European Commission

State Patnership Programme

Chhattisgarh

Final Report on Medium Term Expenditure for Department of Health and Family Welfare

Government of Chhattisgarh

May 2012

giz IS International Services

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LIST OF ABBREVIATIONS

ADIS	Acquired Immuno Deficiency Syndrome
ANC	Ante Natal Check-up
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga, Unnani, Siddah and Homeopathy
BE	Budget Estimate
BPL	Below Poverty Level
CHC	Community Health Centre
DLHS	District Level Health Survey
FRU	First Referral Unit
GSDP	Gross State Domestic Product
HIV	Human Immuno Virus
ICTC	Integrated Counselling and Testing Centre
IEC	Information Education and Communication
IMR	Infant Mortality Rate
IPHS	Indian Public Health Standards
JSY	Janani Suraksha Yojna
MMR	Maternal Mortality Rate
MTEF	Medium Term Expenditure Framework
MTP	Medical Termination of Pregnancy
NGO	Non-Government Organisation
NHP	National Health Policy
NMBS	National Maternity Benefit Scheme
NRHM	National Rural Health Mission
NUHM	National Urban Health Mission
ORS	Oral Re-hydration Salt
PHC	Public Health Centre
PRI	Panchayati Raj Institution
RCH	Reproductive and Child Health
RE	Revised Estimate
RTI	Reproductive Tract Infections
SACS	State AIDS Control Societies
SBA	Skilled Birth Attendant
SC	Sub Centre
SHPP	State Health and Population Policy
SRS	Sample Registration System
STI	Sexually Transmitted Infections
TFR	Total Fertility Rate
VHSC	Village Health and Sanitation Committees

EXECUTIVE SUMMARY

Background

Health is an important sector with a national and state policy, goals and programs placing emphasis on universal access to comprehensive primary health care services, equity in delivery of quality healthcare services, adequacy of health infrastructure and health systems and to develop human resources for healthcare, and population stabilization through vigorous implementation of quality reproductive healthcare, including family planning and other relevant social development measures.

European Commission (EC) assisted State Partnership Program (SPP) has been supporting government of Chhattisgarh (GoC) through providing budget support, intarallia in the areas of health and decentralisaton of development activities. A major objective of the technical assistance for EC-SPP with Chhattisgarh is to achieve a *"more equitable delivery of an access to quality through governance and institutional reforms and capacity development of the State at decentralized levels."* A significant component of this technical assistance is preparation of Medium Term Expenditure Framework (MTEF) to strengthen linkages between policy planning and budgeting to allow for more effective use of public resources.

Mid-term expenditure framework

For the purpose of resource allocation, the conventional system of budgeting is followed based on an annual assessment of resources and their allocation to different sectors in accordance with the priorities indicated by the State Government on an annual basis. Implicit in this is that priorities may change affecting the outcome and quality of expenditure. In order to get over the shortcomings of an annual budgeting system, many countries have started a medium term budgeting system, specifically Medium Term Expenditure Framework (MTEF) which enables a continuous review of policy, programs, objectives and outcomes and budgetary allocations on an annual basis. Incidentally, in the Budget 2012-13, the Finance Minister of Government of India (GoI) has proposed to introduce MTEF for better financial planning and expenditure management.

MTEF for Health Sector

The specific objective of the current exercise is updating MTEF. Also, MTEF as a government strategic policy and expenditure framework within line departments provides greater responsibility for resource allocation decisions and its inputs can be considered for the approach paper for the Twelfth Plan, which is currently under preparation by the State Government, because the plan would represent outlook into the future taken at a particular time, while MTEF is a continuous process of making a forecast and assessing its validity as further progress is made in its implementation.

Institutionalisation of MTEF Process

As part of the exercise for updating of MTEF, efforts were undertaken to institutionalize the MTEF process in the DoH&FW. Accordingly, a workshop was organized on 26 November 2011 jointly by the Department and EC-SPP GIZ IS. The objective of the workshop was to familiarize the officials of the DoH&FW with the concept of MTEF, its benefits, and process with stress on alignment of MTEF with annual plan. Detail discussions were held on analysis of past trends of revenue and expenditure, allocation of funds, goals and targets, achievements, and estimation of current gaps and requirement of resources.

Following the workshop, personnel from the DoH&FW were identified for collation of necessary data and information to update the MTEF. It needs to be mentioned that to achieve institutionalization in the truest sense, it entails an on-going process, which has been initiated. Further, to support this process a MTEF Training Manual may be considered as a set of guide, providing the basic background information, presentations and interactive learning activities on MTEF strategic planning

and budgeting. This manual is expected to provide key reform in strengthening MTEF budgeting process in the DoH&FW.

Overview of the Health Sector

The State has formulated a comprehensive policy on health and set out goals for realization by 2016. The State has also formulated drugs and medical supply policy to facilitate provision and extension of better healthcare services to the people.

The DoH & FW in the State is vested with the provision of health services in the urban and rural areas through its network of health provision centers at different levels of the State according to the population norms that have been accepted for establishment and operation of these centers. This Department is also vested with the responsibility of providing medical education in the State through the medical colleges. Further, this Department recruits the requisite medical professional staff, nursing staff, para-medical staff, and administrative staff to manage the health provision and training them to deliver services. The services can be broadly classified as urban and rural and further sub-classified as primary, secondary and tertiary health. The type of services offered can be classified as in the next page:

- Public Health
- Reproductive and Child Health including immunization
- Family Welfare including family planning
- School Health
- Medical Education
- Training and research
- Food and drug administration

A number of schemes are being implemented under the state health plan. Some of the important schemes are National Rural Health Mission, Reproductive and Child Health Program, National blindness Program, National Leprosy Control Program, National AIDS Control Program, Revised National TB Control Program, National Malaria Control Program, and Janani Suraksha Yojna. Most of these programs are funded by the central government and are implemented through the department of Health and Family Welfare of the State Government.

Sector Review

Chhattisgarh is a progressive State in terms of industrial and socio-economic development and the health sector in trying to keep pace with it.

Estimated birth, death and infant mortality rates in Chhattisgarh as per SRS Bulletin, December 2011, is provided in table below.

Estimated Birth Rate, Death Rate and Infant Mortality Rate in Chhattisgarh

Location	Birth Rate	Death Rate	Infant Mortality Rate
Rural	26.8	8.4	52
Urban	18.6	6.2	44
Total	25.3	8.0	51

The key developments in the health sector of the State are outlined hereunder.

Revision of Essential Drug List

Chhattisgarh formulated an Essential Drug List in 2002, which was revised in 2007 to contain 350 drugs and consumables. The list is being further refined now.

The Mitanin Program

The Mitanin Scheme of community based health services has become a huge success in the State and is also being considered for replication in other States. The program involves Mitanin (Chhattisgarhi for 'Friend') or voluntary health activists who provide health services across hamlets/villages in the State.

Improving Performance of the Hospitals

The Jeevan Deep Approach is a pioneering hospital reform scheme that facilitates creation of 'Hospital Management Committees (called 'Rogi Kalyan Samiti' or Jeevan Deep Samiti) in all types of government health institutions. These committees have power to recommend disciplinary actions as well.

EC-Assisted SPP

Since 2007, EC assisted SPP is being carried out in Chhattisgarh. Under this program certain significant initiatives have been taken in the health sector of the state. These are as follows:

- 3 multipurpose women health workers training centers
- 2 multipurpose health male workers training centers
- 16 primary health centers
- New building construction for 123 sub-centers in progress
- Establishment of AYUSH in 39 community health centers
- Improved ambulance services for transportation of patients
- Provision of computers in 600 primary health centers as part of institutional strengthening for Health Information system
- Distribution of tool kits to 58000 trained Mitanins
- Selection of 5 nurses for higher level of training
- Under Health Panchyat Scheme covering 18000 villages awareness building among Panchyat members and workers regarding health matters and services
- Support under Chief Minister's Child Heart Protection Scheme
- Technical assistance to State Health Resources Center
- Establishment and strengthening of AYUSH Deep Samitis in the state
- Overseas study tour of 5 senior officers of the department
- Assistance for leprosy control and tuberculosis control programs
- Construction of medicine stores in 17 district hospitals

Further the EC-SPP has under its multi-year PIP laid stress on strengthening of civil society and Panchyati raj institutions in regard to health matters, strengthening of State Health Society and district health societies. The PIP also laid stress on improving training infrastructure and enhancing training programs for better development of skills. In addition EC-SPP PIP stresses on behavioral change and communication as well as drugs and supplies management. The Multi Year ES SPP PIP covers tribal health and support for better health services, especially, leprosy, TB, blindness and malaria control programs.

Analysis of Budget Allocations

The share of the health expenditure as a percentage of the overall expenditure of the State has fluctuated considerably over the past 10 years and has been ranging from 4.25 percent in 2001-02 to 2.58 percent in 2008-09 declining consistently over the period. In the year 2009-10 it has shown a considerable increase in health sector allocation to 4.43 and 4.56 percent of the overall expenditure at the State level. This also indicates a corresponding increase in the health sector share as a percentage of the State Gross Domestic Product. The lower allocation in the past after 2004-05 after the institution of National Rural Health Mission (NRHM) that provides the extra budgetary support on health as well as offer central assistance would have shown a lower allocation.

The volume of resources defrayed by the Government has grown consistently since 2005-06. Per-capita expenditure in real terms in fact declined until 2005-06 and registered an increase. However, the number shown against 2009-10 and 2010-11 suggest that allocations have increased substantially. Even though the real per-capita expenditures recorded an increase after 2005-06, budget allocation to health sector as percentage of total state budget, which is a proxy indicator to measure the commitment of the Government, continued to decline. Similarly the share of State income, measured in terms of Gross State Domestic Product (GSDP), devoted to health sector also declined during the entire period of the analysis.

An analysis of the components of expenditure is necessary in any exercise for preparation of MTEF. One has to look into the continuing commitments to the sector, as one is not building expenditure framework on a clean slate. It is only after an analysis of the components that one gets an idea of the space available for planning the expenditure for a medium term taking into the priorities.
State's expenditure on health sector is divided in two categories-plan and non-plan; each of these are further sub-divided into revenue and capital expenditure depending into whether the expenditure is made for creation of assets, or it is basically a consumption expenditure in the form of administrative and program expenses.

A few significant features of the State's expenditure need to be noted.

- Allopathic system has the responsibility for the primary health care services in the rural and urban areas, and accounts for around 70 per cent of the expenditure, if medical education is included.
- Budgetary allocations have been increasing over the years and have recorded significant increase during the last three years but actual expenditure has been below 80 per cent of the budget estimates.
- Allocations under the plan have been going up significantly every year; plan expenditure accounts for more than 60 per cent of the expenditure in the allopathic system.
- Budgetary expenditure, plan or non-plan, is largely on revenue account; a very small percentage is on capital account met from plan budget. This leaves little space for planning of expenditure in the priority area indicated in the policy and plan document.
- A significant percentage of expenditure is devoted to provision of services.
- After the coming into existence of NRHM, budgetary expenditure on national programs has significantly come down as most of these programs get the funds directly from the Central Government.
- NRHM follows a different system of account keeping; it is difficult to distinguish the revenue expenditure from the capital expenditure, and work out the continuing nature of the commitments made in the previous year for planning expenditure for the next year. However, the limited information made available shows that most of the expenditure is on revenue account, and since NRHM is yet in the process of recruiting human resources, medics and paramedics, it still has a large space which can be used for building a primary health care system which would help in the realization of the goals set in the State Health Policy.

The revenue expenditure has been as high as 90 percent and above in the initial years after the formation of the State and steadily declined to around 77-78 percent up to 2008-09 because of the support being received from the center for meeting the revenue expenditure. However, the revenue expenditure again increased in the last two years to above 85 percent.

The budgetary allocations to the AYUSH have been increasing during the last few years. AYUSH is developing as an important adjunct to allopathic system for providing services in the rural areas. An

analysis of components of expenditure would help understand the space that would be available for using the funds in the area of re-worked out priorities. The allocation for medical education has also been showing an increasing trend.

The relative share of the Allopathy system is extremely high and the percentage allocated has been steady at around 85 percent while the share of AYUSH has been fluctuating between 7-7.5 percent and that of medical education has also been hovering around 6-7 percent.
NRHM support provided is an extra budgetary support and the resources flow through the Society structure created for this purpose and does not get accounted under the state budget. The expenditure incurred has 15 percent share being provided through the state plan budget and 85 percent flowing directly through the societal structure. The money released from the center is based on the release of the state share to the society and based on the Implementation Plan prepared by the state and approved by the central government.

