



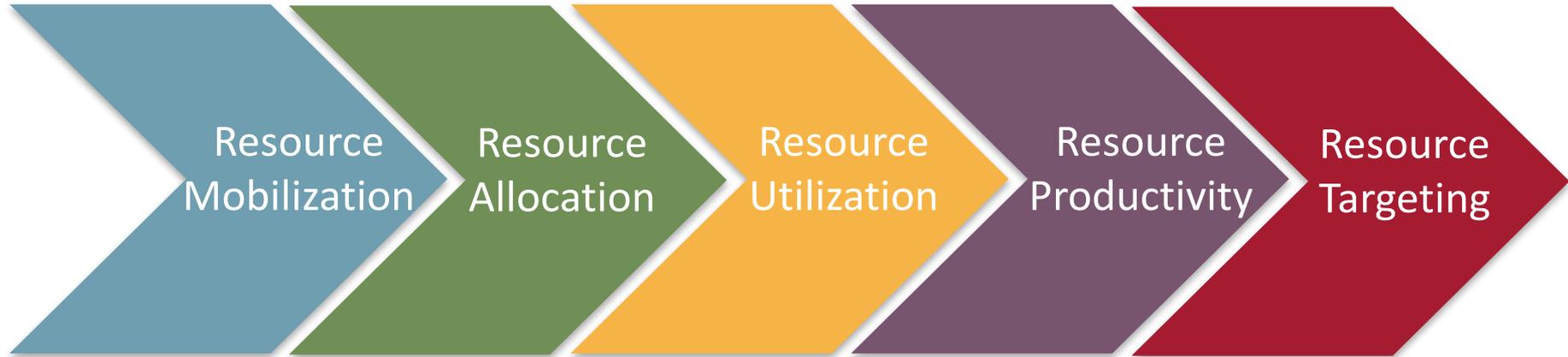
# Resource Tracking and Management (RTM):

## State Level Results from Bihar (2007-08 to 2013-14)

July 2017



# The RTM Conceptual Framework



What is the potential for raising more resources for health? From where? What determines the resource envelope at national and sub-national levels?

How are funds allocated to different programs and functions at national and sub-national levels? What factors determine the allocation to primary care?

Are the allocated funds being utilized? What factors drive successful budget execution? What are the existing bottlenecks?

How effectively are resources being translated into services? Is delivery efficient and what can be gained from efficiency improvements in terms of volume and quality?

Are inputs benefiting the intended individuals and population? Is public spending reaching the poor?



# Methods

- **Financial data** - Analysis is for years 2007-08 to 2013-14
- Streams of financing analyzed
  - **Treasury route** (Funds pooled by the state from general taxation)
    - Expenditures incurred Major codes **2210, 4210 (Medical and Public Health)**, **2211, 4211 (Family Welfare)** under Demand for Grant no. 20 (Health Department)
  - **GOI transfers** (to SHS; and state treasury for infrastructure and maintenance for NHM)
  - **GOI Other** (Centrally sponsored schemes)
- Budget Tracking Tool developed by NHSRC endorsed by the MOHFW was used to estimate primary care. All of NHM is considered primary care for this study and analysis.



# Identifying Primary Care Funding: NHSRC Tracking Toolkit

<b>Hierarchy Level</b>	<b>Budget Lines/Heads</b>	<b>Example with Code</b>	<b>Example with Code</b>
Level 1	Major Head	<b>Medical and Public Health – Revenue Expenditure Head (2210)</b>	
Level 2	Sub-major Head	<b>Public Health Head (06)</b>	
Level 3	Minor Head	Prevention and Control of Diseases (101)	
<b>Level 4</b>	<b>Sub-minor head</b>	<b>National TB Program (04)</b>	<b>PRIMARY CARE</b>
Level 5	Detailed Head	Drugs and Medicines (60)	



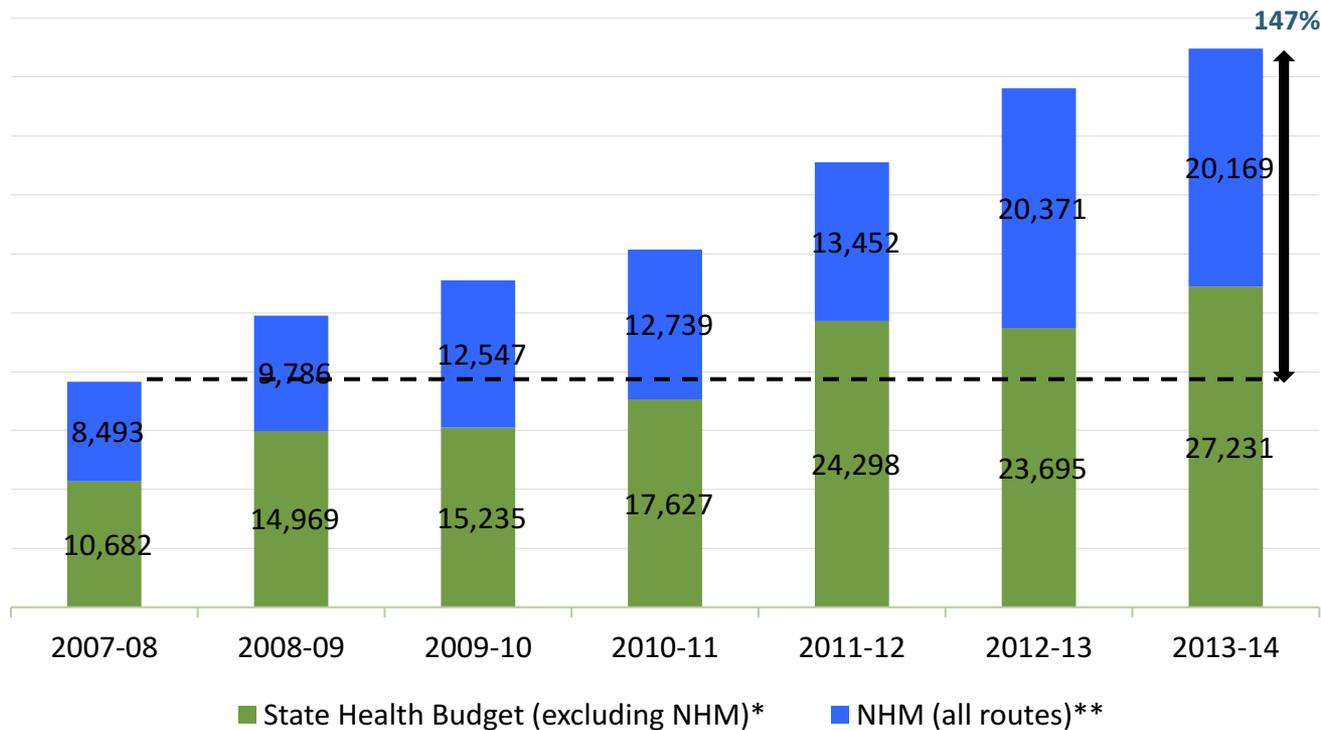
# Sources and Routes Tracked for Health Funds

