides effective health care to rural population throughout the country with focus on 18 states which have weak public health indicators and weak infrastructures, NRHM initiative as a whole with its wide approach is a national movement than just a national health project. It seeks to provide universal access to equitable, affordable and quality health care which is accountable and responsive to the need of the people, reduction of child and maternal deaths as well as population stabilization, gender and demographic balance. It

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<sup>1</sup> <http://www.nrhmorissa.gov.in/pdf/NRHM%20Mission%20Document.pdf>

would also help to achieve the goals set under the NRH policy and Millennium Development Goals.

### **1.1 Statement of the Problem**

Odisha, one of the poorest states of the country, is vulnerable to repeated natural calamities like droughts, floods and cyclones. The recurring natural calamities further exacerbate distress of the people, particularly small and marginal farmers and landless laborers. The agrarian structure predominated by small and marginal farmers whose capacity to invest is limited. The poor agricultural productivity resulted in virtually stagnant agricultural growth and employment generation. That, further, has an adverse effect on the health status of the people. Deficient in infrastructure- railways, paved roads, ports and telecommunication-limits the optimal exploitation of its vast natural resources and the followed industrial growth. On the other hand poor infrastructural development in hilly terrains of western and southern Odisha, many rural communities are physically excluded from the rest of the state and denied access to essential socio-economic amenities like schools and hospitals. As a result of which birth rate, death rate, infant mortality rate, life expectancy rate, maternal mortality ratio, total fertility ratio etc. lags behind the national average. To improve the prevailing situation, the Government of Odisha launched the National Rural Health Mission (NRHM) programme through the state on 17<sup>th</sup> June 2005.

NRHM has completed its six years of journey in Odisha. It becomes necessary to assess the impact of NRHM on the health indicators, to know how the schemes under NRHM are working in Odisha and to assess the transition in the health status of Odisha. This dissertation is an attempt in this broad direction of evaluation of NRHM.

### **1.2 Objectives of the Study**

In the light of the above problem setting, the following objectives are framed for the present study.

1. To analyze the impact of NRHM in terms of health infrastructure in Odisha.
2. To analyze the trends in the health indicators in Odisha after the implementation of NRHM

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307

National Rural Health Mission (NRHM) & Health Status of Odisha: An Economic Analysis

### 1.3 Methodology

The study is purely based on the secondary data. The data are analyzed through Ms-word and Excel. The data are obtained from Economic Survey of Odisha, Ministry of Statistics and Program Implementation and Economic Survey of India.

### 1.4 Scope of the Study

The study only takes into account the secondary data. Primary data are ignored for the present study.

## 2. Review of Literature

This section provides a review of related studies and these are reviewed in the light of the objectives of the study spelt out earlier.

Rani Gopal (1987)<sup>2</sup> examined the paramount role played by human capital in a country's economic development. she emphasizes that human resource development particularly in developing countries like India, goes a long way in both accelerating the tempo of economic activity and in promoting the welfare of the people the author has attempted to access the health status and nutritional status of two important indicator of human resource development of the people in Andhra Pradesh during the study period(1961-1974) using time series data .her analysis reveals that there has been no improvement in the health status but only a decline as pointed out by a substantial status of health and nutrition.

Ramesh Bhat and Maheswari (2004)<sup>3</sup> concluded that the health facilities provided by any private company depends on its profit and its financial status. Like the private company, the facilities provided by the government also depend on its budget allocation which further depends on the financial soundness of the government. For their study, they used unstructured interview method. He interviewed the CEO, hospital head and the other senior doctors of the hospital and reached at the above stated conclusion.

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<sup>2</sup> Rani Gopal k:"Economics of Health and Nutrition ", Chugh publications, Allahabad, 1987.

<sup>3</sup>Ramesh Bhat, Maheshwari Sunil Kumar: "Challenges in sustaining a hospital: lessons for managing healthcare institutions"; Working Paper No. 2004-02-03, February 2004.

Purendra Prasad (2000)<sup>4</sup> made a study on the health related problems of the rural poor in Gujarat. His study suggests that most of the rural poor are facing problem in accessing healthcare services because the government fails to detect the social spaces or gaps in health care policies. He also finds from a study on the leptospirosis epidemic in Gujarat that the quick supply of drugs, increased allocation of equipment, health workers, doctors, and opening of special wards in the hospitals during the 1997-99 epidemics was less significant to save lives.

Arvind Pandey, Nandini Roy, D Sahu, Rajib Acharya(2004)<sup>5</sup> correlated the utilisation of antenatal care services and assistance received during delivery in three recently formed Indian states namely Chhattisgarh, Jharkhand and Uttaranchal., which are characterized with distinct geographical and topographical features. The study focuses on the particular features of the three states. The study concludes that, it is necessary for the reproductive and child health programme to visualize a dynamic strategy giving due consideration to the geographical and socio-economic factors.

