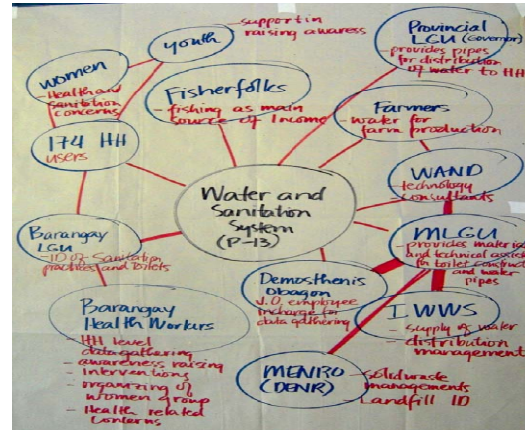




Preparation of City Sanitation Plan – Part III



Session :

Preparation of Investment Plan

Hyderabad, Telangana- 22nd April 2016



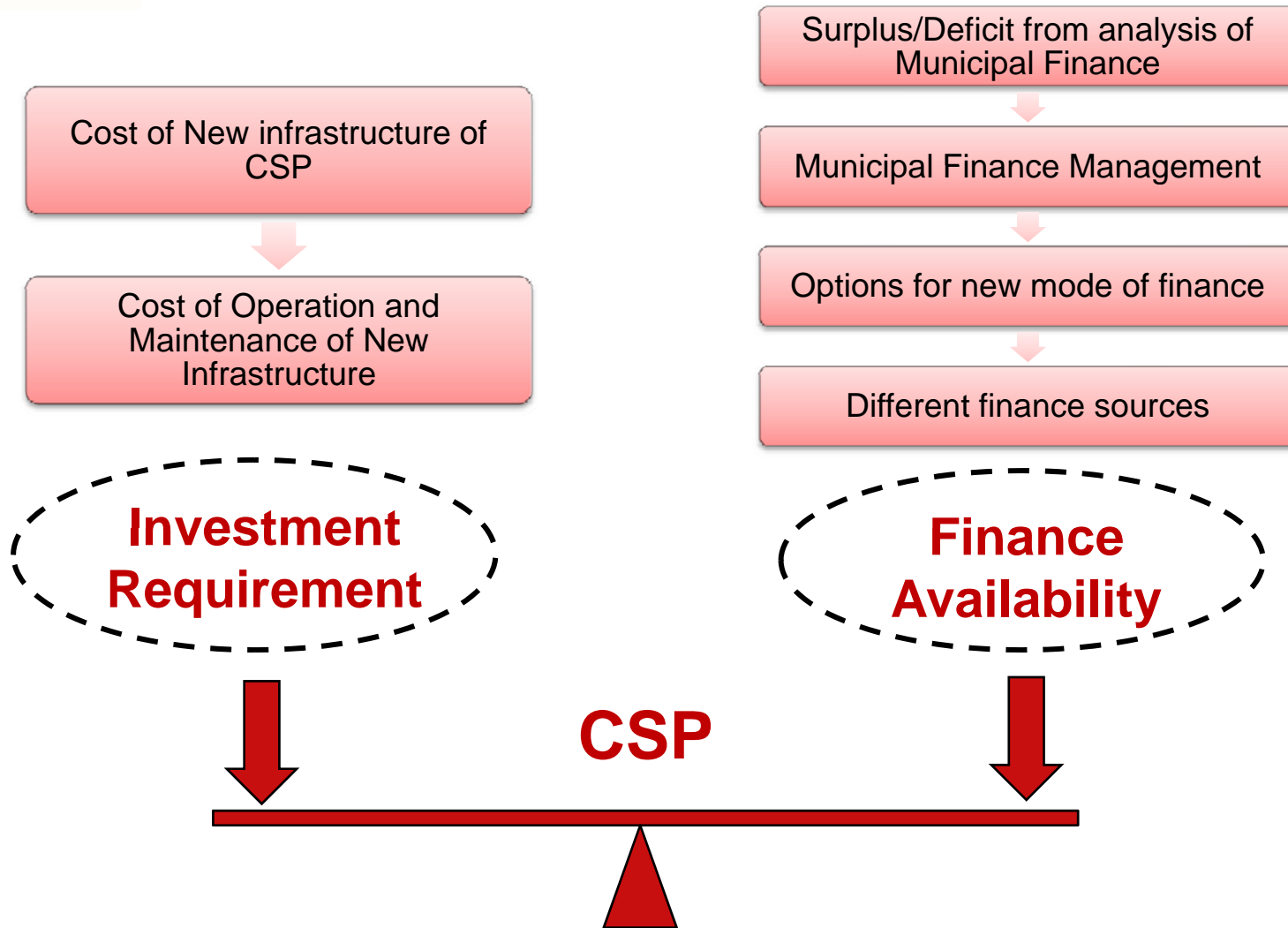
What is Investment Plan?

An estimate of the level and quantum of investment required to implement the strategic sectors in the CSP

- *Linked with **ULBs readiness to implement various reforms and capacity to increase buoyancy of income.***

Why Investment plan?

- Better planning and management
- Better allocation of resources





Example - Investment Requirement

Projects	Cost (in Rs. Lakh)			
	Short	Medium	Long	Total
Toilet				
Public Toilet	2,230		300	2,530
Community Toilet	712		96	808
Wastewater Management		10,000	20,000	30,000
Storm Water Drainage	5,000	8,000	10,000	23,000
Household Level Sanitation Survey	250			
Grand Total	8,192	18,000	30,396	56,338

Measures for Management of Municipal Finances

1. Financial Reforms
2. Revenue Improvement
3. Effective Expenditure Management
4. Asset Management Initiatives

1. Financial Reforms

- **14th Finance Commission:**

- **Condition/Reform for Accessing Performance Grant**

- i. making available **reliable data** on local bodies' receipt and expenditure through **audited accounts**; and
 - ii. improvement in **own revenues**.

In addition, measure and publish SLB for basic services

1. Financial Reforms

Proposed Reforms under AMRUT: ULB Level

#	Reforms	Timelines
1	Property Tax	24 months
2	Complete migration to double entry accounting system and obtaining an audit certificate to the effect from FY 2012-13 onwards.	12 months
3	Appointment of internal auditor. Publication of annual financial statement on website.	24 months
4	<ul style="list-style-type: none">• Municipal tax and fees improvement:<ul style="list-style-type: none">• Atleast 90% coverage,• Atleast 90% collection,• Make a policy to periodically revise property tax, levy charges and other fees• Post Demand Collection Book (DCB) of tax details on the website,• Achieve full potential of advertisement revenue by making a policy having dynamic pricing module.	12 months