Source	Treasury Route	Society Route	Notes
State	(1) State's own health budget	(4) State's share of NHM budget	(1) Allocation of tax revenues by the State Treasury to health and central revenues transfers to states
Center (GOI)	(2) NHM funds for infrastructure & maintenance	(5) GOI share of NHM budget	(2) Approved NHM budget based on PIP transferred by GOI to State treasury
	(3) Other Centrally Sponsored Schemes		(3) GOI contribution to health budget for CSS (non-NHM) (4) State contribution of 15% and now 25% of approved PIP transferred from state treasury to SHS (5) GOI contribution to NHM budget transferred to SHS



# State Health Budget

Total Health Budget  
(in Rs million)



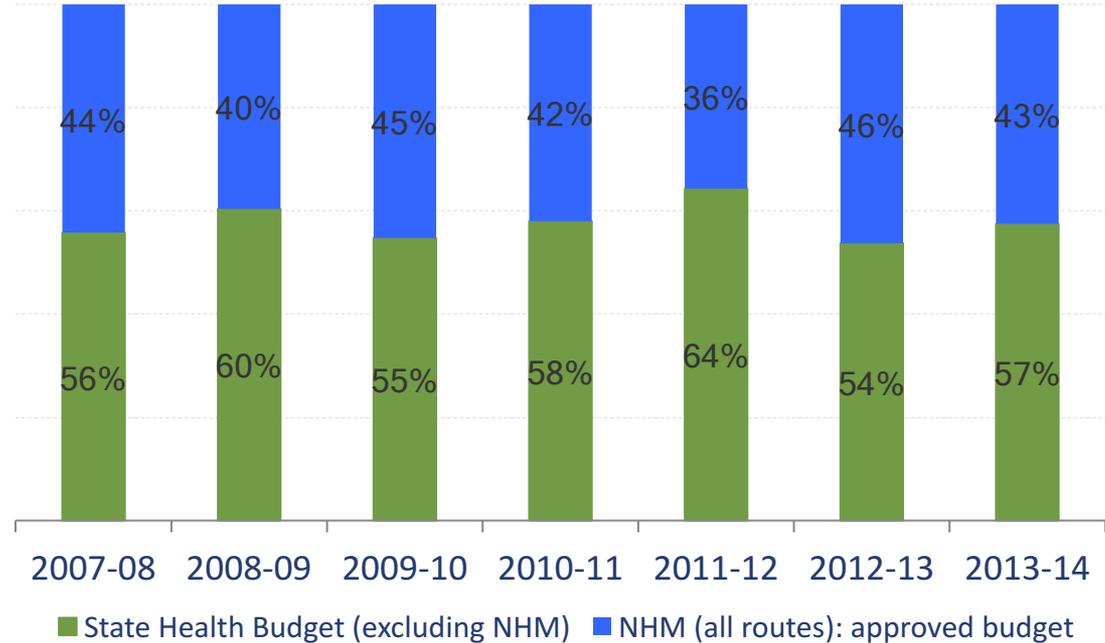
## Total Health Budget:

- Rs 19,174 million (2007-08)
- Rs 47,401 million (2013-14)
- Increase of 147% over 7 years.

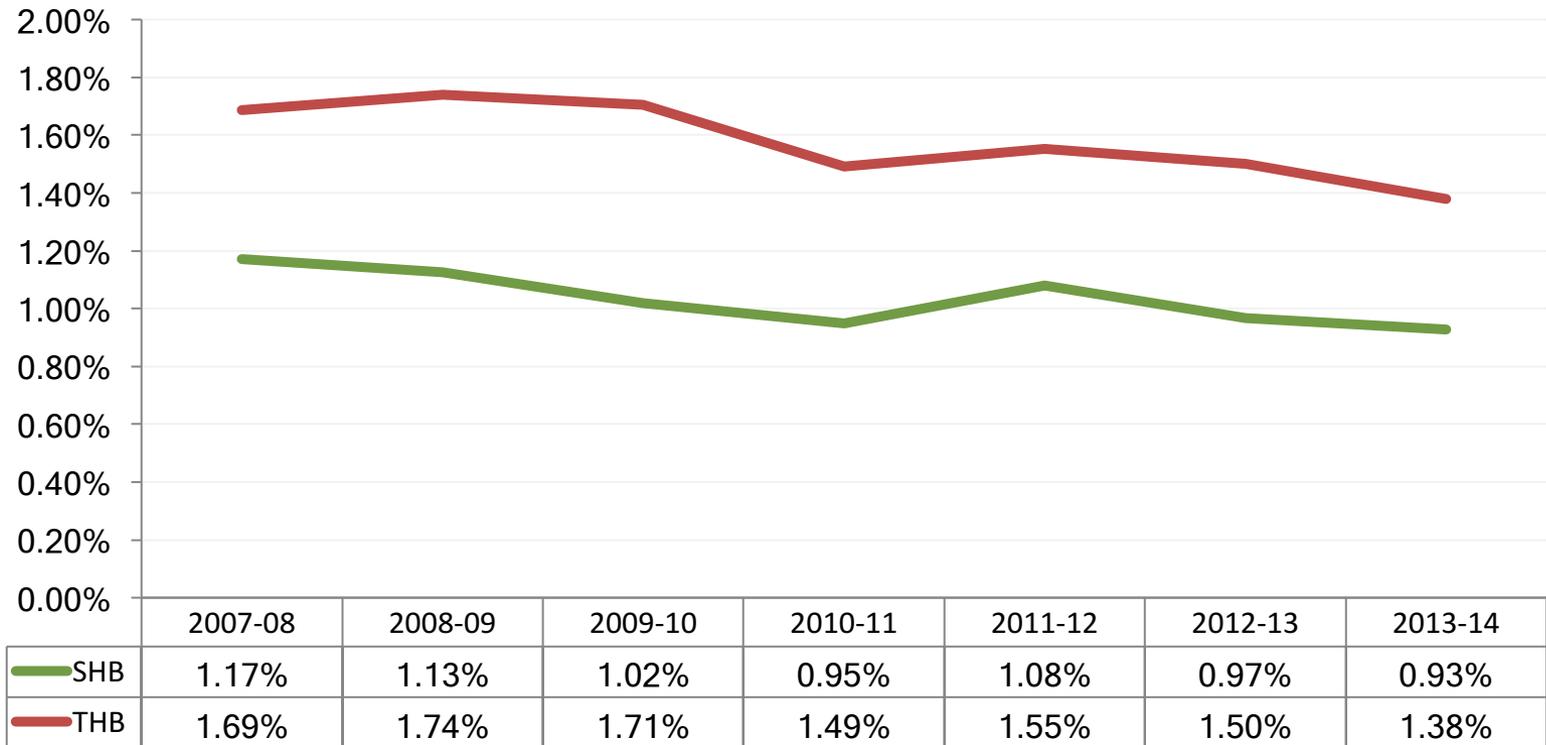
# NHM as a share of Total Health Budget

## Over the last 7 years

- On average NHM has contributed 42% of the THB
- Bihar has among the highest dependency on NHM.
- Share of NHM in the THB was at its highest at 46% in 2012-13,



# SGHB and TGHB as a share of GSDP



- Declining trends in TGHB & SGHB as a share of GSDP, despite economy of the state witnessing among the highest growth trend in the country
- Substantial increase in demand for health services - Four fold increase in patient footfall in hospitals between 2007-08 & 2013-14 due to better infrastructure – Bihar Economic Survey, 2014-15



