

Report

MAHARASHTRA PUBLIC HEALTH BUDGET & EXPENDITURE TRACKING FOR YEAR 2009-10 to 2011-12



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PREFACE

As mentioned in the Mission Document of National Rural Health Mission (NRHM), the Government of India has decided to carry out necessary change in basic health care facility with the goal to improve the health care facilities for people, especially for those residing in rural areas, the poor woman and children. Thus, the plan of action of Mission document includes a commitment to increase public expenditure on health and to rise in public spending on health from 0.9 % to 2-3 % of GDP.

In view of the above, mission has been initiated in 2005. While completing 1st phase of mission it has found some problems in overall process of funds distribution and allocation system. Therefore, considering the problems and difficulties in tracking of funds, National Health Systems Resource Centre (NHSRC) has developed the exercise called as 'BUDGET TRACKING SYSTEM' (BTS). Based on this BTS, similar exercise is carried out for Maharashtra state; where in the budget received from different routes like Treasury and NRHM and the expenditure incurred thereof for last 3 years (2009-12) have been worked out in different indicators. The observations of the exercise will be useful for the annual planning process.

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Table of Contents

List of Abbreviations:	4
Background:	5
Objectives of the Exercise:	6
Framework of Exercise:	6
State Health Budget & Expenditure Tracking Indicators:	7
Data Consideration:	8
Definitions:	8
A) Percentage of Public Health expenditure to total health expenditure	10
Chart 1: India in comparison with neighboring Asian countries	10
Chart 2: India in comparison with Developed countries	10
Public Health Expenditure Flow Chart:	11
Budget, Released funds and Expenditure Statement (2009-12)	12
Public Expenditure on Health as percent of GDP:	14
Observations and Discussion:	14
Conclusion:	34
Recommendations:	34
References:	35

List of Abbreviations:

NRHM	: National Rural Health Mission
GoI	: Govt. of India
GoM	: Govt. of Maharashtra
NHSRC	: National Health Systems Resource Centre
BTS	: Budget Tracking System
WHO	: World Health Organization
SHS	: State Health Society
GDP	: Gross Domestic Product
PIP	: Project Implementation Plan
RoP	: Record of Proceeding
FMR	: Financial Management Report
RCH	: Reproductive Child Health
ESIS	: Employees State Insurance Scheme
SACS	: State Aids Control Society
NDCP	: National Diseases Control Programme
NVBDCP	: National Vector Borne Diseases Control Programme
RNTCP	: Revised National Tuberculosis Control Programme
NLEP	: National Leprosy Eradication Programme
IDD	: Iodine Deficiency Disorder
NPCB	: National Programme for Blindness Control
IDSP	: Integrated Diseases Surveillance Programme
PHD	: Public Health Department
TPHE	: Total Public Health Expenditure
MMU	: Medical Mobile Unit
PPP	: Public Private Partnership
ASHA	: Accredited Social Health Activist
AYUSH	: Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy
IEC	: Information, Education and Communication
HR	: Human Resources
GSDP	: Gross State's Domestic Product
BEAMS	: Budget Estimation, Allocation & Monitoring System

Background:

The public expenditure on health has not only been recognized in fighting with major diseases like HIV/AIDS, tuberculosis, malaria, meeting the Millennium Development Goals (MDGs) targets, reducing poverty but also important for industrial and economic development of a country (CMH, 2001; NCMH, 2005; UN, 2008¹). It is argued that public health expenditure is one of the important components for the provisioning of health facilities which further result in better health outcomes.

The literatures have argued that countries with high level of public spending in health have secured better health outcomes compare to the countries with low level of spending in health (NCMH, 2005). Thus, size of the public fund in health sector matters for better health outcomes. Beside the level of spending, health outcomes are most affected by allocation pattern of public funds in health sector (Breman and Shelton, 2001; Gumber, 1997; Tim Ensor, 2003). It is argued that low level of spending on medicine, drugs, equipment and preventive care can be one of the significant causes of slow progress in some of the health outcomes. The allocation of public funds towards water supply and sanitation (which is preventive in nature) can have salubrious impact on both short as well as long term healthy life in developing / poor countries / regions compare to the expenditure on medical, public health and family welfare (which are of both curative and preventive nature).

Enhancing the government health sector financing in a big way to reach 2-3 percent mark of GDP by 2012 has been an important objective of National Rural Health Mission (NRHM) launched by the Government of India in 2005-06. Both the Central and state governments share the responsibility of enhancing the government spending. As we have crossed 2012, it is necessary to review the success of the NRHM in enhancing the health sector funding by the government, more importantly to know how effectively these funds have got transmitted to the grass root level to be translated to healthcare services.

¹[http://www.internationalhealthpartnership.net/pdf/IHP%20Update%2013/Taskforce/TF%20REVISED%20Press%20statement%20\(2008%2011%2030\)%20v%206.pdf](http://www.internationalhealthpartnership.net/pdf/IHP%20Update%2013/Taskforce/TF%20REVISED%20Press%20statement%20(2008%2011%2030)%20v%206.pdf)

In view of the above, an exercise has been undertaken at SHSRC, Maharashtra to analyze the budget released through various routes in Maharashtra state and the expenditure incurred thereof with following objectives.

Objectives of the Exercise:

The objectives of the exercise are as follows:

1. To track the state health budget and expenditure.
2. To find out the gaps in fund distribution and to assess budgetary allocation between different heads.
3. To provide inputs by using the tracked information for decision making and planning of PIP.

Framework of Exercise:

Budget tracking exercise takes into account the expenditure incurred under treasury route, society route (NRHM) and external funding. The main department that incur majority of expenditure under treasury route is department of public health. Under the treasury route, expenditure incurred by the budget heads under 2210, 2211, 4210, 4211 and 6211 are tracked, irrespective of the department (health or other departments) that incurs expenditure under these heads.

2210 – Medical & Public Health –Revenue Expenditure

2211-Family Welfare –Revenue Expenditure

4210-Capital outlay on Medical & Public Health

4211-Capital outlay on Family Welfare – Capital Expenditure and

6210-Loan & Advances for Medical and Public Health

6211-Loan & Advances for Family Welfare

The expenditure incurred by ESIS and Tribal Sub-Plan may not figure in the above mentioned budget heads. But this expenditure is needed to be factored in while finalizing the total state health budget expenditure.

As far as the extra-budgetary route of funds flow is concerned, this exercise focuses only on the NRHM flow through the state society, thus not considered the State AIDS Control Society (SACS) route. The NRHM funds were taken as the figures reported by the State Health Societies (SHS) as allocation

(the funds approved as per the ROPs). In this budget tracking exercise, the funds from RCH-II, Mission flexi pools (going through the SHS) and the funds flowing for the NDCPs (NVBDCP, RNTCP, NLEP, IDD, NPCB, and IDSP) are included. The tracking also include funds for Routine Immunization, Pulse polio and the component of “Infrastructure Maintenance” for Sub Centers, which actually is part of the NPPE (Non Plan Revenue Expenditure) under central government contribution for the Family Welfare (budget line 2211).

The main data sources for state budgets were Annual Financial Statements of State Governments, Demand for Grants and Annual Plan documents. The society route mainly consists of expenditure incurred by National Health Mission (NRHM) and annual financial statements of state health societies were the main data source to track these expenditure. The data required for the exercise is collected and analyzed at SHSRC with inputs of NHSRC.

State Health Budget & Expenditure Tracking Indicators:

To establish institutional mechanism in state, for health budget and expenditure tracking under a standardized set of definitions, a common analytical framework, methodology and template; NHSRC along with various partner institutions, validated the practicality of some basic indicators.

These indicators were chosen on the following criteria:

- (a) They should be relevant and immediately useful to state health department and state finance department.
- (b) They should rely on easy to access reliable data sources available in the public domain.
- (c) They should be relatively easy to compute so that one can start up and stabilize the general use of budget indicators in planning after which the system could be build on to include more indicators and more disaggregation of data.