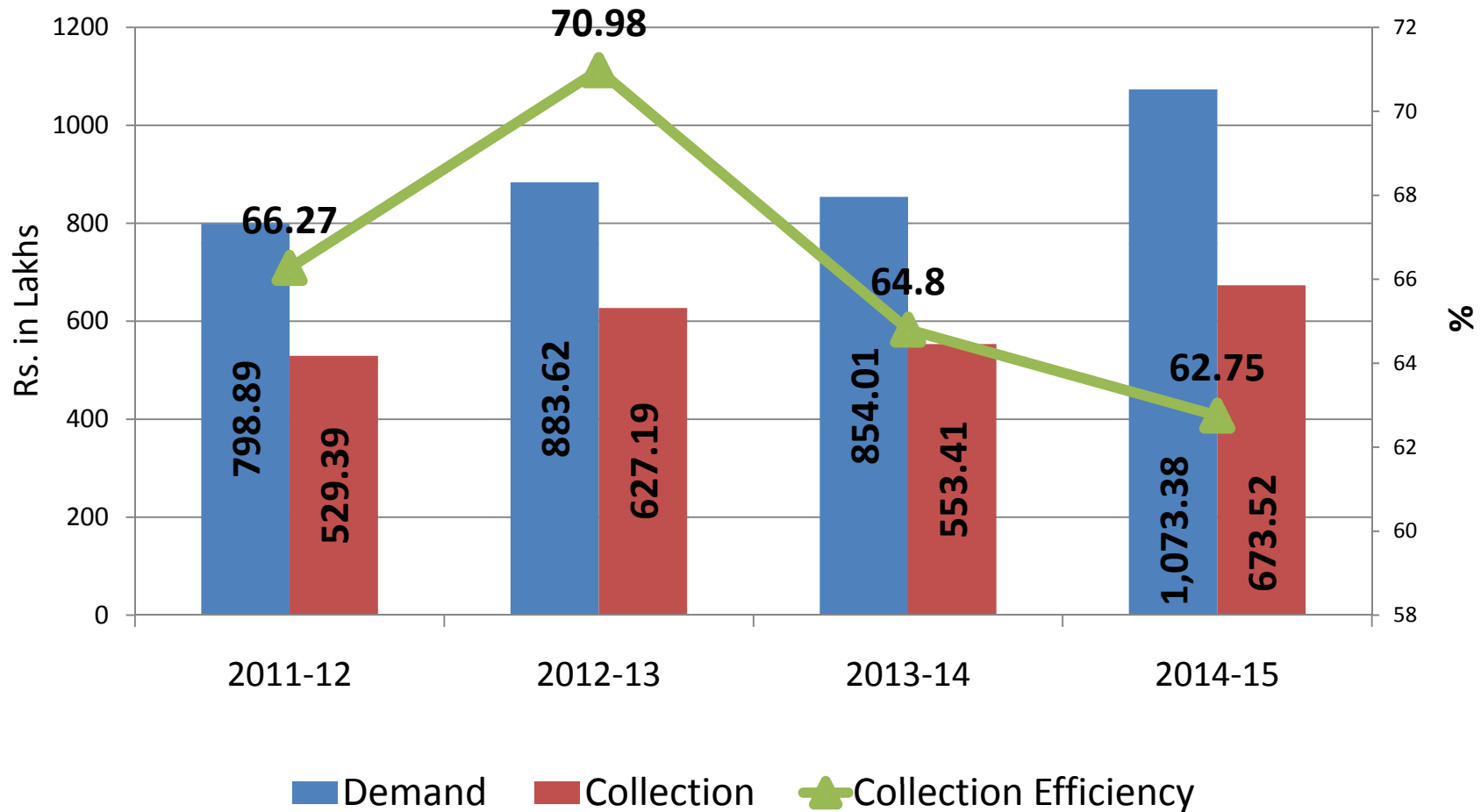
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#	Reforms	Timelines
5	<ul style="list-style-type: none">• Improvement in levy and collection of user charges,• Adopt a policy on user charges for individual and institutional assessments in which a differential rate is charged for water use and adequate safeguards are included to take care of the interests of the vulnerable,• Make action plan to reduce water losses to less than 20 % and publish on the website,• Separate accounts for user charges,<ul style="list-style-type: none">• Atleast 90% billing• Atleast 90% collection.	12 months
6	Complete the Credit Ratings of the ULBs	18 months

2. Revenue Improvement (RI)

- ULBs are plagued with systemic problems
 - unjustified time consuming processes,
 - lack of incentives for innovation and efficiency,
 - poor management of records and assets, etc.
- Revenue improvement can be achieved without any increase in rates/tariffs - by concentrating on removing the internal weakness of the system.

Demand-Collection of Property Tax



Use of GIS for Improvement in Property Tax: Kanpur Municipal Corporation

- Kanpur, a city in Uttar Pradesh with an area of 340 sq.km with about 30 lakh population
- KMC struggling with **extremely low tax revenues**
- **Use of ARV method** of calculating the tax was cause of contention
- Unavailability of latest database & large gap between tax demand and collection
- Involved IIT Kanpur and decided to undertake **GIS mapping** of the properties
- Digitization process commenced along with survey
- No IEC campaign resulted in protests & agitations

Use of GIS for Improvement in Property Tax: Kanpur Municipal Corporation

- Outputs

Particulars	Before Survey	After Survey	Addition
No. of Assessed Properties	274,205	426,893	154,688
Revenue Collection (in Lakhs)	3,349.53	12,613.17	9,264.33

- Project cost was Rs 140 lakhs, shared in 50:50 with Center Govt. grant and KMC's own revenues

Underground Sewerage System – Pallavaram Municipality

- Pallavaram is a peri-urban area within the Chennai urban agglomeration
- Spread over 18 sq.km having population of 1.4 lakh in 2011 which grew by 50% in last decade
- About 25,000 HHs had toilets with septic tanks & about 7% resorting to open defecation
- Discharge of sewerage into open drains resulting in unhygienic conditions
- Followed Alandur Model for financing project – TNUDP III sought to replicate model

Contd...

- Project Cost & its funding and Progress

Source	Amo.	%	Parameters	Unit	Progress
Loans	25.78	52	Treatment	MLD	9
Grants	08.50	17	Distribution	Km	160
Public Contribution	15.00	30	Connections	No.	15,650
Total	49.28	100	Public Convenience	No.	10

Rs. in Crs.

- User Charges

Category	One Time Deposit	User Charges (per month)
Domestic	Rs. 10,000	Rs. 150
Commercial	Rs. 20,000	Rs. 450
Industrial	Rs. 20,000	Rs. 750

Contd...

- Outcomes

Indicator	Unit	Standard	Status
Coverage of Network	%	100	76
Collection Efficiency of Network	%	100	100
Quality of Sewage Treatment	%	100	100
Cost Recovery	%	100	96

- A proposal to introduce slab rate linked with size of property and property taxes paid is under consideration.