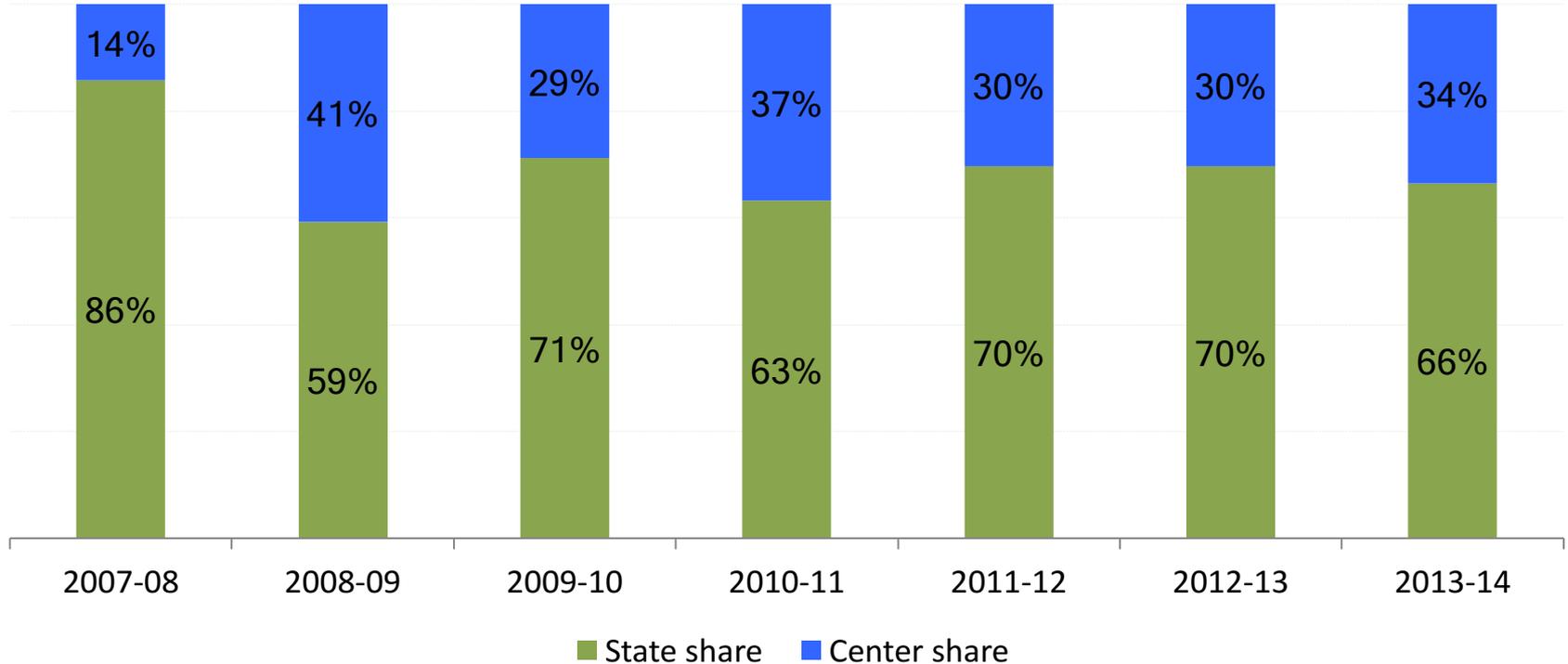
# Actual Government Expenditure on Health (Nominal)

INDICATORS	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total Health Expenditure for Bihar (in Rs Millions)	14,720	19,439	18,677	23,028	26,898	30,411	34,036
State's share in THE (in Rs Millions)	12,622 (86%)	11,522 (59%)	13,294 (71%)	14,553 (63%)	18,744 (70%)	21,203 (70%)	22,615 (66%)
NHM expenditure (in Rs Millions)	3,826	10,927	7,839	14,186	11,074	13,589	11,936
Per Capita THE (in Rs)	159	207	196	238	274	306	338
Total Primary Care Expenditure (State & NHM)	10,273 (70%)	14,109 (73%)	12,603 (67%)	17,049 (74%)	17,586 (65%)	20,278 (67%)	22,253 (65%)
Per Capita Primary Care (in Rs)	111	150	132	176	179	204	221
THE as a percent of State GSDP	1.29	1.37	1.15	1.13	1.11	1.04	0.99
Primary Care Expenditure as percent of State GSDP	0.90%	0.99%	0.77%	0.84%	0.72%	0.69%	0.65%