### 3. Impact of NRHM in terms of Health Infrastructure in Odisha

#### 3.1 Number of Sub Centers, PHCs and CHCs Functioning

Table-1<sup>6</sup>

Years	Odisha			All India		
	Sub	PHCs	CHCs	Sub	PHCs	CHCs
	Centre			Centre		
2005	5927	1282	231	146026	23236	3346
2009	6688	1279	231	147894	23391	4510

<sup>4</sup> Prasad Purendra: "Health Care Access And Marginalised Social Spaces: Leptospirosis In South Gujarat"; Economic And Political Weekly October 7, 2000

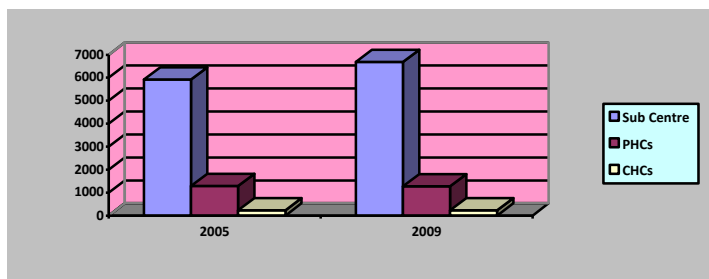
<sup>5</sup> Pandey Arvind, Roy Nandini, Sahu D, Acharya Rajib: "Maternal Health Care Services: Observations From Chhattisgarh, Jharkhand And Uttaranchal", Economic And Political Weekly February 14, 2004

<sup>6</sup> Source- Sample Registration System by GOI

From the table-1, it is clear that in the year 2005 when NRHM launched, there were 5927 sub-centres, 1282 PHCs and 231 CHCs operated in Odisha. In the year 2009, the number of sub-centre and PHCs increased to 6688 and 1279 respectively and there is no increase in CHC in Odisha during the period 2005-2009. At all India level the PHCs, CHCs and Sub-centre also increased during the year 2005-2009.

### 3.2 Sub-Centres, PHCs and CHCs in Odisha

**Chart-1**

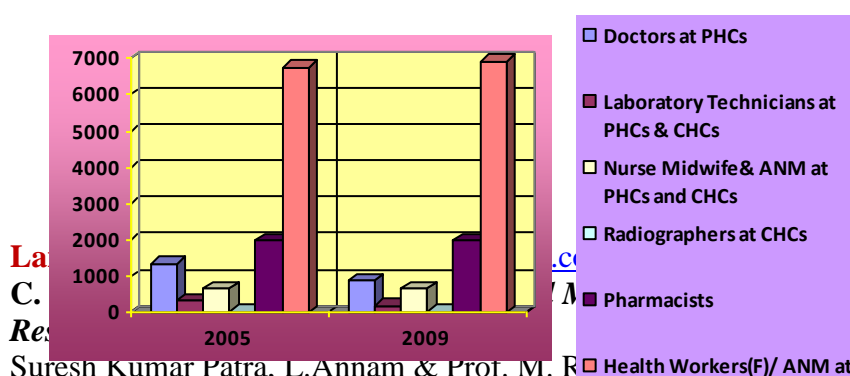


In the above chart (chart-1) it is found that Sub-Centres, PHCs and CHCs have been increased from the year 2005 to the year 2009 after the implementation of NRHM in Odisha.

Similarly, appointment of Doctors at PHCs, Laboratory Technicians at PHCs and CHCs, Radiographers at CHCs, Pharmacists and Health Workers (F)/ANM at SCs and PHCs after the implementation of NRHM in Odisha is shown in the following graph.

### 3.3 Doctors, MPHw (F), Laboratory Technicians, Pharmacists, Radiographers, Pharmacists and Nurse Midwife & ANM at PHCs and CHCs

**Chart-2**



In the above chart (chart-2) it is seen that the appointment of

3:4 April 2013

*Claims on National*

Health Worker (F)/ANM, Nurse Midwife, Radiographers and pharmacists at SCs and PHCs have increased from 2005 to 2009 after the implementation of NRHM in Odisha. But, there is a reduction in the presence of lab technicians and doctors from 2005 to 2009 because of the standardization of health system in Odisha.

### 3.4 Increase in Hospital Bed Strength in Government Institutions 2005to 2009 at CHC level (PHC beds are not included):

**Table-2<sup>7</sup>**

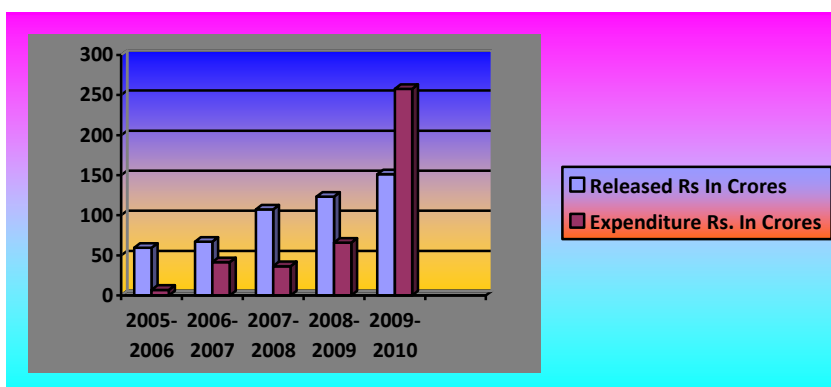
Sl.No	State/year	2005	2009
1.	Odisha	13,146	14,763
2.	India	4,69,559	5,40,328

From the table -2, it is found that Hospital Bed Strength in Government Institutions over the period 2005 to 2009 at CHC level (PHC beds are not included) has been increased from 13,146 in 2005 to 14,763 in the year 2009 in Odisha. At national level in total, the number of Hospital Bed Strength in Government Institutions over the period 2005 to 2009 at CHC level (PHC beds are not included) has also been increased from 4,69,559 in 2005 to 5,40,328 in the year 2009.