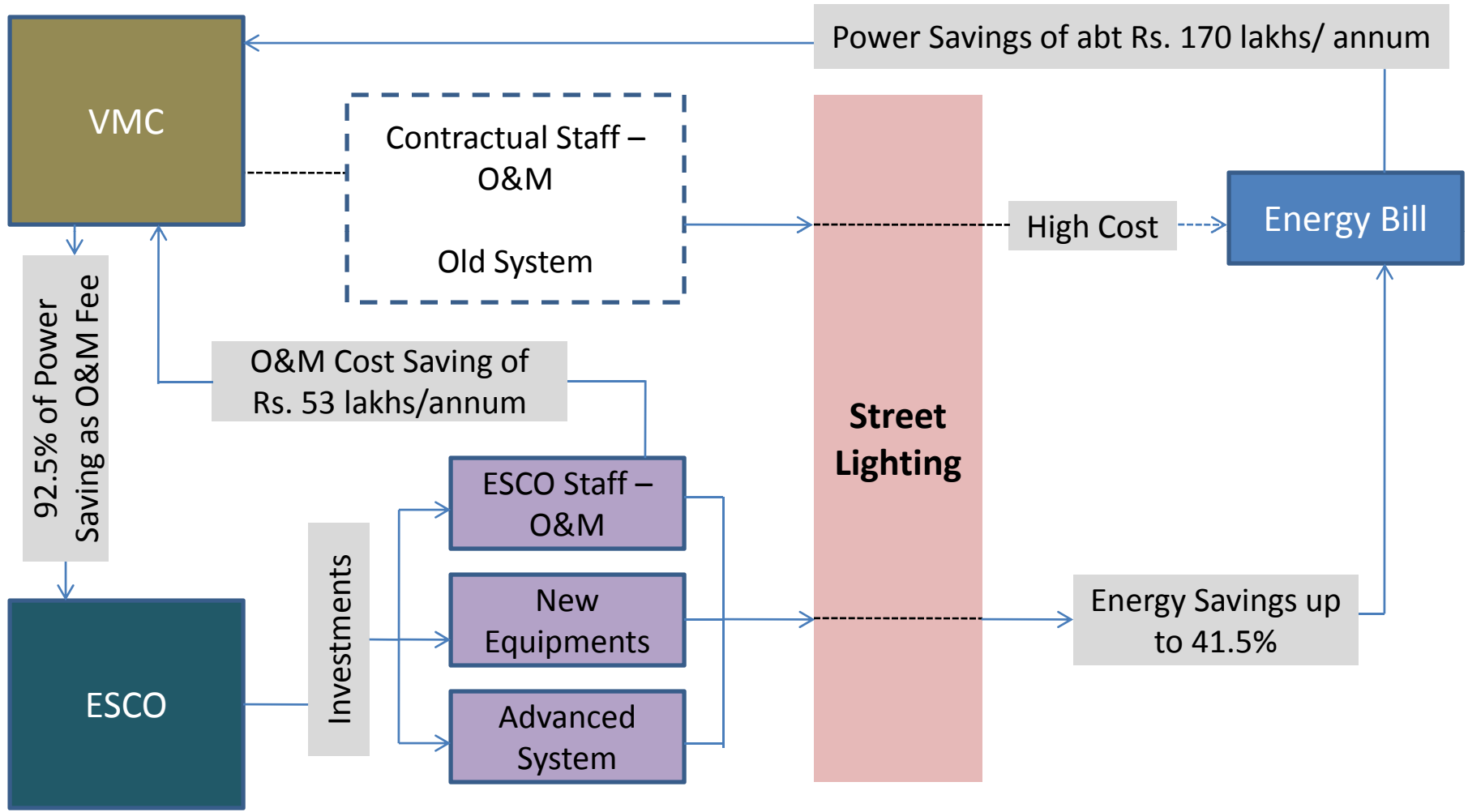
3. Effective Expenditure Management

- Classification of Expenditures
- Expenditure Management Strategies
 - Energy audit
 - Improved tendering procedure
 - Public Private Partnerships / Outsourcing some functions to private operators
 - IT enablement

O&M of Street Lights – Vijayawada Municipal Corporation

- 27,000 street lights, for which Capital works were undertaken through regular EPC contracts and O&M through contractual staff
- Annual expenditure of Rs. 411.18 lakh on energy bills for street lighting and Rs. 53.04 lakh for annual maintenance
- VMC set itself the target of becoming **India's First Energy Efficient City**, and an Energy Conservation Plan was proposed

