

MEDIUM TERM EXPENDITURE FRAMEWORK FOR HEALTH  
2008-09 TO 2012-13

SUBMITTED TO DEPARTMENT OF HEALTH, MEDICAL & FAMILY WELFARE,  
GOVERNMENT OF ANDHRA PRADESH, HYDERABAD

DECEMBER 2009



THE INSTITUTE OF HEALTH SYSTEMS  
HYDERABAD

MEDIUM TERM EXPENDITURE FRAMEWORK  
FOR HEALTH IN ANDHRA PRADESH  
2008-09 TO 2012-13

G.SURENDRA  
C.K.GEORGE  
G.S.PATTNAIK

DECEMBER, 2009



THE INSTITUTE OF HEALTH SYSTEMS, HYDERABAD

## Acknowledgements

This study was commissioned by the Department of Health, Medical and Family Welfare (DoHMFw), Government of Andhra Pradesh, to provide inputs for the development of the Department's Medium Term Expenditure Framework (MTEF). The Study contract was signed with Center for Good Governance (CGG) which is on behalf of DoHMFw. The Department for International Development (DfID) provided financial support to DoHMFw for the study.

The study adopts a National Health Accounts (NHA) framework for health expenditure analysis and forecasting as per National health Policy. Institutionalizing NHA is a key goal of the National Health Policy 2002. The international NHA methodology has been refined to suit Indian requirements under the leadership of the NHA cell of MoHFW, with technical support from WHO. The present study has adopted the Indian NHA methodology as per GoAP requirements and has immensely benefited from opportunity given to the Institute of Health Systems (IHS) to be associated with the Indian NHA exercise.

The Institute of Health Systems has studied earlier in 2006 the Total Health Expenditure (THE) for Govt of Andhra Pradesh and assisted in developing a report on Medium Expenditure Framework for five years with 2006-07 as year one of MTEF . The present report is in second in series to be developed for Dept of Health, Medical & Family Welfare, Govt of Andhra Pradesh in 2009. The IHS thanks the HODs and officials of the DoHMFw and line departments for sharing the data. We also thank Dr. M.Ariz Ahammed. IAS, Addl Secretary and Director (SPIU) and Mr.G.Krishnamurthy,IA&AS(Rtd), Financial Advisor, DoHMFw for their inputs and cooperation in developing the MTEF.

31<sup>st</sup> December, 2009  
Hyderabad

G.Surendra

## Table of Contents

<b>I. Introduction</b> .....	5
1. Background of the Report:.....	5
2. Methodological Framework for Health Expenditure Analysis and Trends.....	5
3. Methodology for development of MTEF:.....	12
4. Organization of the Report.....	12
<b>II. Health Expenditure Analysis</b> .....	13
1. DoHMFW dept Budget Spending:.....	13
2. Expenditure by Societies.....	23
3. Health Expenditure by Other Line Departments.....	24
4. Total Health Expenditure by DoHMFW, other Line Departments and Societies.....	24
<b>III. Estimation of Resource Envelope</b> .....	28
1. National and International Recommendations on Resource Allocations.:.....	28
2. Trend analysis in AP in comparison to national/international recommendations.....	28
3. Recommended Strategy for Projection to arrive at resource envelope:.....	29
4. Baseline Health Expenditure Projections for the Medium Term.....	34
5. Estimation of Resource Envelope for Health in the Medium Term.....	34
<b>IV. Costing of Medium Term Health Strategies (MTHS)</b> .....	36
1. Strengthening of Primary Health Care Services:.....	37
2. Secondary Health Care Services.....	40
3. Tertiary Care Services:.....	43
4. Financial Protection for the Poor - Arogyasri:.....	44
5. Trauma Care:.....	44
6. Health Statistics and Research.....	44
7. National Disease Surveillance Network (NSDN).....	45
<b>V. Medium Term Expenditure Framework</b> .....	47
1. Expenditure Framework for Medium Term Strategies.....	48
2. DoHMFW Medium Term Expenditure Framework.....	50
3. Medium Term Expenditure of DoHMFW Societies.....	53
4. Total Medium Term Expenditure on Health – State Health:.....	54

## List of Tables

Table-1: Financing Sources for Health Care through State Government Agencies.....	6
Table-2: Government Departments and Agencies Managing Health Care in AP.....	7
Table-3: Framework for Health Care Functions.....	8
Table-4: Health Care Providers in Andhra Pradesh.....	9
Table-5: Classification of Health Expenditure by Resource Costs.....	10
Table-6 Resource Costs for Health Expenditure Grouped Under Broad Heads.....	11
Table-7: Trends in Plan and Non Plan Expenditure of DoHMFW (1990-1999).....	13
Table-8: Trends in DoHMFW Expenditure for the years 1999-00 to 2008-09*.....	14
Table 9: Share of Major Accounts Expenditure.....	15
Table 10: Expenditure by different resource categories and its share to total exp.....	17
Table 11: Expenditure by Functions of Care.....	20
Table 12: Expenditure by providers of care from the year 2004-05 to 2008-09(RE).....	21
Table 13: Expenditure by Source of Funds.....	23

Table 14: Expenditure by Societies from 2004-05 .....	23
Table 15: Health Expenditure by other GoAP departments (Rs in '000).....	24
Table 16: Total public Expenditure in the State of Andhra Pradesh (Rs in '000).....	24
Table 17 – DoHMFw (Main health depts.) Expenditure in relation to GoAP Budget and Macroeconomic and demographic indicators .....	25
Table 18 – Contribution of Revenue expenditure on Health to the State Revenue Exp ..	26
Table 19: State Health Expenditure in relation to GoAP Budget and Macroeconomic and demographic indicators.....	27
Table 20: State Health Expenditure in comparison to national recommendations.....	29
Table 21 – Average growth of expenditure year wise for DoHMFw .....	30
Table 22 – Average growth of expenditure year wise for the societies.....	30
Table 23-Receipts and Expenditure for the State of AP .....	31
Table 24 Per capita Expenditure of States -2007-08 (RE) .....	32
Table 25-Central share in Revenue receipts .....	33
Table 26: Baseline Health expenditure and resource envelope (Rs in Cr) .....	35
Table 27: Medium Term Expenditure Framework by Source of Funds (Rs in cr).....	35
Table 28: Costing on filling the posts of MPHAs .....	37
Table 29: Costing primary health care services Resource Category wise (Rs in Crores)	39
Table 30: Costing on Secondary health care services .....	41
Table 31: Costing on HR requirements for secondary health care services:.....	42
Table 32: Costing on Tertiary care the resources (Rs in Croes).....	43
Table 33: Costing on Health Stat & Research, NDSN, Arogyasri and Trauma Care .....	45
Table 34: Summary of the total additional costs for operationalizing MTS .....	46
Table 35: Proposed Allocation of Projected Expenditure by Functions (Rs. Crore).....	48
Table 36: Proposed Allocation of Projected Expenditure by Providers (Rs. Crore).....	49
Table 37: Proposed Allocation of Projected Expenditure by Resource Categories .....	49
Table 38: Medium Term DoHMFw Expenditure (Projected) by Functions of Care.....	50
Table 39: Medium Term DoHMFw Expenditure (Projected) by Resource Categories ..	51
Table 40 : Medium Term DoHMFw Expenditure (projected)by Providers .....	52
Table 41: Medium Term Expenditure by Societies (Rs.Crore).....	53
Table 42 :Medium Term Expenditure by (Projected)Other GoAP Departments .....	53
Table 43: Projections of Medium Term Health Expenditure by GoAP Dept & Soc .....	54

### List of Figures

Fig 1: Trends in Plan and Non Plan expenditure of DoHMFw from 1999-2009.....	14
Fig 2: Trend of Health expenditure in relation to Macroeconomic and population indica- tors.....	26

### List of Annexures

Annexure-1: Detailed expenditure by Resource categories.....	57
Annexure-2: Detailed expenditure by Function.....	59
Annexure -3: Detailed expenditure by Providers.....	61

## Acronyms

APERP	AP Economic Restructuring Project
APFRHSP	AP First Referral Health System Project
APHMIDC	AP Health & Medical Infrastructure Development Corporation
APSACS	Andhra Pradesh State AIDS Control Society
APVVP	AP Vaidya Vidhan Parishad
AYUSH	Ayurveda, Unani, Siddha and Homoeopathy
BPL	Below Poverty Line
CFW	Commissionerate of Family Welfare
CHC	Community Health Center
DCA	Drug Control Administration
DfID	Department for International Development, Government of UK
DME	Director of Medical Education
DoH	Directorate of Health
DoHMFW	Department of Health Medical and Family Welfare
EFC	Eleventh Finance Commission
ESIS	Employees State Insurance Scheme
GoAP	Government of Andhra Pradesh
GOI	Government of India
HE	Health Expenditure
ICHA	International Classification for Health Accounts
IIHFW	Indian Institute of Health and Family Welfare
IPM	Institute of Preventive Medicine
MTEF	Medium Term Expenditure Framework
NACP	National AIDS Control Programme
NHA	National Health Accounts
NHP	National Health Policy
NMCH	National Macroeconomic Commission for Health
NSSO	National Sample Survey Organization
NTR UHS	NTR University of Health Sciences
OSM	Other Systems of Medicine
PHC	Primary Health Centre
PHE	Primary Health Expenditure
RCH	Reproductive & Child Health
SACS	State Aids Prevention and Control Society
WHO	World Health Organization

## I. Introduction

### 1. Background of the Report:

The Department of Health, Medical and Family Welfare (DoHFW) of the Government of Andhra Pradesh (GoAP) has prepared a Medium Term Health Expenditure Framework (MTSEF) for a period of five years, beginning fiscal 2006-07. Its focus is on the development of a feasible planning framework that will guide investment and implementation to improve the health performance of Andhra Pradesh. The GoAP is being supported in this endeavor by the Department for International Development (DfID).

Since preparation of Medium Term Expenditure Framework (MTEF) in 2006<sup>1</sup>, significant changes have happened in scope of operationalization of strategies as well as flow of funds from major sources. This has necessitated rolling out of the MTEF incorporating changes in resource envelope, policy environment and strategies. Further there is need to institutionalize mechanisms and capacity within department to roll out MTEF and bring about a convergence of the budgetary/NRHM planning processes to facilitate integration and avoid duplication. The Institute of Health Systems (IHS) was commissioned by the DoHMFV to provide background support in developing the MTEF.

This report builds on the earlier work done by the Institute of Health Systems that presents the medium term expenditure framework after incorporating revisions in accordance with the strategies that were finalized during the discussions and reviews and the changes in the resource envelope that is most likely to materialize in the medium term.

### 2. Methodological Framework for Health Expenditure Analysis and Trends

In line with the National Health Policy (2002) goals of Government of India, a National Health Accounts (NHA) framework has been used for health expenditure analysis. NHA is an internationally accepted tool for summarizing, describing and analyzing health care financing and expenditure within a particular health system. Health expenditure consists of financial outlays that service the health system. In the current context, the analysis is restricted to expenditure on health by State government entities.

The NHA framework adopts its basic principles of health accounting from the System of Health Accounts (SHA) of the Organization for Economic Cooperation and Development (OECD). The SHA provides the International Classification for Health Accounts (ICHA), which classifies health care entities and categorizes each type of health

---

<sup>1</sup> Medium Term Expenditure framework for Health in Andhra Pradesh by C.K.George, IHS Report Series-RP38/2006(100)

expenditure. Based on health policy requirements and form in which data available in the country, the classification of health accounts have been modified by the Government of India. The National Health Accounts framework identifies the following entities within a health system

#### A. Financing Sources:

Sources refer to the entities from which financial resources are generated for health. Health spending by sources answer the question “who pays for health care?” Sources of financing health care through state government entities in Andhra Pradesh is given in Table-1

Table-1: Financing Sources for Health Care through State Government Agencies.

Code	Source	Data
1	Government of Andhra Pradesh	Non Plan Budget excluding GoI Non Plan Grants 11- Normal State Plan 06- Matching State Share of Centrally Sponsored Schemes CM Relief Fund
2	GOI CSP*	10 - Centrally Sponsored Schemes NRHM NACP
3	Other GoI Grants	12th Finance Commission Grants 05 – PMGY
4	External Aid	03-Externally Aided Projects Grants to SACS
5	Loans**	07-Rural Infrastructure Development Fund (RIDF) Loans From Other Agencies

Note:

\*GoI centrally sponsored schemes includes funds from external sources. Classification adopted focuses on the immediate source for the DoHMFV and does not differentiate the external aid component.

\*\*Loans availed by the Department is essentially a contribution of the GoAP as it is incumbent on the government to repay the same. They are shown as a separate class to give a clear picture of the modes of financing of the budget.

#### B. Financing Agents:

Financing Agents are institutions or entities that channel funds provided by financing sources and use the funds to pay for, or purchase, the activities inside the health accounts boundary. In the AP context they include agencies (HODs) of the Department of Health, Medical and Family Welfare, Department of Labour and Employment and the



Department of Tribal Welfare. List of Agencies under each of the aforesaid departments are given in Table-2.

Table-2: Government Departments and Agencies Managing Health Care in AP

Department	Agencies (Heads of Department)
Health, Medical and Family Welfare	Directorate of Health
	Directorate of Medical Education
	Commissionerate of Family Welfare
	Commissionerate of APVVP
	Commissionerate of AYUSH
	Directorate of Institute of Preventive Medicine
	Drug Control Administration
	AP Health Medical Infrastructure Development Corporation (APHMIDC)
	State AIDS Control Society
	Rajiv Aarogyasri Health Trust
	State Health Society
Tribal Welfare	Strategic Planning and Innovation Unit
	Secretariat
Labour and Employment	Directorate of Tribal welfare Dept
	Commissionerate, Labour for Insurance Medical Services.
Women Child and Disabled Welfare	Directorate of Women and Child Welfare for ICDS schemes

### C. Functions of Care:

Functions refer to the services or activities that providers deliver with their funds. Information at this level answers the question "what type of service product or activity was actually produced?" Functions of Care in the AP context are elaborated in Table-3.