### 3.6 Released Rs in crores and Expenditure in Rs crores in Odisha over the Period 2005-2010

**Chart-3**

<sup>7</sup> Source: National Health Profile 2008 and 2009 , Progress under NRHM (As on 31.01.2010)



In the above chart (chart-3) it is clear that over the period 2005-2010, substantial amount of money is being released by the government and the expenditure out of the released amount is also incurred for the development of the health status of the people of Odisha.

#### 4. Indicators of Health in Odisha

**Table-4<sup>8</sup>**

SL. No	Indicators of Health Progress	2003	2004	2005	2006	2007	2008
1.	Crude Death Rate	9.7	9.6	9.5	9.3	9.2	9.0
2.	Infant Mortality Rate	83	77	75	73	71	69
3.	Total Fertility Rate	2.6	2.7	2.6	2.5	2.4	2.4

From the table-4, it is clear that the crude death rate, infant mortality rate has been reducing over the period 2003 to 2008. The CDR was 9.7 in the year 2003 which reduced to 9.6, 9.5, 9.3, 9.2 and 9.0 in the year 2004, 2005, 2006, 2007 and 2008 respectively in Odisha. Similarly, the IMR was 83 per 1000 live birth which reduced to 75 and further to 69 in the year 2005 and 2009 respectively in Odisha. The TFR is also reducing over the periods. In the year 2003, the TFR was 2.6 which reduced to 2.5 in the year 2005 and further reduced to 2.4 in the year 2008 in Odisha.

<sup>8</sup> Source- Sample Registration System by GOI



## 5. Major Findings of the Study

The major findings of the study are as follows:

1. There is acute shortage of specialists in Odisha.
2. Similarly, at all India level many sub centres were running in rented building and in village volunteer society building.
3. The appointments of Health Worker (F)/ANM, Nurse Midwife, Radiographers and pharmacists at SCs and PHCs have increased from 2005 to 2009 after the implementation of NRHM in Odisha.
4. Over the period 2005-2010, substantial amount are being released by the government and the expenditure out of the released amount is also incurred for the development of the health status of the people of Odisha.
5. The crude death rate, infant mortality rate has been reducing over the period 2003 to 2008.

## 6. Conclusion

The study shows that the health status of study area is very poor and is gradually increasing in quality as a result of the implementation of NRHM and the staple reasons for this tendency are: low income, illiteracy, shortage of doctors, unwillingness doctors to go to remote areas and lack of health care facilities and lack of production of laboratory technicians and radiographers.

## 7. Policy Recommendations

Though there has been a significant improvement in the health status of the people, some possible strategies for adoption by the state to improve the health status further have been suggested below.

- Both the government organizations and non-government organization should put their combined effort to bring reforms in the health system in the rural areas of Odisha.
- Free education up to higher secondary level should be given to SC and ST people.

- After the return of the mother and the child after delivery from the hospital, the domiciliary and clinical based follow up should be carried out by both ASHA and MPHW (F).
- More job opportunities should be initiated in the rural areas through MGNREGA programme.
- Public Private Partnership should be given due importance in order to fill up the large gap in the field.
- NGOs along with ASHAs and AWWs should spread the health awareness among the illiterate people of the region.

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### References

Rani Gopal k.”Economics of Health and Nutrition “, Chugh publications, Allahabad, 1987.

1. L.T.Ruzia:”India’s demography essay on the contemporary population “,SouthAsian publishers private limited, New Delhi, p.13.
2. SP Jain:”Levels and Differentials of infant and child mortality-Determinants and demographic impact, child in India”,Himalayan publishing House,Bombay ,1981,pp.94-114.
3. P G K Panikar and soman,C.R:”Heath status of Kerla;Paradox of economic backwardness and health improvement”,Trivandrum,Centre for Development Studies,1984.
4. Jalandhar Pradhan and Arokiasamy.p:”High Infant and Child Mortality Rates in Orissa:an assessment of major reasons “International Institute for Population Science(IIPS),Deonar , Mumbai,pp-187-200 (2006).
5. Santosh Mehrotra: “*Public Health System in UP; what can be done?*” Economic and Political Weekly, December 6, 2008, New Delhi.
6. A. K Shiva Kumar: “Budgeting for Health: Some Considerations” Economic and Political Weekly, April 2, 2005.

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Suresh Kumar Patra, L.Annam & Prof. M. Ramadass

315

National Rural Health Mission (NRHM) & Health Status of Odisha: An Economic Analysis