# Bihar Total Government Health Expenditure

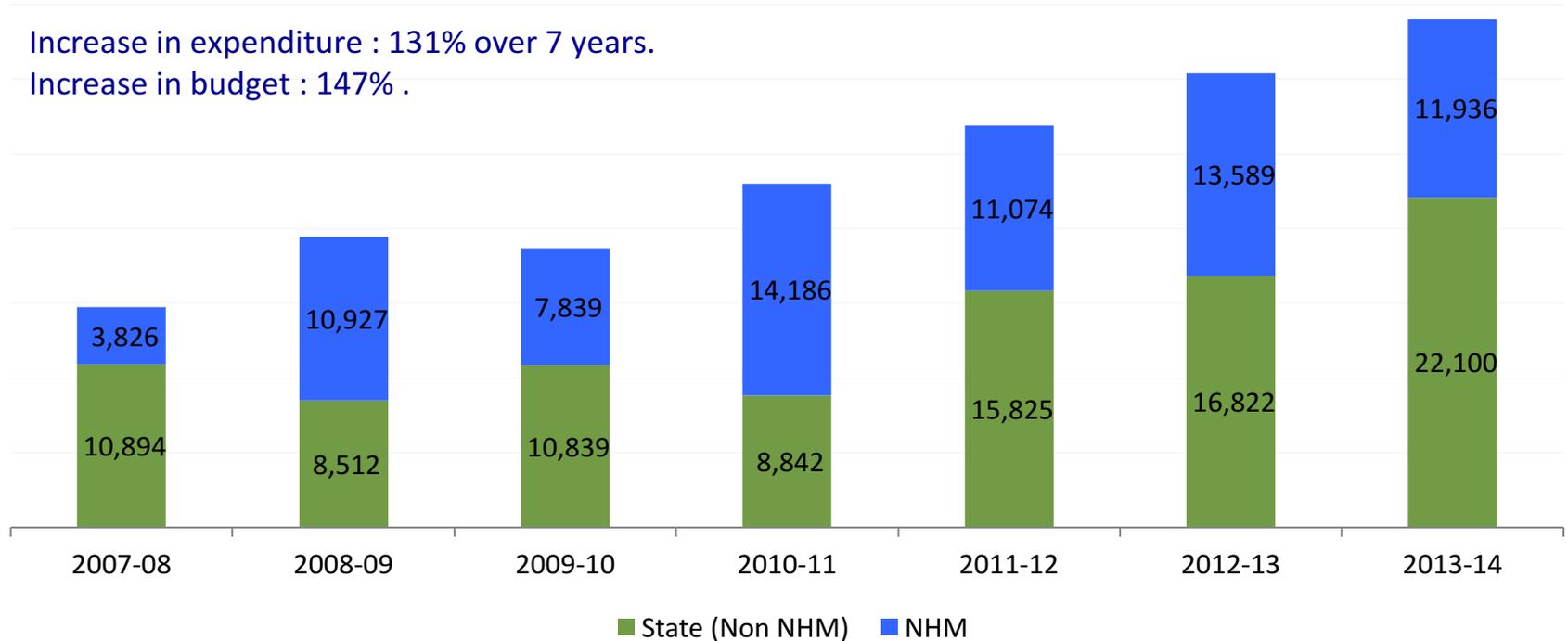
• Average State's share in TGHE: 68 %



# Bihar Total Health Expenditure (By route)

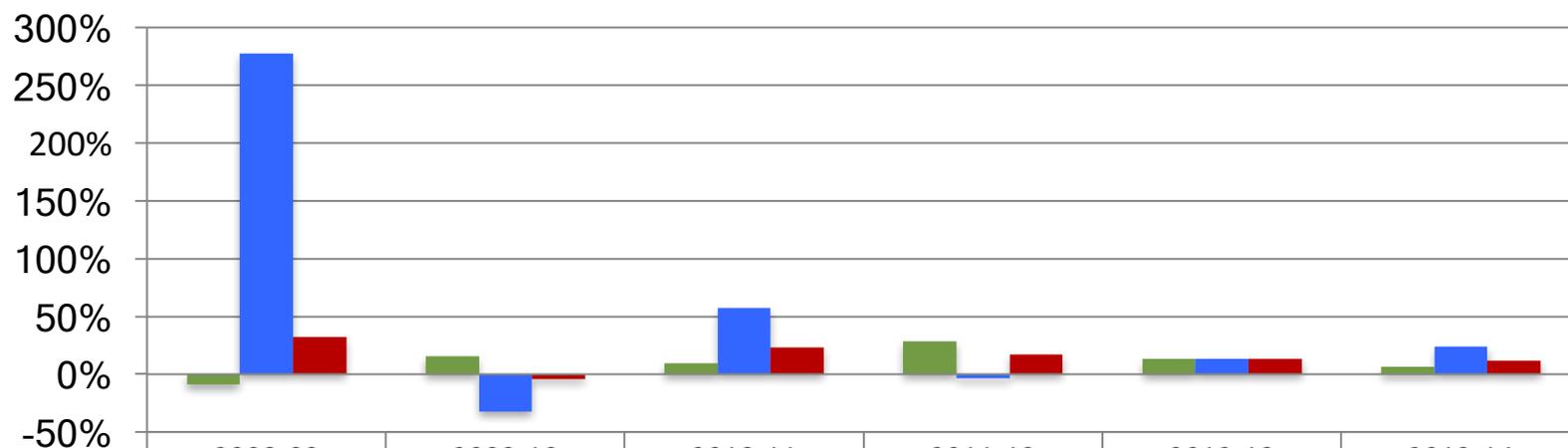
Increase in expenditure : 131% over 7 years.

Increase in budget : 147% .



# Annual Growth Rate in Total Govt. Health Expenditure (by Source of Financing)

Annual Growth Rate in Health Expenditure by Sources



	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
State share	-8.71%	15.38%	9.47%	28.80%	13.12%	6.66%
Center share	277.29%	-32.00%	57.42%	-3.79%	12.93%	24.03%
THE	32.06%	-3.92%	23.29%	16.81%	13.06%	11.92%