Table-3: Framework for Health Care Functions

Broad Functions	Code	Detailed Functions
Direction & Administration	1	Direction and Administration
Primary Care Services	2	Primary Care Services (Allopathic)
	3	Primary Care Services (AYUSH)
	4	Communicable Disease Control Programmes
	5	Non Communicable Disease Programmes
	6	Family Welfare
	7	IEC
	12	Training
	12.1	DH
	12.2	CFW
	12.5	AYUSH
	12.6	Other Training for Primary Care
	13	Food, Water and Drug Quality Control
	13.1	Public Health Laboratory Services
13.2	Drug Control	
Secondary Care Services	15	Ancillary Care Services
	15.1	Drug/Sera Manufacture
	15.2	Emergency Health Transport
	15.3	Help Information Help Line
	15.4	Blood Bank
Tertiary Care Services	8	Secondary Care
	12.3	Training (APVVP)
Medical Education	9	Tertiary Care
	12.4	Training (DME)
Health Statistics & Research	10	Medical Education (Allopathic)
	10.1	Medical and Dental
	10.2	Nursing/Paramedical
	10.3	Public Health
Social Protection Schemes	11	Medical Education (AYUSH)
	14	Health Statistics and Research
Repayment of Loans	16	Social Protection Schemes: Aarogyasri, JSY, FDS, Nutrition and other Programs targeted at the poor
Repayment of Loans	17	Repayment of Loans

#### D. Providers of Care:

They are the end users or final recipients of health care funds. They are the entities which deliver health services. This category provides information on the question

"To whom does the money go?" Table-4 lists the providers funded through State government agencies.

Table-4: Health Care Providers in Andhra Pradesh

Codes	Providers	Institutions Included
1	State/Regional Administrators	Secretariat, Directorates
2	District Administrators	District Offices
3	ASHA	
4	Village Health and Sanitation Committees	
5	Sub Centres/MCH/Family Welfare Centres	
6	Hospitals and Dispensaries (DH)	
7	AYUSH Dispensaries & Hospitals	
8	AYUSH Educational Institutions	Includes APYP
9	PHC	
10	Hospitals (APVVP)	
11	APVVP Administrators	
12	Hospitals Not Specified	
13	Teaching Hospitals	
14	Other Tertiary Care Institutions	NIMS, SVIMS, MNJ Institute of Oncology
15	Mobile Health Centres	
16	Collective Health Services (Disease Control)	Expenditure on DC programmes not specifically allocated to any institution
17	Collective Health Services (Family Welfare)	Expenditure on FW programmes not specifically allocated to any institution
18	Financial Agencies	
19	Boards/Agencies Not Specified Elsewhere	Medicinal & Aromatic Plants Board, Family Welfare Board, NTRUHS/SHTO
20	Drug Control Administration	
21	IPM	
22	Aarogyasri Health Trust	
23	Nursing/Paramedical Colleges	
24	Training and Research Institutions	
25	NRHM Societies/PMU/SPIU	
26	Vital Statistics Division	
27	NGO and Other Private Providers	Includes PPPs
28	Other Departments	Transfers to RD, TW
29	Provider Not Specified	
30	APHMIDC	
31	Grants needing further analysis	
32	State AIDS Control Society	

## E. Resource Costs:

Classification of expenditure by Resource Costs is important especially in public expenditure analysis. They refer to the factors or inputs used by providers or financing agents to produce the goods and services consumed or the activities conducted in the system. Classification of Resource Costs of public expenditure on health is given in Table-5. These resource costs have been further grouped to broader categories in Table-6

Table-5: Classification of Health Expenditure by Resource Costs

Code	Resource Costs
1	010 – Salaries
2	020- Wages
3	110/120 Travel Expenses
4	130 - Office Expenses
5	140 - Rents, Rates and Taxes
6	160 – Publications
7	200 - Other Administrative Expenses
8	210 - Supplies and Materials
9	230 - Cost of Ration/Diet Charges
10	240 - Petrol, Oil and Lubricants
11	250 - Clothing, Tentage & Stores
12	260 - Advertisements, Sales and Publicity Expenses
13	270 - Minor Works
14	280 - Professional Services
15	300 - Other Contractual Services
16	311 - Grants-in-Aid towards Salaries
17	312 - Other Grants-in-aid
18	340 - Scholarships and Stipends
19	500 - Other Charges (which cannot be further classified)
20	510 - Motor Vehicles
21	520 - Machinery & Equipment
22	530 - Major Works
23	630 - Inter Account Transfers
24	800 - User Charges
25	001 - Repayment of Loans
26	500 - Other Charges (Compensation)
27	Incentives to Staff

Table-6 Resource Costs for Health Expenditure Grouped Under Broad Heads

Group	Resource Costs
1	Human Resources 010 - Salaries 020- Wages 311 - Grants-in-Aid towards Salaries 300 - Other Contractual Services Incentives provided vide Societies
2	Scholarships and Stipends 340 - Scholarships and Stipends
3	Operations and Administrative Expenses 110/120 Travel Expenses 130 - Office Expenses 140 - Rents, Rates and Taxes 160 - Publications 200 - Other Administrative Expenses 240 - Petrol, Oil and Lubricants 260 - Advertisements, Sales and Publicity Expenses 280 - Professional Services 800 - User Charges 001 - Repayment of Loans
4	Drugs, Materials and Supplies 210 - Supplies and Materials 250 - Clothing, Tentage & Stores 230 - Cost of Ration/Diet Charges
5	Equipment 520 - Machinery & Equipment
6	Maintenance and Minor Works 270 - Minor Works 510 - Motor Vehicles
7	Major Works 530 - Major Works Capital expenditure recorded under 6210
8	Grant-in-Aid 312 - Other Grants-in-aid
9	Transfers to Households 500 - Other Charges (Compensation/ Sukhibhava) JSY/Compensation under NRHM
10	Other Expenditure 500 - Other Charges (which cannot be further classified) 630 - Inter Account Transfers

### 3. Methodology for development of MTEF:

The following steps were undertaken to develop the MTEF

Analysis of health budget data of the last five years, up to detailed head level using National Health Accounts framework adopted by the Government of India.<sup>2</sup> Health budget data was analyzed using the aforesaid framework to understand trends in public health spending and make baseline projections. Data from demand for grants was mapped by plan/non-plan, major heads, minor heads, subheads and detailed heads. Allocation to each subhead was coded in terms of “source of funds”, “functions” and “providers” for analysis. Further, analysis of expenditure at the detailed head level was done to classify health expenditure by “resource costs”. Similarly extra-budgetary allocation to Societies was also coded and analyzed. The budget was also analysed for intra sectoral or line departments like Tribal Welfare, Women & Child Welfare and Labour Departments. Further the funds received from NRHM to the State Societies implementing the related health programmes was also analysed.

Costing of medium term health strategies has been arrived using GOI, GoAP, National Macroeconomic Commission for Health (India) recommended norms, their estimates and proposals.

Developing the MTEF by reconciling bottom-up estimates of the cost of carrying out policies, both existing and new with the resource envelope available for public health expenditure. The bottom up estimates, actually in the true sense are “what and how much amount is required as per the policy announcements or as per the field environment” to implement at the gross route level. Where as the resource envelope is actually “what and how much is affordable or what is available” at the source level i.e at the Govt.

### 4. Organization of the Report

The report is organized around the following sections:

- Introduction
- Health Expenditure Analysis
- Estimation of the Resource envelope
- Costing of Medium Term Health Strategies.
- Medium Term Expenditure Framework for Health in Andhra Pradesh

---

<sup>2</sup> National Health Accounts India 2001-02, Ministry of Health and Family Welfare, Government of India, 2006

## II. Health Expenditure Analysis

### Government Health Expenditure:

Government Health Expenditure includes that on:

- Department of Health, Medical and Family Welfare (DoHMF) covering all HODs
- Line departments of the State Government such as the Labour, Women & Child Welfare and Tribal Welfare who are also implementing part of the budget for health related programmes.
- Government organized Societies for disease control and family welfare

In the current analysis, we focus on expenditure by main departments of DoHMF as per NHA framework. In respect of Line departments and societies, the budget/funds were analyzed to arrive at the total expenditure for the State as a whole. Data for analysis for main and line departments is from budget documents and income and expenditure statements of respective societies or approvals from MoHFW.

#### 1. DoHMF dept Budget Spending:

Table-7 provides details of overall health care spending by DOHMF during the period from 1990 – 1999 and Table-8 for the period from 1999-00 to 2008-09. Figures for 2008-09 are revised estimates as per the budget documents. For other years, it is based on the Accounts reported in the Budget documents. The data indicates that overall DoHMF spending has been increasing over time. The general trend of an increase has held consistent throughout the period, except for a dip in 2002-03. Since 2005-06, coinciding with uptake of a number of reform programs there has been a significant increase in the expenditure.

Table-7: Trends in Plan and Non Plan Expenditure of DoHMF (1990-1999)

Year	Rs. in Crores			% Share	
	Plan	N Plan	Total	Plan	Non Plan
1990-91	95	236	331	28.68	71.32
1995-96	182	423	605	30.08	69.92
1996-97	280	490	770	36.39	63.61
1997-98	331	519	850	38.97	61.03
1998-99	465	574	1,039	44.76	55.24

Table-8: Trends in DoHMFV Expenditure for the years 1999-00 to 2008-09\*.

Year	Current Prices in Cr			Constant Prices in Cr			% Share	
	Plan	N Plan	Total	Plan	N Plan	Total	Plan	N Plan
1999-00	459	706	1,165	459	706	1165	39	61
2000-01	464	830	1,294	447	799	1246	36	64
2001-02	526	814	1,340	487	754	1241	39	61
2002-03	478	858	1,336	427	766	1193	36	64
2003-04	506	946	1,452	434	812	1246	35	65
2004-05	490	1002	1,492	408	834	1242	33	67
2005-06	526	1098	1,624	427	890	1317	32	68
2006-07	588	1282	1,870	458	999	1457	31	69
2007-08	859	1669	2,528	625	1215	1840	34	66
2008-09 (RE)	1331	1871	3,202	905	1272	2177	42	58

**Source:** DoHMFV, GoAP Budget Documents. \*The expenditure shown above for the years upto 2007-08 is as per Accounts and for the year 2008-09 is as per revised estimate as per the budget documents.

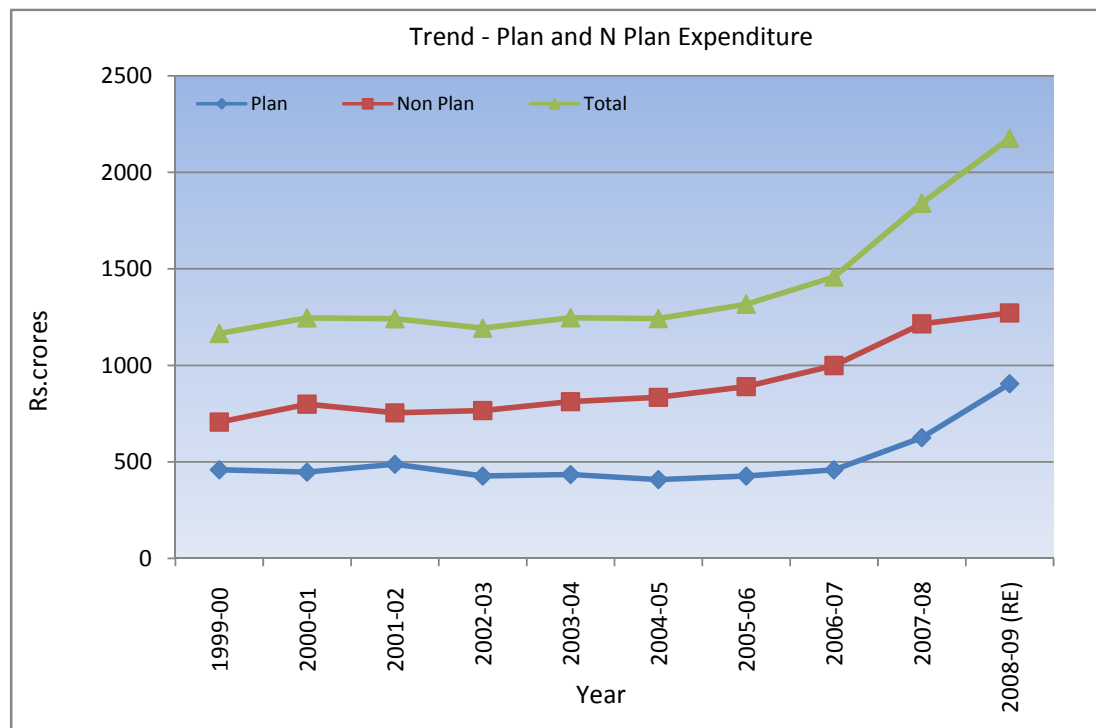


Fig 1: Trends in Plan and Non Plan Expenditure of DoHMFV from 1999-00 to 2008-09 (Constant Prices-1999-00)



In the year 1990-91, Non-plan expenditures accounted for 71.32% to total spending. In the year 2002-03, the non –plan expenditure has declined to 64%. This decline could be the possible increase in other plan schemes and may be other plan activities supported by the World Bank under the APFRP and the APERP projects. From the year 2003-04 to 2007-08, the share of Non Plan expenditure has been around 65-69%. However in 2008-09 (revised estimates), Non-Plan projected expenditure is around 58% resulting in substantial increase of Plan share to about 42% of total projected expenditure as per the budget documents.

#### A. Health Expenditure by Resource categories

Table 9 provides the distribution of expenditure by major accounts like Revenue, Capital and repayment of Loans. The revenue expenditure is varying between 94% and 97% where as the capital expenditure in between 0.57% to 3.5%. of the total expenditure in recent years. The relative share of debt repayment is around 2 to 3.2% of the total expenditure.

Table 9: Share of Major Accounts Expenditure

Year	DoHMFV Expenditure (Rs. Cr)				% Share		
	Revenue	Capital	Loans	Total	Revenue	Capital	Loans
1998-99	1038	1	0	1039	99.87	0.13	0.00
1999-00	1105	60	0	1165	94.83	5.17	0.00
2001-02	1246	48	0	1294	96.30	3.70	0.00
2001-02	1287	53	0	1340	96.02	3.98	0.00
2002-03	1303	33	0	1336	97.50	2.50	0.00
2003-04	1421	8	23	1452	97.85	0.57	1.58
2004-05	1429	15	48	1492	95.76	1.02	3.22
2005-06	1553	23	48	1624	95.64	1.40	2.96
2006-07	1801	9	60	1870	96.30	0.50	3.20
2007-08	2382	80	66	2528	94.24	3.15	2.60
2008-09*	3027	109	66	3202	94.53	3.42	2.06

\*Note: The figures given for 2008-09 are Revised Estimates.

Table 10 below provides the information about the composition of expenditure by major resource categories. The data indicates that the human resource (HR) cost constitute substantial chunk of the total expenditure of the DoHMFV in excess of 50% for the years from 2004 and touching even 69.34% in 2006-07. The HR cost includes salary,

wage and other allowances. The trend shows decreasing of HR expenditure from year to year and this could possibly be due to the freeze in recruitment or non availability of medical and paramedical staff due to various reasons such as market conditions in health industry, conducive environment at the health institutions or lack of human resource development both in public and private sector. It is also quite possible that part of expenditure under “Grant-in-Aid” may contribute to salaries and wages and on inclusion of this; the percentage of HR expenditure even may go up.