The key indicators considered for this exercise are as below:

- 1 - Total Public Health Expenditure of the State (TPHE)
- 2 - Centre and State Share of Total Public Health Expenditure
- 3 - Plan and Non-plan Expenditure as share of Total Public Health Expenditure
- 4 - Capital and Revenue Expenditure as a share of Total Public Health Expenditure
- 5 - Expenditure by function of Health Services Delivery as a share of Total Public Health Expenditure (TPHE)
- 6 - Expenditure by Components Health Services Delivery as a Share of TPHE
- 7 - Expenditure on AYUSH as a Share of TPHE
- 8 - Expenditure on Components under NRHM

Data Consideration:

1. Last 3 year's (Year 2009-10, 2010-11 and 2011-2012) budget books of Treasury route of the State.
2. Last 3 year's (Year 2009-10, 2010-11 and 2011-2012) detailed Statement of Expenses of State Health Systems-SOE (Audited).
3. Handbook of Department of Economics & Statistics (for State Gross Domestic Product)
4. Last 3 year's (Year 2009-10, 2010-11 and 2011-2012) Budget Summery from BDS Live -BEAMS (for Total Public Expenditure of Maharashtra)
5. Census Report of GoI 2001 & 2011 (for Mid-year Population)

Definitions:

Particulars	Definition
Gross Domestic Product (GDP)	The monetary value of all the final goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory. $GDP = C + G + I + NX$ where: "C" = Private consumption, or consumer spending, in a nation's economy "G" = is the sum of government spending "I" = is the sum of all the country's businesses spending on capital "NX" is the nation's total net exports, calculated as total exports minus total imports. ($NX = Exports - Imports$)
Per Capita	Per capita income, also known as income per person, is the mean income of the people in an economic unit such as a country or city. Per Capita Income = $GDP / \text{total population}$.
Capital Expenditure	Capital expenditure can be defined as expenditure incurred on the purchase, alteration or improvement of fixed assets. For example, the purchase of a car to be use to deliver goods is capital expenditure. Included in capital expenditure are such costs as: Delivery of fixed assets, Installation of fixed assets, Improvement (but not repair) of fixed assets, Legal costs of buying property, Demolition costs,

	Architects fees;
Revenue Expenditure	Revenue expenditure is expenditure incurred in the running / management of the business. For example, the cost of petrol or diesel for cars is revenue expenditure. Other revenue expenditure are: Maintenance of Fixed Assets, Administration of the business, Selling and distribution expense
Plan Expenditure	Plan expenditures are estimated after discussions between each of the ministries concerned and the Planning Commission.
Non-plan	• <u>Non-plan revenue expenditure</u> is accounted for by interest payments, subsidies (mainly on food and fertilizers), wage and salary payments to government employees, grants to States and Union Territories governments, pensions, police, economic services in various sectors, other general services such as tax collection, social services, and grants to foreign governments. • <u>Non-plan capital expenditure</u> mainly includes defense, loans to public enterprises, loans to States, Union Territories and foreign governments.

A) Percentage of Public Health expenditure to total health expenditure

Public health expenditure consists of recurrent and capital spending from government (central, state and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds. Total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.

Chart 1: India in comparison with neighboring Asian countries

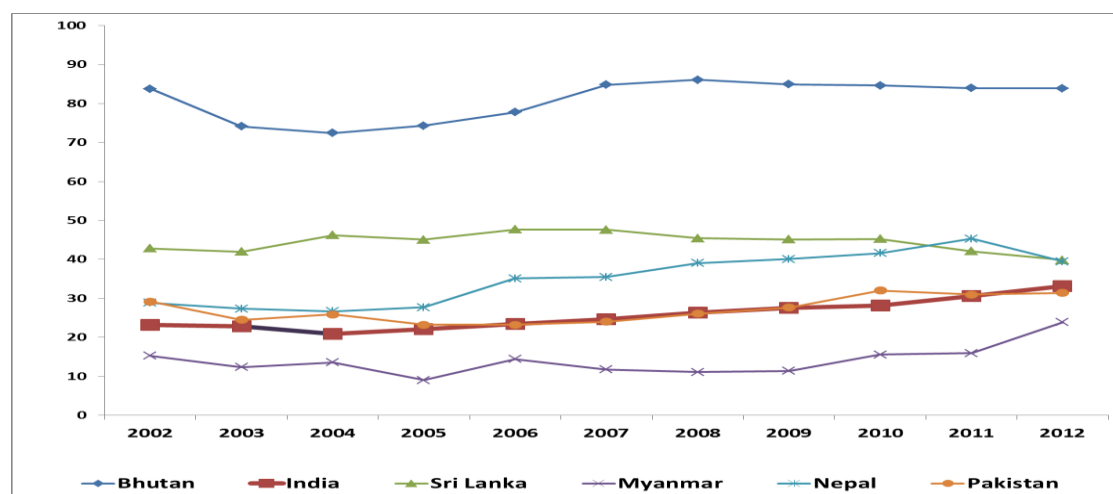
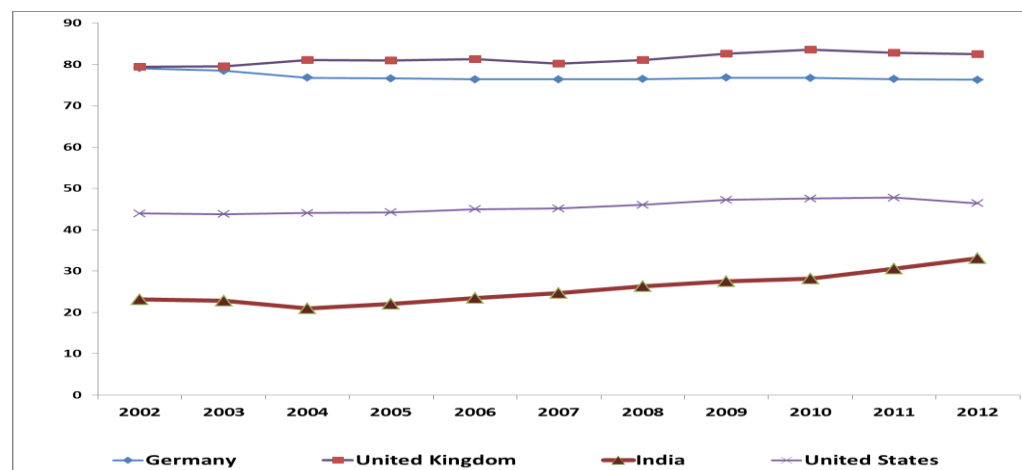


Chart 2: India in comparison with Developed countries

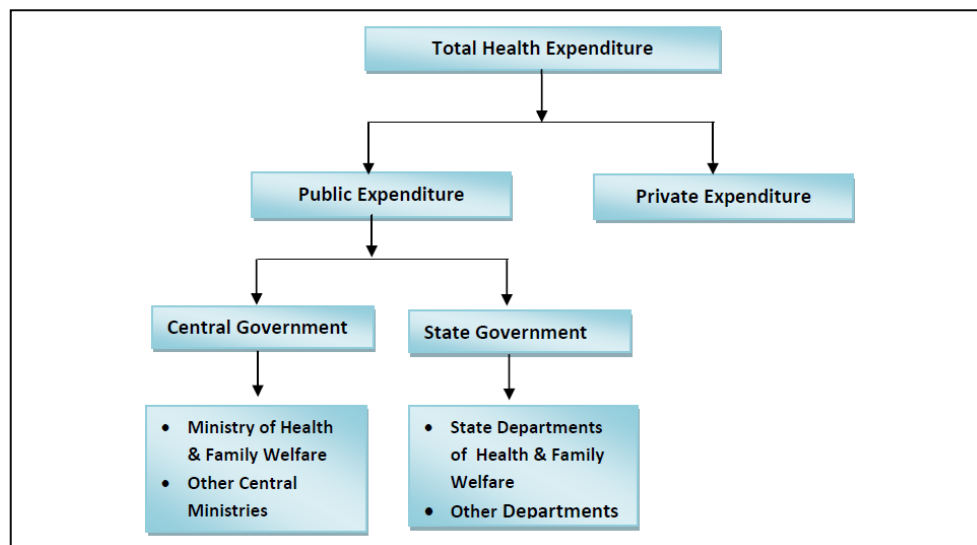


In Chart 1: comparison of India is made with Asian countries. The public spending on Health as percentage to total health spending in India is much lower next to Myanmar. Bhutan though a small country, public spending is above 80% consistently.

In Chart 2: compares India with developed countries. The countries chosen for comparison are with specific reasons. United Kingdom is taken for comparison as NHS is known to be the world's largest publicly funded health service. It is also one of the most efficient, most equity-based and most comprehensive. United States is taken because of its known private sector dominance. Germany has a very peculiar feature of mandatory health insurance where in all citizens are covered by social security scheme.