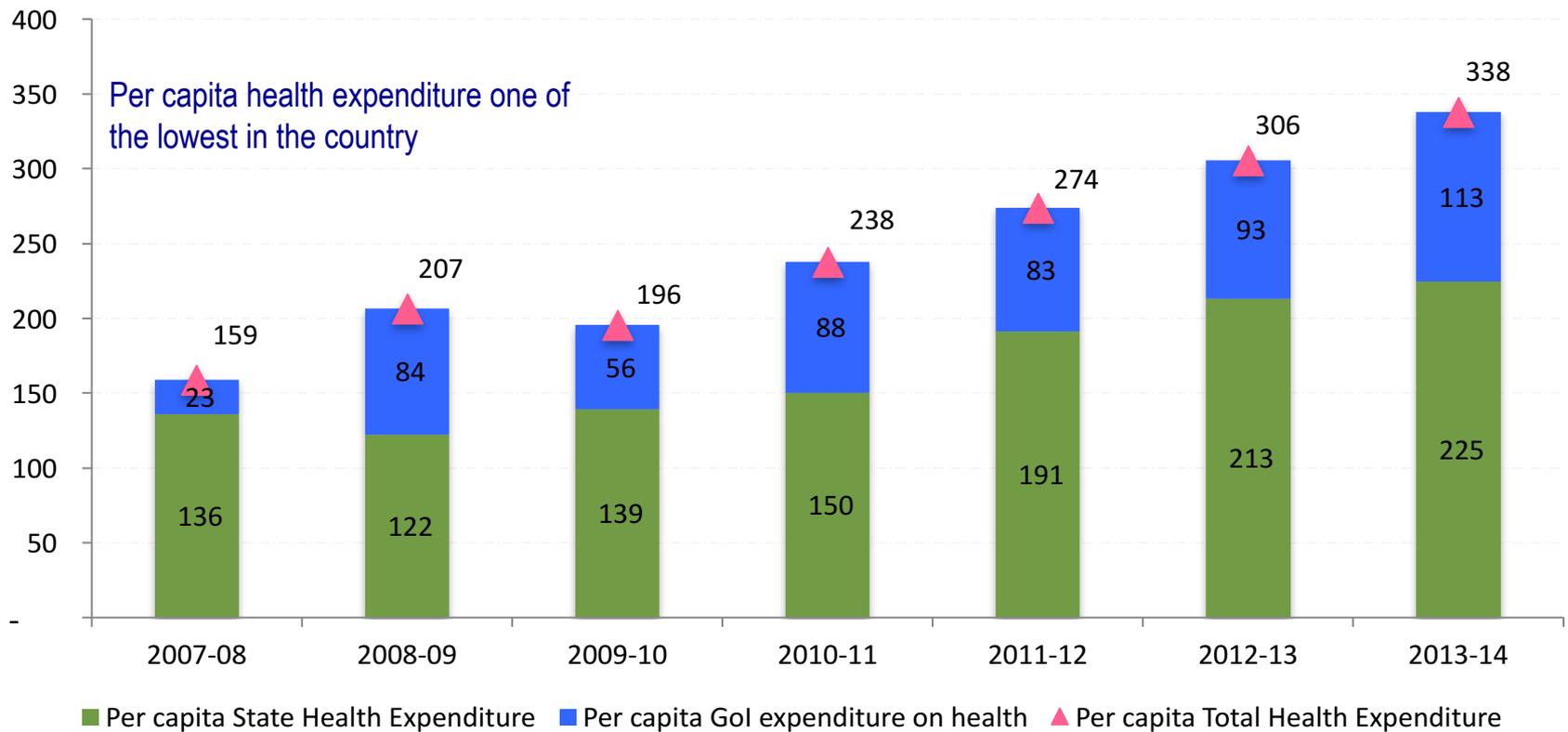
State share Center share THE



**HARVARD**  
**T.H. CHAN**

SCHOOL OF PUBLIC HEALTH

# Total Government Per Capita Expenditure in Bihar



# Bihar Health Expenditures by Levels of Care (Treasury Only) in Rs. Million

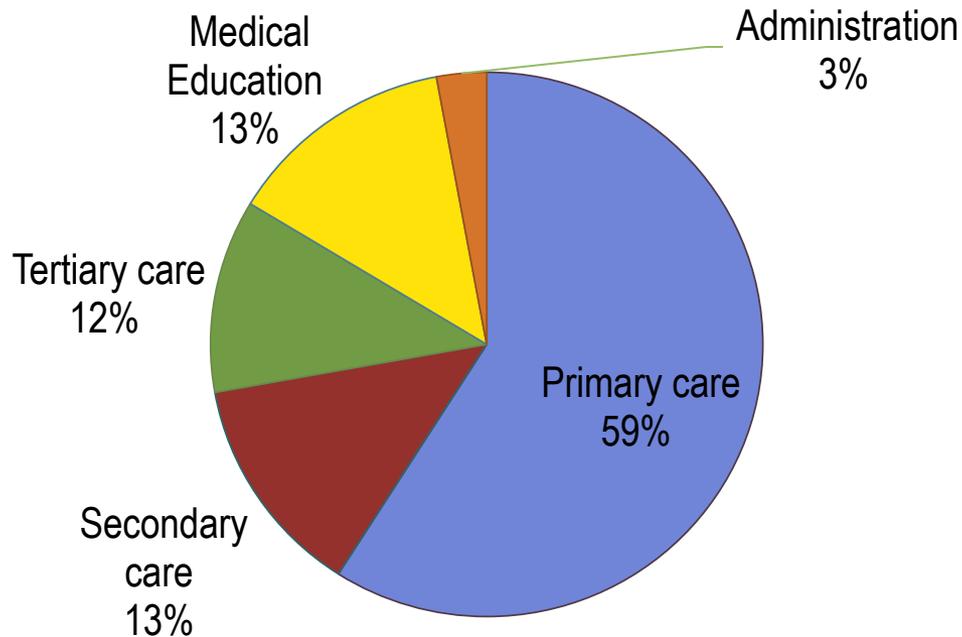
Allocations by Levels of Care	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Primary Care	9,423 (68%)	7,575 (59%)	9,009 (60%)	10,693 (64%)	11,933 (56%)	13,851 (58%)	13,954 (54%)
Secondary Care	1,603	1,831	1,852	1,673	2,976	3,342	3,752
Tertiary Care	1,189	1,767	1,936	2,083	2,555	2,536	2,785
Medical Education	1,286	1,358	1,734	1,994	3,077	3,341	4,613
Administration	370	375	552	229	705	914	633
<b>Total</b>	<b>13,870</b>	<b>12,906</b>	<b>15,083</b>	<b>16,672</b>	<b>21,246</b>	<b>23,984</b>	<b>25,736</b>
Per Capita Primary (Rs.)	82	68	71	100	91	99	102
Per Capita Primary (incl. NHM) (Rs.)	110	149	131	176	179	203	220



# Bihar Expenditure by Levels of Care

(Treasury Only - 7 years average)

2007-08 to 2013-14

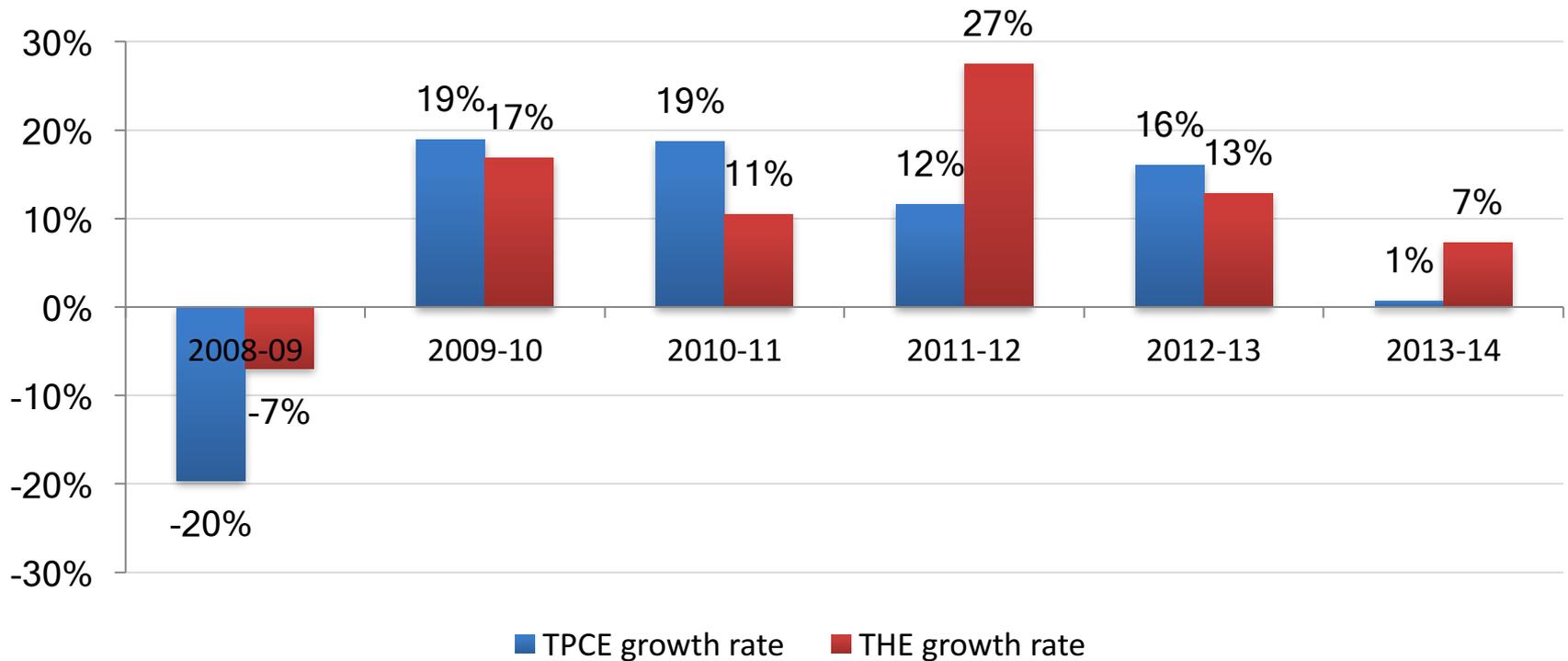


Largest share (59%) of the health expenditure through Treasury route is on Primary Care