The expenditure under “Drugs, Material and Supplies” constitutes next major expenditure which contributed around 8.01% in the year 2008-09 (RE). Though the absolute expenditure is increasing from year to year, if it is taken as percentage to the total expenditure, it shows decreasing trend from 10.24% in 2004-05 to 8.01% in 2008-09 and the possible reason could be the increased expenditure in other categories.

Next category “Operations and Administrative expenses” which also declining from year to year from 8.35% in 2004-05 to 4.73% in 2008-09, but on an average it varies around 5.78% in the last three years. This category includes the expenditure on travel, POL, office expenses, rents & taxes, publicity, professional charges.

Further the small portion of expenditure is in between 0.93% to 1.61% contributing from Scholarships and stipends. Similarly, the expenditure on Machinery and equipment ranges from 1.03% to 1.71% and in the year 2008-09(RE), it is 1.58%. The major works which is capital expenditure presents the expenditure around 3.28% in the last two years which indicates the growth in physical infrastructure.

In respect of the compensation being paid to the households like under Sukhibhava, the expenditure is in between 1.13% to 1.25% in the last three years.

The above categories of expenditure are in addition to the maintenance and minor works which is an average around 2.56% of the total expenditure in the last five years.

The detailed categories of resource expenditure is given in Annexure-1

(Contd.)

Table 10: Expenditure by different resource categories and its share to total expenditure

Resource category	2004-05		2005-06		2006-07		2007-08		2008-09 (RE)	
	Rs.in '000	%	Rs.in '000	%	Rs.in '000	%	Rs.in '000	%	Rs.in '000	%
Human Resources Cost	9739000	65.23	10950200	67.43	12964780	69.34	14702437	58.15	16500148	51.53
Scholarships and Stipends	240100	1.61	230100	1.42	301589	1.61	237894	0.94	296495	0.93
Operations and Administrative Ex- penses	1247000	8.35	1247300	7.68	1320376	7.06	1401919	5.55	1514178	4.73
Drugs, Materials and Supplies	1528500	10.24	1642200	10.11	1570138	8.40	2108015	8.34	2563899	8.01
Machinery & Equipment	155600	1.04	17700	0.11	320154	1.71	261392	1.03	502637	1.57
Maintenance and Minor Works	397400	2.66	429400	2.64	392067	2.10	677162	2.68	872019	2.72
Major Works	152100	1.02	227900	1.40	93471	0.50	797223	3.15	1094860	3.42
Grant-in-Aid	1006200	6.74	1024800	6.31	1444161	7.72	2453294	9.70	7768114	24.26
Transfers to Households (Compensa- tion)	362200	2.43	257000	1.58	217216	1.16	316113	1.25	363000	1.13
Other Expenditure	101095	0.68	212176	1.31	73699	0.39	2326713	9.20	544422	1.70
<b>Total</b>	<b>14929195</b>	<b>100</b>	<b>16238776</b>	<b>100</b>	<b>18697651</b>	<b>100</b>	<b>25282162</b>	<b>100</b>	<b>32019772</b>	<b>100</b>

## B. Expenditure by Functions of Care

Expenditure has been disaggregated in terms of core functional areas for the years from 2004-05 to 2008-09 such as Primary care service, Secondary care service, Tertiary care service, Medical Education, Research including Direction and Administration. The expenditure on health programmes, training and capital formation are normally taken separately in the health accounts framework and from a policy perspective these are expenditures incurred for provision of services. Similarly expenditure on quality control of food, water and drugs and manufacture of vaccines are that on primary preventive services. Accordingly these expenditures have been included in respective services. The expenditure on various categories of functions which were segregated is shown in Table 11. Expenditure on different functions has been arrived at based on the expenditure on relevant sub heads.

Expenditure on primary care includes that on provision of services through PHCs, sub centers, maternal and child health centers, AYUSH dispensaries, Health dispensaries and societies. It also includes expenditure on disease control programmes, family welfare programmes, quality control of water, food and drugs, manufacture of vaccines and sera. Though the absolute expenditure is increasing year by year, if compared in terms of percentage to the total expenditure, it has been decreased from around 57% in the year 2004-05 to 39% in the year 2008-09 (RE). The possible reason for declining in terms of percentage to total expenditure may due to increase in expenditure in infrastructure activities like taking up new & strengthening of hospitals, increase in procurement of equipment in tertiary care, increase in expenditure on Social Protection schemes like Arogya-sri. The expenditure on primary care services contributes to 0.33% of the GSDP both in 2007-08 & 2008-09.

Secondary care expenditure includes that on provision of services through APVVP hospitals, secondary care institutions of the Department of Health, AYUSH medical colleges etc., About 13.22 % of the DoHMFWS expenditure in 2007-08 and 11.04% in 2008-09 (RE) is on provision of secondary care services. More or less, the contribution from secondary care services to total health spending remaining constant for all the years.

About 13.35% to 18.76% of the respective expenditure was on provision of tertiary care services. Further 8.5 % of the DoHMFWS expenditure is on medical education, research and health statistics. This includes expenditure of the Directorate of Medical Education, NTR University of Health Sciences, State Institute of Health and Family Welfare, provision of education through medical, AYUSH, nursing and paramedical colleges, and research schemes.

Social protection schemes like sukhibhava, operational cost of fixed day health services, treatment to poor for serious ailments in NIMS, SVIMS, children suffering from heart diseases, Arogyasri, medical insurance for BPL families have been given major thrust and high priority from 2007-08 as could be seen from the growth of the expenditure which is from 6.65% in 2007-08 to 15.51% in 2008-09 (RE). The high priority was given by the Govt to these schemes for the last three years.

The detailed expenditure by functions of care was given in Annexure -2.

### C. Expenditure by Providers

Table 12 presents the data of expenditure by providers. Expenditure on different providers has been arrived at based on the expenditure under relevant sub heads. Details of sub heads included under each category of providers is provided in Annexure-3 as per the budget documents.

Primary Care providers such as sub centers, PHCs, DoH hospitals and dispensaries, family welfare centers/MCH centers, OSM dispensaries, societies and hospitals and providers of collective services account for about 38.85% of the total expenditure in 2008-09 (RE). Collective health services are expenditure on disease control programs and family welfare services provided through these institutions for which provider wise break up is not available

Secondary Care providers include APVVP hospitals and larger DoH hospitals that accounts for 10.49 to 14.11 % of the total expenditure for the last five years. Tertiary Care providers include teaching hospitals in allopathy, AYUSH and autonomous tertiary hospitals like NIMS, SVIMS etc. They account for about 20 to 25.72% of the budget. This includes expenditure on both treatment and education. Other training and education institutions account for about 1.78% of the expenditure in 2008-09 (RE).

14.05% of the health expenditure is projected in 2008-09 for Arogyasri Health Trust for implementing social protection schemes.

Further APHMIDC is creating and maintaining capital formation consistently for all the years from 5.06% to 5.74%.

DFID contribution is around 3.66% in 2008-09 (RE).

Expenditure on Government Administrators includes that on Secretariat, State (HoDs) and District headquarters etc., accounts on an average for about 4.36% of the total expenditure.

Table 11: Expenditure by Functions of Care

Functions	2004-05		2005-06		2006-07		2007-08		2008-09(RE)	
	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%
Direction and Administration	824337	5.52	970903	5.98	908413	6.86	941751	3.72	1136879	3.55
Primary Health Care	8502725	56.95	8782558	54.08	9643670	51.58	11039003	43.66	12438271	38.85
Secondary Care	1824560	12.22	2001259	12.32	2774631	14.84	3343419	13.22	3534743	11.04
Tertiary Care	1992976	13.35	2506882	15.44	2984739	15.96	4742819	18.76	5156336	16.10
Medical Education	1209994	8.10	1282721	7.90	1523309	8.15	2063163	8.16	2646211	8.26
Health Statistics and Research	30391	0.20	35483	0.22	41211	0.22	54867	0.22	68921	0.22
Social Protection Schemes	64212	0.43	178970	1.10	223078	1.19	1681513	6.65	4967500	15.51
Repayment of Loans	480000	3.22	480000	2.96	598600	3.20	658460	2.60	658400	2.06
Others	0	0.00	0	0.00	0	0.00	757167	2.99	1412511	4.41
<b>Total</b>	<b>14929195</b>	<b>100</b>	<b>16238776</b>	<b>100</b>	<b>18697651</b>	<b>100</b>	<b>25282162</b>	<b>100</b>	<b>32019772</b>	<b>100</b>

Table 12: Expenditure by providers of care from the year 2004-05 to 2008-09(RE)

Providers	2004-05		2005-06		2006-07		2007-08		2008-09 (RE)	
	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%
State/Regional Administrators	460523	3.08	498943	3.07	448579	2.40	406328	1.61	478594	1.49
District Administrators	335736	2.25	447004	2.75	537949	2.88	580809	2.30	710234	2.22
Sub Centres/MCH Centres/Family Welfare Centres	1640264	10.99	1925006	11.85	2469152	13.21	2581193	10.21	2598015	8.11
Hospitals and Dispensaries (DH)	192775	1.29	182273	1.12	181904	0.97	227237	0.90	295058	0.92
AYUSH Dispensaries & Hospitals	484545	3.25	534852	3.29	700919	3.75	645554	2.55	887237	2.77
AYUSH Educational Institutions	189721	1.27	200096	1.23	230092	1.23	253991	1.00	324092	1.01
PHC	2327492	15.59	2078753	12.80	2115739	11.32	2710265	10.72	2988004	9.33
Hospitals (APVVP)	1694513	11.35	1849510	11.39	2638989	14.11	3195109	12.64	3358327	10.49
APVVP Administrators	0	0.00	0	0.00	39285	0.21	45288	0.18	48139	0.15
Hospitals Not Specified	140599	0.94	156145	0.96	143440	0.77	231577	0.92	139367	0.44
Teaching Hospitals	2829866	18.96	3401330	20.95	3957248	21.16	5847029	23.13	6637904	20.73
Other Tertiary Care Institutions	164543	1.10	246066	1.52	457289	2.45	653731	2.59	760431	2.37
Collective Health Services (Disease Control)	1623207	10.87	1713610	10.55	1795105	9.60	1892506	7.49	2340815	7.31

Table 12: Expenditure by providers of care from the year 2004-05 to 2008-09 (Contd.)

Providers	2004-05		2005-06		2006-07		2007-08		2008-09 (RE)	
	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%
Collective Health Services (Family Welfare)	1006161	6.74	908777	5.60	571948	3.06	675600	2.67	651922	2.04
Financial Agencies	480000	3.22	480000	2.96	598600	3.20	658460	2.60	658400	2.06
Boards/Agencies Not Specified Elsewhere	185219	1.24	362124	2.23	391798	2.10	285904	1.13	407288	1.27
Drug Control Administration	47990	0.32	54651	0.34	62562	0.33	73207	0.29	101780	0.32
IPM	151637	1.02	128574	0.79	164765	0.88	176763	0.70	192727	0.60
Aarogyasri Health Trust	0	0.00	0	0.00	2147	0.01	1406189	5.56	4500000	14.05
Nursing/Paramedical Colleges	21945	0.15	27789	0.17	30672	0.16	49963	0.20	199643	0.62
Training and Research Institutions	21031	0.14	25391	0.16	28160	0.15	35578	0.14	48846	0.15
Vital Statistics Division	20492	0.14	24447	0.15	25804	0.14	35000	0.14	38910	0.12
NGO and Other Private Providers	100927	0.68	102435	0.63	109365	0.58	335383	1.33	550132	1.72
Provider Not Specified	0	0.00	0	0.00	0	0.00	0	0.00	242511	0.75
APHMIDC	810009	5.43	891000	5.49	996140	5.33	1450327	5.74	1619396	5.06
DFID	0	0.00	0	0.00	0	0.00	757167	2.99	1170000	3.66
SACS	0	0.00	0	0.00	0	0.00	72004	0.28	72000	0.22
<b>Total</b>	<b>14929195</b>	<b>100</b>	<b>16238776</b>	<b>100</b>	<b>18697651</b>	<b>100</b>	<b>25282162</b>	<b>100</b>	<b>32019772</b>	<b>100</b>



#### D. Expenditure by Sources of Fund

Table 13 provides details of contribution from various sources to DoHMFWS expenditure in from 2004-05 to 2008-09(RE). GoAP contribution currently accounts on an average for about 87.65% of DoHMFWS expenditure. Relative contribution of GoAP has been increasing in 2007-08 and 2008-09 (RE). Government of India contribution is provided under the centrally sponsored programs, finance commission grants and PMGY. There is decline in GoI funding from 13.56% in 2004-05 to 7.51% in 2008-09 (RE). The reason for declining in GoI funds could be increased allocation for NRM funds. External aid accounted for about 3.66 % of the expenditure in 2008-09 (RE). There was a no or little external funding in 2005-06 & 2006-07, but shows increased growth over 2007-08.

Table 13: Expenditure by Source of Funds

Year	Expenditure in Rs. '000				% Share		
	GoAP	GoI	External	Total	GoAP	GoI	External
2004-05	12569506	2024265	335424	14929195	84.19	13.56	2.25
2005-06	14194815	1960957	83004	16238776	87.41	12.08	0.51
2006-07	16760053	1937404	194	18697651	89.64	10.36	0.00
2007-08	22298122	2226873	757167	25282162	88.20	8.81	2.99
2008-09(RE)	28442958	2405814	1171000	32019772	88.83	7.51	3.66

#### 2. Expenditure by Societies

These are expenditures that would ordinarily be classified as being under DOHMFWS auspices, since the funds supporting such expenditures are directly provided to the concerned directorates, state and district-level functionaries in a form that leads to their being excluded in the accounting under the Demand for Grants. The budget document shows the expenditure by “societies” such as the Andhra Pradesh State AIDS Control Society (APSACS) and the State Society for Health and Family Welfare. Similar societies exist for tuberculosis, leprosy, malaria and blindness. These societies are primarily funded by external aid and GOI. Share of GoAP has been usually minimal. Table 14 presents the expenditure from the year 2004 to 2009. With increased funding under NRHM, the growth in health spending under societies has increased tremendously.

Table 14: Expenditure by Societies from 2004-05

Year	Rs.in '000		
	NRHM	SACS	Total
2004-05	0	235801	235801
2005-06	2869100	505004	3374104
2006-07	3352200	855663	4207863
2007-08	5068700	644812	5713512
2008-09	7845100	688608	8533708

*Note :NRHM started in 2005-06, hence no expenditure in 2004-05*

### 3. Health Expenditure by Other Line Departments

Health expenditure by other line departments includes (a) expenditure on Insurance Medical Services by Department of Labor (b) expenditure on Tribal Health Services by Department of Tribal Welfare, and (c) expenditure on Integrated Child Development Services (ICDS) by Department of Women Welfare and Child Welfare. While expenditure on Insurance Medical Services is considered as secondary care expenditure, the expenditure on Tribal Health Services and ICDS is considered as primary health care expenditure. Table 15 presents the data for the last five years.

