Infrastructure: Powering Growth through Connectivity

NITI Aayog
May 2015

Sectoral Issues

1 Energy

- 3.2% peaking deficit and 2.1% energy deficit (March 2015) against 11.1% and 8.5% respectively (March 2012)
- AT & C losses (2012-13): 25.38%, down from 30.62% in 2006-07

2 Ports

- Draft constraints, Berth Productivity and Rail/ Road connectivity

3 Railways

- Congested Routes – 804 out of 1219 sections operating with capacity utilization > 80%
- Low average speeds (Freight - 25.9 kmph: Mail/ Express – 50.6 kmph)

4 Airports

- Inadequate capacity in Runways and Aircraft handling
- Congestion in Parking Space and Terminal Buildings

5 Roads

- 65% of freight and 80% of passenger traffic is carried by roads
- NH constitutes 2% of network but carries 40% of traffic

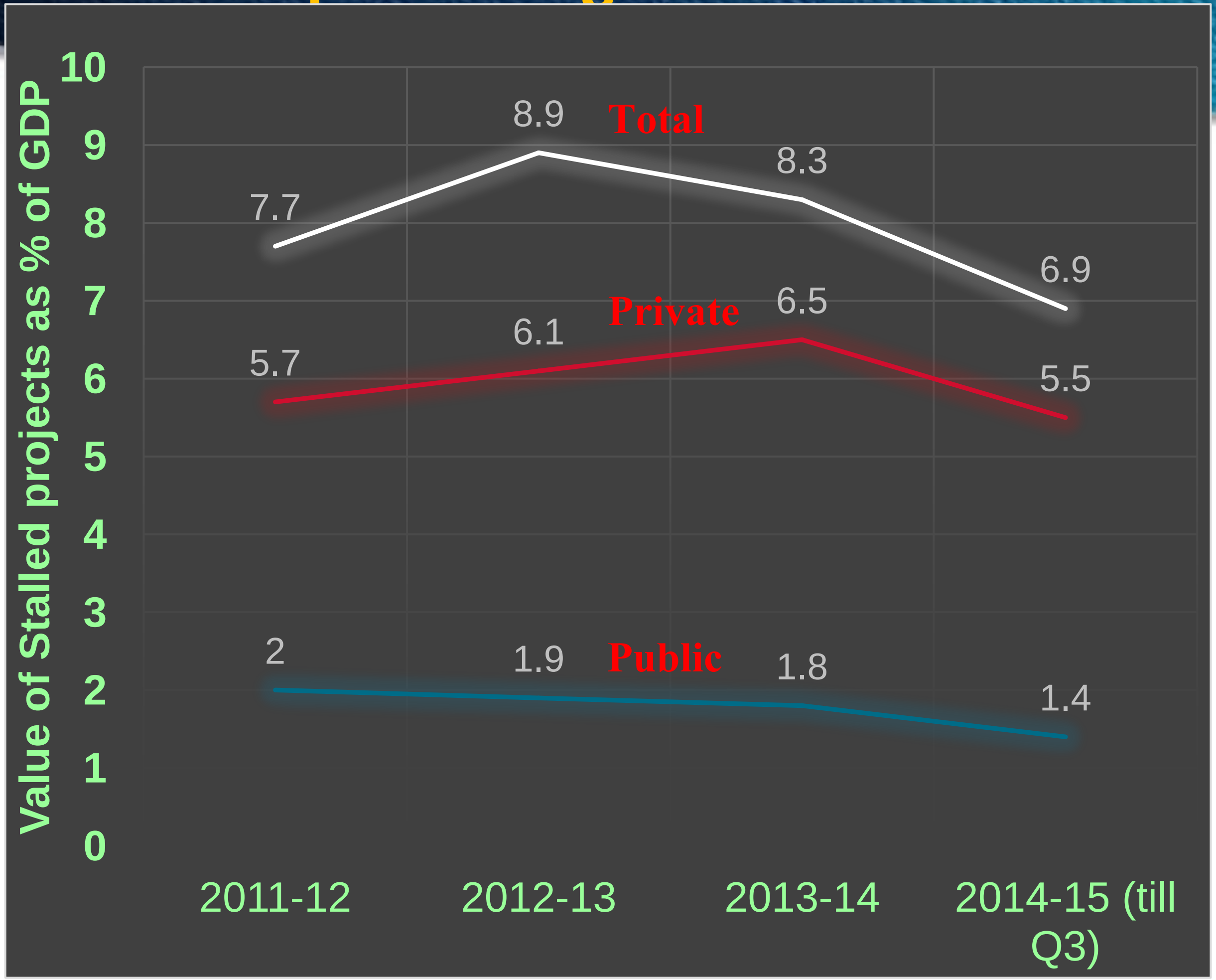
“Stalled” Projects*

- Stalled projects mostly in infrastructure and manufacturing sectors
  - Public sector projects dominate infrastructure sector,
  - Private sector projects dominate manufacturing sector

Major reasons for stalled projects include	
Public Sector	Private Sector
• Lack of environment clearances, • Budget constraints and • Land acquisition	• Lack of environment clearances, • Unfavourable market conditions and • Lack of promoter interest