O&M of Street Lights – Vijayawada Municipal Corporation

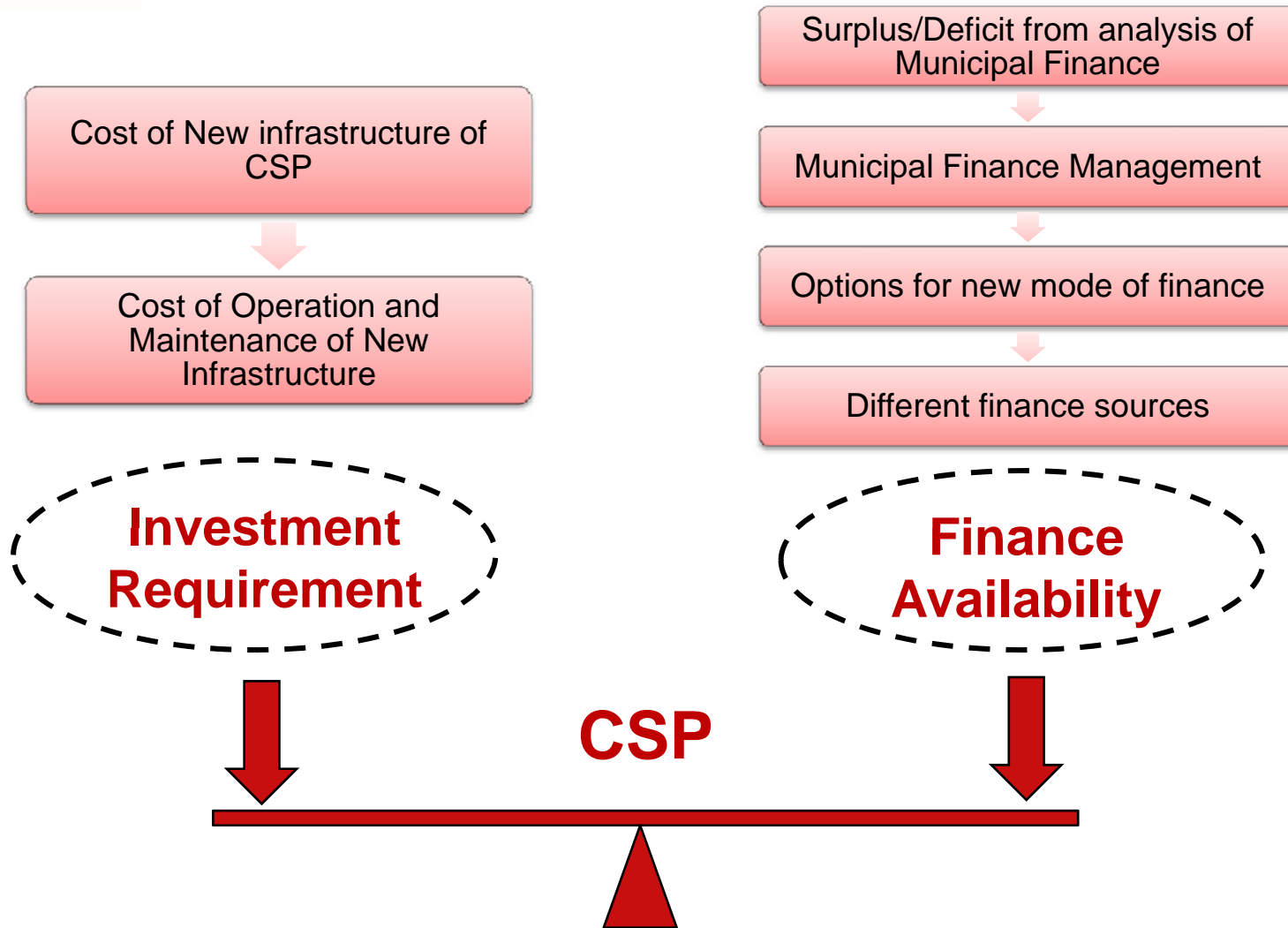


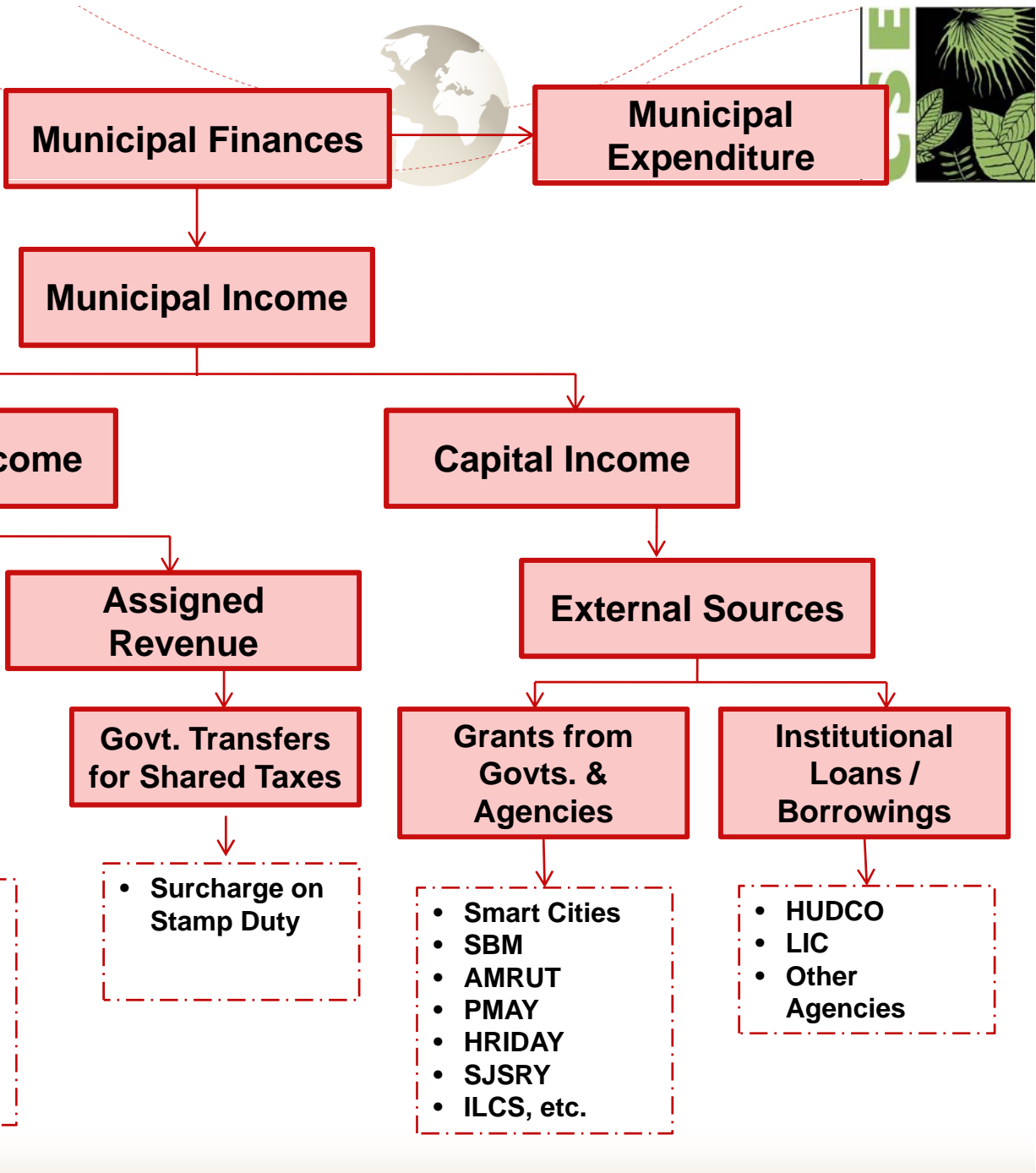
4. Asset Management Initiatives

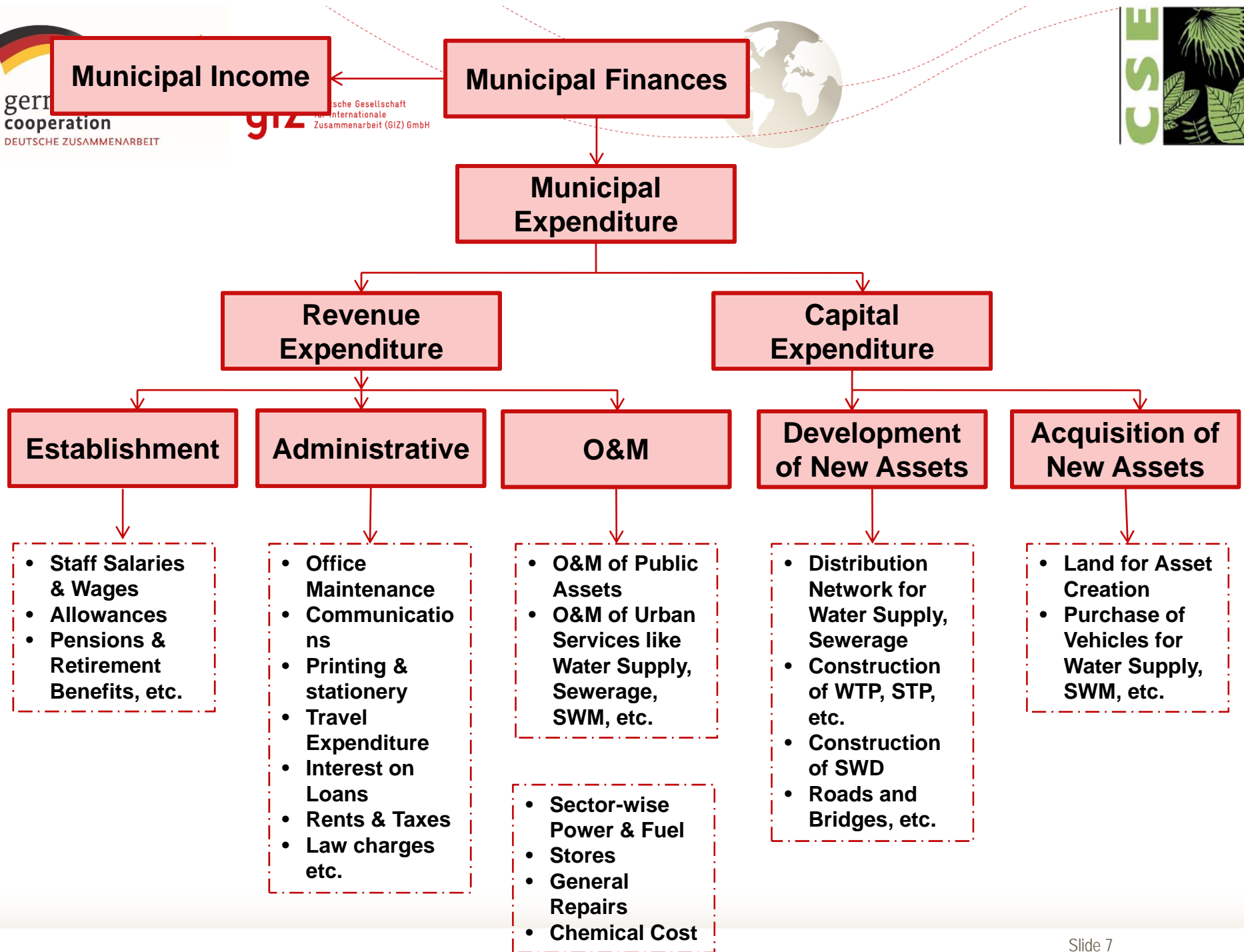
- Develop a comprehensive asset management strategy to make optimum use of the huge portfolio they hold in fixed assets
- Classify the Assets
 - City Use Assets
 - Social Use Assets
 - Surplus Assets