Table 15: Health Expenditure by other GoAP departments (Rs in '000)

Department	Programme	2004-05	2005-06	2006-07	2007-08	2008-09 (RE)
<b>Primary Care</b>						
Tribal Welfare	Health	7992	8755	7568	7789	11857
Women, Child and Disabled Welfare	ICDS Programme	1661759	1921403	2304823	2709108	3801064
<b>Secondary Care</b>						
Labour and Employment	Insurance Medical Services	633410	713037	779904	1062680	964550
Total - All Departments		2303161	2643195	3092295	3779577	4777471

In 2004-05, these departments had a health expenditure of about Rs 230 Cr. of this, about Rs 167 Cr was spent on primary health care and Rs 63 Cr on secondary health care. The budget was increased year by year and in 2008-09, there is tremendous increase totaling to Rs 478 Cr, of which an amount of Rs 382 Cr is on primary health care.

### 4. Total Health Expenditure by DoHMF, other Line Departments and Societies

Table 16 gives the data of the total public expenditure in Andhra Pradesh which includes the main health departments, societies and line departments and its share of contribution.

Table 16: Total public Expenditure in the State of Andhra Pradesh (Rs in '000)

Year	DoHMF	%share	Line depts	%share	Societies	%share	Total
2004-05	14929195	85.47	2303161	13.18	235801	1.35	17468157
2005-06	16238776	72.96	2643195	11.88	3374104	15.16	22256075
2006-07	18697651	71.92	3092295	11.89	4207863	16.19	25997809
2007-08	25282162	72.70	3779577	10.87	5713512	16.43	34775251
2008-09 (RE)	32019772	70.64	4777471	10.54	8533708	18.83	45330951

Table 17 indicates the proportion to the macroeconomic indicators and total state budget. The health expenditure by DoHMFw (only by main health departments) to the State budget has declined from 5.82% in 1999-2000 to 3.39 in 2007-08 and again started increasing. Similar effect can be seen to the Gross State Domestic Product (GSDP) as it has declined from 0.90 in 1999-00 to 0.67 in 2006-07 and again started increasing. However, the percapita spending on health by the State Govt is in increasing trend and has risen from Rs 154.45 in 1999 to Rs 261.65 in 2009 which is calculated on constant prices.

Table 17 – DoHMFw (Main health depts.) Expenditure in relation to GoAP Budget and Macroeconomic and demographic indicators

Year	GSDP (Rs. Cr) prices		GoAP (PE)	Population	DoHMFw Health Expenditure				
	Current	Constant			Current	Constant	GSDP%	PE%	Per Capita
1999-00	129403	129403	20030	75427000	1165	1165	0.90	5.82	154.45
2000-01	144723	139312	25794	76210000	1,294	1246	0.89	5.02	163.45
2001-02	156711	145185	27817	77154000	1,340	1241	0.86	4.82	160.90
2002-03	167096	149143	29853	78074000	1336	1193	0.80	4.48	152.73
2003-04	190017	163085	34081	78973000	1,452	1246	0.76	4.26	157.80
2004-05	211802	176379	36722	79852000	1492	1242	0.70	4.06	155.60
2005-06	239683	194437	42577	80712000	1624	1317	0.68	3.81	163.13
2006-07	277286	216140	51342	81554000	1870	1457	0.67	3.64	178.73
2007-08	328405	239102	74672	82375000	2528	1840	0.77	3.39	223.44
2008-09 (RE)	371229	252318	90891	83178000	3202	2177	0.86	3.52	261.65

*Note: Prices in crores, Percapita in rupees, Pub.Exp=Public Expenditure, Percentage calculated with Current Prices. Percapita is calculated on constant prices.*

Table 18 shows the state revenue receipts, revenue expenditure and the contribution to the DoHMFw revenue expenditure from 2004-05 to 2008-09. There is surplus revenue from 2006-07 onwards and the contribution to the DoHMFw expenditure was almost stagnant during the years from 2006-07 to 2008-09. As there is commitment by the State on revenue receipts which is 11.75% more over 2008-09, there is cascading effect on the health revenue expenditure by 7.19% over the year 2008-09.

Table 18 – Contribution of Revenue expenditure on Health to the State Revenue Expenditure (Rs in Crores )

Year	Revenue Receipts	Revenue expenditure	Surplus/ Deficit	DoHMFw	
				Revenue Expenditure	%
2004-05	28749.5	31307.34	-2557.84	1487.08	4.75
2005-06	34851.19	34915.3	-64.11	1616.39	4.63
2006-07	44245.47	41438.4	2807.07	1853.93	4.47
2007-08	54142.55	53983.56	158.99	2439.06	4.52
2008-09 (RE)	69685.95	67619.04	2066.91	3055.34	4.52

Table 19 and Figure-2 indicates the State Health expenditure trends in proportion to State Budget, GSDP and percapita. The State Health expenditure includes the departments under DoHMFw, line departments like, Tribal Welfare, Labour & Women welfare and also Societies. The State Health expenditure in proportion to the Gross State Domestic Product (GSDP) with current prices is in increasing trend every year. The State Health expenditure in proportion to State Public expenditure is not uniform. It is in between 4.66% to 5.23% for the last five years. From 4.66% in the year 2007-08, it has increased to 4.99% in the year 2008-09 (RE). Whereas, the percapita state health expenditure on constant prices is in increasing trend. From Rs 182 in the year 2004-05, it has increased to Rs 370 in the year 2008-09 (RE).

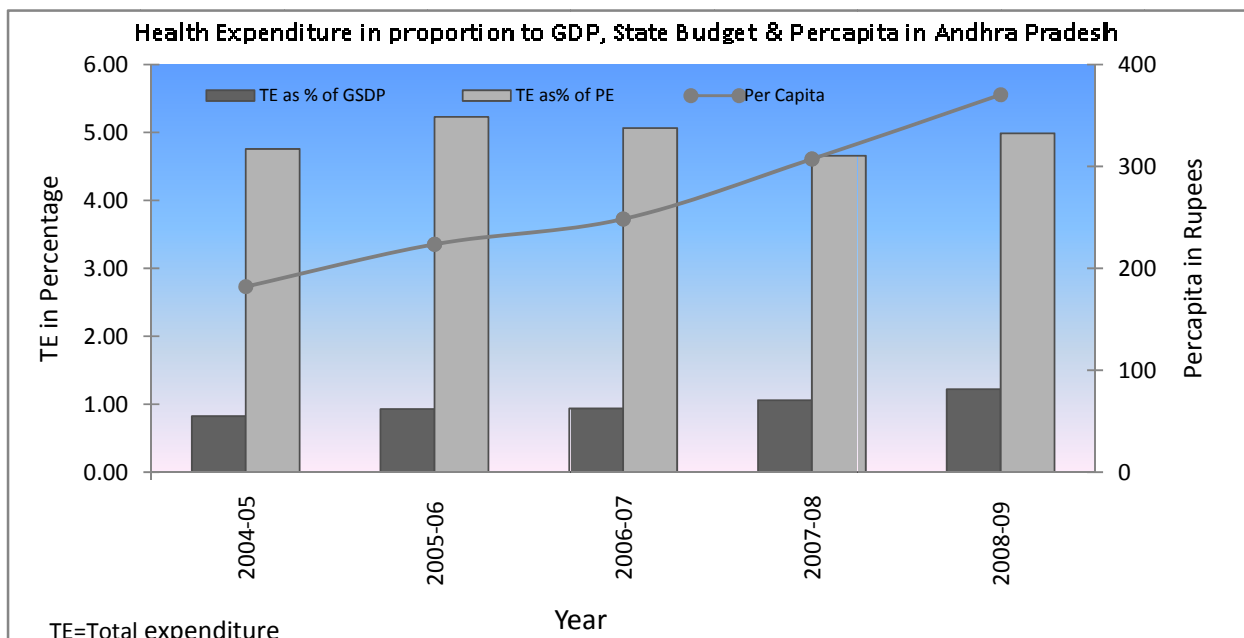


Fig 2: Trend of Health expenditure in relation to macroeconomic and population indicators

Table 19: State Health Expenditure in relation to GoAP Budget and Macroeconomic and demographic indicators

Year	Amount Rs in Crores								
	GSDP (Rs. Cr)		AP Govt	Population	State Health Budget Expenditure				
	Current Prices	Constant Prices			Current Prices	Constant Prices)	% of GSDP	% of PE	Per Capita (Rs)
2004-05	211802	176379	36722	79852000	1747	1455	0.82	4.76	182.17
2005-06	239683	194437	42577	80712000	2226	1805	0.93	5.23	223.69
2006-07	277286	216140	51342	81554000	2600	2026	0.94	5.06	248.48
2007-08	328405	239102	74672	82375000	3478	2532	1.06	4.66	307.36
2008-09 (RE)	371229	252318	90891	83178000	4533	3081	1.22	4.99	370.42

*Note: Percentage to GDP is calculated on current prices. Per capita is calculated on constant prices. Constant prices were estimated based on the GSDP constant prices*

### III. Estimation of Resource Envelope

#### 1. National and International Recommendations on Resource Allocations for Health:

The Commission on Macroeconomics and Health (CMH) set up by the World Health Organization(WHO) has recommended that countries increase mobilization of general tax revenues for health, on the order of 1 percent of GNP by 2007 and 2 percent of GNP by 2015<sup>3</sup>.

Along similar lines, the National Health Policy of India (NHP-2002) recommends a government health expenditure of 2 percent of GDP , by the year 2010. The NHP 2002 envisages that the State Governments would commit to provide 7 percent of the Budget for health by 2005 and to increase it to 8 percent of the Budget by 2010. Further, with the stepping up of the public health investment, the Central Government's contribution would rise to 25 percent from the existing 15 percent by 2010. The provisioning of higher public health investments will be contingent upon the increase in the absorptive capacity of the public health administration so as to utilize the funds gainfully<sup>4</sup>.

The National Commission on Macroeconomics and Health (NCMH) set up by the Government of India has recommended increasing government expenditure on health to about 3% of the GDP from current levels of 0.9% of the GDP to bring down household health expenditures by about 50% and bring about substantial health gains.<sup>5</sup>

#### 2. Trend analysis in Andhra Pradesh in comparison to national and international recommendations

Table 20 indicates the data, comparing public health expenditure by DoHMFW and total state health (including line departments and societies) in Andhra Pradesh to the recommendations of National Health Policy and National Commission on Macroeconomics and Health in proportion to the macroeconomic indicator like GSDP and total state budget. The DoHMFW expenditure in proportion to state budget is in declining trend upto 2007-08 and again raised to 3.52% in 2008-09 (RE). In respect of total expenditure on health including the line departments and societies in proportion to the State Budget, the growth is not uniform. It is increased from 4.76% in 2004-05 to 5.23% in

---

<sup>3</sup> World Health Organization. Investing in Health for Economic Development. Report of the Commission on Macroeconomics and Health, 2001

<sup>4</sup> Government of India. National Health Policy, Ministry of Health and Family Welfare, 2002

<sup>5</sup> Government of India. Report of the National Commission on Macroeconomics and Health, 2005

2005-06, but again declined to 5.06% in 2006-07 and further to 4.66% in 2007-08. But it is increased to 4.99% in 2008-09. When compared to GSDP, the proportion of DoHMFWS expenditure was decreased from 0.70% in 2004-05 to 0.67% in 2006-07, but again there is increased growth from 2007-08. It has increased to 0.86% in 2008-09 (RE). But in case of total state health expenditure, there is increasing trend which has risen from 0.82% in 2004-05 to 1.22% in 2008-09 (RE).

Table 20: State Health Expenditure in comparison to national recommendations

Year	% to State Budget			% to GSDP			
	DoHMFWS	State Health	Recommendations	DoHMFWS	State Health	Recommendations	
			NHP			NHP	NCMH
2004-05	4.06	4.76	7.00	0.70	0.82	2.00	3.00
2005-06	3.81	5.23	7.00	0.68	0.93	2.00	3.00
2006-07	3.64	5.06	7.00	0.67	0.94	2.00	3.00
2007-08	3.39	4.66	7.00	0.77	1.06	2.00	3.00
2008-09*	3.52	4.99	7.00	0.86	1.22	2.00	3.00

*Note: DoHMFWS covers only main health departments where as State Health includes DoHMFWS and also line departments like, Tribal Welfare, Labour, Women welfare and societies*

*\*2008-09 is with revised estimates*

### 3. Recommended Strategy for Projection to arrive at resource envelope:

In a policy environment which favors significant public investment in health, recent trends in health spending in AP reflect such priorities. Overall expenditure of DoHMFWS has grown at an average annual rate of 21.44% during 2004-09 as seen in Table 21. Overall expenditure on health through the Societies has grown at an average annual rate of 36.62% during 2004-09 as seen in Table 22. Robust growth in health expenditure has been primarily on account of increase in contribution from GoAP to the state health budget and Government of India to the Societies budget in addition to central assistance. External aid support for the AP Health Sector Reform Program accounted for about 3.66% of the total allocation to DoHMFWS in 2008-09(RE). Assessment of the potential contribution from each of these three major sources of funds in the medium term is therefore required to determine the resource envelope available to the DoHMFWS.

Table 21 – Average growth of expenditure year wise for DoHMFW

Year	Expenditure in '000				year wise Growth in %		
	GoAP	GoI	External	Total	GoAP	GoI	Total
2004-05	12569506	2024265	335424	14929195	NA	NA	NA
2005-06	14194815	1960957	83004	16238776	12.93	0.00	8.77
2006-07	16760053	1937404	194	18697651	18.07	0.00	15.14
2007-08	22298122	2226873	757167	25282162	33.04	14.94	35.22
2008-09 (RE)	28442958	2405814	1171000	32019772	27.56	8.04	26.65
				Average	22.90	11.49	21.44

*Note: The expenditure under External Aid is not uniform and hence, not considered for arriving annual growth. As there is negative growth in GoI expenditure for the years from 2004-05 to 2006-07, it has been treated as zero.*

NA=Not applicable

Table 22 – Average growth of expenditure year wise for the societies

Year	Rs.in '000			Growth in %		
	NRHM	SACS	Total	NRHM	SACS	Total
2004-05	0	235801	235801	NA	NA	NA
2005-06	2869100	505004	3374104	NA	114.17	NA
2006-07	3352200	855663	4207863	16.84	69.44	24.71
2007-08	5068700	644812	5713512	51.21	-24.64	35.78
2008-09	7845100	688608	8533708	54.78	6.79	49.36
			Average	40.94	41.44	36.62

*Note: As the NRHM started in 2005-06, the expenditure in 2004-05 is nil.*

NA=Not applicable

#### A. Government of Andhra Pradesh

The contribution of GoAP to DoHMFW resources will obviously depend on how its revenues grow in the future and the priority that the government places on health. In turn, a key determinant of revenue growth is economic performance within Andhra Pradesh, and indeed India as a whole. Higher economic growth is associated with increased tax revenues both at the center and the states. Tax revenues at the center; influence the flow of funds to Andhra Pradesh by means of revenue transfers under Finance Commission recommendations. The State's economy has shown robust growth in recent years.