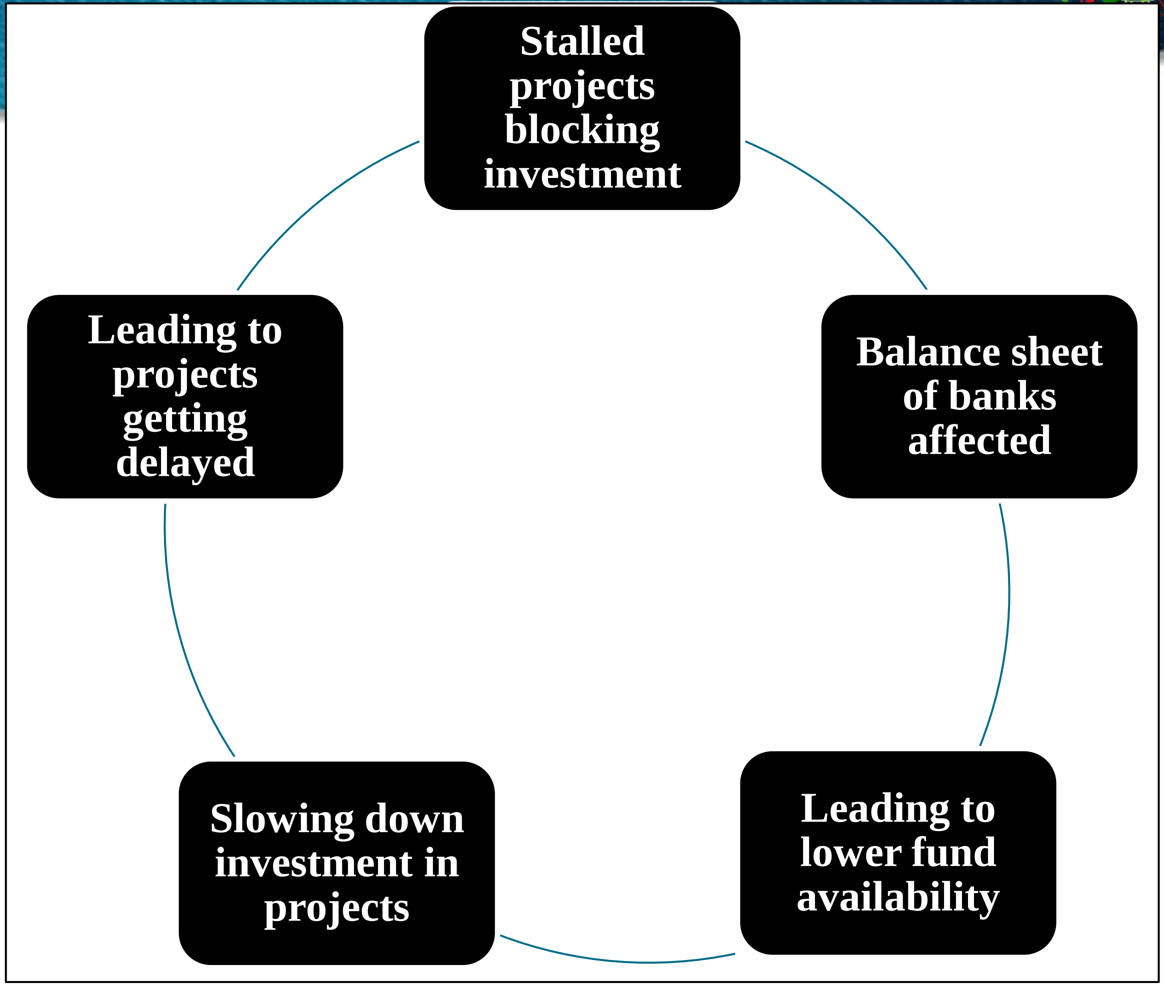
Source: Economic Survey 2014-15

Value of stalled projects as a percentage of GDP



Source: Economic Survey 2014-15

Stalled Projects - Vicious cycle of low investments



Signs of Recovery: Investment "stuck" in stalled projects has been in the range of 8% to 9% of GDP (old series) in last three years; but improved to 7% as on December 2014

2022: 75th Year of India's Independence

VISION

- Provide each house with basic facility of 24- hour power supply, clean drinking water, a toilet and connectivity to a road
- Electrification of remaining 20,000 villages by 2020
- Connect each of the 1,70,000 unconnected habitations by all weather roads
- Communication connectivity to all the villages for removing rural and urban divide

Major Challenge

- With weak private investment via the PPP model, public investment needs to stepped up to catalyze investment

Meeting the Challenge: Union Budget 2015-16

- Investment in infrastructure to go up by Rs. 70,000 cr. in 2015-16 from the Central funds (includes Rs. 14,031 cr. for Roads and Rs. 10,050 cr. for Railways) and internal resources of Central Public Sector Enterprises

Source: Union Budget 2015-16

Meeting the Challenge (2)

Additionally in Union Budget 2015-16

- Establishment of National Investment and Infrastructure Fund (NIIF) with an annual flow of Rs. 20,000 crore to augment equity flow to infrastructure projects
- Tax free infrastructure bonds for the projects in rail, road and irrigation projects
- Revitalizing PPP mode of infrastructure development to enhance private investment
- Setting up 5 new 4,000 ultra mega power projects in plug-and-play mode, i.e., put in place all linkages and clearances before project award
- Also consider similar plug-and-play projects in infrastructure sectors like road, ports, rail line, airports, etc.