From both the charts it could be seen that, though percentage public health expenditure is lower compared to other countries, there is an increase in the percentage public health expenditure over the years which could be attributed to NRHM's spending and increased share of health insurance.

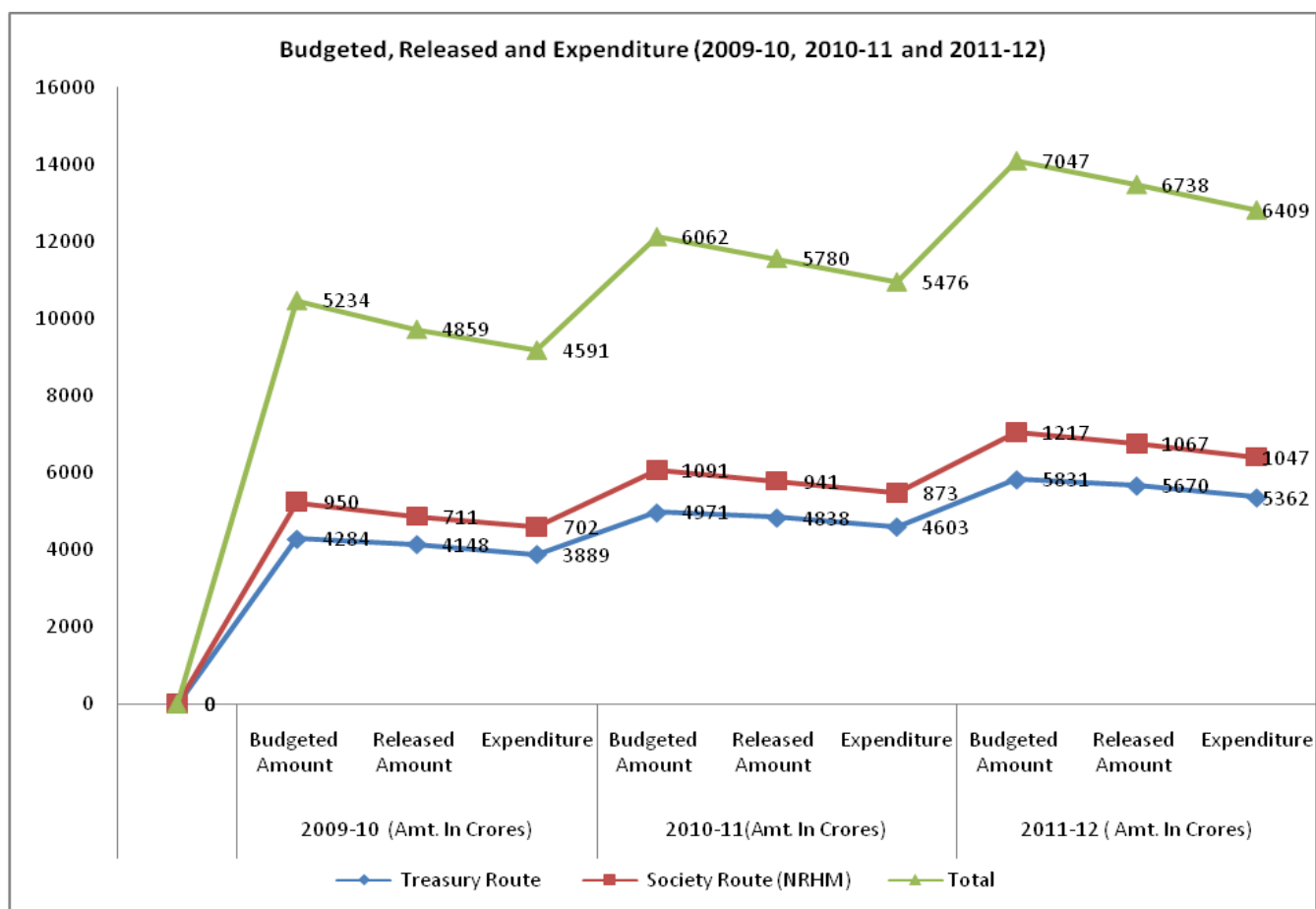
Public Health Expenditure Flow Chart:



Budget, Released funds and Expenditure Statement (2009-12)

Budgeted, Released and Expenditure (2009-10, 2010-11 and 2011-12)										
Department under Public Health, Maharashtra	Budget Heads	2009-10			2010-11			2011-12		
		Revised Budgeted Estimate	Released	Expenditure	Revised Budgeted Estimate	Released	Expenditure	Revised Budgeted Estimate	Released	Expenditure
Public Health	2210	2318.34	2241.85	2126.36	2639.33	2636.84	2539.46	3072.94	3108.48	2947.2
	2211	380.15	334.19	357.53	523.63	431.86	433.49	546.06	542.09	475
	4210	18.69	17.11	4.82	5.47	4.88	2	12.32	12.32	9.9
	4211	0	0	0	0	0	0.05	0	0	0
	6210	0	0	0	0	0	0	0	0	0
	6211	0.24	0.08	0.08	0.3	0.05	0	0	0	0
Tribal	2210	101.2	101.2	77.46	105.34	94.84	85.47	133.86	133.86	127.08
	2211	0.19	0.19	0.12	0.16	0.16	0.12	0.13	0.13	0.11
	4210	17.34	17.34	1.07	13.07	11.77	4.15	24.2	24.2	4.03
	4211	0	0	0	0	0	0	0	0	0
	6210	0	0	0	0	0	0	0	0	0
	6211	0	0	0	0	0	0	0	0	0
PWD	2210	1.74	1.74	1.42	1.03	1.03	0.71	3.41	3.41	1.97
	2211	0	0	0	0	0	0	0	0	0
	4210	123.96	122.75	104.21	194.88	172.27	111.66	417.04	330.35	319.41
	4211	0	0	0	0	0	0	0	0	0
	6210	0	0	0	0	0	0	0	0	0
	6211	0	0	0	0	0	0	0	0	0
Medical Education	2210	1059.36	1058.86	1019.28	1296.24	1299.5	1236.7	1384.25	1277.98	1263.83
	2211	0	0	0	0	0	0	0	0	0
	4210	101.32	77.13	47.49	34.37	37.85	29.89	52.06	52.06	31.57
	4211	0	0	0	0	0	0	0	0	0
	6210	0	0	0	0	0	0	0	0	0
	6211	0	0	0	0	0	0	0	0	0
Planning	2210	144.52	156.9	134.17	143.98	134.02	149.72	165.45	163.57	163.34
	2211	0.45	1.78	0.37	0.9	1.01	0.35	0.41	0.42	0.41
	4210	16.89	17.13	14.78	12.23	12.41	9.65	18.4	21.65	18.2
	4211	0	0	0	0	0	0	0	0	0
	6210	0	0	0	0	0	0	0	0	0
	6211	0	0	0	0	0	0	0	0	0
Treasury Route		4284.36	4148.24	3889.17	4970.93	4838.47	4603.42	5830.53	5670.50	5362.05
Society Route (NRHM)		949.88	711.2	702	1091.32	941.48	873	1216.7	1067.40	1047
Total		5234.24	4859.44	4591.17 (94.5%)	6062.25	5779.95	5476.42 (94.7%)	7047.23	6737.90	6409.05 (95.1%)

Data Source: Budget Allocation Estimation and Monitoring Systems (BEAMS Live) and NRHM Audit Report



The above table indicates department wise amount of budget allocated, released funds and expenditure incurred during 2009-10, 2010-11 and 2011-12. It reveals that, the budget released has been constantly increased every successive year, which are Rs. 4859.44 Crs. during 2009-10, Rs. 5779.95 Crs. during 2010-11 and Rs. 6737.09 Crs. during 2011-12. However, the expenditure incurred during 2009-10 has been Rs. 4591.17 Crs. (94.5%); during 2010-11 Rs. 4576.42 Crs (94.7%) and during 2011-12 Rs. 6409.05 (95.1%). This is revealed in above graph.

Public Expenditure on Health as percent of GDP:

Sr. No.	Country / State	Year wise Percentage				Average %	Data Source
		2009	2010	2011	2012		
1	INDIA's Public Health Expenditure Percentage of GDP	1.09	1.04	1.20	1.34	1.17	Data.worldbank.org, WHO website (http.who.int)
2	Pakistan's Public Health Expenditure Percentage of GDP	0.83	0.96	0.93	0.99	0.93	
3	Netherland's Public Health Expenditure Percentage of GDP	9.45	9.61	9.49	9.93	9.62	

The above tables indicate country's highest and lowest spending on public health and where India's public expenditure stands.