The Finance Minister of AP has placed the Statement of Fiscal Policy for Andhra



Pradesh State during budget presentation in August 2009, out of which an extract as per the Macro-Economic Framework Statement<sup>6</sup>, says “the GSDP at constant (1999-2000) Prices for the year 2008-09 (Updated Advance) is estimated at Rs.2,52,318 crores as against Rs.2,39,102 crores for 2007-08 (Quick Estimates) reflecting a growth of 5.53%. During last Five Years, the GSDP of A.P on the average recorded 9.14%, and higher than the Annual Average Growth of GDP (All India) which is 8.49% only. Further, during last three years, the GSDP of AP was consistently more than 10%, which itself is a record. With more than 10% Growth for the past 3 years and due to this high Base effect, further Growth Rate in during 2008-09 is only 5.53%. In spite of Global recession and negative growth trends in the major world economies, Andhra Pradesh State is able to continue the growth path along with the Nation”.

Table 23 presents the Revenue Account of the State Govt. As against total revenues of Rs 26,868 crores for the year 2003-04, the total revenues for the year 2007-08 reached Rs.54143 crores. During the 2008-09(RE), the revenues are expected to reach Rs.69, 686 crores despite the State facing the impact of the global slowdown. The State earned revenue surplus for the year 2006-07 and 2007-08, while suffering only a marginal revenue deficit of Rs.64.11 crores in the year 2005-06. The revenue surplus projected during 2008-09(RE) is 2066.91 Cr.

Table 23-Receipts and Expenditure for the State of AP

Years	Receipts (Rs in Cr)	Expenditure (Rs in Cr)	Surplus (+)/ Deficit (-)
2003-04	26,868.50	29,830.14	-2,961.64
2004-05	28,749.50	31,307.34	-2,557.84
2005-06	34,851.19	34,915.30	-64.11
2006-07	44,245.47	41,438.40	2,807.07
2007-08	54,142.55	53,983.56	158.99
2008-09(RE)	69,685.95	67,619.04	2,066.91

*Base: Govt of AP Budget in brief 2009*

As per the latest report of RBI on State finances for the year 2008-09<sup>7</sup>, AP stood first in the country in respect of its allocation on plan expenditure, development expenditure, social sector expenditure and capital expenditure. As is evident from Table 24, even for the year 2007-08, AP stood first in respect of per capita expenditure on all the above sectors for States with more than three crores population.

<sup>6</sup> Statement of Fiscal Policy to be laid on the table of the A.P.State Legislature in August 2009 by Sri K.Rosaiah, Minister for Finance, GoAP

<sup>7</sup> State Finances-A Study of Budgets of 2008-09 by Reserve Bank of India

The above trends of economic growth and commitment of funds for social sector expenditure would normally indicate continued support for the health sector. However, the global economic down turn coupled with some amount of belt tightening as a result of fiscal and revenue deficit targets makes it difficult to predict the quantum of support to the health sector in the medium term. However, it is anticipated that at the minimum the State government will be able to meet an annual increase of 22.9% (see Table 21) which is an average increase of the last five years to contribute to the health department as State share. Further for the third year of MTEF i.e 2010-11, the HR cost will increase by 17% to meet the PRC benefit to the employees. (The Govt has extended 39% fitment benefit to the State Govt Employees which will be paid from the 1<sup>st</sup> April 2010 onwards. As the employees are already enjoying 22% interim relief and hence the balance 17% is being paid from the year 20010-11). The above increase in HR will automatically taken care by the above proposed increase of 22.9% annually as the HR component is around 50% of the total health expenditure.

#### B. Government of India

The fiscal situation at the center has consequences for the fiscal health of the government of Andhra Pradesh. This is because central government grants and shared taxes account for a significant proportion of revenue receipts of the Andhra Pradesh

Table 24 Per capita Expenditure of States -2007-08 (RE)

State	Per capita(Amount in Rupees)		
	DEV	SSE	CO
Non-Special Category			
1. Andhra Pradesh	6,607	3,505	1,571
2. Bihar	2,294	1,465	744
3. Chhattisgarh	5,390	3,527	1,494
4. Goa	16,371	8,302	4,409
5. Gujarat	5,518	3,146	1,485
6. Haryana	7,307	3,761	1,690
7. Jharkhand	4,272	2,660	1,249
8. Karnataka	5,858	3,104	1,548
9. Kerala	5,476	3,168	1,424
10. Madhya Pradesh	3,343	1,923	979
11. Maharashtra	5,928	3,478	1,474
12. Orissa	3,928	2,272	1,021
13. Punjab	6,862	3,970	1,784
14. Rajasthan	3,909	2,390	1,110
15. Tamil Nadu	5,536	3,235	1,439
16. Uttar Pradesh	2,988	1,703	995
17. West Bengal	3,687	2,133	959
Special Category			
1. Arunachal Pradesh	24,909	11,581	8,419
2. Assam	4,759	3,019	1,167
3. Himachal Pradesh	9,599	5,553	2,496
4. Jammu and Kashmir	8,639	4,998	3,870
5. Manipur	10,127	5,557	4,787
6. Meghalaya	9,972	5,200	2,279
7. Mizoram	19,100	9,806	5,525
8. Nagaland	10,996	6,361	4,458
9. Sikkim	33,537	19,400	11,773
10. Tripura	7,640	4,718	3,421
11. Uttarakhand	7,974	4,535	2,745
All	4,725	2,717	1,316

DEV: Development expenditure, SSE: Social Sector Expenditure, CO: Capital Outlay.

Source: Based on budget documents of State govts.

Government. Further GOI contributions finance the national health and family welfare programmes at the State level. The central government share in the revenue receipts of GoAP has declined very marginally from about 21.07% in 2004-05 to 18.9% in 2008-09(RE). But, as seen from Table -1, the relative share of GoI contributions in the DoHMFw budget declined from about 13.56% in 2004-05 to 7.51% in 2008-09. The forecast of the GoAP budget indicates a decline in growth rate of central contributions in the medium term. While budgetary support to DoHMFw from central sources is likely to reflect similar trends, it is anticipated that with additional funds that are likely to be devolved under the Finance Commission grants, central contributions to the State budget may increase at a rate of about 11.5% which is an average annual increase. (See Table 21)

Table 25-Central share in Revenue receipts

Year	State Revenue receipts	Share of central taxes	%
2004-05	2874950	605851	21.07
2005-06	3485119	695086	19.94
2006-07	4424547	886600	20.04
2007-08	5414255	1118364	20.66
2008-09 (RE)	6968595	1316846	18.90

Source: Govt of AP Budget in Brief 2009

The National Common Minimum Programme of the present UPA government at the centre envisages an increase in public spending on health to 2-3 per cent of GDP by increased contributions from the Central and State Governments. The articulation of this commitment has been primarily through the establishment of the National Rural Health Mission (NRHM) which seeks to provide effective healthcare to rural population throughout the country. The Mission is conceived as an umbrella programme subsuming all the existing programmes of health and family welfare except the National AIDS Control Program (NACP). The NRHM mission document commits to a 30% annual increase of funds for activities subsumed under NRHM during the period 2005-06 to 2011-12. This commitment is reflected in the allocation of NRHM funds to AP in the last three years at an average annual growth rate of about 41%.(see Table 22) Forecast of GoI contribution to NRHM in the medium term is based on a growth rate of 30% per year.

GoI contribution to the NACP is forecast based on the State PIP for Phase-III of the programme. It is proposed to adopt the same growth rate of 6.79% which is over 2007-08.

### C. External Aid:

The third way to enhance funding for DOHMFV and allied institutions is increased international support, whether in the form of grants or loans. External resources played a major role in the significant increase in health spending during the nineties. However with the major external aided projects having been completed, the relative contribution of external resources to the DoHMFV budget has steeply declined. As seen from Table 13, the contribution from external sources was declined from 2.25% to the total DoHMFV spending to 0.51% in 2005-06 and no receipt in 2006-07. This has increased to about 3.66 % in 2008-09(RE) on account of DfID support to the APHSRP. However, with the DfID support to the APHSRP ending in 2009-10, it is unlikely that the State would benefit from any additional external aid.

### 4. Baseline Health Expenditure Projections for the Medium Term

Baseline projections are forecasts of health expenditure in the event there are no major policy changes regarding health expenditure. Baseline health expenditure projections are pivotal in the estimation of the resource gap or the additional resources that has to be generated by the GoAP to fund the medium term health strategies. Baseline projections may be done on the basis of growth rate of health expenditure in the past, an assumed relationship with projected GSDP or public expenditure growth, projected demographic changes or a hypothesized rate of growth in the medium term.

Hence, the forecast of resource availability for the medium term is based on the following assumptions.

- Govt of Andhra Pradesh allocation to the State health budget (DoHMFV) will increase at a rate of 22.9% annually.
- Govt of India contribution to the State health budget will increase at a rate of 11.5% annually
- Govt of India contribution to NRHM will increase at a rate of 30% annually
- Contribution to the NACP in the State will increase at 6.79% annually.
- External aid vide DfID grant will contribute Rs.127 crore to the health budget only for 2009-10. Hence, no projection has been made from the year 2010-11 onwards

### 5. Estimation of Resource Envelope for Health in the Medium Term

The forecast of allocation to the health department has been arrived based on the medium term fiscal targets, current trends in health spending and commitments of different sources of funds in the medium term. In the next chapter, the bottom-up estimates of

the cost of medium term health strategies have been arrived. Table 26 shows the reconciliation of bottom up estimates and the aggregated resources available as arrived based on the above assumptions. Thereby the resource gap is estimated by finding the difference between the targeted increase in the health expenditure and the projected annual increase in baseline health expenditure.

Additional resources of about Rs. 5093 Cr is anticipated to be available in the next three years for new programs or scaling up of existing programs.

Table 26: Baseline Health expenditure and resource envelope (Rs in Cr)

Projections	2008-09 (RE)	2009-10 (BE)	2010-11	2011-12	2012-13
Baseline Health expenditure	3202	3821	4507	5503	6722
Cost of MTHS*		0	1569	1621	1903
Total Health Expenditure (THE)	3202	3821	6077	7124	8625
Resource Gap	0	0	1569	1621	1903
Percapita THE	262	289	425	461	516
THE as % of PE	3.52	3.69	5.16	5.31	5.65
THE as % of GSDP	0.86	0.91	1.28	1.33	1.42

- *Costing of MTHS is worked out in detail in the next chapter*

Table 27 presents the abstract of Medium Term expenditure Framework by source of funds.

Table 27: Medium Term Expenditure Framework by Source of Funds (Rs in cr)

Sources of Fund	2008-09(RE)	2009-10(BE)	2010-11	2011-12	2012-13
Govt of Andhra Pradesh	2844	3405	4929	6064	7524
Govt of India	241	289	1147	1059	1101
External aid	117	127	0	0	0
Total	3202	3821	6077	7124	8625
<b>% Share</b>					
Govt of Andhra Pradesh	88.83	89.11	81.12	85.13	87.24
Govt of India	7.51	7.56	18.88	14.87	12.76
External aid	3.65	3.32	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00

*Note: External Aid may not be available from the year 2010-11 onwards, hence not provisioned.*

The detailed classifications for the above total amount from the above sources of funds are worked out as per NHA framework in the last chapter both for medium term strategies and medium term frame work.

#### IV. Costing of Medium Term Health Strategies (MTHS)

The Medium Term Strategy has been developed based on “Facility Survey of Public Health Institutions in Andhra Pradesh, 2008<sup>8</sup> conducted by Indian Institute of Health and Family Welfare (IIHFW), Hyderabad, proposals sent by DoHMFW to GoI seeking central assistance through XIII Finance Commission grants and the proposals from HODs making projections for the next budget years. The facility survey by IIHFW was conducted to assess the availability of infrastructure and to identify the gaps of manpower as per Indian Public Health Standards (IPHS) norms.

Costing has been done in general as follows:

- Resource categories based on current budgetary classification of Andhra Pradesh.
- Capital cost like construction of new PHCs, CHCs and their strengthening is based on the proposals from the concerned Heads of Departments and also based on the cost arrived in the report of the National Commission on Macroeconomic Health 2005 with 10% enhancement.
- Equipment cost is based on the proposals from the concerned Heads of Departments.
- The mean cost of the starting basic pay and highest basic pay for the pay scale is calculated to estimate approximate gross pay for filling the new posts for first year and 10% increase in subsequent years.
- The salaries and wages were calculated based on pay scales as recommended in the draft 9th PRC report which is available in [http://www.apfinance.gov.in/html/9th-prc-report\\_2009.htm](http://www.apfinance.gov.in/html/9th-prc-report_2009.htm)
- The projections were made for the years from 2010-11 to 2012-13 as the revised and budget estimates were already available for the years 2008-09 and 2009-10 respectively.

---

<sup>8</sup> Report on “Facility Survey of Public Health Institutions in Andhra Pradesh, 2008 by, Indian Institute of Health and Family Welfare, Hyderabad.

## 1. Strengthening of Primary Health Care Services:

- a. Sub – Centers (SC): There are 12,522 sub-centers in the state. The MoHFW made a concerted effort and developed the guidelines for comprehensive standards for sub-centers and prescribed IPHS norms to maintain an acceptable standard quality of care. IPHS has proposed to increase the number of ANMs (i.e Multipurpose Health Asst (MPHA)) from existing one ANM per center to two ANMs. Presently 93% of sub-centers have at least one ANM. However the percentage of SCs with only one ANM is 75.4% and with two ANMs is 17.5% leaving the gap of 11,300 ANMs to be recruited. Table 28 shows the requirement of amount for filling the gap.

Table 28: Costing on filling the posts of MPHAs

Post	No of Posts	Cost per annum in Rs	Rs in Crores			
			2010-11	2011-12	2012-13	Total
MPHA (ANMs)	11301	235320	88.65	186.15	293.42	568.21

- b. Primary Health Care Centers:

- i. New PHCs:

As per GoI norms there is requirement of 1 PHC per 30000 populations in rural areas and 1 PHC/ 20000 populations in tribal areas. Based on GoI norms AP has a requirement of 1924 PHCs. Currently AP has 1570 PHCs. 128 are in the process of being upgraded to CHCs. There is thus a gap of 354 PHCs in the state. Costing is done as per costing norms prescribed by the National Macroeconomic Commission on Health<sup>9</sup> and State govt

- ii. Strengthening existing PHCs:

This includes filling up of sanctioned posts or new posts, replacing/providing equipment, upgrading infrastructure, and provision of drugs and supplies.