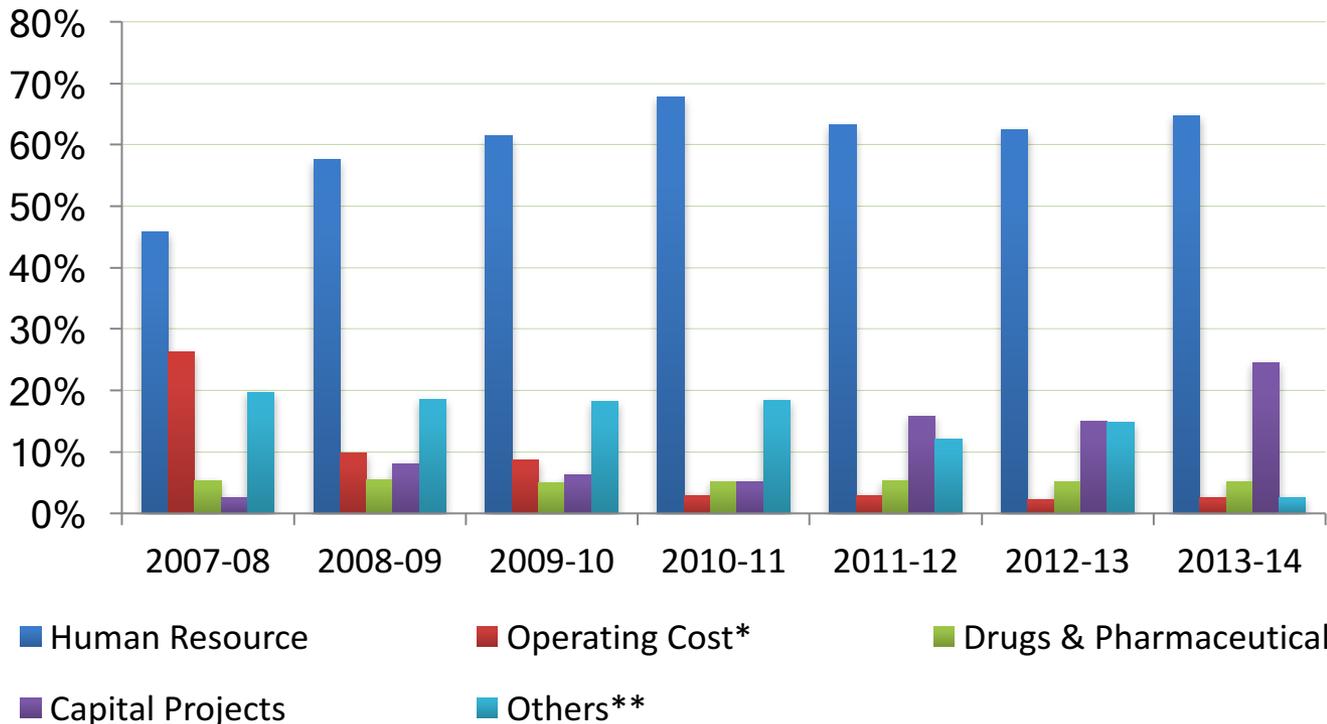


# Comparing Growth Rates: Total Govt. Primary Health Exp. (TGPHE) & Total Govt. Health Expenditure (TGHE)

Comparing growth rate of TGPHE & TGHE



# Expenditure Allocation by Types of Inputs (Treasury Only)



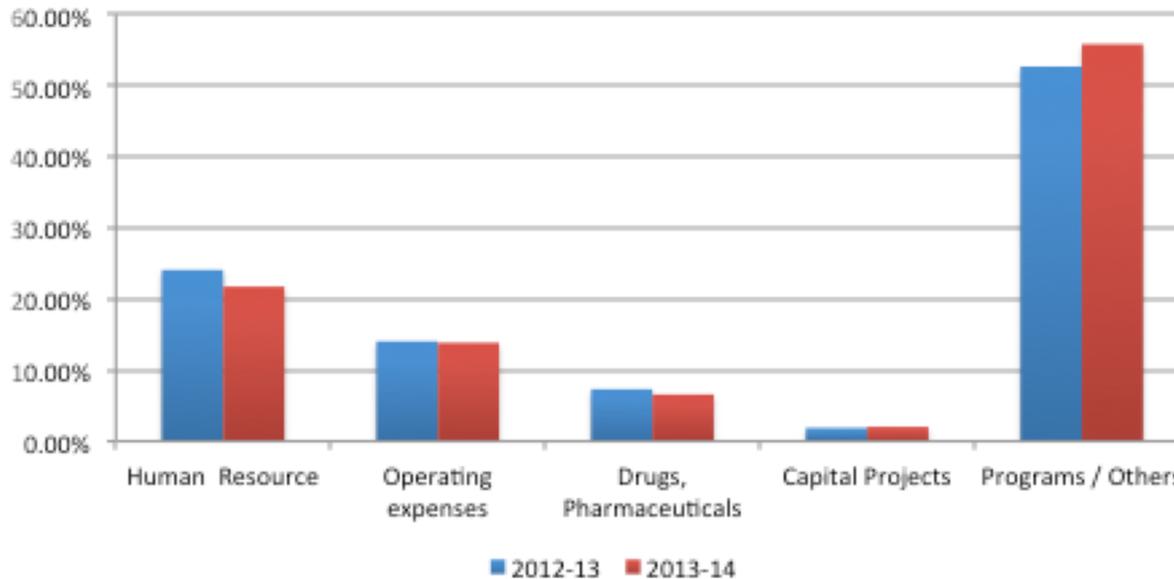
- HR comprises highest share of expenditure
- Drugs, pharmaceuticals & consumables range between 5% to 5.5% across all the 7 years

# Expenditure Allocation by Types of Inputs

(NHM through State Health Society only)

## Distribution of Cost Inputs:

Expenditure through SHS only:  
Based on FMR: 2012-13 & 2013-14



Areas where NHM has been able to make an impact on expenditure:

- Program / service delivery costs
- Drugs, pharmaceuticals & consumables

Programs / Others include: Trainings, Service delivery, incentives, untied funds, IEC/BCC, monitoring and all other costs related to service delivery and program implementation under different components of NHM



# Utilization Rates for Treasury Budgets

(Expenditure in Rs. Million)

Utilization Rate	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Health Budget (Treasury)	13,316	17,588	18,151	21,175	28,438	31,027	34,481
Health Expenditure (Treasury)	13,870	12,906	15,083	16,672	21,246	23,984	25,736
Health Expenditure against budget*	104.17%	73.38%	83.1%	78.73%	74.71%	77.3%	74.64%