Municipal resource mobilization
process requires

**Strong Commitment and
Unwavering Support of
elected leaders as well as of
administrators**









Step 1 - Data Collection and Analysis

#	Particulars	Amount (Rs. in Lakhs)				Average Growth
		2012-13	2013-14	2014-15	2015-16	
A. Total Revenue Income						
1	Taxes – property, advertisement, etc					
2	Non-Taxes – user charge, fees, etc.					
3	Assigned Revenue					
B. Total Capital Income						
4	Grants and Loans					
	Total Income (1+2+3+4)					
C. Total Revenue Expenditure						
5	General, Establishment and Other Revenue Expenditure					
6	O&M of Sanitation including SWM					
D. Total Capital Expenditure						
7	Capital Expenditure					
	Total Expenditure (5+6+7)					
	Overall Surplus/Deficit (1+2+3+4-5-6-7)					



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Case Example



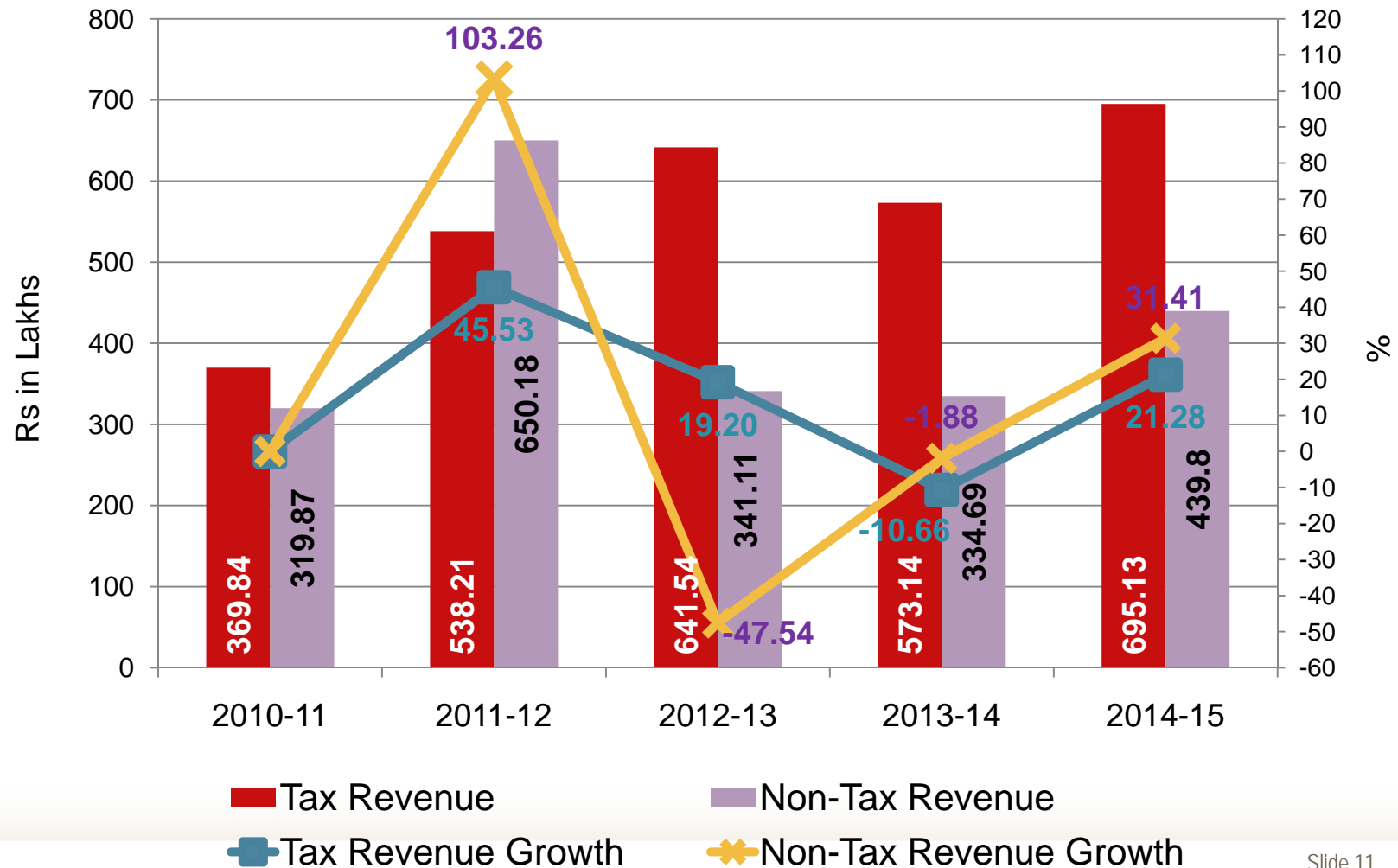
Overall Status of Finance

#	Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
1.	Revenue Income	977.26	1,189.51	984.01	1,124.38	1,454.89
2.	Revenue Expenditure	594.76	856.45	796.41	1,271.84	1,756.36
3.	Revenue Surplus / (Deficit)	382.50	333.07	187.60	(147.46)	(301.47)
4.	Capital Income	334.23	637.95	522.49	967.01	1,810.44
5.	Capital Expenditure	743.84	579.27	510.48	750.54	352.21
6.	Capital Surplus / (Deficit)	(409.61)	58.68	12.01	216.47	1,458.23
7.	Total Income	1,311.49	1,827.47	1,506.51	2,091.39	3,265.33
8.	Total Expenditure	1,338.60	1,435.72	1,306.89	2,022.39	2,108.57
9.	Total Surplus / (Deficit)	(27.11)	391.75	199.62	69.01	1,156.76

(Rs. in Lakhs)