Unblocking the Blocks

Issues

- Enhance Public Investment
- Kick start top 100 stalled projects for speedy execution as it will address 83% of investment
- Identify projects for utilising budget allocations
- Speed-up approval processes and Award
- Commence execution of Projects

Delayed Projects

- 745 Central Sector Projects under Implementation.
  - 258 = Costing Rs. 1000 Crore and above.
  - 487 = Costing between Rs. 150 Crore and Rs. 1000 Crore.
- 81% Projects: Either delayed or with no completion date.
- Time Overrun: 1 month to 20 Years

Source: Online Computerised Monitoring System (OCMS) of Ministry of Statistics & Program Implementation, January 2015

Delayed Central Sector Projects : Focus on Completion

Sr. No.	SECTOR	Anticipated Commissioning 2015-16	Anticipated Commissioning 2014-15	Anticipated Commissioning prior to 2014-15	Anticipated Commissioning after March 2016	Anticipated Commissioning Date not provided	Total Projects
1	ATOMIC ENERGY	1	0	0	3	0	4
2	COAL	4	3	0	7	0	14
3	MINES	0	0	0	1	0	1
4	PETROCHEMICALS	0	0	0	0	1	1
5	PETROLEUM	16	5	0	13	0	34
6	POWER	30	7	0	26	2	65
7	RAILWAYS	8	4	2	25	45	84
8	ROAD TRANSPORT AND HIGHWAYS	20	7	3	5	1	36
9	SHIPPING AND PORTS	1	0	0	0	1	2
10	STEEL	3	1	0	1	0	5
11	TELECOMMUNICATIONS	1	0	0	0	0	1
12	URBAN DEVELOPMENT	3	1	0	6	1	11
	Total	88	27	5	87	51	258
		Projects which can be commissioned in 2015-16					

Source: MoSPI, January 2015

Sectoral Highlights

Setting Targets 2015-16

Sectoral Coverage

- Progress of Parameters,
- Tracking Critical Projects
- Monitoring Delayed Projects)

Rural Infrastructure : Irrigation, Roads, Housing, Electrification and Teledensity

Energy Connectivity : Power (including Hydro), Renewables (including Solar, Wind and Bio-Mass), Coal, Petroleum and Gas

Digital Connectivity : Telecommunications Including Broadband, Wi-Fi and Mobile

Physical Connectivity: Airports, Roads, Railways, Ports and Inland Waterways

How have the Sectors Performed in 2014-15 : An Overall Picture

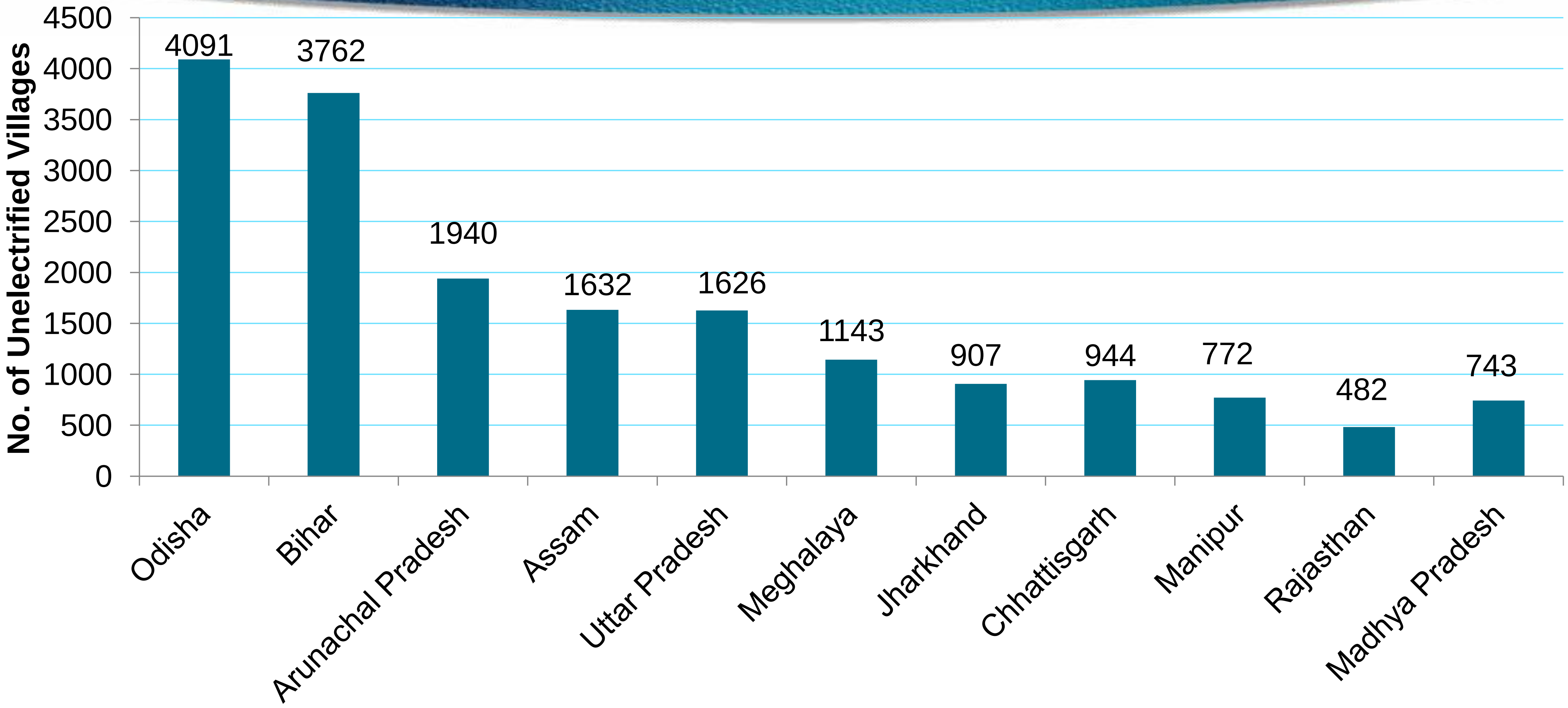
Sr No.	Parameter	Achievement
1	Number of Airports built	2 – Kadappa (Andhra Pradesh), Bikaner (Rajasthan)
2	Port Capacity Added (MT) in Ports	122 MT
3	New Lines Constructed/Lines Doubled/	313km / 705km
4	Highways Constructed	4340 Km
5	Gram panchayats connected by OFC under NOFN	10,900
6	Power Capacity Added	22,566 MW
7	Transmission lines Laid	20,882 cKM
8	Renewable Capacity Added	4,089 MW