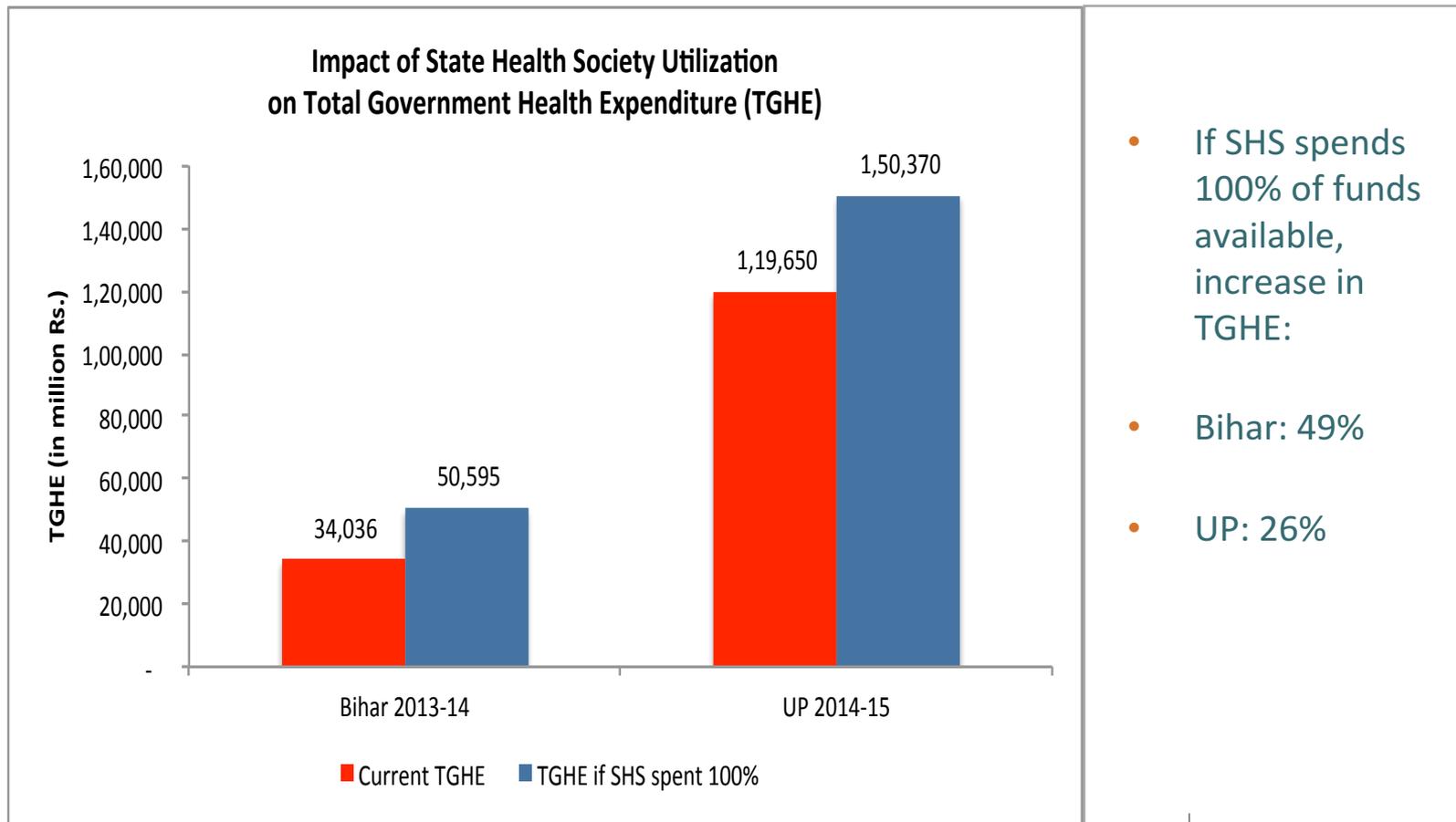
# Utilization Rates for NHM

(Expenditure in Rs. Million)

Utilization Rate	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total NHM Approved budget	8,493	9,786	12,547	12,739	13,452	20,371	20,169
Total funds available under the NHM Scheme (opening balance, interest, funds transferred during the year)	8577	17,388	17,642	20,931	22,899	33,423	30,880
Total Expenditure Incurred	3,826	10,927	7,839	14,186	11,074	13,589	11,936
Utilization against approved budget for NHM – (ENTIRE SCHEME) – all routes: Total Expenditure/ total approved budget	45.05%	111.66%	62.47%	111.35%	82.32%	66.71%	59.18%
Utilization against funds available for NHM – (ENTIRE SCHEME) – all routes: Total Expenditure/ total funds available	44.61%	62.84%	44.43%	67.77%	48.36%	40.66%	38.65%



# NHM (SHS) underutilization – IMPACT



# Reasons for under spending: Capacity and Operational issues

## NHM system design and human capacity factors:

- Lack of leadership to conceive and implement an innovation
- Risk averse attitudes of the manager
- Power dynamics at the local level
- Capacity to procure (civil, medicines, HR)
- Lack of proper knowledge of spending guidelines

Where the purpose of the expenditures is explicit: **Better utilization rates;** for e.g.- salaries, drugs

Budget lines that require discretion in the optimal use of funds –**utilization is lower,** for e.g. - untied grants, MFP.



# Reasons for under spending: Capacity and Operational issues

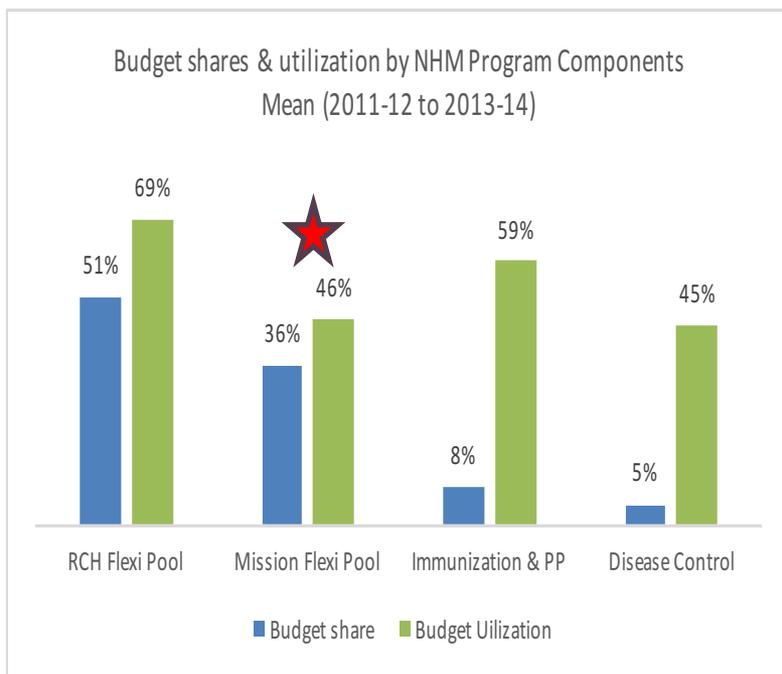
## Other key operational reasons:

- Delays in approval of plans from GOI
- Consequent delays in releases of funds
- Substantial procurement delays
- HR vacancies
- CAG audit team in 2013 found more than 600 JSY beneficiary checks lying undelivered from the previous year (2012). Reasons for delays include delays in receipt of funds and several beneficiaries without a bank account.