<sup>9</sup> Report of Macroeconomic Commission of India, 2005, Government of India

- Staff: As per IPHS Standards, three medical officers and three midwife/nurses are to be provided per PHC. Present availability of medical officers is 2134 leaving a gap of 2192 to be filled. Similarly the availability of nurses/midwife is 2174 leaving the gap of 2152 to be provided. The costing of salaries has been worked out as per the Revised Pay Scales.
- Infrastructure and Equipment: As per the facility survey, 81.1% of the infrastructure like water, electricity, telephone, laboratory, labour room is available and 69.9% of the equipment like deep freezer, vaccine carrier, microscope, needle cutter, MTP suction apparatus, labour room table and other equipment is available. Over all there is gap in 30% equipment and 20% infrastructure in PHCs. Hence costing has been done based on the report of commission on macroeconomic health 2005.
- Supplies & Materials: Further there is 73.5% availability of supplies like various IUD insertion kit, normal delivery kit, standard surgical kit, mounted lamp, refrigerator, computer with internet, IFA large tablet, ORS etc. National Macroeconomic Commission recommends an allocation of Rs. 3 lakhs per annum/PHC on drugs and supplies. It is estimate that PHC currently receives on an average about 2 lakhs/PHC in a year. An additional allocation of Rs. 1 lakh per PHC/ annum is proposed for the same.
- Sukhibhava: This scheme has been designed to support the poor women to opt for institutional deliveries and to reduce infant and maternal mortality rate. This is being implemented since 1999 by paying Rs 300 to pregnant woman who is below poverty line and comes to Govt hospital or PHC for safe delivery. An amount of Rs 20.00 Crores has been sought from GoI during 2009-10. Provision was made for the years in the medium term

Table 29 shows the details of budget required for the gap, resource category wise for the primary care.



Table 29: Costing primary health care services Resource Category wise (Rs in Crores)

Resource Category	unit	Unit cost	Rs in crores			
			2010-11	2011-12	2012-13	Total
<b>New PHCs</b>						
Capital cost	354	0.8	94.40	94.40	94.40	283.20
Salaries and Wages	354	0.1185	13.98	29.36	46.28	89.63
Drugs and Materials	354	0.033	3.89	8.18	12.89	24.96
Operation and Administration	354	0.0163	1.92	4.04	6.37	12.33
<b>Sub-Total for new PHCs</b>			<b>114.20</b>	<b>135.98</b>	<b>159.94</b>	<b>410.12</b>
<b>Strengthening of existing PHCs</b>						
Capital Cost-Infrastructure & Equipment (Unit cost 0.106 & gap is 25%)	1442	0.0265	12.74	12.74	12.74	38.21
Medical Officers – Salaries & wages	2192	405900	29.66	62.28	98.17	190.11
Nurses-Salaries and wages	2152	297660	21.35	44.84	70.68	136.87
Materials and Supplies (unit cost 0.01 and gap is 26.5%)	1442	0.00265	3.82	4.20	4.62	12.65
<b>Sub-total for Strengthening PHCs</b>			<b>67.57</b>	<b>124.06</b>	<b>186.20</b>	<b>377.83</b>
Sukhibhava			20.00	20.00	20.00	60.00
<b>Grand Total</b>			<b>201.77</b>	<b>280.04</b>	<b>366.14</b>	<b>847.96</b>

## 2. Secondary Health Care Services

Secondary care services are provided through 18 district hospitals, 61 Area Hospitals, 167 CHCs and 10 specialty hospitals of APVVP . Currently there are 167 CHCs. 128 PHCs are identified for upgrading to CHCs. Thus there are 295 CHCs in the state. As per GOI norms there is requirement for 438 CHCs. Therefore an additional 143 CHCs have to be created.

APVVP has estimated the requirement of funds for

- Creation of 143 CHCs (30 bedded) for an amount of Rs 467.31 Cr
- Upgradation of the equipment and operational costs in the upgraded 128 PHCs to that of CHCs (30 bedded) for an estimated amount of Rs 65.28 Cr as per the norms of APHMIDC and APVVP.
- Infrastructure and Equipment: Separate emergency/casualty room is available in 60% of the CHCs(30 beds), and separate ward for male & female is available upto 69% of the CHCs. The availability of incinerator is 10%, generator is 65%, telephone & vehicle is 48%. Further the essential furniture like examination table, delivery table, and saline stand, stretcher on trolley is available upto 20% of the CHCs. Other equipment and kits is available ranging from 30 to 80% and on an average we can take it as 50%. The status is slightly better in CHCs with 50 beds. However overall, we can assume 50% of the CHCs needs strengthening the infrastructure and equipment. The cost estimated at Rs 36.74 Cr
- Strengthening of Dist Hospitals, Area Hospitals and CHCs in terms of increasing the additional bed strength of 2810 covering 52 hospitals for an amount of Rs 358.22 Cr as per the existing norms.
- Staff: As per the facility survey, there is gap of human resources as shown in the Table 31 which required to be filled.

Costing of above requirements is in Table 30. The costing is based on both the estimates given by APVVP and also based on National Macroeconomic for Health.

Table 30: Costing on Secondary health care services

Resource Category	Units	Unit Cost	2010-11	2011-12	2012-13	Total
<b>New CHCs</b>			<b>124.89</b>	<b>154.77</b>	<b>187.65</b>	<b>467.31</b>
Capital cost	143	2.05	97.72	97.72	97.72	293.15
Salaries	143	0.4	19.07	40.04	63.11	122.22
Drugs and Operational costs	143	0.11	5.24	11.01	17.36	33.61
Maintenance	143	0.06	2.86	6.01	9.47	18.33
<b>PHC Upgradation to CHC</b>			<b>21.76</b>	<b>21.76</b>	<b>21.76</b>	<b>65.28</b>
Drugs and Operational costs	128	0.11	14.08	14.08	14.08	42.24
Maintenance	128	0.06	7.68	7.68	7.68	23.04
Strengthening of Secondary care in Area Hospitals, dist hospitals, CHC in terms of increase of beds						
<b>No of beds</b>	<b>2810</b>		<b>119.41</b>	<b>119.41</b>	<b>119.41</b>	<b>358.22</b>
<b>Strengthening of Infrastructure and Equipment (Unit cost is 0.44 and gap is 50%)</b>	<b>167</b>	<b>0.22</b>	<b>12.25</b>	<b>12.25</b>	<b>12.25</b>	<b>36.74</b>
<b>HR Cost - New Posts*</b>			<b>41.79</b>	<b>87.75</b>	<b>138.31</b>	<b>267.85</b>
Total			320.09	395.94	479.37	1195.40

\*The costing on human resource requirements worked out as per the Table 31

Table 31: Costing on Human Resource requirements for secondary health care services:

Post	Gap-Posts to be filled			Cost	Rs in Crores			
	CHCs	AHs	Total		2010-11	2011-12	2012-13	Total
<b>Medical Staff</b>								
General Surgeons	106	80	186	507660	3.15	6.61	10.42	20.18
Physicians	106		106	507660	1.79	3.77	5.94	11.50
Medical Specialists		101	101	507660	1.71	3.59	5.66	10.96
Obstetrics and Gynecologists	61	32	93	405840	1.26	2.64	4.16	8.06
Pediatrician	91	64	155	405840	2.10	4.40	6.94	13.44
Eye Surgeons	18		18	405840	0.24	0.51	0.81	1.56
Anesthetist	96	67	163	405840	2.21	4.63	7.30	14.13
Sub Total	478	344	822		12.45	26.15	41.22	79.83
<b>Para medical Staff</b>								
Staff Nurses	253	1726	1979	297660	19.64	41.23	64.99	125.86
Medical Record Officers		50	50	313380	0.52	0.52	1.10	1.73
Statisticians		56	56	268380	0.50	1.05	1.66	3.21
Physiotherapists		37	37	354600	0.44	0.92	1.45	2.80
Radiographers	42	121	163	268380	1.46	3.06	4.83	9.35
Lab Technicians	232	169	401	254700	3.40	7.15	11.27	21.82
ECG Technicians		52	52	160860	0.28	0.59	0.92	1.79
Pharmacist	234		234	254700	1.99	4.17	6.58	12.73
Ophthalmic Assts	106		106	313380	1.11	2.33	3.67	7.10
Sub Total	867	2211	3078		29.33	61.60	97.09	188.02
Grand Total	1345	2555	3900		41.79	87.75	138.31	267.85

### 3. Tertiary Care Services:

Strengthening Tertiary Care Sector: The Govt has availed loans to strengthen medical colleges as per MCI norms involving expenditure on construction of buildings. Key expenditure will be for meeting the balance cost of construction, procurement of equipment etc., The following are the new schemes proposed by the Director of Medical Education for 88.50 cr for the year 2010-11. Maintenance of 10% was added for subsequent years totaling Rs 106.20 upto 2012-13.

- Construction of Maternity Hospital Block II at Petla Burg, Hyderabad and proposed Rs 16.50 Cr for the year 2010-11
- Construction of new college of Nursing and Hostels at Gandhi Hospital Premises, Secunderabad and an amount of Rs 5.00 Cr has been proposed in the year 2010-11
- Construction of Super Specialty Hospital/Block at Vijayawada and an amount of Rs 5.00 has been proposed.
- An amount of Rs 2.00 Cr has been proposed for operationalisation of Super specialty Block at KGH Visakhapatnam in the year 2010-11
- Construction of new medical college and teaching General hospital at Nizamabad at a cost of Rs 25.00 cr
- Construction of buildings for Visakha Institute of Medical Sciences, Visakhapatnam at a cost of Rs 25.00 Cr
- An amount of Rs 10.00 Cr has been proposed in the year 2010-11 for establishment of National Accreditation Bureau.

The following Table 32 shows the details worked out for the above components.

Table 32: Costing on Tertiary care the resources (Rs in Crores)

Resource Costs	Rs in Crores			
	2010-11	2011-12	2012-13	Total
National Accreditation Bureau	10.00	1.00	1.00	12.00
Capital-Major Works and Construction	78.50	7.85	7.85	94.20
Total (Rs. Crore)	88.50	8.85	8.85	106.20

#### **4. Financial Protection for the Poor - Arogyasri:**

This is a unique model that empowers the rural poor who are in below poverty line to access best of the medical intervention for the treatment of serious ailments requiring hospitalization and surgery through identified health care providers. The stakeholders include 1.65 lakh BPL families and the entire operation is cashless for them. The requirement is Rs 925 Cr for Arogyasri I and Rs 400 Cr for Arogyasri II. Totally the requirement is Rs 1325 Cr. In the year 2009-10(BE), provision was made for an amount of Rs 925 Cr. It is proposed to seek GoI assistance for an amount of Rs 700 Cr every year

#### **5. Trauma Care:**

This scheme is to create facilities to provide medical care within reach for immediate attention within the golden hour in highway accidents to save valuable lives. An amount of Rs125 Cr was budgeted in 2010-11 for which assistance sought from GoI.

#### **6. Health Statistics and Research**

NHP 2002 Policy envisages an increase in Government-funded health research to a level of 1 percent of the total health spending by 2005; and thereafter, up to 2 percent by 2010. Domestic medical research would be focused on new therapeutic drugs and vaccines for tropical diseases, such as TB and Malaria, as also on the sub-types of HIV/AIDS prevalent in the country. Research programmes taken up by the Government in these priority areas would be conducted in a mission mode. Emphasis would also be laid on time-bound applied research for developing operational applications. This would ensure the cost-effective dissemination of existing / future therapeutic drugs/vaccines in the general population. Private entrepreneurship will be encouraged in the field of medical research for new molecules / vaccines, inter alia, through fiscal incentives.

The Policy also envisages the completion of baseline estimates for the incidence of the common diseases – TB, Malaria, and Blindness – by 2005. The Policy proposes that statistical methods be put in place to enable the periodic updating of these baseline estimates through representative sampling, under an appropriate statistical methodology. The policy also recognizes the need to establish, in a longer time-frame, baseline estimates for non-communicable diseases, like CVD, Cancer, Diabetes; and accidental injuries, and communicable diseases, like Hepatitis and JE. NHP-2002 envisages that, with access to such reliable data on the incidence of various diseases, the public health system would move closer to the objective of evidence-based policy-making.

At present only 0.22% of the health budget is being spent on Health Statistics and Research. Hence, it is proposed to allocate 1% of the health budget for Health Statistics and Research.

## 7. National Disease Surveillance Network (NSDN)

This Policy envisages the full operationalization of an integrated disease control network from the lowest rung of public health administration to the Central Government, by 2005. The programme for setting up this network will include components relating to the installation of data-base handling hardware; IT inter-connectivity between different tiers of the network; and in-house training for data collection and interpretation for undertaking timely and effective response. This public health surveillance network will also encompass information from private health care institutions and practitioners. It is expected that real-time information from outside the government system will greatly strengthen the capacity of the public health system to counter focal outbreaks of seasonal diseases. GoAP recommendation is to allocate 2% of the normal departmental plan budget. However, due to resource constraints, it is proposed 1% of the budget for the network.

Table 33 shows the costing details for the Arogyasri, Trauma care, Health statistics and Research and National Disease Surveillance Network (NSDN).

Table 33: Costing on Health Statistics & Research, NDSN, Arogyasri and Trauma Care

Resource Category	Rs in Crores			
	2010-11	2011-12	2-12-13	Total
Health Statistics and Research	32.02	35.22	38.74	105.99
National Disease Surveillance Network	13.31	14.64	16.11	44.06
Trauma Care	125.00			125.00
Arogyasri	700.00	700.00	700.00	2100.00

Thus, the total cost has been arrived for the Medium Term Health Strategies for all types of functions. The abstract details are given in the Table 34. These are the additional costs to be raised which are the bottom up estimates required to implement to fill the critical gaps in infrastructure and also in human resource requirement and as per the health policy including the standards like Indian Public Health Standards.

Further, the the additional costs of strategies have been analysed and fit into the NHA framework for each category like function, resource costs and providers.