Rural

Rural (1)

Sr No	Sector	Parameter & Unit	Target (2014-15)	Achievement (2014-15)	% Growth in achievement in 2014-15 over 2013-14	Target (2015-16)
1	Indira Awas Yojana	Houses Constructed (No. in lakhs)	25.18	16.50 (66%)	4%	25.18
2	Pradhan Mantri Gram Sadak Yojana	Road Length (in km)	21,775	36,883 (170%)	46%	26,000
		Habitations Connected (in number)	5,182	10,990 (212%)	68%	8,500
3	Electrification	Un-electrified Villages (in number)	1,900	1,405 (74%)	17%	3,500
5	Teledensity (%)		No Target	48%	9%	54%

Rural (2)
Break-up of Un-electrified villages - State wise

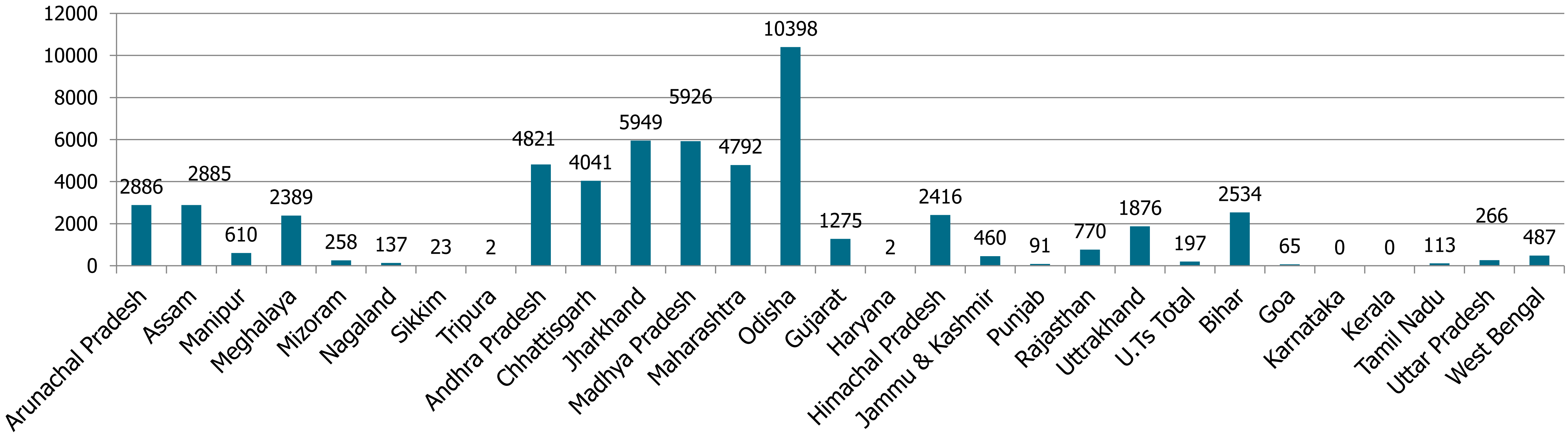


Note : These 11 States constitute 98% of Unelectrified villages in India

Rural 3 :Uncovered Villages (Mobile)

(Total No. of uncovered Villages: 55,669)

- Rural tele-density approximately 48% (March 2015); Target for 2015-16: 54 % & to reach: 70% by 2017 and 100% by 2020.
- Broadband penetration: 97.37 million (Feb 2015); Target for 2015-16: 150 Mn & 175 Mn by 2017 & 600 Mn by 2020.



Source: DOT

Telangana State Separate figures not available

Irrigation (1)
Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

Parameters	Achievement in 2014-15	Growth in 2014-15 over 2013-14	Target in 2015-16	Remarks
Creation of additional irrigation potential	-	about 6 lakh ha is created annually	6 lakh ha*	Rs. 2000.0 crore (Rs. 1000 crore each for AIBP and CADWM) allocated in 2015-16.
Command area and water management infrastructure	-	about 2 lakh ha is developed annually	3-4 lakh ha*	
Micro-Irrigation	2.88 lakh ha	4.34 lakh ha achieved in 2013-14	3.7 million ha*	The allocation for micro-irrigation is doubled in 2015-16 to Rs. 1800.0 crore against Rs. 962.65 crore released to States in 2014-15. Given the very ambitious targets, it may require further increase at RE stage.