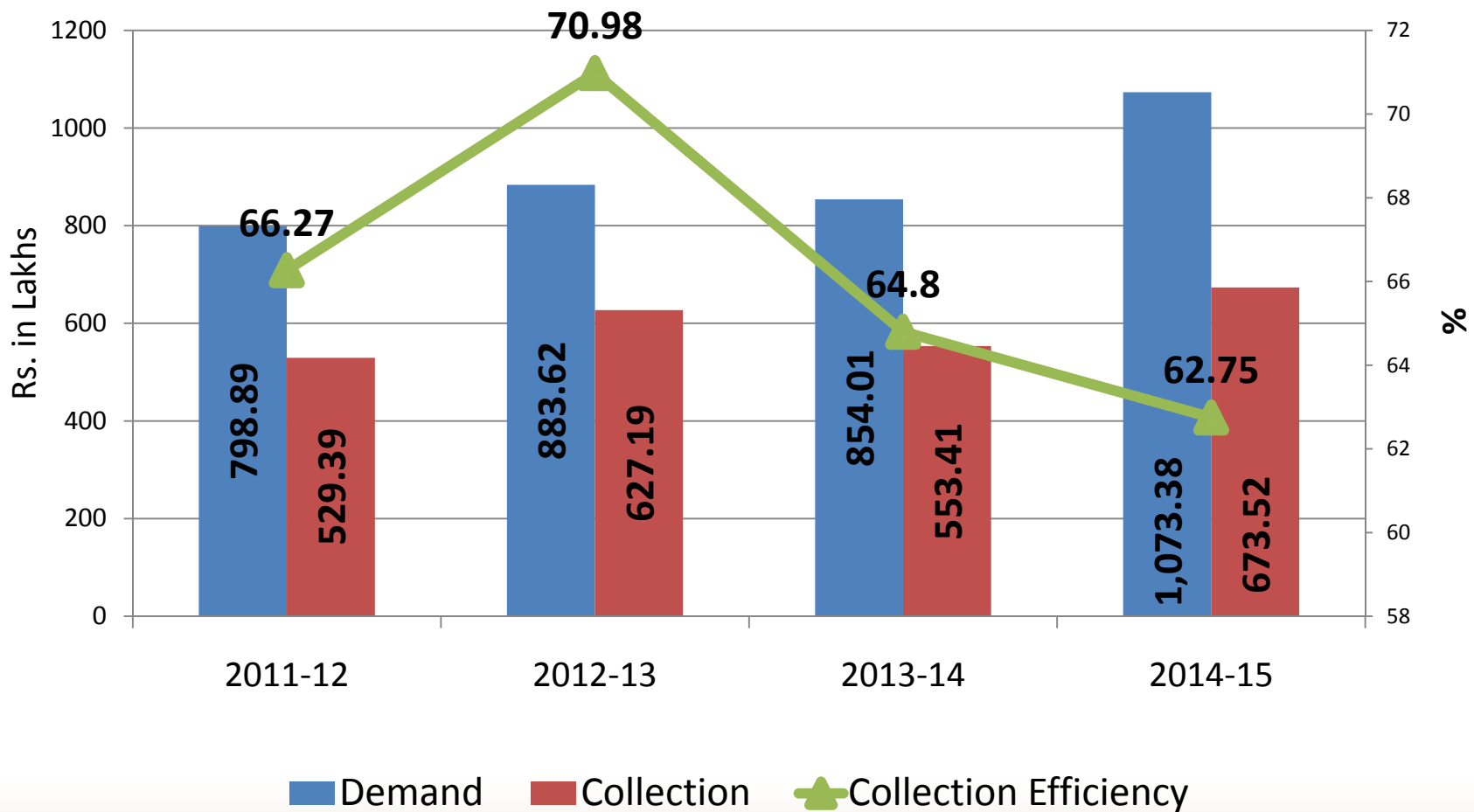


Tax & Non-Tax Revenue



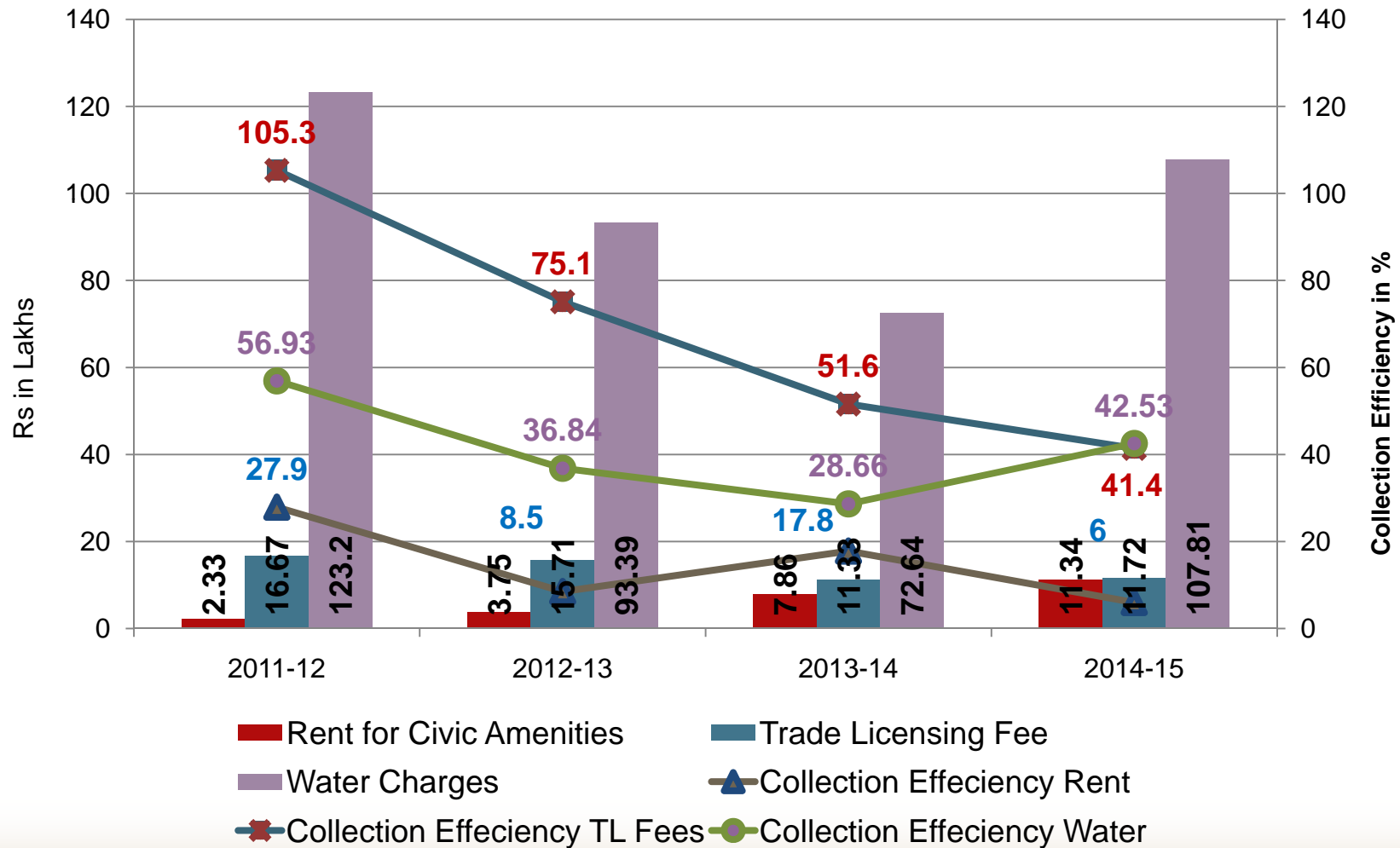


Property Tax Demand-Collection



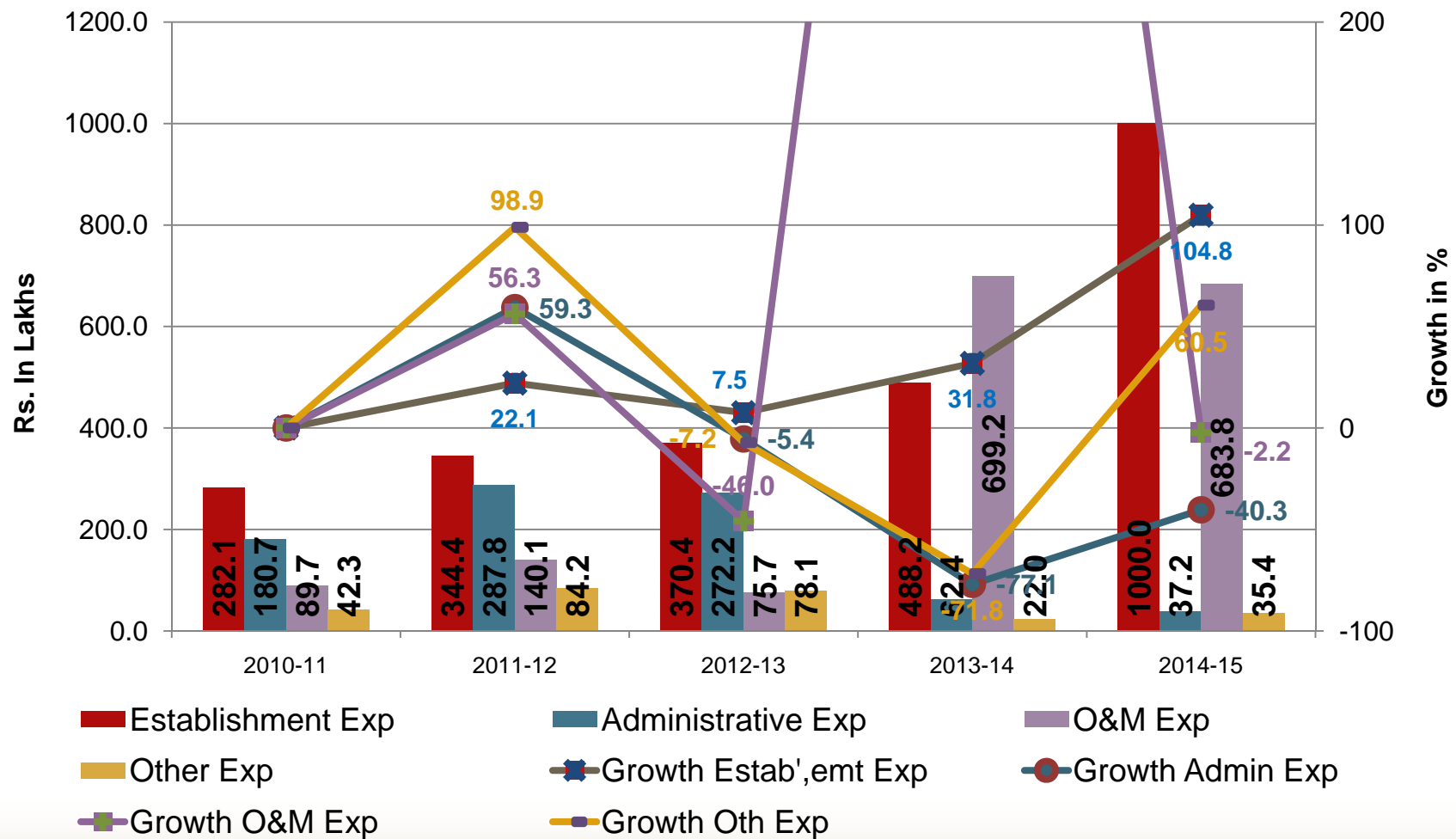


Collection Efficiency of Major Sources of Non-Tax Income





Revenue Expenditure





Step 2 - Identification of Key Issues in each of income heads

Step 3 - Identification of Areas of Improvement / Reforms

Step 4 - Priorities Areas of Improvement or Reforms

Step 5 – Finalize Assumption for Resource Increase & Forecast

Example:

Parameters	Current Status	Assumptions
Property Tax	5.4 % Growth Rate	An average increase of 8%
		Increase in Number of Assessment
		Improved collection efficiency (90%) to be attained by 2017
Sewerage charge	NIL	10% of water tariff / monthly tariff
SWM charges	NIL	Rs.10 per HH per month
Advertisement Tax	6%	With increase in Collection Efficiency; growth 10%



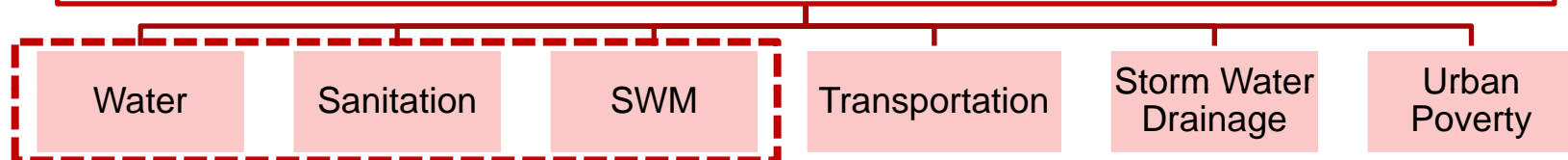