Utilization of the funds received from NRHM has not been quite satisfactory and it has slipped to about a third of the funds received. This clearly points to the extent of planning that is carried out prior to the request for funds and also the process involved in sanctions and transfer of funds. This may have to be carefully looked into if the utilization needs to improve.

Consideration for MTEF Projections
Public health sector has many areas of national concern: prevention and control of communicable and non-communicable diseases, medical education, development of AYUSH, and special public health related problems of women, youth and the geriatrics. However, development of comprehensive health care system in the rural and urban areas is the most important with clearly defined norms, standards, and time schedule indicated in the policy and plan documents. As would be seen, it is indeed difficult to provide a comprehensive health care system, primary, secondary and tertiary, at the present level of funding along with a complementary support system in the form of medical education, training facilities, and implementation of special programs.

The parameters considered for MTEF projections are:

- Primary Healthcare System
- Village Health and Sanitation Committees
- Primary Health Centers
- Community Health Centers
- Tertiary Health Care covering first referral units, district hospitals, civil hospitals and civil dispensaries
- Disease control program
- Population Control program
- Jeevandeep Samities
- Training
- Medical Education
- Human Resources

MTEF Projections and Resource Requirements
Summarized MTEF for department of Health and Family Welfare, Chhattisgarh, for the period 2012-13 to 2014-15 is presented below.

Resource Envelopes (INR00000)

Year	Resource Envelope
2012-13	113909
2013-14	133274
2014-15	155930

Revenue and Capital Resource Estimation (INR 00000)

Year	Revenue	Capital	Total
2012-13	96823	17086	113909
2013-14	113283	19991	133274
2014-15	132541	23390	155930

Resource Envelope for Allopathic System (INR 00000)

Year	Resource
2012-13	79736
2013-14	93292
2014-15	109151

Allocation under Different Heads (INR 00000)

Year	Salaries and Wages	Medicines, Equipment and Supplies	Grants-in Aid	Other Expenditure	Total
2012-13	51829	11960	9568	6379	79736
2013-14	60640	13994	11195	7463	93292
2014-15	70948	16373	13098	8732	109151

Resource Envelope for AYUSH

Year	Resource
2012-13	18225
2013-14	21324
2014-15	24949

Allocation under Different Heads (INR00000)

Year	Salaries and Wages	Medicines, Equipment and Supplies	Grants-in Aid	Other Expenditure	Total
2012-13	14580	1823	365	1458	18225
2013-14	17059	2132	426	1706	21324
2014-15	19959	2495	499	1996	24949

Suggestions for Sector Reform and Data for better utilization of resources

As stated in the previous MTEF, it is reiterated that attention should be given to planning and monitoring, coordination between NRHM and State budget execution. Appropriate focus needs to be provided on Human resource management and optimal utilization of existing resources to strengthen the health system in the State. Further, as suggested in the previous MTEF, may be created within the DoH & FW either by contracting staff or by deputing interested staff in order that the personnel can be trained and the exercise carried out regularly.

It is necessary to carry out MTEF periodically every year in order that it can be rolled over for the next three years and the requirement of resources is estimated to meet the policy objectives in the area of health. This will provide a basis for negotiations with the finance department on the budget allocations and will also increase the commitment to this sector.

This has to be looked at in the context of the overall sectoral MTEF that needs to be carried out for the State.

CHAPTER 1 : INTRODUCTION

1.1 BACKGROUND

The Department of Health & Family Welfare (DoH&FW) of the Government of Chhattisgarh (GoC) has prepared a Medium Term Expenditure Framework (MTEF) for a period of three years, beginning fiscal 2011-12. Its focus is on development of a feasible planning framework that will guide investment and implementation to improve performance in the health sector of Chhattisgarh.

The GoC is supported in this exercise by European Commission (EC) assisted State Partnership Program (SPP).

1.2 MID-TERM EXPENDITURE FRAMEWORK

For the purpose of resource allocation, the conventional system of budgeting is followed based on an annual assessment of resources and their allocation to different sectors in accordance with the priorities indicated by the State Government on an annual basis. Implicit in this is that priorities may change affecting the outcome and quality of expenditure. In order to get over the shortcomings of an annual budgeting system, many countries have started a medium term budgeting system, specifically Medium Term Expenditure Framework (MTEF) which enables a continuous review of policy, programs, objectives and outcomes and budgetary allocations on an annual basis. Incidentally, in the Budget 2012-13, the Finance Minister of Government of India (GoI) has proposed to introduce MTEF for better financial planning and expenditure management.

1.3 MTEF FOR HEALTH & FAMILY WELFARE

The specific objective of the current exercise is updating MTEF. Also, MTEF as a government strategic policy and expenditure framework within line departments provides greater responsibility for resource allocation decisions and its inputs can be considered for the approach paper for the Twelfth Plan, which is currently under preparation by the State Government, because the plan would represent outlook into the future taken at a particular time, while MTEF is a continuous process of making a forecast and assessing its validity as further progress is made in its implementation.

This Report contains updated MTEF of the DoH&FW. The MTEF is updated taking into account the following factors:

- Consideration of Government policies that guide the overall expenditure levels in the medium-term;
- Evaluation of the on-going programs to assess the contribution of a program or service to the achievement of departmental objectives or plan targets;
- Identification of options for prioritization, policy reform and change within the sector;
- Definition of the outcomes sought from various services, programs and activities;
- Determination of the inputs and outputs for various services, programs and activities;
- Assessment of resources likely to be available to the sector;
- Relative financial costs of inputs and outputs in achieving the desired outcomes;
- Adjustments or improvements required to reduce financial costs or enhance effectiveness.

1.4 INSTITUTIONALIZATION OF MTEF PROCESS

As part of the exercise for updating of MTEF, efforts were undertaken to institutionalize the MTEF process in the DoH&FW. Accordingly, a workshop was organized on 26 November 2011 jointly by the Department and EC-SPP GIZ IS. The objective of the workshop was to familiarize the officials of the DoH&FW with the concept of MTEF, its benefits, and process with stress on alignment of MTEF with annual plan. Detail discussions were held on analysis of past trends of revenue and expenditure, allocation of funds, goals and targets, achievements, and estimation of current gaps and requirement of resources.

Following the workshop, personnel from the DoH&FW were identified for collation of necessary data and information to update the MTEF. It needs to be mentioned that to achieve institutionalization in the truest sense, it entails an on-going process, which has been initiated. Further, to support this process a MTEF Training Manual may be considered as a set of guide, providing the basic background information, presentations and interactive learning activities on MTEF strategic planning and budgeting. This manual is expected to provide key reform in strengthening MTEF budgeting process in the DoH&FW. A basic structure of the MTEF Training Manual is presented below in **Table 1.1**.

Table 1.1: Structure of the MTEF Training Manual

TOPIC	LEARNING OBJECTIVE
1. Following the annual planning & budgeting cycles	To establish a common understanding of the different stages in the annual planning & budgeting cycle
2. Linking strategic planning to 3-year budgeting	To develop a clear appreciation that strategic planning & budgeting are interdependent in the MTEF process
3. Why follow an MTEF approach?	To highlight the benefits of 3-year and results-based budgeting in an MTEF approach
4. Using budget execution, monitoring & reporting to strengthen 3-year budgeting	To confirm the importance of budget execution, monitoring & reporting in completing the budget and expenditure cycle

Besides, to supplement the training, a MTEF Preparation Manual may be developed for DoH & FW guide and reference. This Manual would contain MTEF Methodology. MTEF Preparation Process (i.e. top-down budgeting, aggregate plan resource envelope, bottom-up budgeting, sector overview and prioritization of objectives, mapping and measurement of outputs and objectives, gap analysis, reconciliation and reprioritization), and documentation of MTEF. These two measures would better facilitate and strengthen the process of institutionalization of MTEF.

CHAPTER 2 : HEALTH SECTOR OVERVIEW

2.1 HEALTH POLICY

The Health Policy covers all aspects of health care in the State. The objectives set out in the policy document are as follows:

- To ensure universal access to comprehensive primary health care services;
- To ensure equity in delivery of quality health care services;
- To ensure adequacy of health infrastructure and health systems and to develop human resources for health care;
- To achieve population stabilization through vigorous implementation of quality reproductive health care, including family planning and other relevant social development measures by adopting an inter-sector strategy.

The document lists out the strategic directions, interventions, and priority areas. It also sets goals that have to be achieved over a set period of time. Some of the areas, which may have financial implications, are stated below:

1. Comprehensive primary health care with availability of prescribed health staff at the village/habitation, sub-centre, PHC, CHC (first referral unit), and the district hospital (secondary referral level) with guaranteed package of services covering communicable and non-communicable diseases, upgraded annually to reflect acceptable standards of care. Prescribed level of drugs at the village/habitation level would be available, and medical and curative services would be available in an hour and access to hospitalization facilities, the first referral unit, made available within two hours travel with adequate transport facilities.
2. Affirmative action for providing equity in availability of health services to different segments of social and economic groups reflected in basic health indicators.
3. Quality and standards in health care services would be ensured through well enforced regulatory mechanism.
4. Move towards compulsory social and health guarantee scheme with the State paying the premium for the poorest for primary and secondary health care.
5. Effective disease surveillance system for monitoring the magnitude and distribution of communicable diseases in different population groups and areas with plans and strategies for effective interventions and linked and integrated with the health system as a whole at the Gram Panchayat, Block and District levels.
6. Provision of mental health services through development of institutional mechanism.
7. Provision of geriatric health care services.
8. Health care provision for urban areas with a trained public health nurse assisted by community health volunteers for every 5000 urban population with urban health care referral center with adequate medical officers and health care facilities for every 100,000 population
9. Encourage medical education and research through budgetary provision in State's budget.
10. Annual increase in the budgetary allocation for purchasing drugs and supplies for both in-patients and outpatients in the public health sector.
11. Increase in public health sector allocation to at least 6 per cent of the total budgetary allocation.

Goals Set in the State Health Policy

The State Health policy sets out the goals for realisation by 2016. These are given in **Table 2.1** in next page**.**

Table 2.1. Socio-Demographic Goals as Indicated in the State Health and Population Policy for 2016

S. No.	Indicator	Current Level	Goals for 2016
1	Birth Rate	27.4	<15
2	Death Rate	7.7	<5
3	Life expectancy at birth	61.4	72
4	Infant mortality rate(IMR)	63	30
5	Child mortality rate	122.7	60
6	Maternal mortality ratio (MMR)	379	100
7	Total fertility rate (TFR)	3.4	2.1
8	Contraceptive prevalence rate (CPR) (%)	53.2	65
9	Registration of births, deaths and marriages	-	100
10	Unmet needs of family planning	10.5	0
11	Median months of use of spacing methods	31.6	48
12	Median age at marriage among women	18.1	21
13	Median age at first childbirth among women	18.1	21

No specific dates have been indicated for the realisation of the various goals listed in the State Health Policy. These are in the nature of outcomes; how these have to be achieved has also not been indicated in the Policy document, except that the budgetary allocation for the public health sector will be increased to 6 per cent of the total budgetary allocation.

The NHP-2002 also sets out the goals to be achieved during the period 2000-2015 and this is provided in **Table 2.2.**

Table 2.2 : NHP-2002: Goals to be achieved by 2000-2015

Eradicate Polio and Yaws	2005
Eliminate Leprosy	2005
Eliminate Kala Azar	2010
Eliminate Lymphatic Filariasis	2015
Achieve Zero level growth of HIV/AIDS	2007
Reduce Mortality by 50% on account of TB, Malaria and other Vector and Water Borne diseases	2010
Reduce Prevalence of Blindness to 0.5%	2010
Reduce IMR to 30/1000 and MMR to 100/Lakh	2010
Improve nutrition and reduce proportion of LBW Babies from 30% to 10%	2010
Increase utilisation of public health facilities from current level of 20 to 75%	2010
Establish an integrated system of surveillance, national Health Accounts and Health Statistics	2005
Increase health expenditure by Government as a % GDP from the exiting 0.9% to 2.0%	2010
Increase share of Central grants to Constitute at least 25% of total health spending	2010
Increase State Sector Health spending from 5.5% to 7% of the budget Further increase to 8%	2005 - 2010

There is a clear indication that the budgetary allocation will be increased as percentage of the GDP by 2010, and that State Sector Health spending will be increased too between 2005 and 2010.