***As projected in the EFC of the PMKSY. The EFC is yet to be approved. 10% increase in irrigation efficiency can add 14 m Ha under irrigation**

Irrigation (2)
Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

Rs. 5300 Crore allocated for 2015-16

PMKSY

01 Har Khet Ko Pani
Protective irrigation to all agricultural fields

02 Per Drop More Crop
Micro-Irrigation
(Rs. 1800 Cr)

03 Jal Sanchay & Sinchan
AIBP and IWMP
(Rs. 3500.0 Cr)

Target for 2015-16

- Creation of additional irrigation potential in ~ 6 lakh ha
- Command area development in 3-4 lakh ha
- Micro-Irrigation on 3.57 million ha

- Investment on micro-irrigation doubled. Rs. 1800.0 crore allocated in 2015-16 against total release of Rs. 962.65 crore in 2014-15.
- Average productivity in assured irrigated States is 3 t/ha while only 1.6 t/ha in rainfed States

Energy

New & Renewable Energy

- **Reset the targets of renewable energy by 2022**:
  - Solar: ~3,000 MW → 100,000 MW
  - Wind: ~22,000 MW → 60,000 MW
  - Others: ~7,000 MW → 15,000 MW
  - RE-Invest 2015 saw capacity commitments of 273,000 MW
  - 17 solar parks (12,259 MW) – land available, transmission being setup
  - Rapid scale-up of solar water pumps for agricultural needs
    - 25,000 installed last year; plan 100,000 this year
- **Key concerns:**
  - **Cost of capital**: Introducing dollar tariff structures to achieve grid parity (~Rs. 5/unit)
  - **DisCom payments:** Introducing NTPC & PTC to buy renewable power
  - **Off-grid and roof-top solar viability:** Government support needed
  - **States commitment to purchase power**: Tariff policy revision

Power (1) : Progress of Parameters

Sr. No.	Parameter	Target (2014-15)	Achievement (2014-15)	Growth in 2014-15 over 2013-14	Target (2015-16)	Target 2019-20
1	Capacity Addition (MW)	17,830.30	22,566.3 (127%)	27%	20,037.1	17,881 (Target for Next 4 years = 81,602)
2	Transmission Lines (cKm)	20,882	22,101 (106%)	32%	23,712	31,082 (Target for Next 4 years = 1,12,650)
3	Power Generation (Billion Unit)	1,023	1,048.4 (102%)	8%	1,137.5	1491
4	Formulation of State specific Action Plans for 24x7 power supply	-	2	-	All remaining States / UTs	-
5	Go Live Towns (Nos.) R-ARDRP	350	352 (100%)	4%	360	All 1412 towns will be completed by 2016-17
6	Connecting Unconnected Villages (Nos)	1900	1405	17%	3500	18452

Power (2)
Deen Dayal Upadhayay Grameen Jyoti Yojana (DDUGJY)

Un-electrified villages	2015-16	2016-17	2017-18	2018-19	Total
Ongoing works	3500	3050	2700	2672	11922
Yet to be sanctioned		1000	2400*	3130*	6530
Total	3500#	4050	5100	5802	18452

* Including electrification through Renewable Energy sources – confirmation of figures awaited from States
# Out of a target of 3500 villages for 2015-16, 2200 villages would be left overs from projects prepared prior to 2012.

Power (3)
Monitoring Delayed Projects

- Projects commissioned – 3 (Trans 2, Thermal 1)
- Projects with no time overrun – 7 (Trans 4, Thermal 3)
- Delayed projects and reasons for delay – 40
  - Transmission (24) : RoW problems, delay in forest clearances
  - Hydro (12) : Geological and Local issues, delay in E&F clearances
  - Thermal (4) :Delays in land acquisition and equipment supply
- Projects on hold – 2 (Lata Tapovan – NTPC; Lower Subansiri – NHPC)
- **31 projects to be commissioned in in 2015-16**

Steps taken :

- Transmission lines : Relaxing norms for compensatory afforestation for private sector; Procedure for survey & tree felling after Stage-I simplified; Powers delegated to Regional Offices
- Regular regional review meetings taken by Secretary (Power) to resolve issues with States. Power Projects Monitoring Panel set up by Ministry

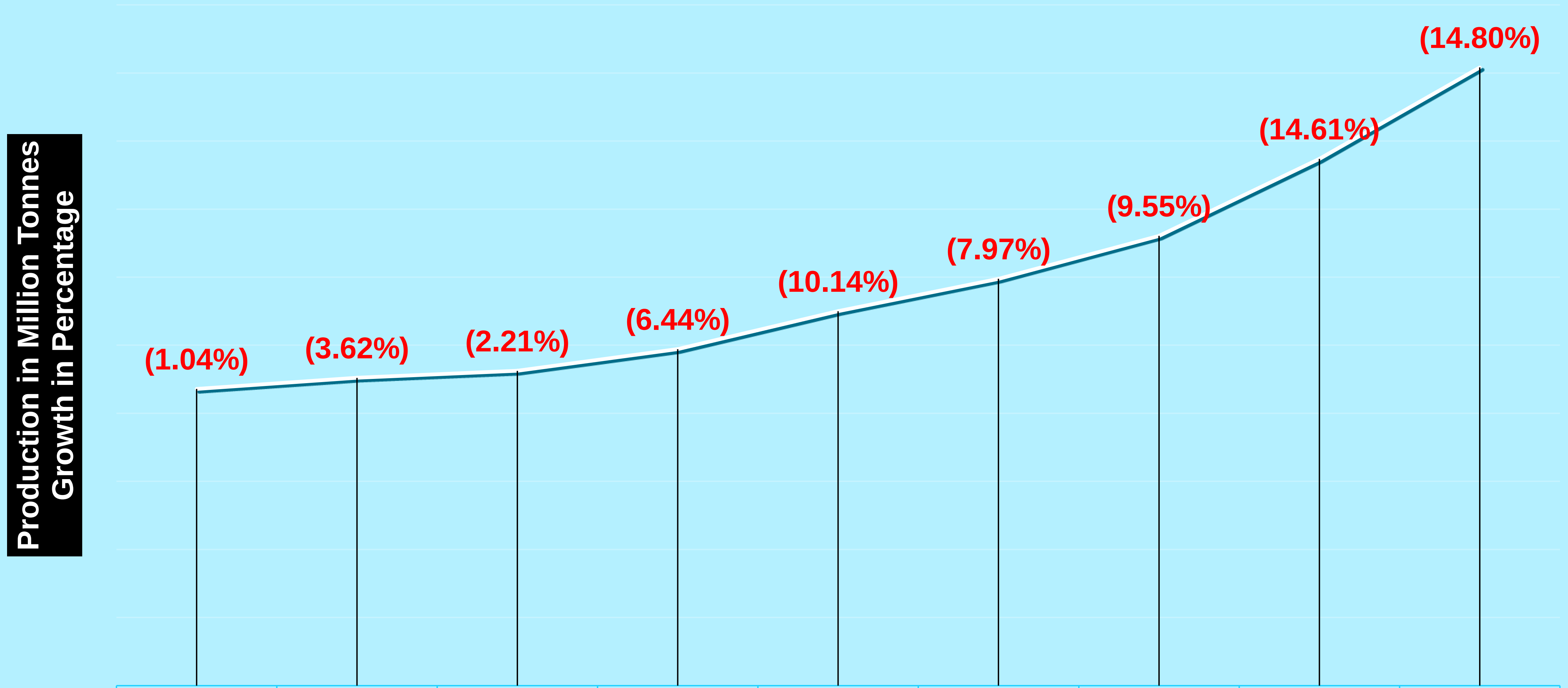
Key Constraint : Financial Health of Discoms