Table34: Summary of the total additional costs for operationalizing MTS

MTHS	Rs in Crores			
	2010-11	2011-12	2012-13	Total
<b>Primary Care Services</b>				
Sub Center	88.65	186.15	293.42	568.21
Creation of New PHC	114.20	135.98	159.94	410.12
Strengthening PHC	67.57	124.06	186.20	377.83
Sukhibhava	20.00	20.00	20.00	60.00
<b>Sub-Total</b>	<b>290.41</b>	<b>466.20</b>	<b>659.56</b>	<b>1416.17</b>
<b>Secondary Care Services</b>				
Creation of New CHCs	124.89	154.77	187.65	467.31
Upgrading of PHCs	21.76	21.76	21.76	65.28
Strengthening of beds	119.41	119.41	119.41	358.22
Strengthening of Infra and equip	12.25	12.25	12.25	36.74
HR Costs - New Posts	41.79	87.75	138.31	267.85
<b>Sub-Total</b>	<b>320.09</b>	<b>395.94</b>	<b>479.37</b>	<b>1195.40</b>
<b>Tertiary Care Services</b>				
National Accreditation Bureau	10.00	1.00	1.00	12.00
Capital Cost	78.50	7.85	7.85	94.20
<b>Sub-Total</b>	<b>88.50</b>	<b>8.85</b>	<b>8.85</b>	<b>106.20</b>
Trauma Care	125.00	0.00	0.00	125.00
Arogyasri	700.00	700.00	700.00	2100.00
<b>Sub-Total</b>	<b>825.00</b>	<b>700.00</b>	<b>700.00</b>	<b>2225.00</b>
<b>Governance</b>				
Health Statistics and Research	32.02	35.22	38.74	105.99
National Disease Surveillance Network	13.31	14.64	16.11	44.06
<b>Sub-Total</b>	<b>45.33</b>	<b>49.86</b>	<b>54.85</b>	<b>150.04</b>
<b>Total Additional Resources</b>	<b>1569.33</b>	<b>1620.85</b>	<b>1902.63</b>	<b>5092.81</b>



## V. Medium Term Expenditure Framework

The medium term health expenditure framework describes the proposed distribution of DOHMFWS health expenditure for the next three years in terms of:

- **Functions of Care:** Functions refer to the services or activities that providers deliver with their funds. Examples include primary care, secondary care, tertiary care, family welfare services, disease control, health care administration, education, research, etc.
- **Providers:** Providers are the end users or final recipients of health care funds. They are the entities which deliver health services. In the context of DOHMFWS, they include subcenters, PHCs, secondary hospitals, tertiary hospitals, academic and research organizations, government administrators, drug control administration etc
- **Resource Costs:** the factors or inputs used by providers or financing agents to produce the goods and services consumed or the activities conducted in the system. This includes value of labour (H R Cost), pharmaceutical supplies, equipment and buildings, compensation under sukhibhava and so on.

In developing the expenditure framework the following assumptions are used:

- Given recent trends, the health expenditure is set to grow at a rate similar to that of the last 5 years i.e 22.9% by Govt of AP and 11.5% by Govt of India even in the absence of any special attention to the health sector.
- Since there is very little flexibility in the existing budget for reallocation of funds it is assumed that the additional funds will be proportionately distributed among current activities of the department.
- Figures for the first two years of MTEF i.e 2008-09 (RE) and 2009-10 (BE), the budget amounts have been adopted.
- The requirement of funds as arrived from Medium Term Strategies is to be mobilized by the government.

## 1. Expenditure Framework for Medium Term Strategies

### A. Classification of Additional Support by Functions:

Table 35 presents the details on proposed allocations as per the functional categories. The projection is more for Social Protection scheme like Arogyasri for which the assistance is sought from Govt of India. i.e 44.61% in 2010-11, 43.19% in 2011-12 and 36.79% in 2012-13. Next major share is projected for primary and secondary health care services.

Table 35: Proposed Allocation of Projected Expenditure by Functions (Rs. Crore)

Function	2010-11	%	2011-12	%	2012-13	%
Direction and Administration	23.31	1.49	15.64	0.96	17.11	0.90
Primary Health Care services	415.41	26.47	466.20	28.76	659.56	34.67
Secondary Health Care Services	320.09	20.40	395.94	24.43	479.37	25.20
Tertiary Health Care services	78.50	5.00	7.85	0.48	7.85	0.41
Health Statistics and Research	32.02	2.04	35.22	2.17	38.74	2.04
Social Protection Schemes	700.00	44.61	700.00	43.19	700.00	36.79
Total	1569.33	100.00	1620.85	100.00	1902.63	100.00

### B. Classification of Additional support by Providers

The major projection is on Arogyasri to be extended by the health care provider Arogyasri Health Trust which works out to more than 36.79% in all the years. Next major health care providers are under primary care services like PHCs, Sub centers, Family welfare centers. Further, APVVP Hospitals accounts for more than 20% of the total projection in all the years for creating infrastructure and meeting HR cost. Table 36 gives the details.

### C. Classification of Additional support by Resource Categories

Major share goes to compensation under Arogyasri, HR Cost and Capital cost-Major works in all the years. i.e more than 37.84 % in all the years goes for compensation. About 14.30% to 37.37% goes for HR cost, and further about 10.51% to 17.24% goes for major works which involves creation of infrastructure. Table 37 gives the details

Table36: Proposed Allocation of Projected Expenditure by Providers (Rs. Crore)

Classification of Providers		2010-11	%	2011-12	%	2012-13	%
<b>Code</b>	<b>Providers</b>						
5	Sub Centers/MCH Centers /Family Welfare Centers	88.65	5.65	186.15	11.49	293.42	15.42
6	Hospitals and Dispensaries (DH)	125.00	7.97	0.00	0.00	0.00	0.00
9	PHC	181.77	11.58	260.04	16.04	346.14	18.19
10	Hospitals (APVVP)	320.09	20.40	395.94	24.43	479.37	25.20
13	Teaching Hospitals	88.50	5.64	8.85	0.55	8.85	0.47
16	Collective Health Services (Disease Control)	13.31	0.85	14.64	0.90	16.11	0.85
17	Collective Health Services (Family Welfare)	20.00	1.27	20.00	1.23	20.00	1.05
22	Aarogyasri Health Trust	700.00	44.61	700.00	43.19	700.00	36.79
24	Training and Research Institutions	32.02	2.04	35.22	2.17	38.74	2.04
Total		1569.33	100.00	1620.85	100.00	1902.63	100.00

Table 37: Proposed Allocation of Projected Expenditure by Resource Categories (Rs. Cr)

Code	Resource costs	2010-11	%	2011-12	%	2012-13	%
1	Human Resources Cost	224.49	14.30	451.43	27.85	710.96	37.37
3	Operations and Administrative Expenses	47.25	3.01	53.90	3.33	61.22	3.22
4	Drugs, Materials and Supplies	27.04	1.72	37.47	2.31	48.95	2.57
5	Machinery & Equipment	149.98	9.56	24.98	1.54	24.98	1.31
6	Maintenance and Minor Works	129.95	8.28	133.09	8.21	136.55	7.18
7	Major Works	270.62	17.24	199.97	12.34	199.97	10.51
9	Transfers to Households (Compensation)	720.00	45.88	720.00	44.42	720.00	37.84
Total		1569.33	100.00	1620.85	100.00	1902.63	100.00

## 2. DoHMFWS Medium Term Expenditure Framework

The DoHMFWS medium term framework describes the distribution and uses of the entire DoHMFWS expenditure projected for the medium term. This will be a function of the existing trends in health expenditure and the proposed allocation of additional support.

### A. Medium Term Projected Expenditure by Functions

The projected expenditure by various functions is given below in Table 38. There is increasing trend in projection for social protection schemes and secondary care centers. Under Social protection scheme, it has increased from 15.51% in 2008-09 to 27.39% in 2012-13. Similarly under secondary health care it has increased from 11.04% in 2008-09 to 13.09 in 2012-13 for creation of infrastructure. In respect of primary care and tertiary care, there is declining trend in projections and this could be on account of social protection schemes and infrastructure cost.

Table 38: Medium Term DoHMFWS Expenditure (Projected) by Functions of Care

Function	DoHMFWS expenditure in Crores					% Share	
	2008-09	2009-10	2010-11	2011-12	2012-13	2008-09	2012-13
Direction and Administration	113.79	126.45	172.46	197.73	239.53	3.55	2.78
Primary Health Care	1243.83	1353.33	2011.67	2414.99	3040.13	38.84	35.25
Secondary Care	353.47	369.48	755.89	927.99	1129.31	11.04	13.09
Tertiary Care	515.63	514.26	685.08	748.39	912.46	16.10	10.58
Medical Education	264.62	285.92	337.24	411.72	502.94	8.26	5.83
Health Statistics and Research	6.89	9.72	43.48	49.21	55.84	0.22	0.65
Social Protection Schemes	496.75	945.00	1814.63	2060.80	2362.29	15.51	27.39
Repayment of Loans	65.84	66.00	77.85	95.04	116.10	2.06	1.35
Others	141.25	151.24	178.39	217.79	266.05	4.41	3.08
<b>Total</b>	<b>3202.08</b>	<b>3821.41</b>	<b>6076.69</b>	<b>7123.66</b>	<b>8624.64</b>	<b>100.00</b>	<b>100.00</b>

## B. Medium Term Projected Expenditure by Resource Categories

The projected expenditure by resource costs is given in Table 39. There is increasing trend in projections for the categories like maintenance & minor works, major works, Grants-in-Aid and compensation (Transfer to households). Under Maintenance and minor works, the projected expenditure has increased from 2.72% in 2008-09 to 3.53% in 2012-13. Under major works, it has increased from 3.42% in 2008-09 to 3.68% in 2012-13. Similarly under compensation, it has increased from 1.13% to 8.60%. Under Grants-in-Aid, it has increased from 24.26% to 24.74%. But, there is marginal declining trend in the projections under HR Cost and Materials and supplies and possibly, this could be due to more allocations to infrastructure cost and compensation.

Table 39: Medium Term DoHMFWS Expenditure (Projected) by Resource Categories

Resource category	DoHMFWS Expenditure in Crores					% Share	
	2008-09	2009-10	2010-11	2011-12	2012-13	2008-09	2012-13
Human Resources Cost	1650.01	1911.71	2479.36	3204.28	4073.73	51.53	47.23
Scholarships and Stipends	29.65	33.81	39.88	48.69	59.48	0.93	0.69
Operations and Administrative Expenses	151.42	150.65	224.94	270.83	326.21	4.73	3.78
Drugs, Materials and Supplies	256.39	242.81	313.43	387.11	476.05	8.01	5.52
Machinery & Equipment	50.26	31.46	187.10	70.29	80.33	1.57	0.93
Maintenance and Minor Works	87.20	95.63	242.75	270.81	304.78	2.72	3.53
Major Works	109.49	66.90	349.53	296.31	317.65	3.42	3.68
Grant-in-Aid	776.81	1213.00	1430.74	1746.72	2133.72	24.26	24.74
Transfers to Households (Compensation)	36.30	12.50	734.74	738.00	741.99	1.13	8.60
Other Expenditure	54.44	62.93	74.22	90.62	110.69	1.70	1.28
<b>Total</b>	<b>3201.98</b>	<b>3821.41</b>	<b>6076.69</b>	<b>7123.66</b>	<b>8624.64</b>	<b>100.00</b>	<b>100.00</b>

## C. Medium Term Projected Expenditure by Providers

The projected expenditure by various providers is given in Table 40. There is increasing trend in projections for the health care providers like Sub-centers / Family Welfare centers, PHCs, APVVP Hospitals, Arogyasri Health Trust and Training Institutions. There is decreasing trend for the providers like, Teaching Hospitals, Collective health

services, Nursing and Para medical colleges, APHMIDC and this could be on account of possible increase by primary, secondary care providers and social protection schemes.

Table 40 : Medium Term DoHMFWE Expenditure (projected) by Providers

Provider	DoHMFWE expenditure in Crores					% Share	
	2008-09	2009-10	2010-11	2011-12	2012-13	08-09	12-13
State/Regional Administrators	47.86	49.87	58.83	71.82	87.73	1.49	1.02
District Administrators	71.02	78.93	93.10	113.66	138.84	2.22	1.61
Sub Centres/MCH Centres/Family Welfare Centres	259.80	307.67	451.54	629.20	834.62	8.11	9.68
Hospitals and Dispensaries (DH)	29.51	34.24	165.39	49.30	60.23	0.92	0.70
AYUSH Dispensaries & Hospitals	88.72	93.88	110.73	135.18	165.14	2.77	1.91
AYUSH Educational Institutions	32.41	28.96	34.16	41.70	50.94	1.01	0.59
PHC	298.80	342.75	586.05	753.60	949.06	9.33	11.00
Hospitals (APVVP)	335.83	348.35	730.96	897.55	1092.13	10.49	12.66
APVVP Administrators	4.81	5.70	6.73	8.21	10.03	0.15	0.12
Hospitals Not Specified	13.94	18.05	21.30	26.00	31.76	0.44	0.37
Teaching Hospitals	663.79	636.17	838.87	924.94	1127.90	20.73	13.08
Other Tertiary Care Institutions	76.04	81.65	96.31	117.58	143.63	2.37	1.67
Collective Health Services (Disease Control)	234.08	253.82	312.69	380.15	462.59	7.31	5.36
Collective Health Services (Family Welfare)	65.19	40.89	68.23	78.88	91.92	2.04	1.07
Financial Agencies	65.84	66.00	77.85	95.04	116.10	2.06	1.35
Boards/Agencies Not Specified Elsewhere	40.73	80.40	94.84	115.78	141.43	1.27	1.64
Drug Control Administration	10.18	11.47	13.52	16.51	20.17	0.32	0.23
IPM	19.27	25.57	30.16	36.82	44.98	0.60	0.52
Aarogyasri Health Trust	450.00	925.00	1791.04	2032.00	2327.11	14.05	26.98
Nursing/Paramedical Colleges	19.96	12.00	14.15	17.28	21.11	0.62	0.24

Training and Research Institutions	4.88	4.59	37.43	41.83	46.81	0.15	0.54
Vital Statistics Division	3.89	4.91	5.79	7.07	8.63	0.12	0.10
NGO and Other Private Providers	55.01	55.87	65.90	80.45	98.27	1.72	1.14
Provider Not Specified	24.25	24.24	178.39	217.79	266.05	0.76	3.08
APHMIDC	161.94	161.94	191.01	233.19	284.86	5.06	3.30
DFID	117.00	127.00	0.00	0.00	0.00	3.65	0.00
SACS	7.20	1.48	1.75	2.14	2.61	0.22	0.03
<b>Total</b>	<b>3201.98</b>	<b>3821.41</b>	<b>6076.69</b>	<b>7123.66</b>	<b>8624.64</b>	<b>100</b>	<b>100</b>

### 3. Medium Term Projected Expenditure of DoHMFWS Societies

Table 41 provides projections of the expenditure of different disease control societies put together both under NRHM and APSACS. Projections are made on

Programme	2008-09	2009-10	2010-11	2011-12	2012-13
Societies	784.51	868.84	1129.49	1468.34	1908.84
SACS	68.86	83.60	89.28	95.34	101.81
<b>Total</b>	<b>853.37</b>	<b>952.44</b>	<b>1218.77</b>	<b>1563.68</b>	<b>2010.65</b>

Programme Implementation Plans (PIP) and growth rate in previous years.