Netherland's is spending 9.62 % of their GDP on public health, which is highest and Pakistan has lowest spending on public health which is 0.93 % of their GDP.

Public Health spending in India is 1.17 % of State GDP which is less than 2.00% as recommended in Public Health Policy 2002. Therefore, state government should increase the public health expenditure up to 2.00 % of GDP.

Observations and Discussion:

The indicator wise analysis and output is revealed in table 1-8 and are as follows.

Table 1 - Total Public Health Expenditure of the State (TPHE)

Table 2 - Centre and State Share of Total Public Health Expenditure

Table 3 - Plan and Non-plan Expenditure as share of Total Public Health Expenditure

Table 4 - Capital and Revenue Expenditure as a share of Total Public Health Expenditure

Table 5 - Expenditure by function of Health Services Delivery as a share of Total Public Health Expenditure (TPHE)

Table 6 - Expenditure by Components Health Services Delivery as a Share of TPHE

Table 7 - Expenditure on AYUSH as a Share of TPHE

Table 8 - Expenditure on Components under NRHM

Table 1 - Total Public Health Expenditure of the State (TPHE)

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
				2009-10		2010-11		2011-12	
				Amount (In crores)	%	Amount (In crores)	%	Amount (In crores)	%
1	Absolute Value (Rs. In Corers)		2210 + 2211 + 4210 + 6211 + NRHM	4346	-	5352	-	6215	-
2	Per Capita (In Rupees)	Total Public Health Expenditure (TPHE)	2210 + 2211 + 4210 + 6211 + NRHM and Mid-year Population	Rs. 395	-	Rs. 479	-	Rs. 549	-
		Mid-year Population							
3	Change Over expenditure percentage in comparison of previous year (In Percentage)	Current Year Expenditure - Previous year Expenditure* 100	2210 + 2211 + 4210 + 6211 + NRHM	-	-	1007	23.15	863	16.12
		Previous Year Expenditure							
4	Public Health Expenditure (PHD) Share of State's GDP (In Percentage)	TPHE * 100	2210 + 2211 + 4210 + 6211 + NRHM & State's Gross Domestic Product (GDP)	4346	0.51	5352	0.52	6215	0.52
		State's GDP							
5	Expenditure under NRHM as a share of Total Public Health Expenditure (TPHE) (In Percentage)	Total NRHM Expenditure * 100	2210 + 2211 + 4210 + 6211 + NRHM	702	16.16	873	16.32	1046	16.84
		TPHE							

6	Change Over previous year in NRHM Expenditure as share of TPHE (In Percentage)	Share in percentage of Current Year NRHM Expenditure as TPHE - Share in percentage of Previous Year NRHM Expenditure as TPHE	2210 + 2211 + 4210 + 6211 + NRHM	-	-	171	0.16	173	0.52

Table No. 1 Indicates total public health expenditure:

- In Maharashtra State, the public health expenditure is 0.52 % of SGDP for all three years
- Total expenditure of Maharashtra State under department of Public Health has shown continually increase in the year 2009-10 to 2011-12 and there is increase in per capita expenditure as well; which is a good indication.
- Expenditure under NRHM as a share of Total Public Health Expenditure has also shown increase in the year 2009 to 2012.
- There is continuous increase in the budget over the years. The rate of increase in the first year i.e. from 2009-10 to 2010-11 is 23.15% while the rate in the next year is 16.5% i.e. during 2010-11 to 2011-12.

Table 2 - Centre and State Share of Total Public Health Expenditure (TPHE)

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
				2009-10		2010-11		2011-12	
1	Centre's Share (In Percentage)	Centre's Share *100	Centrally Sponsored Schemes under budget heads 2210 + 2211 + 4210 + 6211 + NRHM	1100	25.31	1382	25.82	1571	25.28
		Total Public Health Expenditure (TPHE)							
2	Centre's Share per capita (In Rupees)	Total of Centre's Share	Centrally Contribution Schemes under budget heads 2210 + 2211 + 4210 + 6211 + NRHM & Mid-year Population	Rs.100	-	Rs. 124	-	Rs. 139	-
		Mid-year Population							
3	State's Share (In Percentage)	State's Share *100	State Contribution under budget heads 2210 + 2211 + 4210 + 6211 + NRHM	3246	74.69	3971	74.19	4644	74.72
		Total Public Health Expenditure (TPHE)							
4	State's Share Percentage of Total Expenditure of STATE (In Percentage)	State's Share Public Health Expenditure *100	State Contribution Schemes under budget heads 2210 + 2211 + 4210 + 6211 + NRHM & Total State Expenditure	Info not available	Info not available	3971	3.17	4644	3.31
		Total Public Expenditure of state							
5	State's Share as Percentage of State's Gross Domestic Product (In Percentage)	State Share/ Contribution *100	State contribution under budget heads 2210 + 2211 + 4210 + 6211 + NRHM	3246	0.38	3971	0.38	4644	0.39
		State Gross Domestic Product							
6	State's Share Per Capita	State Share/ Contribution	State contribution	Rs. 295/-	-	Rs. 356/-	-	Rs.410/-	-

	(In Rupees)	Mid-year Population	under budget heads 2210 + 2211 + 4210 + 6211 + NRHM						
7	External (Foreign) Funding as share of TPHE (In Percentage)	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

Table No. 2: There are 7 Parameters in table no. 2 which indicates different variables regarding share of central government and state government.

Health is a state subject and therefore state's share to health should increase. The current scenario is as below:

- Indicator no. 1: The percentage share of Central government in total public health expenditure has been constant for last 3 years and it was 25.31% during 2009-10, 25.82% during 2010-11 and 25.28% during 2011-12. In Maharashtra, It confirms with the norms recommended by National Health Policy 2002, which is 25%.
- Indicator no. 2: In Maharashtra, the Centre's Share per capita (In Rupees) has shown constant increase over a period of 3 years, it is being Rs. 100/- in 2009-10, Rs. 124/-in 2010-11 and Rs. 139/- in 2011-12.
- Indicator no. 3: The percentage share of State Government in total public health expenditure has been constant for last 3 years and it was 74.69% during 2009-10, 74.19 % during 2010-11 and 74.72 % during 2011-12. In Maharashtra.
- Indicator no. 4: In Maharashtra, the state share as percentage of total expenditure of state has shown increase over a period. It was 3.17 % during 2010-11 and 3.31 % in 2011-12.
- Indicator no. 5: In Maharashtra, the state share as percentage of state's gross domestic product has constant. It was 0.38 during 2009-10 and 2010-11 and 0.39 % in 2011-12.
- Indicator no. 6: the State's Share per capita (In Rupees) has shown constant increase over a period of 3 years, it is being Rs. 295/- in 2009-10, Rs. 356/- in 2010-11 and Rs. 410/- in 2011-12.
- In Maharashtra, external funding for public health is contributed ZERO percent.

Table 3 - Plan and Non-plan Expenditure as share of Total Public Health Expenditure (TPHE)

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage*					
				2009-10		2010-11		2011-12	
1	State Plan Expenditure (In Percentage)	State Total Plan Expenditure*100	2210 + 2211 +	832	19.15	1075	20.08	1526	24.55
		Total Public Health Expenditure (TPHE)	4210 + 6211 + NRHM						
2	Change in State Plan Expenditure as Share of TPHE (In Percentage)	Share in percentage of Current Year State Plan Expenditure as TPHE - Share in percentage of Previous Year State Plan Expenditure as TPHE	2210 + 2211 + 4210 + 6211 + NRHM	-	-	243	0.93	451	4.47
3	State Non-Plan Expenditure (In Percentage)	State Total Non-Plan Expenditure*100	2210 + 2211 + 4210 +	2811	64.59	3404	63.60	3643	58.61
		Total Public Health Expenditure (TPHE)	6211 + NRHM						
4	Change in State Non-Plan Expenditure as Share of TPHE (In Percentage)	Share in percentage of Current Year Non-Plan Expenditure as TPHE - Share in percentage of Previous Year Non-Plan Expenditure as TPHE	2210 + 2211 + 4210 + 6211 + NRHM	-	-	593	-1.09	239	-4.99

* Total health expenditure is comprised of Plan + Non-Plan + NRHM expenditure

Table no. 3: There are 4 parameters in table 3 which indicates state plan and non-expenditure.