1. Total accumulated losses of Discoms is Rs 2.51 lakh crore (2012-13) across all States and Uts.
2. Rising gap between average cost of supply and tariff stands at 82 paise/unit (2012-13).
3. The effect of this gap is that generation and capacity addition is not being fully utilised and coal stocks will also soon exceed demand.
4. Distribution utilities of Sikkim, West Bengal, Delhi, Punjab, Karnataka (HESCOM & MESCOM), Kerala and Gujarat are only in profit. Rest distribution utilities in the country are in loss.
5. Consultations may be held with Chief Ministers of all States to find a solution.

Coal (1)
Progress of Parameters (fig in MT)

Sr. No.	Parameter	Target (2014-15)	Achievement (2014-15)	% Growth in 2014-15 over 2013-14	Target (2015-16)
1	Public Sector (CIL+SCCL)	562	546.77 (97%)	7%	606
2	Captive and Others	68.25	65.82 (96 %)	24%	94
3	Total Domestic Production	630.25	612.59 (97 %)	8%	700
4	Import based Coal Plants*	54.00	48.50 (90 %)	15%	42
5	Blending Purposes *	40.00	42.70 (107 %)	13%	73
6	Total Imports by Power Sector *	94.00	91.20 (97 %)	14%	115

Coal (2)
Projected Growth of Production by Coal India Limited



	2011-12 (Act)	2012-13 (Act)	2013-14 (Act)	2014-15 (Act)	2015-16 (TGT)	2016-17 (Proj)	2017-18 (Proj)	2018-19 (Proj)	2019-20 (Proj)
Series1	435.84	452.21	462.41	494.23	550.00	597.60	660.70	773.70	908.10

Coal (3)
Steps Being Taken to Ramp up Production

- Mine-wise Plan & identification of issues for each mine;
- Institutional framework - Coal Projects Monitoring Portal (CPMP) and periodic meeting with Railways, MoEF & CC and the States;
- New Mining Projects 69 numbers to contribute 182 Million Tonnes in 2019-20 and 124 on-going Projects to contribute additional production of 243 Million Tonnes;

Critical Issues :

- Evacuation of Coal by Railways
- Non-payment of dues by Power Utilities (Current Balance of Rs. 8000 Crore)

Renewables
Progress of Parameters

Sr. No.	Parameter & Unit	Target (2014-15)	Achievement (2014-15)	% Growth in 2014-15 over 2013-14	Target (2015-16)
1	Wind Energy (MW)	2,000	2312 (+116%)	+11%	2400 (+3.81)
2	Solar Energy(MW)	1,100	1112.07 (+101%)	+16%	1400 (+25.89)
3	Small Hydro Project (MW)	250	251.61 (+101%)	+47%	250 (-0.64)
4	Bio Power (MW)	400	405 (+101%)	-2%	400 (-1.23)
5	Total Capacity Addition (MW)	3,770	4089.18 (+108%)	+12%	4460 (+9.07)
6	Waste to Power (MW)	20	8.5 (+43%)	-19%	10 (+17.65)

Urban
Waste to Energy

Waste to Energy

- **India's Waste to Energy Capacity-(Presently -18 MW, Target for 2015-16 – 50 MW)**
- **Tariff Policy in Indian Electricity Act, 2003**
- **Amendment proposed for State Distribution Company to mandatorily procure power from all municipal waste to energy plants in the state**
- **Industry has petitioned CERC for determining the general tariff for Solid Waste-to-Energy plants**
- **State Regulatory Commissions to determine tariff, based on CERC tariff.**

Waste to Compost

- Ministry of Fertilizer agreed to tag the lifting and sale of compost with sale of Urea.
- Market development assistance of Rs 2000/- per Metric tonne proposed.
- Target to Increase the production from 1 lakh tonne to 5 lakh tonne in the year 2015-2016.

Energy Efficiency in Government Buildings

- Pilot Project taken up for two Govt. Buildings : (I) Nirman Bhawan (II) I.P. Bhawan
- MoU signed Between CPWD and EESL for installation of energy efficient fixtures.
- Expected Energy savings in these two buildings for year 2015-16 is 17 lakh Units.