Financial Forecast

#	Particulars	Assumed/ proposed Growth Rate	Amount (Rs. in Lakhs)		
			2016-17	2017-18	2018-19
A. Total Revenue Income					
1	Taxes				
	Property Tax				
	Advertisement Tax.....				
2	Non-Taxes				
3	Assigned Revenue				
B. Total Capital Income					
4	Grants and Loans				
Total Income (1+2+3+4)					
C. Total Revenue Expenditure					
5	General, Establishment and Other Revenue Expenditure				
6	O&M of Sanitation including SWM				
D. Total Capital Expenditure					
7	Capital Expenditure				
Total Expenditure (5+6+7)					
Overall Surplus/Deficit (1+2+3+4-5-6-7)					



Step 6 - Ascertain Surplus for ULB

Step 7 - Component-wise allocation of Surplus

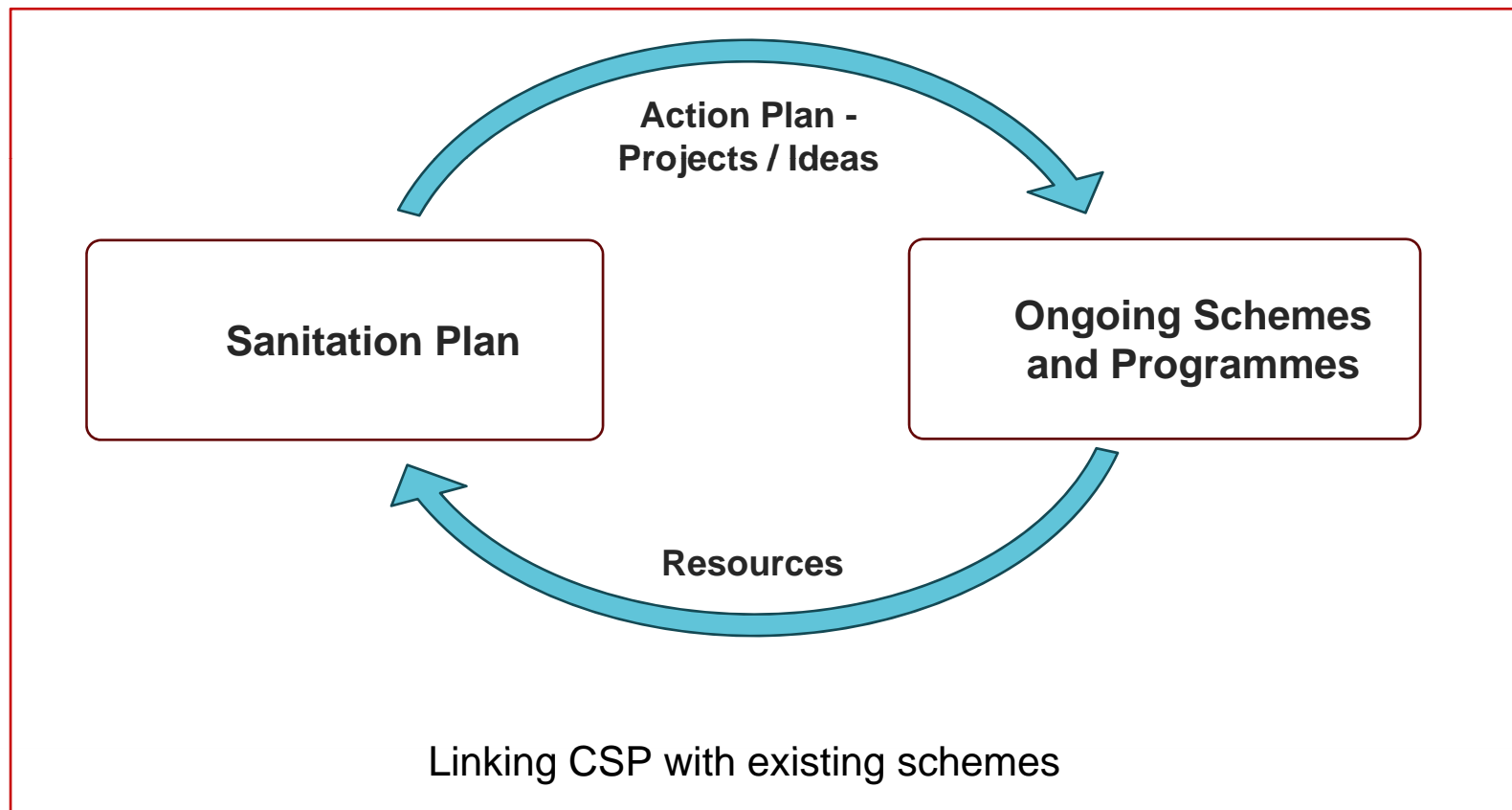


Step 8: Listing of Project Proposals

Sectors	Actions		
	Short (upto 3 to 5 yrs.)	Medium (5 to 10 yrs.)	Long term (10 yrs. to ---)
SWM	1) 2) n....	1) 2) n....	1) 2) n....
Sanitation			
Water supply			