- Indicator no. 1 – Percentage State Plan Expenditure: It shows constant growth in expenditure of state plan in Maharashtra over the period of last three years. It was 19.15 % during 2009-10, 20.08 % during 2010-11 and 24.55 % during 2011-12 towards completion / extension of ongoing activities or initiation of the new activities in Maharashtra.
- Indicator no. 3 – Percentage change in State Plan Expenditure as Share of TPHE: The rate of change has increased nearly 5 times over the period. It was 0.93 % in 2010-11 and 4.47 % during 2011-12.
- This obviously reflects that there is decrease in the percentage of non-plan expenditure, which is evident from the data above – indicator 3 & 4.

Table 4 Capital and Revenue Expenditure as a share of Total Public Health Expenditure (TPHE)

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
				2009-10		2010-11		2011-12	
1	Capital Expenditure as share of TPHE (In Percentage)	Capital Expenditure*100 / Total Public Health Expenditure (TPHE)	2210 + 2211 + 4210 + 6211 & NRHM	83	1.91	154	2.88	320	5.16
2	Change in Capital Expenditure as Share of TPHE (In Percentage)	Share in percentage of Current Year Capital Expenditure as TPHE - Share in percentage of Previous Year Capital Expenditure as TPHE	2210 + 2211 + 4210 + 6211 & NRHM	-	-	71	0.97	166	2.28
3	Revenue Expenditure as share of TPHE (In Percentage)	Revenue Expenditure*100 / Total Public Health Expenditure (TPHE)	2210 + 2211 + 4210 + 6211 & NRHM	3560	81.93	4325	80.80	4848	78.00
4	Change in Revenue Expenditure as Share of TPHE (In Percentage)	Share in percentage of Current Year Revenue Expenditure as TPHE - Share in percentage of Previous Year Revenue Expenditure as TPHE	2210 + 2211 + 4210 + 6211 & NRHM	-	-	765	-1.13	523	-2.80

* Total health expenditure is comprised of Capital + Revenue + NRHM expenditure

Table no. 4: There are 4 parameters in table 3 which indicates Capital and Revenue Expenditure as a share of Total Public Health Expenditure:

- The trend of capital expenditure is increasing during 2009-12 at Maharashtra. In year 2009-10 capital expenditure was 1.19 % which has increased up to 5.16 % in year 2011-12. In the following years this should stagnate and the revenue expenditure should increase for better services.
- As in the initial period the capital expenditure is increasing, the revenue expenditure is decreasing.

Table 5 Expenditure by function of Health Services Delivery as a share of Total Public Health Expenditure (TPHE)

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
				2009-10		2010-11		2011-12	
1	Primary Health Care (In Percentage)	Total of Primary Health Care*100	2210 + 2211 +	1516	34.88	1874	35.00	2005	32.25
		Total Public Health Expenditure (TPHE)	4210 + 6211 + NRHM						
2	Secondary Health Care (In Percentage)	Total of Secondary Health Care*100	2210 + 2211 +	330	7.59	286	5.34	348	5.59
		Total Public Health Expenditure (TPHE)	4210 + 6211 + NRHM						
3	Tertiary Health Care (In Percentage)	Total of Tertiary Health Care*100	2210 + 2211 +	973	22.40	1230	22.98	1400	22.53
		Total Public Health Expenditure (TPHE)	4210 + 6211 + NRHM						
4	Medical Education, Training and Research (In Percentage)	Total of Medical Education, Training and Research *100	2210 + 2211 +	508	11.69	554	10.35	602	9.68
		Total Public Health Expenditure (TPHE)	6211 + NRHM						
5	Administration (In Percentage)	Total of Administration *100	2210 + 2211 +	1018	23.44	1379	26.33	1834	29.95
		Total Public Health Expenditure (TPHE)	6211 + NRHM						
Total (Percentage)					100.0		100.0		100.0

Table no. 5: There are 5 parameters in table 5 which indicates Expenditure by function of Health Services Delivery as a share of Total Public Health Expenditure:

- Primary Health Care includes expenditure at Sub-centre, PHCs, All National Programmes, Camps and IEC of Maharashtra state. Primary Health Care expenditure at year 2009 -11 is increasing and declining at year 2011-12.
Theoretically, the expenditure on Primary health care should be more to reduce the burden on increase the access to community and marginalized. This will also reduce the unnecessary burden on the higher level health facilities.
- Secondary health care includes community health centers, TB, ESI and dispensaries other than hospitals. The trend of Secondary Health Care expenditure is declining during year 2010 to 2012 except 2009-10.
- Tertiary Health care includes hospital & dispensaries and Medical College Hospitals. It indicates almost stable trend of Tertiary Health Care expenditure around 22.50 % in the state.
- Medical Education, Training and Research are consecutively declining during year 2009-10 to 201-12.
There should be provision for separate allocation for public health research as this is very much necessary to create evidence for planners and policy makers.
- The trends of administration cost are constantly increasing during year 2009-10 to 201-12. The expenditure on administration includes general/facility administration, PWD and Human resource cost.

Table 6: Expenditure by Components Health Services Delivery as a Share of TPHE

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
							2009-10	2010-11	2011-12
1	Medicines and Consumables (In Percentage)	Total of Medicine and Consumables*100	2210 + 2211 + 4210 + 6211 + NRHM	251	5.78	313	5.85	284	4.57
		Total Public Health Expenditure (TPHE)							
2	Medical Equipment (In Percentage)	Total of Medical Equipment*100	2210 + 2211 + 4210 + 6211 + NRHM	85	1.95	36	0.68	88	1.42
		Total Public Health Expenditure (TPHE)							
3	Human Resources (Salary, Contractual Payment and Allowances (In Percentage)	Total of Human Resources*100	2210 + 2211 + 4210 + 6211 + NRHM	2820	64.89	3363	62.83	3697	59.48
		Total Public Health Expenditure (TPHE)							
4	Maintenance and Repair (In Percentage)	Total of Maintenance and Repair *100	2210 + 2211 + 4210 + 6211 + NRHM	46	1.06	50	0.94	52	0.84
		Total Public Health Expenditure (TPHE)							
5	Construction Works (In Percentage)	Total of Construction Works *100	2210 + 2211 + 4210 + 6211 + NRHM	217	4.99	337	6.29	572	9.21
		Total Public Health Expenditure (TPHE)							
6	Office Expenditure (In Percentage)	Total of Office Expenditure *100	2210 + 2211 + 4210 + 6211 + NRHM	378	8.71	446	8.34	647	10.41
		Total Public Health Expenditure (TPHE)							
7	Other (In Percentage)	Total of Others *100	2210 + 2211 + 4210 + 6211 + NRHM	548	12.62	776	15.07	866	14.07
		Total Public Health Expenditure (TPHE)							
Total (In Percentage)					100.00		100.00		100.00
8	Medicines and Consumables (Per Capita in	Total of Medicine and Consumables	2210 + 2211 + 4210 + 6211 +	Rs. 23	-	Rs. 28	-	Rs. 25	-
		Mid-year							

	Rupees)	Population	NRHM and Mid-year Population						
9	Contractual Staff as a share of Total Expenditure on HR (In Percentage)	Total of Contractual HR *100	2210 + 2211 + 4210 + 6211 + NRHM	70	2.47	95	2.83	152	4.10
		Total HR							

Table no. 6: There are 9 parameters in table 6 which indicates Expenditure by Components Health Services Delivery as a Share of TPHE:

- There are provisions in public health budgeting system on Medicine & Consumables, Equipments, HR, Maintenance and Construction works including at society and treasury route.
- Expenditure of medicine and consumables are inconsistent during above three year's period. It is around 5% over the period. The expenditure on this should be increased as the studies done have shown that there is scarcity / non-availability of medicines at public health facilities and out-of-pocket expenditure (OOPE) are mainly on medicines.
- The trend of medical equipment expenditure is also indicates fluctuating during three year's period. It shows considerable decrease in 2010-11 as compared to year 2009-10 and it increases in year 2011-12 i.e. up to 1.42 %.
- There are constant declining trend on expenditure of human resources during period 2009-10 to 2011-12. The same trend indicates at maintenance and repair head also.
- Construction expenditure is increasing over the period of three year which is almost doubled in year 2011-12.
- The expenditure on contractual staff is around 3.14 % of total 62.40 % of TPHE. It means around 5.00 % expenditure of contractual staff against total expenditure on human resources.
- There should be separate component for expenditure on training as CME like trainings are necessary for the human resources to keep them updated with the latest developments in the field.