2.2 CHHATTISGARH DRUGS AND MEDICAL SUPPLY POLICY

The State has formulated Drugs and Medical Supply Policy, the essential components of which are:

- Availability of safe, effective and good quality drugs and medical supplies at reasonable prices at all times to the people of the State.
- Availability of drugs and medical supplies to underprivileged on principles of equity and social justice.
- Rational use of drugs in the public and private sector through regulation, training, dissemination of information, better system of prescription, and dispensing practices.
- The setting up of an organizational structure in the public sector for procurement, storage, distribution and use of drugs and medical supplies.
- Availability of qualified and trained personnel at all levels for procurement, storage, distribution, use and regulation of drugs and medical supplies.

The implementation of this policy has financial implications. The Policy document states that while the funds available for procurement of drugs and medical supplies are limited, efforts will be made to ensure regular availability of essential lifesaving drugs and medical supplies at all times. Mechanisms for additional resource mobilisation through charging of user fees etc. will be explored. While cost of procurement and supply of drugs may be covered to an extent by levy and collection of user charges, the establishment of an organisation, storage, recruitment and training of a separate cadre of functionaries will be a charge on the public exchequer.

The steps for establishing Chhattisgarh Medical Services Corporation has been initiated and the steps for changing the procurement system of drugs and medicines are being attempted. This is expected to be in line with the Tamil Nadu Medical Services Corporation including the logistics and warehousing at the district level.

2.3 POPULATION AND GROWTH

Overall economic growth is on par with similarly placed States but the level of inequality and disparity is very high within the State. The total population of the State is projected to be around 25.54 million in 2011. Nearly 76.76 percent of the people live in rural areas and about 23.24 percent of the population lives in urban areas of the State. The density of population is very low with 189 persons per square kilometer. A vast geographic area of the State remains inaccessible due to the geographic conditions and the geo-political conditions. These factors pose a challenge for provision of health services in certain parts of the State.

2.4 PROVISION OF HEALTH SERVICES

The DoH & FW in the State is vested with the provision of health services in the urban and rural areas through its network of health provision centers at different levels of the State according to the population norms that have been accepted for establishment and operation of these centers. This Department is also vested with the responsibility of providing medical education in the State through the medical colleges. Further, this Department recruits the requisite medical professional staff, nursing staff, para-medical staff, and administrative staff to manage the health provision and training them to deliver services. The services can be broadly classified as urban and rural and further sub-classified as primary, secondary and tertiary health. The type of services offered can be classified as in the next page:

- Public Health
- Reproductive and Child Health including immunization
- Family Welfare including family planning

- School Health
- Medical Education
- Training and research
- Food and drug administration

2.5 INSTITUTIONAL STRUCTURE - HEALTH & FAMILY WELFARE DEPARTMENT

Health sector in Chhattisgarh is mainly administered by the Department of Health & Family Welfare. The functioning of the DoH & FW includes a number of divisions, mission directorates and agencies. The organogram of DoH & FW is presented below.

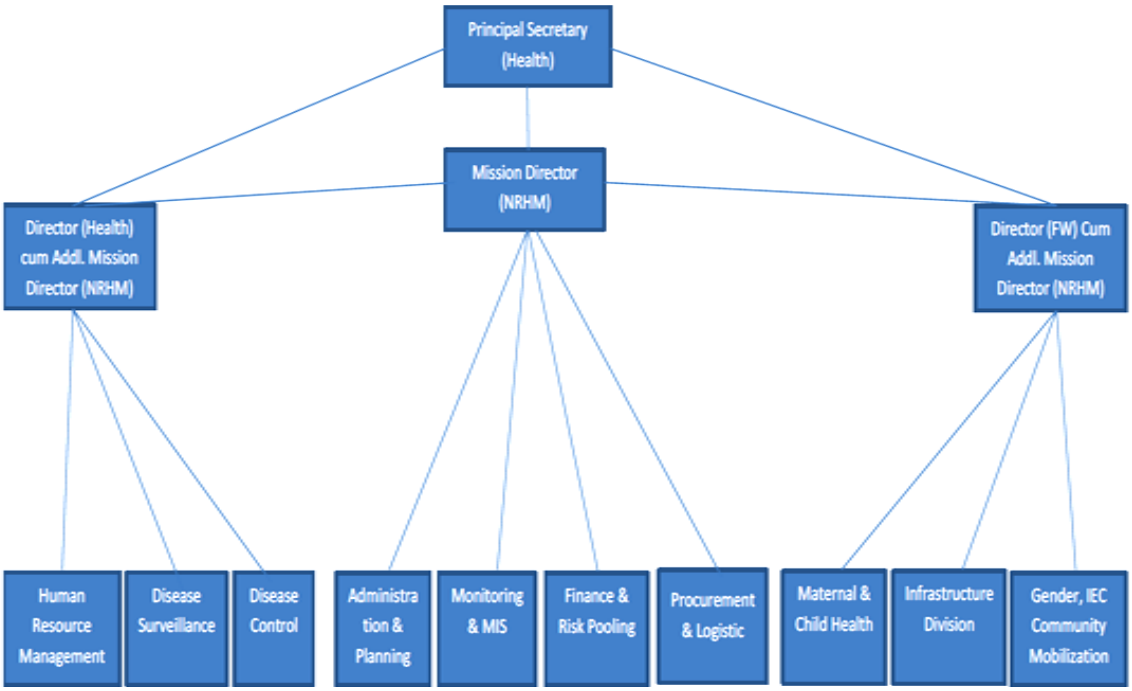

Figure 2.1. Organogram of DoH & FW

The Mission Directorate is responsible for the programs which are centrally sponsored by such as National Rural Health Mission (NHRM), National AIDS Control Program, etc. and it is the responsibility to ensure the effective implementation and functioning of these programs. The Directorate of Family Welfare is responsible for the welfare of the people by looking into the matters which leads to better living of the people.

The Directorate of Health Services is responsible for the effective delivery of health facilities which are being implemented such as maternal and child health services.

The Directorate of State Training Institute is responsible for the training and enhancing the capacity of health workers for better supervision and management of Public Health activities.

The DoH & FW is structured into District, Block and Village level for effective implementation of the programs. The Chief Medical and Health Officer are at the top and have the overall responsibility of all health programs at each level in the State. The Chief Medical and Health Officer sit in each district and include several other functions of health departments. In each district there will be one Civil Hospital. At the block level there will be Community Health Centre where medical officers are working. At Sector level there are Primary Health Center which integrates small health Centers for both men and women and at village level there are Mitanin who are elected by communities operational at the block level.

2.6 SCHEMES UNDER STATE HEALTH PLANS

The important schemes carried through DOH & FW are outlined below:

2.6.1. National Rural Health Mission (NRHM)

National Rural Health Mission is the flagship program of the Government of India to improve the availability of health services in the rural areas. This program has integrated all the vertical programs that were hitherto being implemented by the States and brought them under the purview of a single program under the mission. The governance, financing and implementation has also been integrated. State Health Societies and District Health Societies have been formed to facilitate implementation and flow of financial resources for the various programs. The HIV/AIDS prevention program has still not been integrated into the umbrella program.

NRHM was commenced in 2005 in order to enable the attainment of the goals set in National Health Policy 2003 and Millennium Development Goals (MDG) in the rural areas of the country with special focus on 18 States which have weak public health indicators and/or weak health infrastructure and Chhattisgarh is one of the 18 identified States. The Mission provides for a shift from the disease oriented vertical health and family welfare programs to their integration and merger as an all-inclusive health program with pooling of resources at the district level. NRHM provides for the strengthening of rural public health infrastructure, including provision of mobile clinics to improve access and appointment of Accredited Social Health Activists (ASHA) in each village.

The program components of NRHM are divided into four parts:

- RCH Flexi pool
- Special initiatives under NRHM
- Immunization
- National Disease Control Programs

Each State prepares the Program Implementation Plan (PIP) for NRHM and implements the same after approval from the Central Government. The strategies outlined under NRHM are outlined below:

- Strengthen sub-centres through an untied fund to enable local planning and action and augment the Male Multi-Purpose Workers (MPW)
- Strengthen existing PHC and CHC and provide 30-50 bedded CHC per 100000 populations for improved curative care to normative standard (Indian Public Health Standards).
- Strengthen capacities for data collection, assessment and review for evidence based planning, monitoring and supervision
- Training and enhancing the capacity of Panchayati Raj Institutions (PRI) for supervision and management of Public Health activities.
- Effective and viable risk pooling and social health insurance to provide health security to the poor

Specific strategies are:

- ASHA for every 1000 population/large habitations and in tribal pockets
- All PHC, with three staff nurses to provide 24x7 services
- CHC to be strengthened/established with seven specialists and nine staff nurses
- Taluka/ sub-division/district hospital strengthened to provide quality services
- Mobile medical unit for each district.

2.6.2. RCH Program

RCH program has been implemented in the State since the formation of the State. The present program includes all the components of maternal and child health services such as child survival and safe motherhood, safe MTP services, family planning services, RTI/STI and HIV/AIDS. The aim of the program is to ensure that every woman receives care at delivery and during the pregnancy, that every

delivery is assisted by a skilled birth attendant and is preferably institutional, that every child is completely immunized for vaccine preventable diseases, provided prompt care for ARI, diarrhoea and fever, that there is a referral service available for every patient needing obstetric care or emergency neonatal care.

The aim of RCH program is also to include confidence in the couple so that they can maintain sexual relationship without fear of pregnancy and contracting disease and they have the ability to plan and have a child when so desired. All districts of the State are being covered under the program. The key to these services is through strengthening routine services in the sub-center and PHC with good referral back up provided by CHC and district hospital.
In order to ensure success of these services and provide community level care through community participation and mediated and increased community awareness that would be ensured by the voluntary supportive care workforce of the Mitanin/ASHA program. As regards the availability of contraception methods/materials, it has to be ensured that the target couples are able to access these from the center nearest to their residence. The couple is offered a choice of terminal or spacing methods. They are also offered choice of terminal methods.

2.6.3. National Blindness Program

The treatment of eye and related problems are handled under this program. The prevention of possible blindness by detecting the symptoms early is one of the main objectives of the program. The creation of awareness among the public as well as informing them of the services available is one of the objectives of the program. School eye checkup and screening of children is also carried out by the program. Cataract surgery and provision of spectacles is carried out under the program. Eye treatment facilities are available in district/civil hospitals, all medical college hospitals and CHC. There are 7 mobile units in the State. All District Hospitals and Medical College Hospitals have been covered under Intra Ocular Lens Surgery facilities.

2.6.4. National Leprosy Control Program

Leprosy program aims at prevention of leprosy, early identification and detection of patients through an intensive approach. The program also provides for reconstructive surgery. The prevalence of leprosy is high in the State and the main thrust of the program is to detect patients and treat them with multi-drug therapy. The objective of the State is to bring down the prevalence rate below 1 per 1000 population.

2.6.5. National Aids Control Program

The HIV/AIDS program aims at providing communication and awareness to the people and prevents the spread of HIV. Targeted intervention with high risk behavior population is being undertaken. Blood safety through screening of blood and blood products is another key aspect of the program. The program has the following components:

- Creation and linkages of blood banks with blood storage units along with modernizing of blood banks by installing blood component separation units
- Designating STI clinics at district level and also convergence with NRHM by provision of STI services through clinics at the different levels of the health system
- Establishment of Integrated Counseling and Testing Centers through standalone ICTC Facility, Integrated ICTC and mobile ICTC.
- Targeted Intervention programs in collaboration with Civil Society Organizations
- Communication and programs with the general population
- Establishment of Anti-Retroviral Therapy Centers for provision of care support and treatment

- Provision of treatment for opportunistic infections and care facilities in collaboration with Civil Society Organizations and Faith Based Organizations

The State has been implementing this program from its formation in 2000.