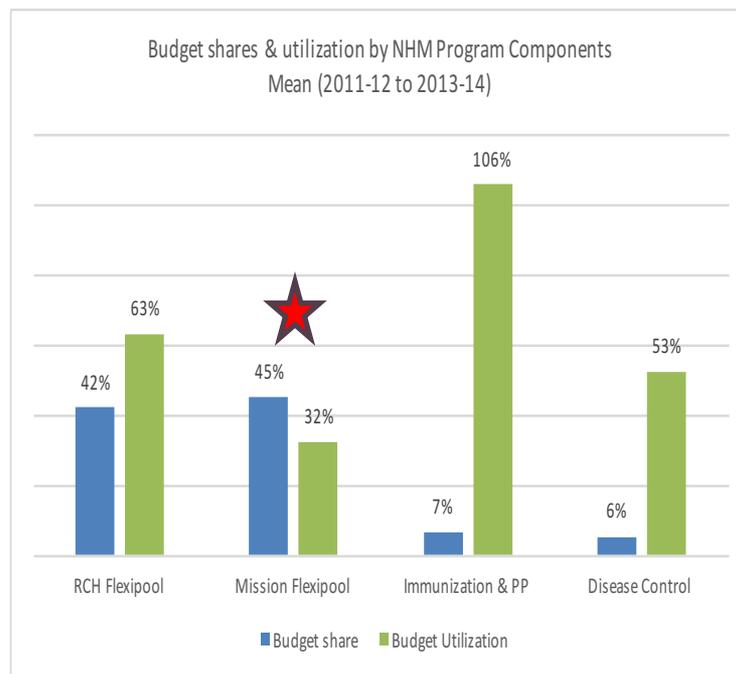


# Limited leadership capacity to conceive and implement innovations: Mission Flexipool

## BIHAR



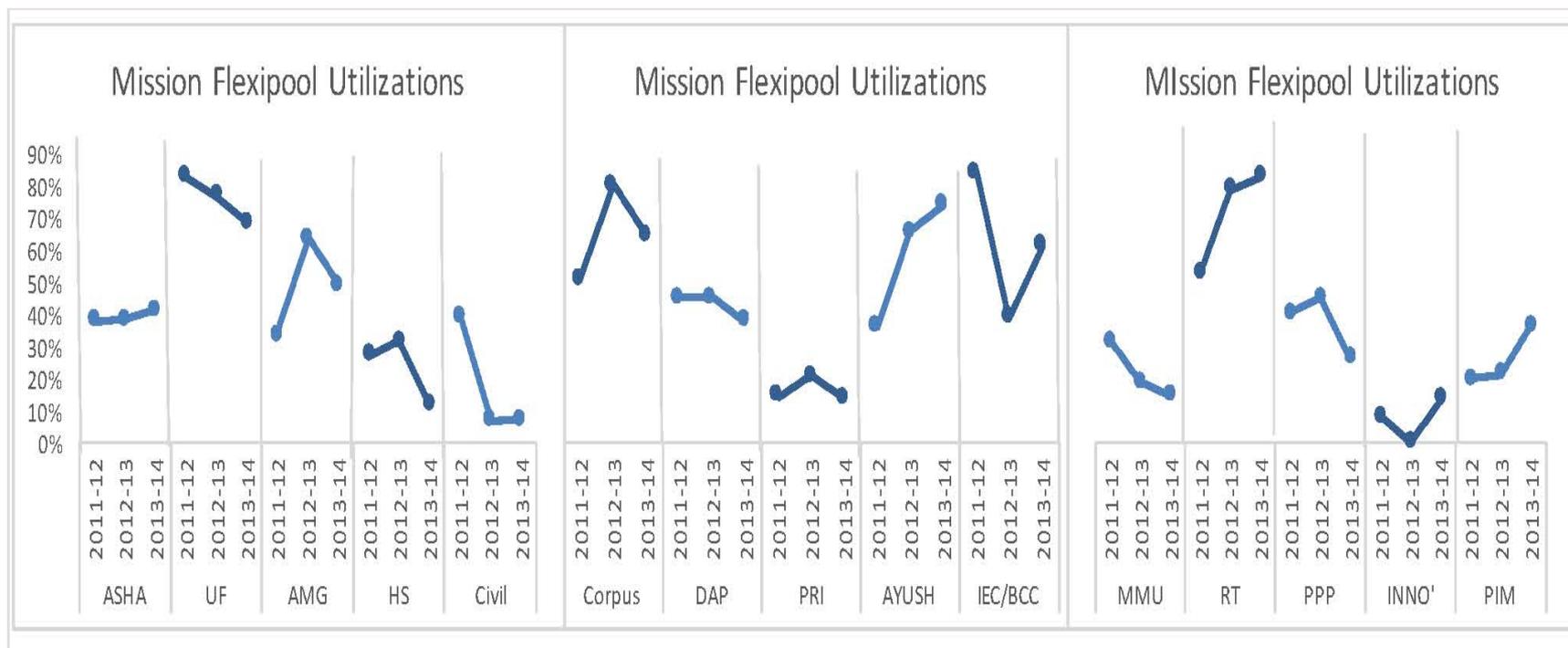
## UTTAR PRADESH



NHM flexi pool utilization is consistently low (includes corpus grants, untied grants etc);  
 UP – Utilization of immunization program is high – expenditure on explicit budget items – vaccines  
 Very low spending on disease control – only half the funds spent out of an already very low budget



# Limited leadership capacity to conceive and implement innovations: Mission Flexipool



# Delays in Civil Works – lack of capacity (Capacity & Operational Issue)

- Only 5 out of 298 construction work could be completed between 2011 & 2015
- 35 are incomplete and 258 projects were yet to start even though SHSB transferring Rs. 4461.7 million to the Bihar Medical Services and Infrastructure Corporation (BMSIC) between April 2011 & February 2014.
- Utilization of budget allocated for new construction/renovation: 39% (2011-12), 7% (2012-13 and 2013-14)



# Limited medicine procurement capacity (Capacity & Operational Issue)

- Delays in supply of drugs were widespread - delays based on audit reports :
  - 418 days in Madhubani district, 337 days in Gaya district
  - 168 days in East Champaran, 165 days in Kishanganj



# Some Policy Implications

## 1) Consider alternate or innovative means of financing pharmaceutical expenditure (**Resource Productivity**):

- Buying generic drugs
- Eliminate supplier (middle men) and buy directly from manufacturers
- Pooling of funds

## 2) Separate treatment of expenditure units for release of funds to improve utilization of funds (**Resource Utilization**):

- Treating the expenditure units independently will enable all those units, that are able to spend the funds timely, receive the required funds promptly without having to wait for Utilization Certificates (UCs) to be aggregated at each level (PHC/Block/District level).



# Some Policy Implications

## (Resource Utilization)

### **3) Delink the capital expenditures from routine expenditures. (Resource Utilization)**

- A separation could free the routine funds flow from the getting blocked by unspent balances under capital works and procurement.

### **4) Improve existing auditing processes to encourage innovation. (Resource Utilization)**

- The current approach of financial audit needs to shift from checking “compliance to guidelines and directives” to “demonstrating transparency and positive outputs/outcome”.
- The concurrent audits can accommodate this new angle by modifying the TORs of such auditors appointed by the State Health Society.



# Policy Implications

## 5) Reconsider the resource input allocation norms to improve health service delivery outputs

- Redesigning the existing institutional structure and HR allocation norms, given Bihar's less developed infrastructure, should be considered. Redesign could be based not only on administrative level and population but also on an element that takes into account the "time" to access health care.



# Data Sources – RTM Bihar

1. Audited balance sheets of NHM from 2007-08 to 2013-14
2. Website of the NHM, Government of India: <https://nrhm-mis.nic.in/SitePages/Home.aspx>
3. PIPs and ROPs of NHM
4. FMRs of NHM at the state level
5. NHM State Project Implementation Plans for the study years
6. Budget Books – Government of Bihar
7. Census 2011, Government of India
8. Planning Commission: <http://planningcommission.gov.in>
9. Reserve Bank of India: <https://www.rbi.org.in>
10. Website of the Ministry of Statistics & Programme Implementation, Government of India: [http://mospi.nic.in/Mospi\\_New/site/home.aspx](http://mospi.nic.in/Mospi_New/site/home.aspx)
11. Bihar Economic Survey, 2014-15