Table 7 Expenditure on AYUSH as a Share of TPHE

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
				2009-10		2010-11		2011-12	
1	AYUSH (In Percentage)	Total of AYUSH *100	2210 + 2211 + 4210 + 6211 + NRHM	495	11.40	508	9.49	559	9.00
		Total Public Health Expenditure (TPHE)							

Table no. 7: There is 1 parameter in table 7 which indicates Expenditure on AYUSH as a Share of TPHE:

- AYUSH program has budget provision for up gradation of AYUSH educational standards, quality control and standardization of drugs, improving the availability of medicinal plant material, research and development and awareness generation at Maharashtra state. (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy).
- Public expenditure on AYUSH shows declining trend during 2009-10 to 2011-12 at Maharashtra state.
- AYUSH is one of the major components of NRHM and majority of the expenses are from NRHM. If AYUSH needs to be strengthened, there should be coordination among all departments and budgetary allocation from each of them for AYUSH should increase.

Table 8 Expenditure on Components under NRHM

Sr. No.	Indicators	Numerator / Denominator	Data Element (Budget Line)	Year wise output in Amounts and percentage					
				2009-10		2010-11		2011-12	
	Expenditure under NRHM (Absolute Value in Rs. CRORES)		NRHM FMR	702		873		1047	
1	Human Resources (In Percentage)	Total of Human Resources *100	NRHM FMR	61	8.74	83	9.48	104	9.97
		Total Expenditure under NRHM							
2	Medicines and Supplies (In Percentage)	Total of Medicines and Supplies *100	NRHM FMR	19	2.67	26	2.95	19	1.80
		Total Expenditure under NRHM							
3	Medical Equipment (In Percentage)	Total of Medical Equipment *100	NRHM FMR	5	0.77	0.00	0.00	1	0.14
		Total Expenditure under NRHM							
4	Infrastructure and Civil Works (In Percentage)	Total of Infrastructure and Civil Works *100	NRHM FMR	97	13.78	92	10.48	112	10.78
		Total Expenditure under NRHM							
5	ASHA (In Percentage)	Total of ASHA *100	NRHM FMR	22	3.14	38	4.33	43	4.13
		Total Expenditure under NRHM							
6	Hospital Management Society/ Rugna Kalyan Samiti (In Percentage)	Total of Hospital Management Society/Rugna Kalyan Samiti *100	NRHM FMR	43	6.07	47	5.41	48	4.63
		Total Expenditure under NRHM							
7	Untied Fund (In Percentage)	Total of United Fund *100	NRHM FMR	40	5.75	50	5.76	54	5.16
		Total Expenditure under NRHM							
8	Conditional Cash Transfer (JSY) (In Percentage)	Total of Conditional Cash Transfer(JSY) *100	NRHM FMR	27	3.82	33	3.77	35	3.38
		Total Expenditure							

		under NRHM							
9	Program Management and Monitoring and Evaluation (In Percentage)	Total of Program Management and Monitoring and Evaluation *100	NRHM FMR	42	5.92	56	6.47	45	4.30
		Total Expenditure under NRHM							
10	Public Private Partnership / NGOs (In Percentage)	Total of Public Private Partnership / NGOs *100	NRHM FMR	2	0.31	4	0.48	36	3.44
		Total Expenditure under NRHM							
11	Referral Transport (In Percentage)	Total of Referral Transport *100	NRHM FMR	1	0.21	0.82	0.09	7	0.64
		Total Expenditure under NRHM							
12	Mobile Medical Units (In Percentage)	Total of Medical Mobile Units *100	NRHM FMR	0.09	0.01	5	0.60	10	1.02
		Total Expenditure under NRHM							
13	IEC / Behavior Change Communication Activities (In Percentage)	Total of IEC / Behavior Change Communication Activities *100	NRHM FMR	8	1.19	7	0.83	8	0.79
		Total Expenditure under NRHM							
14	Mainstreaming of AYUSH (In Percentage)	Total of Mainstreaming of AYUSH*100	NRHM FMR	0.30	0.04	5	0.55	13	1.19
		Total Expenditure under NRHM							
15	Strengthening and up gradation of Health Facilities (In Percentage)	Total of Strengthening and up gradation of Health Facilities *100	NRHM FMR	140	20.00	157	17.93	247	23.63
		Total Expenditure under NRHM							
16	Training (In Percentage)	Total of Training *100	NRHM FMR	36	5.13	45	5.18	30	2.84
		Total Expenditure under NRHM							
17	Family Planning (In Percentage)	Total of Family Planning *100	NRHM FMR	41	5.80	40	4.54	37	3.51

		Total Expenditure under NRHM							
18	Child Health	Total of Child Health * 100	NRHM FMR	5	0.66	47	5.40	25	2.42
		Total Expenditure under NRHM							
19	ARSH	Total of ARSH * 100	NRHM FMR	1	0.07	2	0.21	2	0.17
		Total Expenditure under NRHM							
20	PNDT Activities	Total of PNDT Activities * 100	NRHM FMR	0	0.00	0	0.00	2	0.14
		Total Expenditure under NRHM							
21	Urban RCH	Total of Urban RCH * 100	NRHM FMR	14	2.03	14	1.60	17	1.64
		Total Expenditure under NRHM							
22	Vulnerable Groups	Total of Vulnerable Groups * 100	NRHM FMR	0.33	0.05	0.52	0.06	1	0.11
		Total Expenditure under NRHM							
23	Immunization	Total of Immunization * 100	NRHM FMR	57	8.08	62	7.07	50	4.76
		Total Expenditure under NRHM							
24	School Health Programme	Total of School Health Programme * 100	NRHM FMR	29	4.15	0	0.00	36	3.47
		Total Expenditure under NRHM							
25	IDD	Total of IDD * 100	NRHM FMR	0	0.00	0.13	0.02	0.16	0.02
		Total Expenditure under NRHM							
26	IDSP	Total of IDSP * 100	NRHM FMR	0	0.00	1	0.15	2	0.21
		Total Expenditure under NRHM							
27	NVBDCP	Total of NVBDCP * 100	NRHM FMR	0	0.00	4	0.42	10	0.95
		Total Expenditure under NRHM							
28	NLEP	Total of NLEP * 100	NRHM FMR	0	0.00	2	0.28	3	0.29
		Total Expenditure							

		under NRHM							
29	NBCP	Total of NBCP * 100	NRHM FMR	0	0.00	6	0.68	11	1.03
		Total Expenditure under NRHM							
30	RNTCP	Total of RNTCP * 100	NRHM FMR	0	0.00	27	3.08	33	3.12
		Total Expenditure under NRHM							
31	Others (In Percentage)	Total of Others*100	NRHM FMR	7	0.94	18	2.04	45	4.29
		Total Expenditure under NRHM							
Total (Percentage)					100.0		100.0		100.0