2.6.6. Revised National TB Control Program

The program aims at intensive case identification through referral of more cases that are suspect (without abatement of cough for 3 days) and refer them to the designated microscopy centers for sputum testing. If found positive, provide them treatment through drugs using the strategy of DOTS. In the State of Chhattisgarh there are 16 DTB Centers, 62 treatment units and 287 microscopy centers providing services. This is a centrally sponsored scheme and 100 percent funded by the Central Government. Non-plan expenditure is borne by the State Government. TB is one of the most serious diseases and according to national survey 216 persons per 100,000 population is suffering from TB in the State and out of which 80 per 100,000 population are new smear positive cases. Hence, it is an important program for the State.

2.6.7. National Malaria Control Program

In order to control malaria National Vector Borne Disease Control Program is being implemented. It covers filarial and kala-azar which are also vector borne. This provides insecticide treated bed nets free of cost to people living in the endemic zones. This scheme offers 50 percent assistance from the Central Government. This also provides for indoor residual spraying of houses.

The drugs for malaria treatment and kits for rapid and other diagnostic processes are also provided. The program offers artimisinine based drugs where the cases have become chloroquin resistant. The mitanins operating at the village levels are engaged in preventive and curative services. The objective of the program is Early Diagnosis and Prompt Treatment (EDPT) in the high risk areas to reduce morbidity and mortality due to malaria. Integrated vector control measures like IRS, LLIN and biological measures such as using Larvivorous fish are also being implemented.

2.6.8. Janani Suraksha Yojna

Janani Suraksha Yojana (JSY) under the overall umbrella of National Rural Health Mission (NRHM) is being proposed by way of modifying the existing National Maternity Benefit Scheme (NMBS). While NMBS is linked to provision of better diet for pregnant women from BPL families, JSY integrates the cash assistance with antenatal care during the pregnancy period, institutional care during delivery and immediate post-partum period in a health center by establishing a system of coordinated care by field level health worker. The JSY is a 100 percent centrally sponsored scheme.

Vision

- To reduce overall maternal mortality ratio and infant mortality rate,
- To increase institutional deliveries in BPL families.

Target Group

All pregnant women belonging to the below poverty line (BPL) households and

- Of the age of 19 years or above
- Up to two live births.

Strategy

The main strategy to achieve the envisaged vision stated above is to link the cash assistance under JSY to institutional delivery. This would, however, entail carrying out following:

- Early registration of the beneficiaries with the help of the village level health workers like ASHA or an equivalent worker;
- Early identification of complicated cases;
- Providing at least three antenatal care, and post-delivery visits;
- Organizing appropriate referral and provide referral transport to the pregnant mother;
- Convergence with Integrated Child Development Services (ICDS) worker by way of involving AnganWadi Worker (AWW) intensively;

- Devising as well as ensuring transparent and timely disbursement of cash assistance to the mother and the incentive to the Accredited Social Health Activist (ASHA) or an equivalent worker with fund available with ANM.

The strategy also involves the following

- Making operational 24/7 delivery services at PHC level to provide basic obstetric care,
- Making operational First Referral Units (FRU) to provide the emergency obstetric care,
- Building partnerships through a process of recognition/accreditation with doctors, hospitals/nursing homes/clinics from the private sector especially in the rural areas to provide obstetric services to the JSY beneficiaries.

Features

a. States/UT has been classified into two categories based on the institutional delivery rate. The 10 States namely the eight EAG States and the States of Assam and Jammu & Kashmir would constitute Low Performing States (LPS) and the rest High Performing States (HPS).
b. Cash assistance linked to Institutional Delivery: The benefits under the scheme would be linked to availing of antenatal checkups by the pregnant women and getting the delivery conducted in health centers/hospitals. While the beneficiaries will be encouraged to register themselves with the health workers at the Sub-Center/Anganwadi/Primary Health Centers for availing of at least three antenatal checkups, post-natal care and neo-natal care, the disbursement of enhanced benefits under the scheme will be linked to institutional delivery.
c. Cash Assistance in the graded scale. One of the accepted strategies for reducing maternal mortality is to promote deliveries at health institutions by skilled personnel like doctors and nurses. Accordingly, cash assistance is to be provided to women from Below Poverty Line (BPL) families, for enabling them to deliver in health institutions.

CHAPTER 3 : REVIEW OF THE HEALTH SECTOR

3.1 GENERAL OVERVIEW

Chhattisgarh is a progressive State in terms of industrial and socio-economic development and the health sector in trying to keep pace with it.

Estimated birth, death and infant mortality rates in Chhattisgarh as per SRS Bulletin, December 2011, is provided in **Table 3.1**.

Table 3.1. Estimated Birth Rate, Death Rate and Infant Mortality Rate in Chhattisgarh

Location	Birth Rate	Death Rate	Infant Mortality Rate
Rural	26.8	8.4	52
Urban	18.6	6.2	44
Total	25.3	8.0	51

Another key indicator pertaining to the heath sector in the State is presented in **Table 3.2** below.

Table 3.2. Health Institutions in Chhattisgarh

Health Institutions	2007	2008	2009	2010
Medical College	3	3	3	3
District Hospital	14	14	17	17
Community Health Center	113	137	143	148
Primary Health Center	659	721	716	741
Sub-Center	4164	4758	4776	5076
Ayurvedic Hospital	6	6	6	6
Ayurvedic Dispensary	633	634	634	635
Unani Hospital	0	0	0	0
Unani Dispensary	6	6	6	6
Homeopathic Hospital	0	0	0	0
Homeopathic Dispensary	52	52	52	52

Source: Annual Reports of DOH&FW and RHS Bulletin, MoHFW, GoI

3.2 KEY DEVELOPMENTS

The key developments in the health sector of the State are outlined hereunder.

Revision of Essential Drug List

Chhattisgarh formulated an Essential Drug List in 2002, which was revised in 2007 to contain 350 drugs and consumables. The list is being further refined now.

The Mitanin Program

The Mitanin Scheme of community based health services has become a huge success in the State and is also being considered for replication in other States. The program involves Mitanin (Chhattisgarhi for 'Friend') or voluntary health activists who provide health services across hamlets/villages in the State.

Improving Performance of the Hospitals

The Jeevan Deep Approach is a pioneering hospital reform scheme that facilitates creation of 'Hospital Management Committees (called 'Rogi Kalyan Samiti' or Jeevan Deep Samiti) in all types of government health institutions. These committees have power to recommend disciplinary actions as well.

The State has taken a number of initiatives in improvement of health services.[i] In the area of infrastructure up gradation 67 24x7 PHCs, 27 FRUs, 2 SNCUs, 38 NBSUs and 192 NBCCs have been institutionalized for better service delivery. State is also going to construct 320 SC under institutional strengthening. 365 staff nurses have been appointed on contractual basis and recruited in above centers. A comprehensive referral system has been established by pooling of resources from all available sources. Additionally, the successful operationalizing of EMRI in the State has resulted in a steep increase in accessibility of services to remotest of areas. As of now, a total of 26385 pregnancies related cases are tackled by EMRI till date out of 83710 emergencies. Intensive capacity building measures in the form of hands on training of FHW on SBA and special training to RMA on BMOC has been done. Training of medical officers in EmoC and anesthesia on guidelines as prescribed by Government of India has been done. Radical policy level changes have taken place in the form of passing JSSK guidelines in regard to 48 hours stay for mothers who have just delivered and cashless delivery at public health facilities at block level and above.

In the field of child health, an initiative in the form of training in facility based new born care for establishing a system for training for medical officers to counter the acute shortage of pediatricians in the State has been initialized. Operationalization of NRCs with the support of UNICEF and CINI has been established. New born care units and new born stabilization units have been established at facility. In the crucial area of family planning a commendable effort was made in improving the performance in number of NSV and IUD acceptors. In the year 2011-12 (till December, 2011) total NSV cases reported are 4520, LTT and CTT cases are 50438 and IUD cases are 56512, which is on a growing trend from the previous year's performance.

In the area of other disease control programs, efforts have been intensified. Chhattisgarh is on the forefront in successful implementation of the national program for control of blindness. In 2011-12, the cataract surgical rate of Chhattisgarh was as high as 500. Chhattisgarh is one of the States performing highest number of cataract surgeries.

The State has also taken steps in recruitment and redeployment of manpower. Contractual appointment of medical officers and specialists through walk-in-interview has added 70 medical officers. Laboratory Technicians, Dressers and Pharmacists have been recruited at district level along with appointment of multi-purpose workers male and female. Redeployment of specialists for operationalization of FRUs has been the prime strategy.

3.3 EC-ASSISTED SPP

Since 2007, EC assisted SPP is being carried out in Chhattisgarh. Under this program certain significant initiatives have been taken in the health sector of the state. These are as follows:

- 3 multipurpose women health workers training centers
- 2 multipurpose health male workers training centers
- 16 primary health centers
- New building construction for 123 sub-centers in progress
- Establishment of AYUSH in 39 community health centers
- Improved ambulance services for transportation of patients

- Provision of computers in 600 primary health centers as part of institutional strengthening for Health Information system
- Distribution of tool kits to 58000 trained Mitanins
- Selection of 5 nurses for higher level of training
- Under Health Panchyat Scheme covering 18000 villages awareness building among Panchyat members and workers regarding health matters and services
- Support under Chief Minister's Child Heart Protection Scheme
- Technical assistance to State Health Resources Center
- Establishment and strengthening of AYUSH Deep Samitis in the state
- Overseas study tour of 5 senior officers of the department
- Assistance for leprosy control and tuberculosis control programs
- Construction of medicine stores in 17 district hospitals

Further the EC-SPP has under its multi-year PIP laid stress on strengthening of civil society and panchyati raj institutions in regard to health matters, strengthening of State Health Society and district health societies. The PIP also laid stress on improving training infrastructure and enhancing training programs for better development of skills. In addition EC-SPP PIP stresses on behavioral change and communication as well as drugs and supplies management. The Multi Year ES SPP PIP covers tribal health and support for better health services, especially, leprosy, TB, blindness and malaria control programs.

3.4 CONCLUSION

However, certain practices existed in both public and private healthcare that reduced the availability of medicine and services for a large number of citizen consumers. Prevalence of such practices in public healthcare has huge implications especially for the poor.

CHAPTER 4 : ANALYSIS OF BUDGET ALLOCATION AND COMPONENTS IN THE PAST

4.1 HEALTH BUDGET IN THE CONTEXT OF OVERALL GOVERNMENT EXPENDITURE

Given below is the overall scenario of expenditure on health in the state.

Table 4.1. Health Expenditure as a Proportion of Overall Expenditure & GSDP (INR 00000)

Year	Expenditure on Health	Total Government Expenditure	GSDP	Health expenditure as % of Total Expenditure	Health Expenditure as % of GSDP
2001-02	23056	542062	2953935	4.25	0.78
2002-03	24010	634979	3249265	3.78	0.73
2003-04	25793	761591	3380209	3.38	0.76
2004-05	26560	838263	4358904	3.16	0.61
2005-06	29312	895405	5099654	3.27	0.57
2006-07	34199	1100054	6470628	3.11	0.52
2007-08	39479	1397055	7941350	2.83	0.49
2008-09	50791	1967402	9620419	2.58	0.52
2009-10	69367	2091044	10784823	3.32	0.64
2010-11	74891	2287616	11756700	3.27	0.64

Source: Budget Documents of various years of DOH&FW, GoC

The share of the health expenditure as a percentage of the overall expenditure of the State has fluctuated considerably over the past 10 years and has been ranging from 4.25 percent in 2001-02 to 3.27 percent in 2010-11, fluctuating over the period. This also indicates a corresponding increase in the health sector share as a percentage of the State Gross Domestic Product since 2004-05. The lower allocation in the past after 2004-05 after the institution of National Rural Health Mission (NRHM) that provides the extra budgetary support on health as well as offer central assistance would have shown a lower allocation.

4.2 HEALTH FINANCING IN CHHATTISGARH- A REVIEW

Health, being primary responsibility of the State, as per the Constitution of India, is shaped by the government policies and regulations. **Table 4.2** given below clearly indicates that the allocation to health sector was more arbitrary than any norms as the increases to the budget were marginal with fluctuations. Trends in the allocations also reveal that the Government made a conscious attempt to improve public health system though a consistent approach of substantially increasing the spending on both revenue and capital expenditures in the State. Initiation of NRHM by the Government of India furthered the efforts of the State with additional resources. However, these additional resources have an impact on the state budget in terms of matching grants in certain areas.