Petroleum & Natural Gas (1)
Progress of Parameters

Sl. No.	Parameters	Target 2014-15	Achievement 2014-15	Growth in 2014-15 over 2013-14 (%)	Target 2015-16
1	Crude oil Production (MMT)	38.76	37.46 (97%)	(-)0.9 %	37.05
2	Natural Gas production (BCM)	36.62	33.65 (92%)	(-) 4.9 %	35.28
3	Petroleum Products (MMT)	-	221.12	0.4 %	224.26
4	Plan Expenditure (Rs. Cr)	80,678	74,991 (RE)	(-)24.6 %	76615
5	Investment by Private Companies (Rs. Cr)	-	36,153	-	38708

Petroleum & Natural Gas (2)
Monitoring Delayed Projects

76 projects are under implementation as on 1.4.2015, of which 49 projects are delayed.

Delays mainly due to contractual issues, non-receipt of Environment & Forest clearances, and RoW issues especially for pipeline projects.

During 2014-15, 33 projects completed (against 17 projects in previous year) with investment of Rs. 93,244 crore.

Description	2014-15	Target 2015-16
Completion of Projects	33*	35
of which: Greater than Rs.1000 crore	18	13

30 projects of CPSEs & another 3 projects of JVs completed during 2014-15.

Digital Connectivity

Telecommunications (1)
Vision 2022- Digitally Connected India

Broadband : Broadband for a Billion	Universal Access: Mobile Connectivity to Every Village	Facilitating Public Wi-Fi : Urban Areas and Tourist Places

India grows by 1.08% points for every 10% increase in internet subscribers- Potential economic benefit (GDP growth) of Rs. 23,26,275 crore

Telecommunications (2)
Broadband for a Billion

Project/ Scheme	Action Point	Timeframe for Implementation	Target 2014-15	Achievements 2014-15	Targets for 2015-16
Broadband to all villages by 2022	Connect 2,50,000 GPs	December 2017 by the Review committee - BharatNet)	• Connect 50,000 GPs	• Permanently Lubricated (PLB) duct laid – 50,088 km • Cable laid – 30,825 km • OFC laying done for 10,900 GPs • Report of High Level Review Committee finalised	Project to be reformulated based on Govt. decision on Committee's recommendations

Issues to be resolved for Urban Broadband

•*Rules for Right of Way (RoW)*
•*Convergence of Cable TV for all Telecommunication Services*

December 2015

•*Introduction of Virtual Network Operators (VNO)*
•*Sharing, Trading, Harmonization, Contiguity and Delicensing of spectrum*

March 2016

Telecommunications (3)
Tracking Critical Projects

Sl. No	Project/ Scheme	No of Uncovered Villages	Timeframe for Implementation	Achievements 2014-15	Targets for 2015-16	Remarks
1	NER	8621	March, 2017	• Approvals obtained • Amendment of Indian Telegraph Rules done.	Project initiation by December 2015	By 2022 Coverage of 100 % villages
2	Himalayan States	4752	July 2017	Draft DPR Ready	Project award by March 2016	
3.	Western Border States	2138	August 2017	Nil	Project initiation by March 2016	
4	Chhattisgarh, Jharkhand, Bihar and Odisha	22922	March 2019	NIL	DPR preparation by March 2016	
5	Rest of India	16667	March 2019	NIL	DPR preparation by March 2016	

Telecommunications (4)
Tracking Critical Projects: Islands & LWE areas

Action Points	Implementation Timeline	Achievement 2014-15	Target 2015-16
Islands			
Submarine OFC connectivity between Mainland & Islands	December 2018	Draft DPR submitted	• Project Initiation by March 2016
Augmentation of Satellite Bandwidth in A&NI & Lakshadweep by BSNL	March, 2016	DPR approved	• Bandwidth augmentation for ANI by Dec 2015
2G coverage in uncovered villages and along NH 223	March, 2017	-	• Project initiation by March 2016
LWE Areas			
2199 Mobile Towers in 88 LWE districts	March 2016	510	Remaining 1689 towers by March 2016

Telecommunications (5)
Facilitating Public Wi-Fi : Urban Areas and Tourist Places

Wi-Fi in Tourist Places	• By Ministry of Tourism and Ministry of Culture
Wi-Fi in Cities	• By State Governments

With Technical Support from DoT.

- BSNL to provide Wi-Fi services
  - at own cost at four locations: Taj Mahal, Fatehpur Sikri, Sarnath and Konark Temple **by March 2016**
  - at six additional locations: Shore Temple, Mahabalipuram, Hampi, Khajuraho, Thanjavur-Brihadeshwar temple, Bodh-Gaya and Jagannath Puri **by March 2016**

- RailTel to provide Wi-Fi services in Red Fort and Humayun's Tomb.
- Wi-Fi services at Varanasi Ghats launched by BSNL on February 8, 2015

Physical Connectivity

Airports, Ports & Inland waterways, Railways & Highways

Airports (1)
Progress of Parameters

Sr. No.	Parameters	2014-15		Growth in % of 2014-15 over 2013-14	2015-16	Remarks
		Target	Achievement		Target	
1.	Investment by AAI	934	898 (96%)	(+)58%	680	Consistent with Budgetary allocations.
2.	Total Investment in Airport Sector	1639	1673 (100%)	(-)43%	1930	
3.	Development of Airports in 50 Tier II and III Cities.	Commencement of work in 5 cities	Work commenced in Hubli, Belgaum, Kishanganrh, Tejpur, Jharsuguda .	-	More airports to be chosen for 2015-16	
4.	Award of OMD under PPP	4 Airport (Ahmedabad, Jaipur, Kolkata, and Chennai)	RFQ issued but award progress not completed	-	To complete award in 4 Airports	Progress of OMD projects slow