Table 42 provides health expenditure projections for other GoAP departments (line departments). Projections are made on the basis of the growth rate in previous years.

Table 42 : Medium Term Expenditure by (Projected)Other GoAP Departments (Rs Cr)

Department	Programme	2008-09 (RE)	2009-10 (BE)	2010-11	2011-12	2012-13
<b>Primary Care</b>						
Tribal Welfare	Health	1.19	0.94	0.98	1.01	1.05
Women, Child and Disabled Welfare	ICDS Programme	380.11	1168.33	1435.88	1764.70	2168.81
<b>Secondary Care</b>						
Labour and Employment	Insurance Medical Services	96.46	115.37	134.32	156.39	182.08
<b>Total</b>		<b>477.75</b>	<b>1284.65</b>	<b>1571.18</b>	<b>1922.10</b>	<b>2351.94</b>

#### 4. Total Medium Term Projected Expenditure on Health – State Health:

Total health expenditure projected in Andhra Pradesh, say Public Health expenditure covering the departments (HODs & Secretariat) of DoHMF, Societies and other GoAP line departments is given in the Table 43. The projections indicate increase from Rs 4533.20 Cr in 2008-09 to Rs.12987.23 Cr in 2012-13. Primary Health Care expenditure (projected) accounts for about 55.60% of the total health expenditure in the year 2012-13 of the medium term.

The projected expenditure is expected to increase from 1.22% of GSDP in 2008-09 to 2.14% of GSDP in 2012-13. It is more than 2% of the GSDP on reaching 2012-13 that satisfies the norm as recommended by National Health Policy 2002.

Similarly the projected expenditure in proportion to State Budget increases from 4.99% to 8.50%. This projection is more than 8% as recommended by National health Policy 2002.

Table 43: Projections of Medium Term Health Expenditure by GoAP Departments & Societies (Rs in Crores)

Function	State Health covering depts, Societies					%share
	2008-09 (RE)	2009-10 (BE)	2010-11	2011-12	2012-13	2012-13
Direction and Administration	113.79	126.45	172.46	197.73	239.53	1.84
Primary Health Care	2478.49	3475.05	4667.30	5744.38	7220.64	55.60
Secondary Care	449.93	484.85	890.22	1084.38	1311.39	10.10
Tertiary Care	515.63	514.26	685.08	748.39	912.46	7.03
Medical Education	264.62	285.92	337.24	411.72	502.94	3.87
Health Statistics and Research	6.89	9.72	43.48	49.21	55.84	0.43
Social Protection Schemes	496.75	945.00	1814.63	2060.80	2362.29	18.19
Repayment of Loans	65.84	66.00	77.85	95.04	116.10	0.89
Others	141.25	151.24	178.39	217.79	266.05	2.05
<b>Total</b>	<b>4533.20</b>	<b>6058.49</b>	<b>8866.64</b>	<b>10609.44</b>	<b>12987.23</b>	<b>100.00</b>
% GSDP	1.22	1.44	1.87	1.98	2.14	
% State Budget	4.99	5.85	7.53	7.91	8.50	

*Note: The percentage arrived over GSDP and State Budget for the years from 2010-11 is based on the figures projected with growth rate over 2008-09 & 2009-10.*



### Annexure-1-Detailed expenditure by Resource costs

Code	Resource costs	2006-07 (Actuals)	2007-08 (BE)	2007-08 (Actuals)	2008-09 (BE)	2008-09 (RE)
1	Human Resources	12964780	14459939	14702437	16445107	16500148
	010 – Salaries	10155451	11298392	11504075	12884614	13078650
	020- Wages	57682	97796	91222	145835	92972
	311 - Grants-in-Aid towards Salaries	2083794	2201979	2438024	2568708	2570358
	300 - Other Contractual Services	667853	861772	669116	845950	758168
2	Scholarships and Stipends					
	340 - Scholarships and Stipends	301589	313001	237894	296495	296495
3	Operations and Administrative Ex- penses	1320376	1661332	1401919	1580551	1514178
	110/120 Travel Expenses	201136	229811	206376	205783	204305
	130 - Office Expenses	408246	626447	415234	545895	498789
	140 - Rents, Rates and Taxes	48404	67743	52121	79476	79361
	160 – Publications	6334	16090	15480	17805	11430
	200 - Other Administrative Expenses	1060	2075	510	1875	1875
	240 - Petrol, Oil and Lubricants	30641	38493	30296	44881	37335
	260 - Advertisements, Sales and Pub- licity Expenses	15716	11548	9264	15600	12688
	280 - Professional Services	10239	9865	14178	10776	9995
	800 - User Charges	0	800	0	0	0
	001 - Repayment of Loans	598600	658460	658460	658460	658400

MTEF for Health in AP-2009

4	Drugs, Materials and Supplies	1570138	2405057	2108015	2615806	2563899
	210 - Supplies and Materials	1451802	2239872	1953994	2436017	2415553
	250 - Clothing, Tentage & Stores	33763	48589	41984	41932	30161
	230 - Cost of Ration/Diet Charges	84573	116596	112037	137857	118185
5	Equipment					
	520 - Machinery & Equipment	320154	1047078	261392	686637	502637
6	Maintenance and Minor Works	392067	889663	677162	885382	872019
	270 - Minor Works	265834	865448	664058	856515	853649
	510 - Motor Vehicles	126233	24215	13104	28867	18370
7	Major Works					
	530 - Major Works	93471	1770000	797223	2054720	1094860
8	Grant-in-Aid					
	312 - Other Grants-in-aid	1444161	2716681	2453294	8370764	7768114
9	Transfers to Households					
	500 - Other Charges (Compensation)	217216	363000	316113	363000	363000
10	Other Expenditure	73699	1635324	2326713	428293	544422
	500 - Other Charges (which cannot be further classified)	73699	1635324	2326714	428293	544422
	630 - Inter Account Transfers	0	0	-1	0	0
	Total	18697651	27261075	25282162	33726755	32019772

### Annexure-2 – Detailed expenditure by Functions

Code	Functions	2004-05	2005-06	2006-07 (BE)	2006-07 (Actuals)	2007-08 (BE)	2007-08 (Actuals)	2008-09 (BE)	2008-09 (RE)
1	Direction and Administration	824337	970903	1091046	908413	977534	941751	1110476	1136879
	Primary Health Care								
2	Primary Care Services (Allopathic)	2405711	2153432	2650955	2174582	2814592	2801557	3096500	3097989
3	Primary Care Services (AYUSH)	452053	507243	612339	641461	665128	595200	809150	839424
4	Communicable Disease Control Pro-grammes	1477933	1526122	1897026	1826799	2364686	1961659	2356595	2428512
5	Non Communicable	145754	120815	43626	43800	50150	47848	56686	56686
6	Family Welfare	2827967	3162294	3517660	3281811	3640420	3394354	3439492	3455472
7	IEC	0	0	0	0	0	0	0	0
7.1	IEC (DC)	10843	14229	17684	17645	19785	19008	18852	19573
7.2	IEC (FW)	0	0	0	0	0	0	0	0
8	Secondary Care	1824560	2001259	2603882	2774631	3122920	3343419	3525968	3534743
9	Tertiary Care	1992976	2506882	3038861	2984739	5644401	4742819	5973735	5156336
10	Medical Education (Allopathic)	0	0	0					
10.1	Medical and Dental	995727	1059613	1287759	1268170	2505029	1765293	2690530	2099063
10.2	Nursing/Paramedical	21945	27789	30202	31490	167583	54784	209447	208118
10.3	Public Health	0	0	0	0	10000	0	10000	10000

**MTEF for Health in AP-2009**

11	Medical Education (AYUSH)	192322	195319	177227	223649	309507	243086	313308	329030
12	Training	0	0	0	0	0	0	0	0
12.1	DH	12659	14375	20160	15518	22525	17556	20076	20900
12.2	CFW	68387	79810	124962	94692	103909	99062	121445	121445
12.3	APPVP	1205	1075	1266	707	1266	0	1266	1266
12.4	DME	19945	20555	24889	65089	31298	27346	16215	21881
12.5	AYUSH	514	554	559	353	559	510	559	559
12.6	Training Unspecified	7811	8411	8415	8412	18200	13650	14000	14000
13.1	Public Health Laboratory Services	116429	128574	169798	165245	230496	176769	250543	202727
13.2	Drug Control	47990	54651	64046	62082	82930	73201	86969	91780
14	Health Statistics and Research	30391	35483	39252	41211	43993	54867	155112	68921
15	Ancillary Care Services	0	0	0	0	0	0	0	0
15.1	Drug Manufacture	75848	78847	93754	59105	41604	45890	43949	45754
15.2	Health Transport	21667	20571	25254	190229	321100	315066	344986	350907
15.3	Help Information Help Hine	0	0	0	0	0	0	50000	50000
16	Social Protection Schemes	64212	178970	430000	223078	1050000	1681513	5495000	4967500
17	Repayment of Loans	480000	480000	598600	598600	658460	658460	658460	658400
18	Central Purchase of Drugs	810009	891000	1063044	996140	1450000	1450327	1619396	1619396
19	Grants that require further analysis	0	0	1500000	0	850000	757167	1170000	1344471
20	Function Not Specified	0	0	0	0	63000	0	68040	68040
	<b>Total</b>	<b>14929195</b>	<b>16238776</b>	<b>21132266</b>	<b>18697651</b>	<b>27261075</b>	<b>25282162</b>	<b>33726755</b>	<b>32019772</b>

## Annexure-3 – Detailed expenditure by Providers

Providers	2004-05		2005-06		2006-07 (BE)		2006-07 (Actuals)		2007-08 (BE)		2007-08 (Actuals)		2008-09 (BE)		2008-09 (RE)	
	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%	Rs.'000	%
State/Regional Administrators	460523	3.08	498943	3.07	545645	2.58	448579	2.40	468556	1.72	406328	1.61	479885	1.42	478594	1.49
District Administrators	335736	2.25	447004	2.75	503712	2.38	537949	2.88	565010	2.07	580809	2.30	682665	2.02	710234	2.22
ASHA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Village Health and Sanitation Committees	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Sub Centres/MCH Centres/Family Welfare Centres	1640264	10.99	1925006	11.85	2222695	10.52	2469152	13.21	2474470	9.08	2581193	10.21	2613833	7.75	2598015	8.11
Hospitals and Dispensaries (DH)	192775	1.29	182273	1.12	195377	0.92	181904	0.97	335038	1.23	227237	0.90	289270	0.86	295058	0.92
AYUSH Dispensaries & Hospitals	484545	3.25	534852	3.29	646754	3.06	700919	3.75	708791	2.60	645554	2.55	855158	2.54	887237	2.77
AYUSH Educational Institutions	189721	1.27	200096	1.23	182515	0.86	230092	1.23	315490	1.16	253991	1.00	322043	0.95	324092	1.01
PHC	2327492	15.59	2078753	12.80	2468622	11.68	2115739	11.32	2644084	9.70	2710265	10.72	2984099	8.85	2988004	9.33
Hospitals (APVVP)	1694513	11.35	1849510	11.39	2440192	11.55	2638989	14.11	2946530	10.81	3195109	12.64	3358327	9.96	3358327	10.49
APVVP Administrators	0	0.00	0	0.00	0	0.00	39285	0.21	45294	0.17	45288	0.18	48139	0.14	48139	0.15
Hospitals Not Specified	140599	0.94	156145	0.96	159918	0.76	143440	0.77	382629	1.40	231577	0.92	150515	0.45	139367	0.44
Teaching Hospitals	2829866	18.96	3401330	20.95	3894298	18.43	3957248	21.16	7199520	26.41	5847029	23.13	7678604	22.77	6637904	20.73
Other Tertiary Care Institutions	164543	1.10	246066	1.52	558749	2.64	457289	2.45	1046510	3.84	653731	2.59	875431	2.60	760431	2.37
Mobile Health Centres	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Collective Health Services (Disease Control)	1623207	10.87	1713610	10.55	2123408	10.05	1795105	9.60	2305807	8.46	1892506	7.49	2281782	6.77	2340815	7.31

MTEF for Health in AP-2009

Collective Health Services (Family Welfare)	1006161	6.74	908777	5.60	981105	4.64	571948	3.06	937987	3.44	675600	2.67	636120	1.89	651922	2.04
Financial Agencies	480000	3.22	480000	2.96	598600	2.83	598600	3.20	658460	2.42	658460	2.60	658460	1.95	658400	2.06
Boards/Agencies Not Specified Elsewhere	185219	1.24	362124	2.23	406663	1.92	391798	2.10	406206	1.49	285904	1.13	651723	1.93	407288	1.27
Drug Control Administration	47990	0.32	54651	0.34	64046	0.30	62562	0.33	104930	0.38	73207	0.29	111969	0.33	101780	0.32
IPM	151637	1.02	128574	0.79	169798	0.80	164765	0.88	193496	0.71	176763	0.70	210543	0.62	192727	0.60
Aarogyasri Health Trust	0	0.00	0	0.00	200000	0.95	2147	0.01	500000	1.83	1406189	5.56	4500000	13.34	4500000	14.05
Nursing/Paramedical Colleges	21945	0.15	27789	0.17	30202	0.14	30672	0.16	165583	0.61	49963	0.20	198347	0.59	199643	0.62
Training and Research Institutions	21031	0.14	25391	0.16	27736	0.13	28160	0.15	48602	0.18	35578	0.14	48637	0.14	48846	0.15
NRHM Societies/PMU/SPIU	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Vital Statistics Division	20492	0.14	24447	0.15	26763	0.13	25804	0.14	30264	0.11	35000	0.14	36637	0.11	38910	0.12
NGO and Other Private Providers	100927	0.68	102435	0.63	122424	0.58	109365	0.58	342818	1.26	335383	1.33	1125132	3.34	550132	1.72
Other Departments	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Provider Not Specified	0	0.00	0	0.00	63044	0.30	0	0.00	63000	0.23	0	0.00	68040	0.20	242511	0.76
APHMIDC	810009	5.43	891000	5.49	1000000	4.73	996140	5.33	1450000	5.32	1450327	5.74	1619396	4.80	1619396	5.06
DFID	0	0.00	0	0.00	1500000	7.10	0	0.00	850000	3.12	757167	2.99	1170000	3.47	1170000	3.65
SACS	0	0.00	0	0.00	0	0.00	0	0.00	72000	0.26	72004	0.28	72000	0.21	72000	0.22
Total	14929195	100	16238776	100	21132266	100	18697651	100	27261075	100	25282162	100	33726755	100	32019772	100