Table 4.2. Trends in Government Expenditure on Health (INR 00000)

Year	Revenue Expenditure	Capital Expenditure	Non-Budgetary Allocation	Total Expenditure on Health
2001-02	23,056	1,241	24,297	48,594
2002-03	24,010	1,962	914	27,486
2003-04	25,793	3,371	2,364	31,529
2004-05	26,560	3,862	1,605	32,026
2005-06	29,312	3,848	7,036	40,197
2006-07	34,199	7,562	12,422	54,183
2007-08	39,479	8,281	9,140	56,900
2008-09	50791	11,394	6,368	68,557
2009-10	69367	12,437	10,088	1,06,298
2010-11	74891	20,271	11,897	1,20,164

Source: State budgets, various years.

The volume of resources defrayed by the Government has grown consistently since 2005-06. Per-capita expenditure in real terms in fact declined until 2005-06 and registered an increase. However, the number shown against 2009-10 and 2010-11 suggest that allocations have increased substantially.

Even though the real per-capita expenditures recorded an increase after 2005-06, budget allocation to health sector as percentage of total state budget, which is a proxy indicator to measure the commitment of the Government, continued to decline (**Table 4.3**). Similarly the share of State income, measured in terms of Gross State Domestic Product (GSDP), devoted to health sector also declined during the entire period of the analysis.

Table 4.3. Trends in Health and Total Government Expenditure in Chhattisgarh

Year	Real Per-Capita Health Expenditure (Rs.)	Real Per-Capita Expenditure on Medicines (Rs.)	Real Per-Capita Total Govt. Expenditure (Rs.)	Health as % of Total Budget	Health as % of GSDP
2001-02	108	16	2,310	4.66	0.78
2002-03	103	14	2,308	4.45	0.76
2003-04	103	10	2,646	3.91	0.66
2004-05	98	12	2,632	3.74	0.61
2005-06	98	21	2,487	3.93	0.57
2006-07	104	22	2,679	3.89	0.53
2007-08	108	19	2,959	3.64	0.50
2008-09	122	18	3,308	3.68	0.53
2009-10	272	25	4,361	4.47	0.78
2010-11	293	27	4,468	4.47	0.81

Source: Estimated from budget, CSO and RGI.

4.3 COMPONENTS OF EXPENDITURE

An analysis of the components of expenditure is necessary in any exercise for preparation of MTEF. One has to look into the continuing commitments to the sector, as one is not building expenditure framework on a clean slate. It is only after an analysis of the components that one gets an idea of the space available for planning the expenditure for a medium term taking into the priorities.

State's expenditure on health sector is divided in two categories-plan and non-plan; each of these are further sub-divided into revenue and capital expenditure depending into whether the expenditure is made for creation of assets, or it is basically a consumption expenditure in the form of administrative and program expenses.

Expenditure on administration, and to an extent on the programs in the health sector, could be considered as a continuing commitment, whether done under plan or non-plan. Salaries of the employees have to be paid, and PHC, CHC, hospitals and dispensaries have to provide certain medical and health services involving expenditure on medicines and diagnostic services.
Components of the expenditure of the Public Health on revenue and capital account for both plan and non-plan are given in **Table 4.4.** Expenditure on non-plan capital account has all along been nil. A few significant features of the State's expenditure need to be noted.

- Allopathic system has the responsibility for the primary health care services in the rural and urban areas, and accounts for around 90 per cent of the expenditure, if medical education is included.
- Budgetary allocations have been increasing over the years and have recorded significant increase during the last three years but actual expenditure has been below 80 per cent of the budget estimates.
- Allocations under the plan have been going up significantly every year; plan expenditure accounts for more than 60 per cent of the expenditure in the allopathic system.
- Budgetary expenditure, plan or non-plan, is largely on revenue account; a very small percentage is on capital account met from plan budget. This leaves little space for planning of expenditure in the priority area indicated in the policy and plan document.
- A significant percentage of expenditure is devoted to provision of services.
- After the coming into existence of NRHM, budgetary expenditure on national programs has significantly come down as most of these programs get the funds directly from the Central Government.
- NRHM follows a different system of account keeping; it is difficult to distinguish the revenue expenditure from the capital expenditure, and work out the continuing nature of the commitments made in the previous year for planning expenditure for the next year. However, the limited information made available shows that most of the expenditure is on revenue account, and since NRHM is yet in the process of recruiting human resources, medics and paramedics, it still has a large space which can be used for building a primary health care system which would help in the realization of the goals set in the State Health Policy.

It needs to be taken into consideration that the funds flowing through NRHM does not flow through the state budget but gets transferred directly to the State Health Society and then on gets transferred to the District Health Society and then on to the implementation units at the field level. The exception to this flow is the funds flowing through the central scheme for HIV/AIDS. This fund flows through the State AIDS Control Society (SACS) and then is routed through the implementing units or through contractual mechanisms that are adopted by the SACS.

Table 4.4. Revenue and Capital Allocation in the State Health Budget (INR00000)

Year	Revenue Expenditure	Capital Expenditure	Total	Revenue Expenditure as % of overall budget	Capital expenditure as % of overall budget
2001-02	16863	1240	18103	93.1	6.9
2002-03	21251	1961	23212	91.5	8.5
2003-04	22366	3371	25737	86.9	13.1

Year	Revenue Expenditure	Capital Expenditure	Total	Revenue Expenditure as % of overall budget	Capital expenditure as % of overall budget
2004-05	20980	3861	24841	84.5	15.5
2005-06	22461	3848	26309	85.4	14.6
2006-07	26151	7562	33713	77.6	22.4
2007-08	31038	8281	39319	78.9	21.1
2008-09	39778	11894	51672	77.7	22.3
2009-10	73854	12436	86290	85.6	14.4
2010-11	77926	10069	87995	88.5	11.5

Source: Finance Accounts and budget for the different years of the state

It can be clearly observed from the above that the revenue expenditure that was as high as 90 percent and above in the initial years after the formation of the State and steadily declined to around 77-78 percent up to 2008-09 because of the support being received from the center for meeting the revenue expenditure. However, the revenue expenditure again increased in the last two years to above 85 percent. However, this needs to be taken with caution because of the figures for the last two years being revised estimate and budget estimate respectively. If the utilization of 80 percent of the estimates is taken into account the figures would become comparable.

The revenue expenditure needs to be analyzed in terms of its composition into the different heads of account namely, salaries, travel etc. The composition of the revenue expenditure into its categories is provided in **Table 4.5** and **Table 4.6.**

Table 4.5. Composition of Revenue Expenditure (INR 00000)

Year	Salaries and Wages	Medicines, Supplies & Equipments	Grants in aid	Office, Travel,, Rent and Other Expenditures	Total Expenditure on Health
2001-02	17,138	3,341	306	2,271	23,056
2002-03	17,140	3,407	1,612	2,451	24,610
2003-04	18,576	2,591	1,412	3,215	25,794
2004-05	18,589	3,247	1,299	3,426	26,561
2005-06	19,846	6,386	473	2,607	29,312
2006-07	22,355	7,382	991	3,471	34,199
2007-08	25,525	7,072	3,283	3,599	39,479
2008-09	32,306	7,402	6,827	4,260	50,795
2009-10	53491	13675	13217	3390	83773
2010-11	58042	12039	11208	6706	87995

Source: Finance accounts and Budget Documents of various years of the state

Table 4.6. Percentage Composition of the diff. categories of Revenue expenditure

Year	Salaries and Wages	Medicines, Supplies & Equipments	Grants in aid	Office, Travel, Rent and Other Expenditures	Total Expenditure on Health
2001-02	74.3	14.5	1.3	9.9	100
2002-03	69.6	13.8	6.6	10	100
2003-04	72.0	10.0	15.5	12.5	100

Year	Salaries and Wages	Medicines, Supplies & Equipments	Grants in aid	Office, Travel, Rent and Other Expenditures	Total Expenditure on Health
2004-05	70.0	12.2	4.9	12.9	100
2005-06	67.7	21.7	1.6	9.0	100
2006-07	65.4	21.6	2.9	10.1	100
2007-08	64.7	17.9	8.3	9.1	100
2008-09	63.6	14.5	13.4	8.5	100
2009-10	63.9	16.3	15.7	4.1	100
2010-11	66.0	13.7	12.7	7.6	100

Source: Finance accounts and Budget Documents of various years of the state

It can be seen from the above that salaries and wages forms a significant proportion of the expenditure with a proportion of about 65 percent. The medicines and equipment supplies constitutes another 15 percent. Grants-in-aid as a component would constitute another 12 percent. The other expenditure will constitute another 8 percent. This trend is more or less a stabilized composition and is indicative of the trends in the future.

4.4 RELATIVE SHARE OF THE THREE MAIN CONSTITUENTS OF STREAMS OF EXPENDITURE

Further, the budgetary expenditure in the State through the three streams allopathic, other systems of medicine and medical education needs to be analyzed in terms of its relative share. **Table 4.7** provides the relative share of revenue, capital and total expenditure.

Table 4.7. Relative Shares of the Three Streams (INR 00000)

Year	Allopathic	AYUSH	Medical Education	Total
2001-02	20199	1952	905	23,056
2002-03	20458	1855	2297	24,610
2003-04	21637	2247	1909	25,793
2004-05	21805	2141	2613	26,559
2005-06	24120	3814	1370	29,304
2006-07	29187	2713	2298	34,199
2007-08	34247	2716	2515	39,478
2008-09	43178	3360	4257	50,795
2009-10	57436	5272	6659	69,367
2010-11	57913	8830	8148	74,891
2011-12 RE	83930	15695	13735	113,360
2012-13 BE	90157	21107	17167	128,430

Source: Finance Accounts and budget Documents of Chhattisgarh

The budgetary allocations to the AYUSH have been increasing during the last few years. AYUSH is developing as an important adjunct to allopathic system for providing services in the rural areas. An analysis of components of expenditure would help understand the space that would be available for using the funds in the area of re-worked out priorities. This has been carried out in a later section.

The allocation for medical education has also been showing an increasing trend. **Table 4.8** presents the percentage composition of the different streams.

Table 4.8. Percentage Composition of the Different Streams

Year	Allopathic	AYUSH	Medical Education	Total
2001-02	88	8.5	3.5	100
2002-03	83.1	7.5	9.4	100
2003-04	83.8	8.7	7.5	100
2004-05	82	8	10	100
2005-06	82.3	13	4.7	100
2006-07	85.3	7.9	6.8	100
2007-08	86.7	6.8	6.5	100
2008-09	85	6.6	8.4	100
2009-10	82.8	7.6	9.6	100
2010-11	77.3	11.7	11	100
2011-12- RE	74.04	13.85	12.11	100
2012-13-BE	70.20	16.43	13.36	100

Source: Derived from Finance Accounts and Budget Documents of Chhattisgarh

It can be observed from the above that the relative share of the allopathic system is extremely high and the percentage allocated has been steady at around 85 percent while the share of AYUSH has been fluctuating. It can be seen that AYUSH has been around 7 to 7.5 percent and that of medical education has also been hovering around 6-7percent.

4.5 ANALYSIS OF BUDGET ALLOCATION TO *AYUSH*

Table 4.9. Allocations to AYUSH-Revenue/ in both Plan and Non-plan (INR 00000)

Year	Salaries and wages			Others		
	P	NP	C	P	NP	C
2001-02	20	1641	0	116	176	0
2002-03	2	1634	0	51	168	0
2003-04	0	1762	0	142	343	0
2004-05	0	1751	0	33	343	14
2005-06	0	1888	0	175	383	1368
2006-07	5	1876	0	221	472	140
2007-08	7	2001	0	19	666	24
2008-09	17	2427	0	85	477	55
2009-10	273	4104	0	604	4363	21
2010-11	1939	6116	0	650	1668	0

Source: Finance Accounts and Budget Documents of Chhattisgarh

Some important features may be mentioned here.

- The expenditure on AYUSH is mostly on non-plan revenue account; the plan revenue expenditure is very small.
- Capital expenditure is only on plan account and occasional, not a regular feature. Secondly, more than 94 per cent of the expenditure is on Ayurvedic system; others**,** homoeopathic and Unani, are very small.
- The expenditure on AYUSH is on administration i.e. salary, wages, administrative expenses; there is hardly any expenditure on programs.