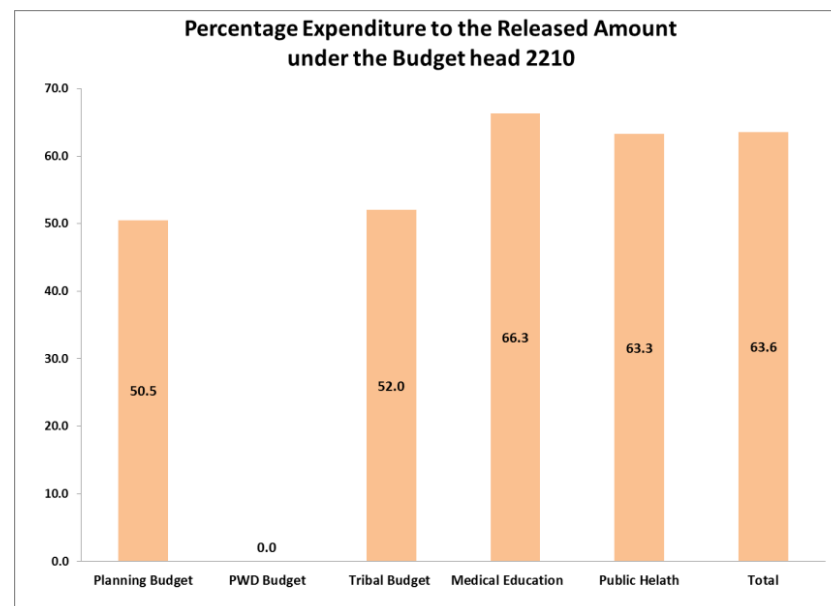
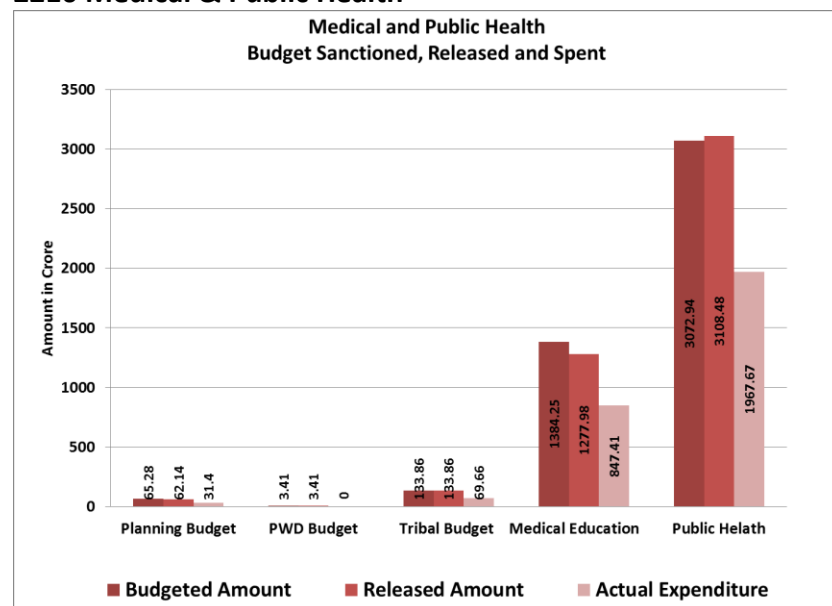
Table no. 8: There are 31 parameters in table 8 which indicates Expenditure on Components under NRHM:

- In addition to existing system, improved health status and quality life of rural population with special focus on sustainable development measures in 2005, NRHM has established with separate financial provision.
- The financial provision during 2009-2012 reveals:
 1. The expenditure under NRHM is increasing during 2009-12 which is good sign overall.
 2. The trend of HR and ASHA worker's expenditure under NRHM is increasing and averagely spends on HR is 9.40 % and ASHA is 3.86 % during 2009-12.
 3. The trend of expenditure on medicine, consumable and medical equipments, Infrastructure and Civil Works, Program Management, strengthening of health facilities Monitoring &Evaluation, Training are fluctuating during 2009-2012.
 4. The trend of expenditure on IEC is constantly decreasing during 2009-2012.
 5. Also, NRHM has initiated various schemes as well as strengthen the existing schemes like family planning scheme expansion, Mainstreaming of AYUSH, PPP, Medical Mobile Unit, Referral Transport etc. trend of these newly and existing schemes is decreasing.
 6. Average expenditure on training is 4.38 % during 2009-12.

Summary Sheet of Detailed Head wise Budgeted, Released and Actual Expenditure of year 2011-2012 of Maharashtra:

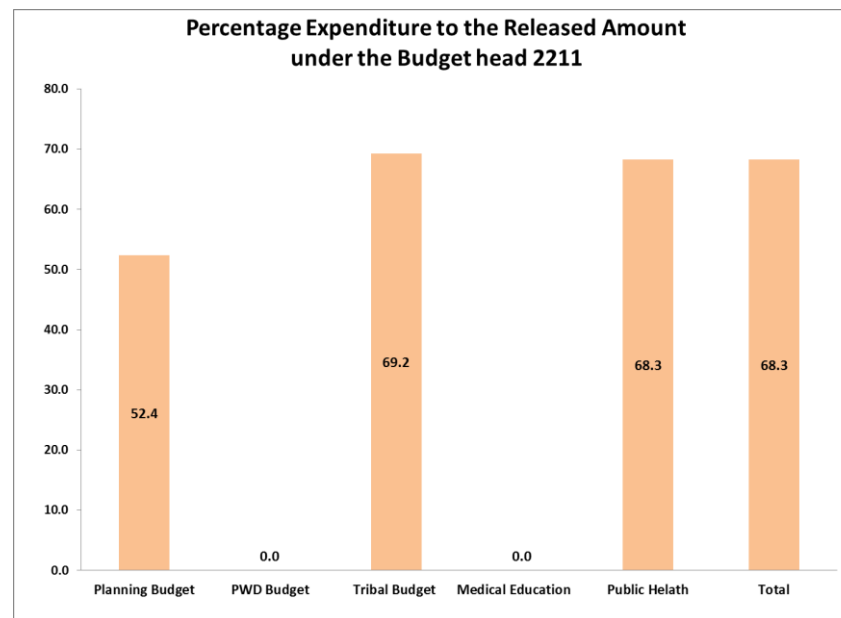
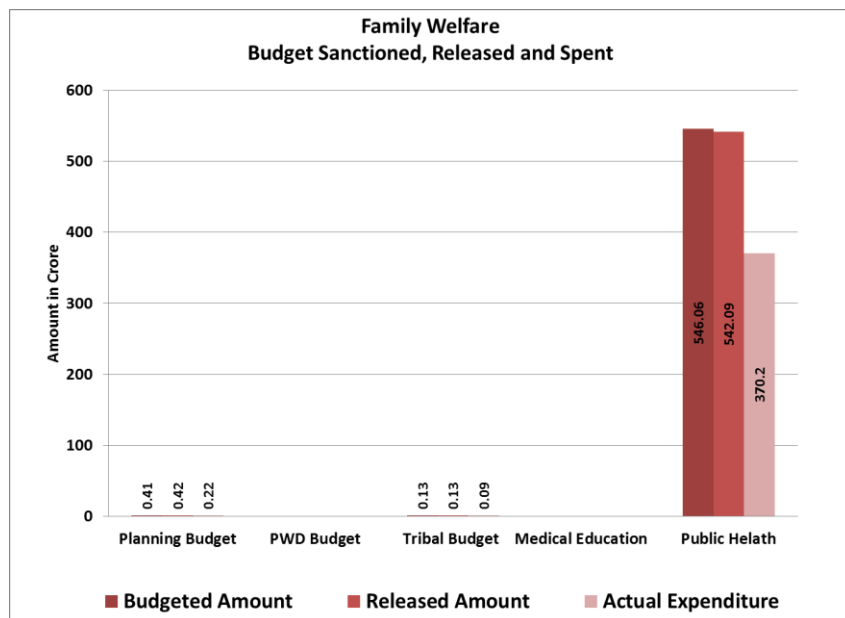
	2210			2211			4210		
	Medical & Public Health			Family Welfare			Capital Outlay On Medical & Public Health		
	Budgeted Amount	Released Amount	Actual Expenditure	Budgeted Amount	Released Amount	Actual Expenditure	Budgeted Amount	Released Amount	Actual Expenditure
Planning Budget	65.28	62.14	31.4	0.41	0.42	0.22	18.35	21.65	3.84
PWD Budget	3.41	3.41	0				417.04	330.35	0
Tribal Budget	133.86	133.86	69.66	0.13	0.13	0.09	24.2	24.2	0
Medical Education	1384.25	1277.98	847.41				52.06	52.06	0.04
Public Health	3072.94	3108.48	1967.67	546.06	542.09	370.2	12.32	12.32	0.01
Total	4659.74	4585.87	2916.14	546.6	542.64	370.51	523.97	440.58	3.89

2210 Medical & Public Health



Under 2210, grants are coming from mainly the public health and medical education. From Tribal, PWD and planning department, though grants are less comparatively the amounts are not small. It is very disheartening fact that, the percentage of expenditure to the released amount is only about 50 – 60% (as depicted in graph 2).