When identifying projects also keep in mind about **linking with existing schemes** as it will help to **ensure that resources are available to implement the plan.**





New Projects

SI no	Projects	Amount (Rs. in Lakhs)		
		2016-17	2017-18	2018-19
1	Toilet construction			
	Capital investment			
	Operation and Maintenance			
2	Awarenes Generation for toilet construction			
3	New vehicle for waste management			
	Capital investment			
	Operation and Maintenance			
4	Treatment Plant			
	Capital investment			
	Operation and Maintenance			
5	Vehicle tracking system for SWM			
6			
	Total Operation and Maintenance			
	Total Capital Investment			

Finance

SI no	Particulars/Items	Amount (Rs. in Lakhs)		
		2016-17	2017-18	2018-19
1	Opening Balance			
2	Revenue Income			
3	Revenue Expenditure			
4	O&M of New Infrastructure			
5	Revenue Surplus (1+2-3-4)			
6	Capital Income (6.1+6.2+6.3)			
6.1	State Government			
6.2	Central Government			
6.3	Other sources of funding			
7	Capital Expenditure of new projects			
8	Capital Surplus (6-7)			
9	Total Income (2+6)			
10	Total Expenditure (3+4+7)			
11	Closing Balance (9-10)			



Balance = Income – Expenditure

(try to keep on positive side)

- **Reduce expenditure through phasing**

Restructuring project period

Sl no	Projects	Amount (Rs. in Lakhs)		
		2016-17	2017-18	2018-19
1	Toilet construction			
2	Awarenes Generation for toilet construction			
3	Procure new vehicle for waste management			
4	Waste Treatment Plant			
5	Vehicle tracking for SWM			

- **Increase income**

Mode of Financing

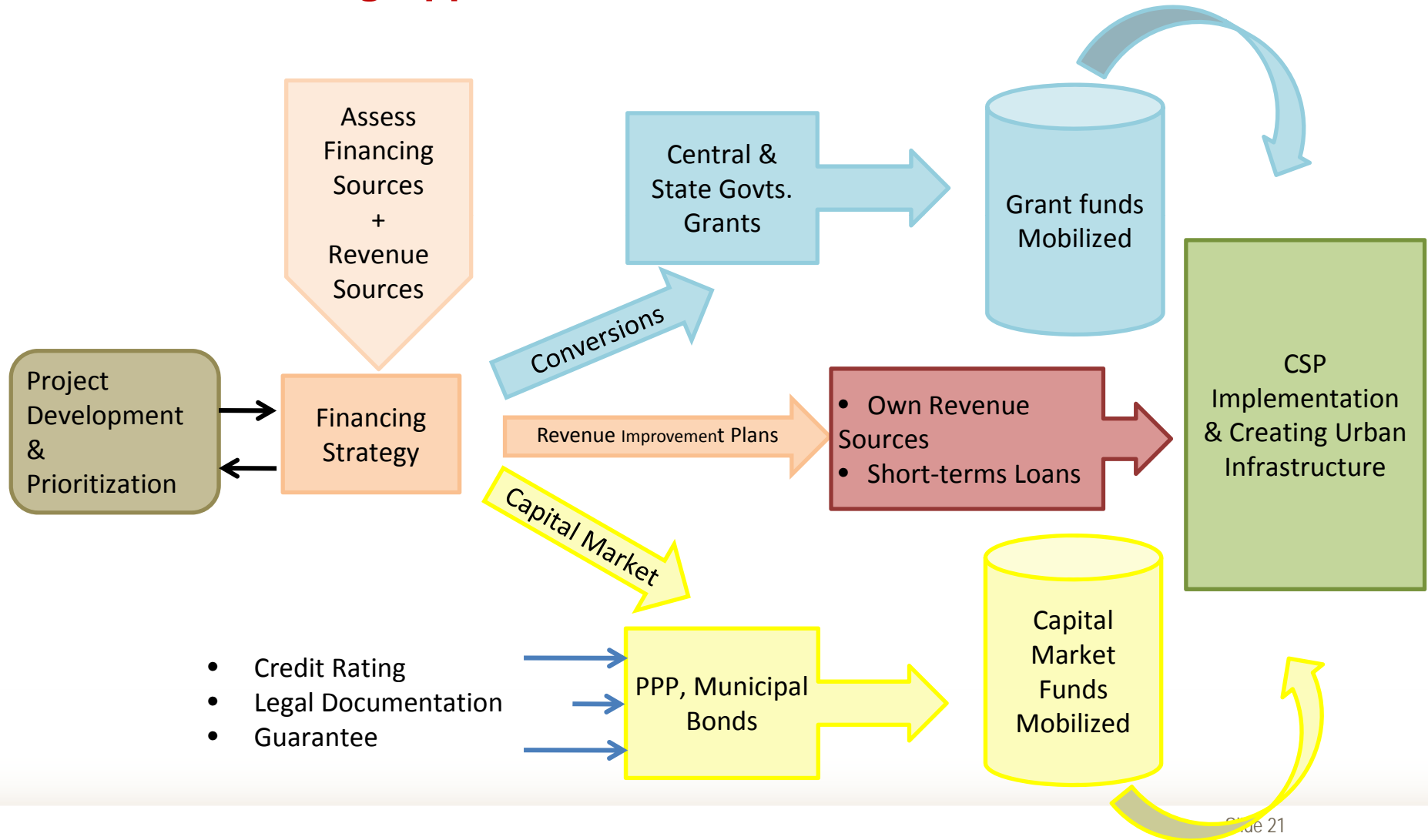
- Equity
- Debt
- Private Sector Participation
- Grants from Higher Level of Governments
- Public contributions

Source of Financing

- Government Mission - SBM, Smart City Mission, AMRUT, PMAY, HRIDAY
- Loans
- Municipal Bonds
- PPP
- VGF Scheme
- India Infrastructure Project Development Fund (IIPDF)
- Member of Parliament Local Area Development Fund (MPLAD)
- Member of Legislative Assembly Local Area Development Fund (MLALAD)



Mixed Financing Approach





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Group Exercise



Example for Growth Rate Calculation

$$(\text{Year 2} - \text{Year 1}) / \text{Year 1} \times 100$$

Refer Table 3 in Workbook:

Year 1 Amount = 187 Lakhs

Year 2 amount = 219 Lakhs

$$(219 - 187) / 187 \times 100 = 17.1\%$$



Example for Forecasting Revenue/Expenditure



{(Assume

- vaibhav.p@cgg.gov.in - 9959727428
- eskoni.h@cgg.gov.in - 9963590111

) } + Year 4

Refer Table

Assumed Gi
Year 4 amou

22.04.2016

XXX

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$$\{(6.0 \times 212.5) / 100\} + 212.5 = 225.25$$



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Thank you