4.6 MEDICAL EDUCATION

Expenditure on medical education forms a very small component of the expenditure on public health. Despite the inflation, the non-plan revenue expenditure has been around 280 million. The plan expenditure has been going up in recent years, largely due to opening of new medical institutions. Capital expenditure has been mainly on plan account, mainly on purchase of equipment.

Table 4.10. Expenditure on Medical Education (INR 00000)

Year	Salaries and wages	Others	Total
2001-02	499 (55%)	407 (45%)	906
2002-03	509 (22%)	1788 (78%)	2297
2003-04	476 (25%)	1433 (75%)	1909
2004-05	479 (18%)	2134 (82%)	2613
2005-06	774 (56%)	596 (44%)	1370
2006-07	936 (41%)	1362 (59%)	2298
2007-08	1257 (50%)	1258 (50%)	2515
2008-09	2184 (51%)	2073 (49%)	4257
2009-10	4326 (54%)	3714 (46%0	8040
2010-11	5223 (55%)	4346 (45%)	9569

Source: Finance Accounts and Budget Documents of Chhattisgarh

The figures in parenthesis are the relative share of the salaries and wages and other expenses to the overall revenue expenditure on Medical Education. There has been a fluctuation in favour of the other expenditure but after 2007-08 there has been a trend of 50 percent to salaries and wages and 50 percent to the other expenses.

The outlay on capital expenditure in this sphere over the years has been lower in the earlier phase of the ten years but it has steadily increased after 2006-07. The following **Table 4.11** provides the details.

Table 4.11. Capital outlay in Medical Education (INR 00000)

Year	Plan	Non-Plan	Total
2001-02	27	0	27
2002-03	141	0	141
2003-04	566	55	621
2004-05	764	0	764
2005-06	1119	0	1119
2006-07	3173	0	3173
2007-08	2927	0	2927
2008-09	2747	0	2747
2009-10	3622	0	3622
2010-11	8021	0	8021

Source: Finance Accounts and Budget Documents of Chhattisgarh

4.7 NATIONAL RURAL HEALTH MISSION EXPENDITURE

NRHM support provided is an extra budgetary support and the resources flow through the Society structure created for this purpose and does not get accounted under the state budget. The expenditure incurred has 15 percent share being provided through the state plan budget and 85 percent flowing directly through the societal structure. The money released from the centre is based on the release of the state share to the society and based on the Implementation Plan prepared by the state and approved by the central government.

Table 4.12 provides the funds received through the central allocation and utilized by the state.

Table 4.12. Expenditure details under NRHM (INR 000000)

Year	Opening Balance	Fund Received		Total Funds	Expenditure	Closing Balance	% Utilization
		Share	Central	Received			
2005-06	17.96		81.90	81.90	63.06	36.80	77.00
2006-07	36.80		118.93	118.93	114.48	41.25	96.26
2007-08	46.41	17.13	106.38	123.51	99.96	69.96	58.82
2008-09	69.96	28.84	133.22	162.06	77.45	154.57	32.31
2009-10	154.57	18.32	103.86	122.18	128.24*	148.51	46.46*

Table 4.13. Expenses Details of National Rural Health Mission Chhattisgarh FY 2008-2011 (INR 00000)

Particulars	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Expenses details	Expenses Details *	Expenses details	Expenses details
RCH Flexi pool	4544.27	5795.56		23221
Pulse Polio(PPI)	630.70	445.31		1160
RNTCP	472.95	384.54		1376
NVBDCP *	460.54	300.58		5994
IDDCP	0.00	0.00		24
NPCB	289.46	335.15		949
IDSP *	67.19	117.25		353
NLEP	118.28	102.58		406
Other (RCH)	1161.56	5343.79		48216
Total	**7744.95**	**12824.76**		**81699**

It can be observed that the utilization of the funds received from NRHM has not been quite satisfactory and it has slipped to about a third of the funds received. This clearly points to the extent of planning that is carried out prior to the request for funds and also the process involved in sanctions and transfer of funds. This may have to be carefully looked into if the utilization needs to improve.

CHAPTER 5 : CONSIDERATION OF AREAS FOR ASSESSMENT OF ADDITIONAL RESOURCE REQUIREMENTS IN MTEF

5.1 INTRODUCTION

The State spends a little less than 1 per cent of its GSDP on public health and less than 4 per cent of the budgetary allocations, which include its contribution to NRHM and funds received from the EC-SPP. Funds made available by the Central Government go directly to NRHM, which is managed by the State Health Society. The State Health Policy gives priority to the provision of primary health care services, and strengthening of the FRU and the secondary and tertiary health care systems. All health institutions in the district have to be upgraded to the Indian Public Health Standard (IPHS).This includes not only the availability of the Mitanin/ASHA, and the formation of Village Health and Sanitation Committees with annual grants of untied funds, but also the establishment and strengthening of the Sub-Centers, PHC, and CHC according to the approved norms. It also provides for the strengthening of the Taluka/Sub-divisional hospitals and the district hospitals, as a part of the primary health care system.

Public health sector has many other areas of national concern: prevention and control of communicable and non-communicable diseases, medical education, development of AYUSH, and special public health related problems of women, youth and the geriatrics. However, development of comprehensive health care system in the rural and urban areas is the most important with clearly defined norms, standards, and time schedule indicated in the policy and plan documents. As would be seen, it is indeed difficult to provide a comprehensive health care system, primary, secondary and tertiary, at the present level of funding along with a complementary support system in the form of medical education, training facilities, and implementation of special programs.

The goals set in the State Health Policy require a comprehensive planning, if these are to be achieved within the set timeframe. It requires, not only the deployment and redeployment of financial resources, but also development of the strategies which ensures that infrastructure conforming to IPHS is in place and that medical and nursing staff of requisite qualifications is in position. No comprehensive report has been made available which addresses these issues. There is a need for aligning the policy and the goals set with the availability of physical and financial resources and setting inter se priority for realization. Once this is in place, it is easier to work out the strategy. The task is huge; the resources scarce. But health care program, primary, secondary and tertiary, duly supported by medical education and training, is the backbone of public health system. In any exercise for the MTEF, the financial implications of this program have to be built in the state budget and the NRHM keeping the time frame set for it. The National Commission on Macroeconomics and Health (NCMH, 2005) has laid down the standards, which are the basis for IPHS, and worked out the recurring costs for SC, PHC and CHC as also other health services. It has also indicated the report that inflation at the rate of 7 per cent should be taken into account while working out the cost of providing the health care services. The report of the Sixth Pay Commission has been implemented in the State, enhancing the cost of personnel which forms bulk of the recurring expenditure. However, the norms of 7 percent recommended by the NCMH have been taken into account in working out the expenditure on account of salary.

5.2 PRIMARY HEALTH CARE SYSTEM

The primary health care system was built over the Sub-centers, PHC and CHC in the rural areas, and civil dispensaries and hospitals in the urban areas. The VHSC and the ASHA have got added to it. Norms for the ASHA, VHSC, SC, PHC and CHC have been laid down; the system with IPH standards has to be built on the basis of these norms. ASHA do not involve any direct expenditure from the budget or the NRHM, but other institutions require financial support taken from the budget or the NRHM.

5.3 VILLAGE HEALTH AND SANITATION COMMITTEES (VHSC)

The VHSC is an integral part of the health set up in the rural areas of the State. It has to be formed for every village from members of the village community. It gets untied funds of INR 10,000 per annum under the NRHM. The State has 20308 villages. In addition members of the VHSC have to be given training on health and sanitation which would involve additional expenditure on capacity building depending on the number of persons to be trained, the duration of the training, the place of training and the institutional charges for organizing the training.

The sub-center is the basic institution for a cluster of villages and population for providing basic public health services. According to the norms, there has to be one sub-center for a population of 5000 in plain areas and for a population of 3000 in tribal, hilly or desert areas. On the basis of the population as reported in 2001 census, 5414 sub-centers are required for the State, 2287 in plain areas and 3127 in tribal/hilly areas. Only 4741 SC are in existence. Provision of the full complement of staff, equipment and building would mean additional expenditure to what is being presently provided for and incurred. In addition, every SC is to be provided untied funds of INR. 10,000 per annum for expenditure and another INR 10,000 per annum as maintenance grant. Additional funds would be required for setting up the remaining 673 sub-centers with recurring and non-recurring expenditure.

5.4 PRIMARY HEALTH CENTERS (PHC)

The State has 721 PHC in existence as against the requirement of 850 PHC (381 in plain areas and 469 in tribal/hilly areas). The PHC, in existence, are basically of three types: PHC working 24x7days; those having round the clock facility for delivery, and those which do not have any of these facilities and run during the normal working hours. As against the requirements of 1442 doctors under the revised set up, only 776 doctors are in place. As many as 189 PHC are without a doctor. In the case of the para-medics and other staff, the position is no better. The requirements of funds for the PHC will be more than twice the present level of expenditure once the full set-up becomes operational. In the case of buildings, only 346 PHC are operating from their own buildings; 264 buildings are under construction. Provision will need to be made for the construction of the remaining buildings as also for the gaps in infrastructure and equipment.

Provision has also to be made for 129 PHC which have to be established in accordance with the norms taking the 2001 population into account. This number is likely to go up after the 2011 census.

5.5 COMMUNITY HEALTH CENTERS (CHC)

The total requirement of CHC, on the basis of 2001 population, is 213. The state has only 136 CHC in position, 60 in plain areas and 76 in hilly/tribal areas. The set up provides for four specialists, one block medical officer, one PGMO, and one Assistant Surgeon. The number of specialists in position in the CHC is 151 only as against the requirement of 544. A large number of posts of paramedics and other support staff, apart from the non-specialist cadre doctors are also vacant. Once these vacant

posts are filled, the requirement of funds will be two to three times than what is provided in the budget.

In the case of buildings, only 56 CHC are functioning from government building; 73 CHC buildings are under construction. Only seven CHC have to be provided with buildings.

The State requires another 77 CHC as per norms on the basis of 2001 population. This would mean that the revenue expenditure on account of the new CHC will go up by over 56 per cent. Provision for buildings will be the additional expenditure on capital account for which would require to be made if the state aspires to have primary health care facilities in accordance with the national standards.

5.6 TERTIARY HEALTH CARE

5.6.1. First Referral Units (FRUs)

The State has designated 96 CHC and 16 district hospitals as FRU. FRU will be required to be set up in the remaining CHC, which would mean additional expenditure on staff and equipment and facilities. Standard set of facilities have to be available in every FRU.

5.6.2. District Hospitals

The State has 18 districts but 16 district hospitals which also function as FRU. These are divided in three categories depending on the number of beds-100, 200, or 300. Staff, equipment and other facilities are sanctioned on the basis of the size of the hospital.

5.6.3. Civil Hospitals

The State has 6 civil hospitals having 50 or 100 beds. These are located in the areas which are important towns outside the district headquarter. Staff and equipment is sanctioned on the basis of the size of the hospital.

5.6.4. Civil Dispensaries

The State has 30 civil dispensaries. Each has one medical officer with supporting staff with a supporting staff of 7 other persons, usually paramedics.

Health care services require human resources to dispense them to persons needing them. This has financial implication which has to be built into the MTEF for the public health sector. It is not the purpose here to discuss the adequacy or otherwise of the health care services or the human resources provided, but to see the extent of availability against the posts which have already been sanctioned. The filling of these vacant posts would require additional budgetary expenditure on salaries, almost to the same level as it is incurred at present.

5.7 STATUS OF HUMAN RESOURCES (ALLOPATHIC SYSTEM)

Health care services require human resources to dispense them to persons needing them. This has financial implication which has to be built into the MTEF for the public health sector. It is not the purpose here to discuss the adequacy or otherwise of the health care services or the human resources provided, but to see the extent of availability against the posts which have already been sanctioned. The filling of these vacant posts would require additional budgetary expenditure on salaries, almost to the same level as it is incurred at present.

5.8 DISEASE CONTROL PROGRAM

The State Health and Population policy set certain socio-economic goals to be achieved by 2016. These include reduction in infant mortality and maternal mortality, 100 per cent institutional delivery, availability of obstetrics care at the PHC level, full immunization of children, reduction in annual

parasitic index (API), complete elimination of leprosy, measles, cholera, yaws, tetanus, and polio, and availability of ORS for management of childhood diarrhoea, vitamin A etc. Control of TB, HIV/AIDS, blindness and other disease related programs also require budgetary support. Some of the goals set in the health sector would be achieved by improvement in the availability of health care facilities in accordance with the norms. But additional expenditure will still be required to be incurred for special disease related programs and provided in the state budget.