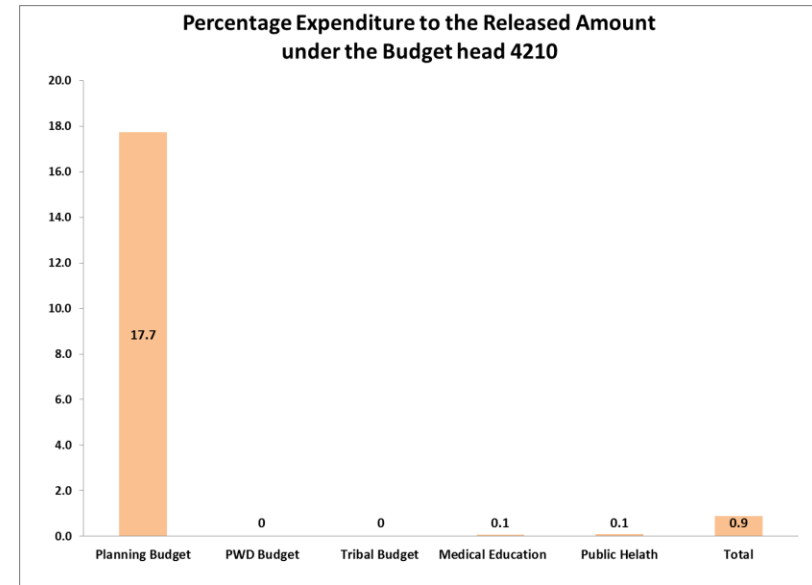
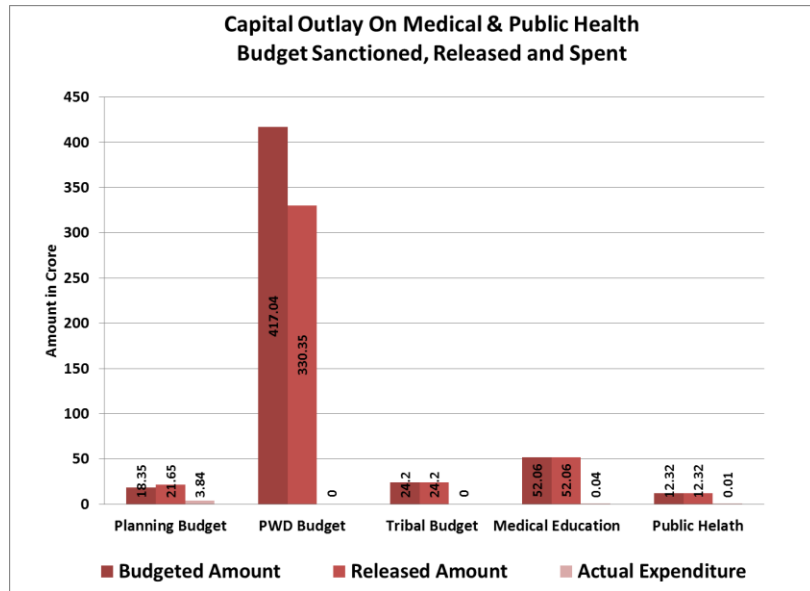
2211 Family Welfare



Under 2211, grants are coming from mainly the public health. Tribal and planning department funds are small. The unspent funds / grants in this case are also about 40%.

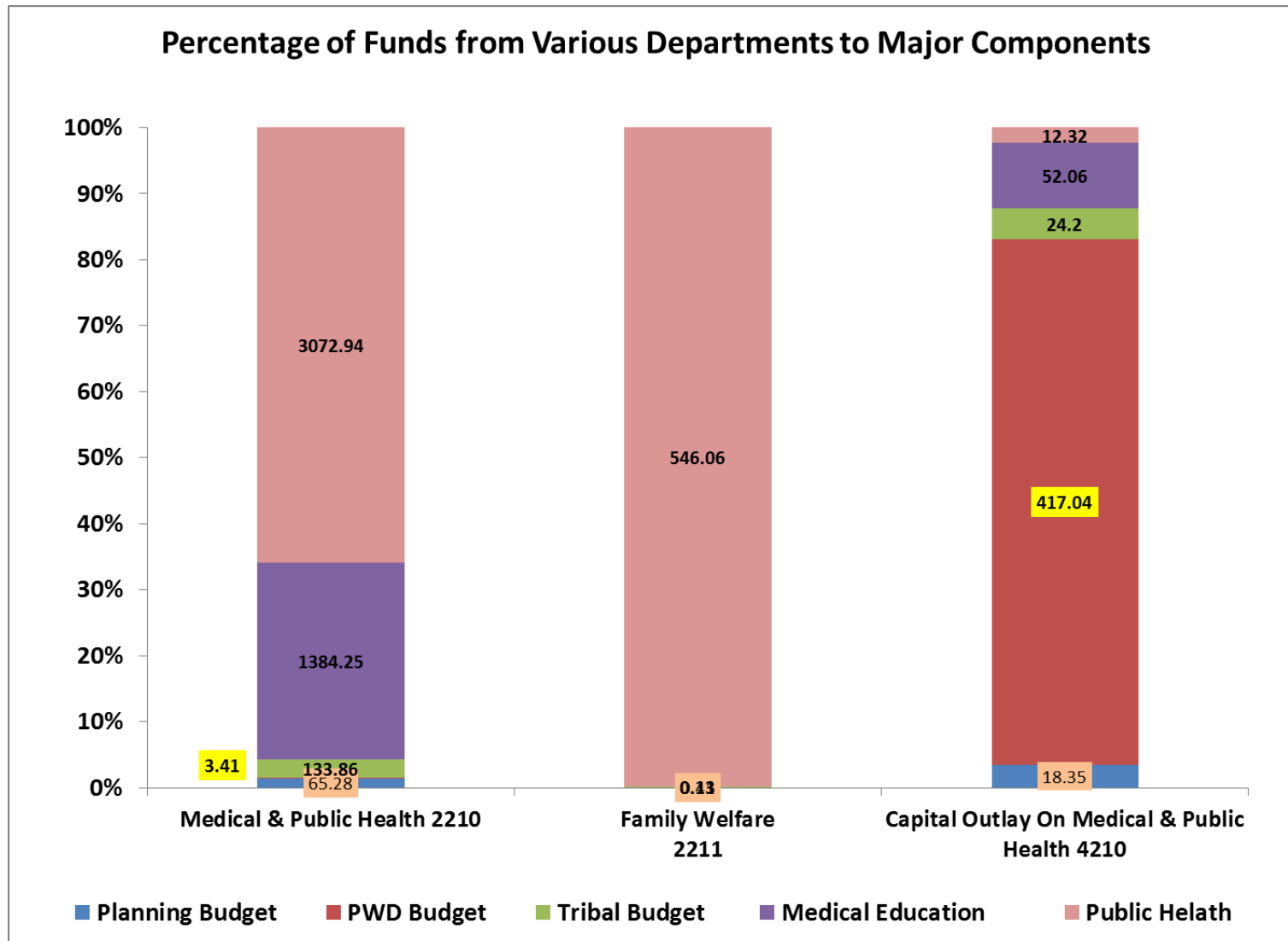
There is need to find out reasons for not spending the released amount despite there being the need. Therefore, reform in the fund utilization procedures is the need of the hour.

4210 Capital



Under 4210, similar picture is seen as far as spending is concerned.

Summary Graph



Conclusion:

As mentioned in report, total public health expenditure at Maharashtra is 0.52% of GSDP which needs to accelerate up to 2.00 % of GDP as suggested in public health policy 2002. As part of acceleration in terms of money, Gol has initiated scheme i.e. National Health Mission (NRHM) in 2005. Through, NRHM government has contributed additional funding which is 16.16 % in 2009-10, 16.32 % 2010-11 and 16.84 % in 2011-12 at Maharashtra.

The report reveals that, there is a need to increase in capital assets of public health institution through which maximum possible services can be offered to the citizens but in later part of project it should remain stable and simultaneously increase in revenue expenditure. There is also a need to increase in primary health care allocation from present 32% to 45%. The separate allocation for public health research should also be considered since there is no provision at state level. The expenditure on regular human resource is high (ranges between 60-65% of TPHE) which need to reduce.

Recommendations:

- Capital expenditure should remain stable and the revenue expenditure should increase for better services.
- Theoretically, the expenditure on Primary health care should be more to reduce the burden on increase the access to community and marginalized. This will also reduce the unnecessary burden on the higher level health facilities.
- There should be provision for separate allocation for public health research as this is very much necessary to create evidence for planners and policy makers.
- There should be separate component for expenditure on training as CME. Trainings are necessary for the human resources to keep them updated with the latest developments in the field.
- If AYUSH needs to be strengthened, there should be coordination among all departments and budgetary allocation from each of them for AYUSH should increase.
- State's total public health expenditure needs to increase from existing 0.52 % to 2.00 % of SGDP.
- State's share of public health expenditure needs to increase from existing 3.24 % to 5 to 7 % as against total state's public expenditure. (Maharashtra)
- The expenditure on Human Resource (treasury route) needs to review.
- The expenditure of Non-plan activity can be reduced and promote the plan expenditure of state.

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