5.9 POPULATION CONTROL PROGRAM

Some aspects of the program are taken care of by an effective primary health care system, and the RCH. However, reduction in the fertility rate through specific interventions requires expenditure, which has to be provided for in the budget. It also involves expenditure on program related IEC.

5.10 JEEVAN DEEP SAMITIS

Jeevan Deep Samitis , registered as Societies under the Societies Registration Act, have been set up at the level of district hospital, civil hospitals, CHC and PHC level for improving the facilities and performance of these institutions and managing them . A Samiti consists of representatives of the public, non-government organizations (NGOs)working in the health sector, NGOs working in the social sector, donors, officials of the health department and district administration. Specific tasks assigned to these committees are: improvement and extension of existing buildings including construction of new buildings; assessment of the requirement and utilization of equipments and making arrangements for them; assessment of the requirement of human resources-medical and non-medical, and making arrangements for it; making available the critical medicines in the unit; information and guidance to patients about available services; monitoring development works; arranging cleanliness, water, and power; arranging and managing funds; and preparation and implementation of annual plans. These are given annual grants, on a differential scale, by the State Government. Funds collected from the patients for providing services are also credited in its account and form the basic corpus. It is an additional resource to the health sector to the extent expenditure is met locally from funds collected from the patients,

5.11 TRAINING

The State has a state level training institution, the State Institute of Health and Family Welfare. Apart from this, there are training institutions for the training of nurses and paramedics in the district. There is a vast number of paramedics which require training. Even though ASHA are voluntary workers, they have also to be provided training at the state's expenditure. This is another important item of expenditure in the health sector.

5.12 AYUSH SYSTEM

The NPH-2002 has a paragraph on the alternative system of medicine, referring to the systems included in the AYUSH, the Ayurvedic, Yoga Unani , Siddha and Homeopathic, and focuses on building up credibility through research and standardisation, consolidation and codification of indigenous knowledge, a certification system to promote their popular acceptance. It further states that the main component of NHP-2002 apply equally to the alternative system of medicine. The state policy on AYUSH includes Yoga also and is more explicit. It provides for mainstreaming of the AYUSH for contributing to better health care for all.

While the importance of AYUSH is recognized at the national and state level for providing low cost health care and for use of indigenous systems, it has not been structured the way the reach of the allopathic system has been structured for providing services to the rural and urban population. The NRHM program provides for the co-location of AYUSH dispensaries with the PHC, appointment of AYUSH doctors and paramedics on a contractual basis in the primary health care system, inclusion of AYUSH modules in the training of ASHA, inclusion of a few medicines in the RCH program, and establishment of speciality clinics etc. in the district hospitals.

AYUSH has been functioning, both as an adjunct to the allopathic system of medicine and as an independent system practicing alternate systems of medicine. It has therefore independent demands on resources on account of education and research, apart from providing curative services in the dispensaries and hospitals separately established for this purpose. In the absence of any structured approach, the planning of MTEF becomes difficult, as assessment of needs can only be done on the basis of some set goals and milestones to be achieved within a specified period. The approach has so far been ad-hoc and therefore in the MTEF, provision can only be made for the visible gaps.

State's expenditure on AYUSH is included in the Demand No. 79, which also provides for expenditure on medical education. A number of posts have been created in recent years in this sector, for which provision will have to be made in the budget. A significantly large number of posts are lying vacant, the financial implications of which is not reflected in the current level of expenditure. |

5.13 MEDICAL EDUCATION

Medical education is another important area of expenditure. The State runs a number of medical, dental and nursing colleges. It also manages a number of hospitals associated with teaching and expenditure on them is booked on their account. The relevant Demand Number is 79 where the expenditure on AYUSH is also booked.

Shortage of doctors has been the basic bottleneck in the expansion of health facilities in the rural areas. Expansion in medical education has to keep pace with contemplated expansion in primary health care facilities. In fact, it has to precede it, as it may be possible to set up a dispensary or a hospital and furnish it, but it takes a minimum of six to ten year for the availability of capable medical personnel after higher secondary. An assessment of needs in this area has to be done now for the coming years so that adequate human resources is available in the State itself.

5.14 HUMAN RESOURCES

The overall position of sanctioned filled and vacant positions of different categorised of staffs and officers in the health sector is presented in the table below.

Figure 5.1. Sanctioned, filled and vacant positions

Sl. No.	Posts	Approved	Working	Vacant
1	Specialist	866	215	535
2	Medical Officer	2365	1014	1351
3	BMO	143	0	143
4	Sub-district extension and resource officer	11	4	7
5	Health Tutor	14	3	11
6	Male Health Inspector	929	540	389
7	Male Health Worker	4918	2531	2387
8	Assistant Statistical Officer	17	12	5

Sl. No.	Posts	Approved	Working	Vacant
9	Eye Assistant Worker	771	194	577
10	Chief Steno Typist	36	4	32
11	Accountant	158	96	62
12	Assistant Grade II	92	83	9
13	Computer cum data operator	163	58	105
14	Cashier	22	8	14
15	Steward	20	14	6
16	Store Keeper cum typist	16	5	11
17	Assistant Grade III	319	275	44
18	Steno Typist Grade III	17	6	11
19	Steno Typist Grade II	2	0	2
20	Junior Auditor	16	2	14
21	BEE	142	62	80
22	Malaria Inspector	29	3	26
23	Junior Malaria Inspector	6	6	0
24	Statistician	3	1	2
25	Physiotherapist Technician	11	6	5
26	Electrician	4	5	1
27	Refrigerator Mechanics	18	10	8
28	Radiographer	204	106	98
29	Darkroom Assistant	27	9	18
30	Biochemist	5	1	4
31	Lab Technician	761	375	386
32	Lab Assistant	41	23	18
33	Store Keeper (Pharmacist)	23	5	18
34	Pharmacist Grade II	1100	733	367
35	Dresser Grade I & II	1111	771	340
36	NMA	137	448	311
37	NMS	158	108	50
38	Driver	461	320	141
39	Senior NMS	6	2	4
40	Artist cum Photographer	4	2	2
41	Projectionist	2	3	1
42	Optometrist	11	2	9
43	Assistant Malaria Officer	16	8	8
44	Pump Mechanic Grade III	3	3	0
45	Insect Collector	4	4	0
46	Assistant Accountant cum Data Operator	6	2	4
47	Health Assistant	1	0	1
48	Sanatorium	1	0	1
49	Clerk	367	408	41
50	Staff	0	0	0
51	Ward boy	1054	945	109
52	Ward-lady sister	715	513	202
53	Guard	230	150	80

Sl. No.	Posts	Approved	Working	Vacant
54	Sweeper	771	669	102
55	Barber	2	5	3
56	Laundryman	148	87	61
57	OT Attendant	228	134	94
58	Dental Attendant	1	2	1
59	Darkroom Attendant	12	10	2
60	Lab Attendant	3	5	2
61	Pump Attendant	5	5	0
62	Cook	55	53	2
63	Mess Servant	58	56	2
64	Domestic Servant	15	14	1
65	Field Worker	10	5	5
66	Sanitary Worker	12	7	5
67	Waterman	138	24	114
68	Carpenter	5	2	3
69	Plumber	5	2	3
70	Medical Store Staff	0	7	7
71	Clinic Assistant	0	1	1
72	Driver Grade II	41	24	17
73	Gardener	12	5	7

Source: Statistics of Department of Health, GoC

CHAPTER 6 : MTEF PROJECTIONS AND RESOURCE REQUIREMENTS

6.1 ANALYSIS OF PAST TRENDS

It is important to understand the trends in allocation of resources to health sector in order to understand the priority provided to this sector and ability to utilize the available resources. This sector also depends upon the availability of human resources who are qualified to occupy the positions earmarked in the system with requisite qualification and experience. The outturn in the medical education is just not adequate to meet the requirement of the public health system. Similar is the case in the availability of the qualified technical support staff as well as the trained nursing personnel. Hence, this state is confronted with an overall shortage of staff at all levels. The state in order to bring up its health indicators needs to adopt different and innovative public health strategy and the state has commenced its efforts in this direction by involving private sector providers through partnerships and accreditation. The involvement of Rural Medical Practitioners also is being used as a strategy. In order to improve the universal access to health services the state may have to initiate development of standard operating protocols and define minimum services that will be available at the peripheral level such as PHC and Sub-Centers. Curative services available with Faith Based Organizations and other large private trusts and hospitals needs to be utilized through Public-Private Partnership in order that minimum curative services are available at the periphery.

If the strategy is evolved in this direction for providing services at the lower levels then the focus of the public health system can be on improving the service delivery from the level of CHC upwards and here again alternative service provision strategy needs to be adopted.
The resource availability has been analyzed taking into account these constraints that are faced by the public health service provision in the state.

Table 6.1. Health Expenditure as proportion of GSDP and Government Expenditure

Year	Health expenditure as % of Total Expenditure	Health Expenditure as % of GSDP
2001-02	4.25	0.78
2002-03	3.78	0.73
2003-04	3.38	0.76
2004-05	3.16	0.61
2005-06	3.27	0.57
2006-07	3.11	0.52
2007-08	2.83	0.49
2008-09	2.58	0.52
2009-10	3.32	0.64
2010-11	3.27	0.64

Though the State Health Policy states that the overall allocation will be increased to about 6 percent of the overall government expenditure it may take another 5-6 years before that can be achieved. Similar is the case of achieving the Health Sector expenditure being 2 percent of the Gross State Domestic Product.

6.2 ESTIMATING THE RESOURCE ENVELOPE

The other way of analyzing the growth in expenditure allocation for the health sector is to analyze the year on year growth and examine the feasible rate of growth that can be achieved/ feasible in the health sector spending. The following **Table 6.2** provides the year on year growth.

Table 6.2. Year on Year Growth in Health spending (INR 00000)

Year	Health Expenditure	Year on Year Growth
2001-02	23056	-
2002-03	24010	4.14
2003-04	25793	7.42
2004-05	26560	3
2005-06	29312	10.36
2006-07	34199	16.6
2007-08	39479	15.43
2008-09	50795	28.6
2009-10	69367	36.56
2010-11	74891	7.96

It can be seen from the above that in the period 2006-07 to 2008-09 has shown an increase of 16 percent to 28 percent. After that it has shown a sudden jump in allocation but in the succeeding year it has shown a steep decline to 12.5 percent. Hence, the increase in the range of 17 percent to 22 percent can be considered a broad range on which the projections can be based on. The scenario of total allocation to health sector has been made based on these increases that may be feasible. The projections on these scenarios are provided in

Table 6.3. The projections have been made with 2010-11 as the base because this is the last year for which actual figures are available. However, when the projections were made based on this range the allocation was not representative of even the current level of allocations that are being made. Hence, two other scenarios of growth at 25 percent and 30percent from the base line were made to obtain the resource envelope on the normal scale.

The projection under the different scenarios is presented below:

Table 6.3. Resource Envelope under different scenarios (INR 00000)

	17%	18%	19%	20%	21%	22%	23%	25%	30%
2011-12	87622	88371	89120	89869	90618	91367	92116	93614	97358
2012-13	102518	103395	104271	105147	106023	106899	107776	109528	113909
2013-14	119946	120972	121997	123022	124047	125072	126097	128148	133274
2014-15	140337	141537	142736	143936	145135	146335	147534	149933	155930

The projections were reviewed based on the following criteria:

- Representative nature of the overall allocation
- Share of the health expenditure to the overall expenditure of the state
- Share of the health expenditure as a proportion of the Gross State Domestic product

Share of Health expenditure to the overall expenditure of the state

Table 6.4. Share of projected health expenditure as percentage of overall expenditure of State

	17%	18%	19%	21%	22%	23%	25%	30%
2011-12	3.01	3.04	3.07	3.09	3.12	3.14	3.17	3.22
2012-13	2.92	2.94	2.97	2.99	3.02	3.04	3.07	3.12
2013-14	2.80	2.83	2.85	2.88	2.90	2.92	2.95	3.00
2014-15	3.25	3.28	3.30	3.33	3.36	3.39	3.41	3.47

Through using the above criteria the projections based on 30 percent increase seems to closely proximate the current level of allocations achieved in the year 2011-12 representing the Revised Estimates and the Budget Estimates for the years 2012-13. The allocations as a percentage of the overall government expenditure in 2010-11 are 3.22 percent and 3.12 percent in 2012-13. Considering the actual utilization the projections at 30 percent represents only 3.00 percent in 2013-14 and 3.47 percent in 2014-15 which can be a close representation of the actual situation.

Therefore according to this criterion 30 percent increase over base level allocation seems the most representative.

Share of Health expenditure as a percentage of GSDP

Table 6.5. Share of projected health expenditure as % of GSDP

	17%	18%	19%	21%	22%	23%	25%	30%
2011-12	0.59	0.59	0.60	0.60	0.61	0.61	0.62	0.63
2012-13	0.62	0.62	0.63	0.63	0.64	0.64	0.65	0.66
2013-14	0.65	0.65	0.66	0.66	0.67	0.68	0.68	0.69
2014-15	0.68	0.69	0.69	0.70	0.70	0.71	0.72	0.73

Analyses of the above projections clearly indicate that the projections at 30 percent increase over the base level closely represent the current situation. The actual budget for 2010-11 represents 0.64 percent of GSDP. Further the Revised Budget Estimates of 2011-12 represents 0.84 percent of GSDP. However, if an adjustment is to be made to take into account the variation in the estimates and actual accounts that obtain then the levels of 0.63 percent and 0.66 percent obtained through the projections closely represent years 2011-12 and 2012-13 respectively.

Representative Nature of Overall allocation

The projections made on the base year over the different scenarios also confirm that the choice of 30 percent growth over the base year of 2010-11 is the most representative of the current allocations to the health sector.

Table 6.6. Projections of resource allocation to health (INR 00000)

	17%	18%	19%	20%	21%	22%	23%	25%	30%
2011-12	87622	88371	89120	89869	90618	91367	92116	93614	97358
2012-13	102518	103395	104271	105147	106023	106899	107776	109528	113909
2013-14	119946	120972	121997	123022	124047	125072	126097	128148	133274
2014-15	140337	141537	142736	143936	145135	146335	147534	149933	155930

It can be seen that the projections based on the base year actual of 2010-11 provides estimates for 2011-12 and 2012-13 that are below the revised estimates for 2011-12 and budget estimates for 2012-13. This represents the realistic assessment of the utilization trends in the past.

Hence all the analysis points to 30 percent increase over the base year of 2010-11 to be the most representative scenario and hence the same has been chosen for making further MTEF projections.

6.3 RESOURCE ENVELOPE FOR HEALTH

Table 6.7 provides the estimates for resource envelope for health in the future.

Table 6.7. Resource Envelopes (INR00000)

Year	Resource Envelope
2011-12	97358
2012-13	113909
2013-14	133274
2014-15	155930

6.4 PROJECTIONS UNDER DIFFERENT HEADS

The analysis of the trends in composition of expenditure has been made for the different aspects of the health system:

- Allopathic
- AYUSH
- Medical Education
- Public Health
- Family Welfare

The composition of the capital and revenue expenditure under the budgets have also been analyzed and based on the estimates arrived, the resource envelope has been bifurcated into Revenue and Capital for the projection years.

Table 6.8. Revenue and Capital Resource Estimation (INR 00000)

Year	Revenue	Capital	Total
2011-12	82755	14604	97358
2012-13	96823	17086	113909
2013-14	113283	19991	133274
2014-15	132541	23390	155930

6.4.1. Projections of Allopathic Expenditures

Table 6.9. Resource Envelope for Allopathic System (INR 00000)

Year	Resource
2011-12	68151
2012-13	79736
2013-14	93292
2014-15	109151

Table 6.10. Allocation under Different Heads (INR 00000)

Year	Salaries and Wages	Medicines, Equipment and Supplies	Grants-in Aid	Other Expenditure	Total
2011-12	44298	10223	8178	5452	68151
2012-13	51829	11960	9568	6379	79736
2013-14	60640	13994	11195	7463	93292
2014-15	70948	16373	13098	8732	109151

6.4.2. Projections of Ayush (INR 00000)

Table 6.11. Resource Envelope for AYUSH

Year	Resource
2011-12	15577
2012-13	18225
2013-14	21324
2014-15	24949

Table 6.12. Allocation under Different Heads (INR00000)

Year	Salaries and Wages	Medicines, Equipment and Supplies	Grants-in Aid	Other Expenditure	Total
2011-12	12462	1558	312	1246	15577
2012-13	14580	1823	365	1458	18225
2013-14	17059	2132	426	1706	21324
2014-15	19959	2495	499	1996	24949

6.4.3. Projections of Medical Education (Inr 00000)

Table 6.13. Resource Envelope for Medical Education

Year	Resource
2011-12	13630
2012-13	15947
2013-14	18658
2014-15	21830

Table 6.14. Allocation under Different Heads (INR00000)

Year	Salaries and Wages	Medicines, Equipment and Supplies	Grants-in Aid	Other Expenditure	Total
2011-12	8860	2726	682	1363	13630
2012-13	10366	3189	797	1595	15947
2013-14	12128	3732	933	1866	18658
2014-15	14190	4366	1092	2183	21830

6.4.4. Family Welfare

The Family Welfare program is an entirely Central funded program and hence has not been projected here.

6.5 NATIONAL RURAL HEALTH MISSION

This is an extra budgetary support and hence has not been projected. The trends clearly indicate that the annual requirement from NRHM will be in the region of INR 2000 million and the state needs to provision about INR 300 million as its share in order to obtain the balance INR1700 million. These are over and above the base line projections.

6.6 CAPITAL OUTLAY

This has not been split up further and has been projected as part of the resource envelope.

6.7 ALLOCATION INTO PLAN, NON-PLAN AND CENTRAL SHARE OF THE ENVELOPE

Table 6.15. Revenue Expenditure Break up (INR 00000)

Year	Plan	Non-Plan	Central	Total
2011-12	8275	74479	-	82755
2012-13	9682	87141	-	96823
2013-14	11328	101954	-	113283
2014-15	13254	119287	-	132541

Table 6.16. Additional requirements of funds for next three periods of the MTEF period

Posts	Short Fall in 2010-11	Proposed to be Filled in 2011-12	Additional budget Requirement	filled in 2012-13	Additional budget Requirement	Filled in 2013-14	Additional budget Requirement
Nurse (Mid wife)	976	195	281	195	281	293	422
Lab Tech	489	98	118	98	118	146	176
Pharmacists	371	74	80	74	80	112	120
Radiographer	64	13	16	13	16	19	21
Specialists	431	86	310	86	310	130	466
Pediatrician	108	22	80	22	80	33	117
Physician	112	22	80	22	80	33	120
Obstetrician/ Gynecologists	109	22	80	22	80	32	117
Surgeons	102	20	72	20	72	30	109
Health Assistants(M)	601	120	130	120	130	181	196
Health Assistants(F)	222	44	48	44	48	68	72
Health workers (M)	1403	281	236	281	236	421	354
Health workers (F)	1733	347	292	347	292	520	437
Total	**6721**	**1344**	**1823**	**1344**	**1823**	**2018**	**2727**

Table 6.17. Additional Budget Requirement on account of Buildings and Infrastructure

Institutes	Number	Have Own Building	Building Needed	Additional needs Capital	Additional Needs revenue
DHC	17	15	2	1000	1500
Civil	17	15	2	1000	1500
CHC	144	123	21	8400	5000
PHC	715	404	311	5900	8500
Sub Center	4776	2358	2418	4400	3400
Total		**20700**		**19900**	

The capital requirements will be spread over 5 years and hence the phasing will be 2011-12 to 2015-16 at the rate of INR 414 million, each year on capital account another INR 398 million on revenue account.

6.8 ADJUSTED REQUIREMENTS

Table 6.18. Adjusted Revenue Account (INR 00000)

Year	Plan	Non-Plan	Central	Total
2011-12	13466	85374	-	98840
2012-13	20448	110835	-	131283
2013-14	27971	144279	-	172250

Table 6.19. Capital Account (INR 00000)

Year	Plan	Non-Plan	Central	Total
2011-12	17877	-	3000	20877
2012-13	22901	-	3000	25901
2013-14	29428	-	3000	32428

CHAPTER 7 : SUGGESTIONS FOR SECTOR REFORM & DATA FOR BETTER UTILIZATION OF RESOURCES

7.1 PLANNING AND MONITORING EXECUTION FOR BETTER UTILIZATION

The resources being allocated are not being fully utilized and even if utilized is not accounted for in a timely manner in order that it can reflect as utilization. In the case of NRHM disbursements there is a high amount of closing balance accruing every year providing an impression that the resources are being sought for but the State does not have the capacity to absorb the funds. The requirements exist in terms of strengthening the infrastructure and also in filling the gaps in the human resource requirements. The requirements are evident but it is still inexplicable why the utilization is low.

Hence, strengthening of the systems in the following areas are required:

- Planning and implementation
- Receipt of funds and accounting for it
- Identification of requirements such as land etc. before requesting funds
- Capacity building to monitor the utilization

7.2 COORDINATION BETWEEN NRHM AND STATE BUDGET EXECUTION

The sources of funds are different but the application of the funds is towards the strengthening of the health systems in the State. The Planning for NRHM also needs to involve the finance personnel from the department in order that the requisite share from the State budget can be provided for. Coordination can also prevent duplication of funding as well as enable the Directorate to plan better for its requirements as well as synchronize the fund utilization in order that the systems can function in tandem. Coordination can enable the assessment of total resources flowing into the health sector.

Organizational arrangements and systems of reporting, needs to be established in order that it can facilitate this coordination at the State level. The arrangements also need to be established at the district level in order this is better coordinated.

7.3 HEALTH SYSTEM STRENGTHENING

The State needs to draw up health system strengthening and financing arrangements in order that the outcomes desired by the National Health Policy and the Millennium Development Goal (MDG) can be achieved in the planned time frame.

Some of the strategies to improve availability of health care facilities such as involvement of the private sector has been already evolved and are being implemented. The State needs to draw up a basic strategy document for improving health services and the sources of financing it. Considering that the basic outturn of the technical personnel in the State is inadequate to meet its requirements, strategies such as the basic services that will be available at the different levels have to be clearly marked and standard operating protocols needs to be developed to provide the minimum services at each level. Training of the personnel at each level also needs to be undertaken in order that the services can be provided. Referral system and transport for referral also needs to be strengthened in order that the services can be provided through referral chain. Fixed day clinics, mobile clinics and outsourcing are other strategies that can be considered.

Health Systems Improvement project can be drafted and financing can be sought through different donor agencies. The infrastructure can be strengthened at the secondary and tertiary levels for providing quality services.

7.4 MTEF CELL AND CONTINUING THE EXERCISE

It is suggested that an MTEF and Financial Analysis cell may be created within the DoH & FW either by contracting staff or by deputing interested staff in order that the personnel can be trained and the exercise carried out regularly.

It is necessary to carry out MTEF periodically every year in order that it can be rolled over for the next three years and the requirement of resources is estimated to meet the policy objectives in the area of health. This will provide a basis for negotiations with the finance department on the budget allocations and will also increase the commitment to this sector.

This has to be looked at in the context of the overall sectoral MTEF that needs to be carried out for the State.

7.5 HUMAN RESOURCE MANAGEMENT

Since human resource is critical to the delivery of health services it is important that the management of human resources is planned for and managed well. It is essential that over a period of the next year the department carries out a detailed human resource planning exercise to analyze the age pattern of the current staff and the rates of retirement each year in order that the position based on the current staffing pattern can be arrived at for each year in the future. This will enable the department to identify any large scale retirements that will occur in any particular year and be able to plan for it much ahead of that.

7.6 UTILIZING EXISTING RESOURCES OPTIMALLY

In certain areas such as procurement of drugs and medicines adoption of certain processes can enable obtaining more for the same amount of resources expended. The State is initiating steps in this direction for setting up Chhattisgarh Medical Services Corporation and adopting/adapting the model that has functioned well in Tamil Nadu. This can enable procurement of twice or even more quantum of drugs and medicines by a shift in the procurement policies and practices. This will enable the State to offer more for the same quantum of resources and maintain better quality. Introduction of prescription audits at the facility level can enhance the utilization of existing drugs and save out of pocket expenses for the clients attending the clinics.

[i] PIP for 2012-13 of NHRM for Chhattisgarh