Airports (2)
Achievements in 2014-15

- ***Restoration of Category 1 status in Aviation safety by Federal Aviation Authority (FAA).***
- **Awarded by Global Agency, Airports Council International (ACI).**
  - Delhi – Best Airport in the world in 25-40 Million category
  - Mumbai – 5^{th} best in the world – 25-40 million category
  - Hyderabad – 3^{rd} best in the world – 5-15 million category.
- Air Navigation Service (ANS) of AAI – Golden Peacock Award for best Airspace Service.
- **Two new Airlines started operations during June – Dec 2014 : Air Asia; Vistara**
- **Passenger Movement** - Risen from 169 million in FY 2013-14 to 188.67 million in FY 2014-15 a growth of **11.8%,** highest since 2009.(Avg annual growth during 2009-14 was 7%)
- **Cargo Movement-** risen from 2.28 million tonnes in FY 2013-14 to 2.54 million tonnes a growth of **11.6%**, highest since 2009. (Avg annual growth during 2009-14 was 3%)

Airport (3)
Vision 2020: Airports in Private / State Sector

Sl. No.	Airport/Location and State	Investment in Rs. Crores	Likely date of completion
1	Shirdi, Maharashtra	350	31.06.16
2	Sindhudurg Airport, Maharashtra	450	31.7.17
3	Kannur International Airport, Kerala	1892	31.8.2017
4	Navi Mumbai International Airport- Maharashtra	15575	30.6.2019
5	Mopa Airport, Goa	3000	31.12.2019

Airports (4)
Tracking Critical Projects: 2015-16 and Beyond up to 2020

SNo	Parameter	Targets for 2015-16
1	Completion of Construction of new airport terminals by AAI	• Chandigarh with an investment of Rs 500 Cr - target date 31.5.2015 • Khajuraho with an investment of Rs 75 Cr– target date 31.5.2015 • Tirupati with an investment of Rs 174 Cr - target date 31.7.2015. • Vadodara with an investment of Rs 116 Cr- target date 31.12.2015.
2	Airports in JVE Sector/JV	Durgapur International Airport, West Bengal – 31.05.2015 (Investment 1000 Cr.)
3	Setting up world class Maintenance Repair & Overhaul (MRO)	Air India and M/s Boeing at Nagpur – 30.07.2015 – (Investment Rs 6420 Cr)
4	New Projects over Rs 100 Cr by AAI (Tier –II cities)	▪ Port Blair- New Integrated Terminal Bldg with an investment of Rs 375 Cr - target date 30.9.2018 ▪ Jharsugudha- airport development with an investment of Rs 200 Cr - target date 30.9.2018 ▪ Calicut-New arrival hall and strengthening of runway- with an investment of Rs 155 Cr - target date 31.12.2017 ▪ Vijaywada-Construction of terminal building – with an investment of Rs 105 Cr- target date 31.12.2016

Airports (5)
Monitoring Delayed Projects

Out of 8 projects monitored by MOSPI, 6 have been completed and two are pending

1. Pakyong Airport :
   - State Govt. agreed to protect site for restart of work after joint site visit by MoCA, NITI, and State Govt on 15th April, 2015.

2. Establishment of AOCC (Airport Operations Control Centre) at Pune which is to be completed by 31.5.2015

Ports & Inland Waterways (1)
Traffic & Capacity Forecasts for 2020

(Figures in MTPA)

Year	Traffic		Capacity Required According to 70% Capacity Utilisation Norm		Actual Capacity Available
2014-15	1051.4		1502		1522 (Spare Capacity = 450 MTPA)
	Projections				
Year	Traffic		Capacity Required		Capacity Expected to be Available
	8% GDP Growth	9% GDP Growth	8% GDP Growth	9% GDP Growth	
2015-16	1131.51	1146.02	1622.16	1637.18	1680.00
2019-20	1539.41	1617.70	2206.93	2311.01	2408.08

According to the above projections, capacity in port sector is expected to be sufficient for the Traffic for 8% and 9% growth.
But there are variations in capacity utilisation with some ports being highly saturated where as the others being underutilised.

Ports & Inland Waterways (2)
Progress of Parameters

	Parameter Unit	Target (2014-15)	Achievement (2014-15)	Growth over 2013-14	Target (2015-16)	Remarks	Types of Projects
1.	Award and Approval of New Projects						
(a)	Number	26	26 (100%)	-13%	30	Non-GBS investment from Port's resources and private Investment	▪ Capacity addition :18 ▪ Capital dredging : 4 ▪ Mechanisation : 3 ▪ Connectivity & Others : 5
(b)	Capacity (MT)	218*	155.23 (71%)	-29%	162.20		
(c)	Investment (Rs. Cr.)	22536*	10543.47 (47%)	-49%	14225.98		
2.	Completion of On-going Projects						
(a)	Number	19	21	50%	34		• Extension of Container Berth by 330 m towards north (JN Port), 10 MTPA, Rs 600 Cr • Construction of North Cargo Berth 2 (VOC Port, Tuticorin), 7 MTPA, Rs 332.16 Cr. • Development of Container Terminal (Kamarajar (Ennore) Port), 5 MTPA, Rs 780 Cr.
(b)	Capacity (MT)	103	90.40	38%	92.81		
(c)	Investment (Rs. Cr.)	3861	4622.75	28%	4653.79		

* Ministry had proposed a target of 114.62 Million tones and investment of Rs 5325.64 crores based on identified shelf of projects.

Ports & Inland Waterways (3)
Tracking Critical Projects

Sr. No.	Parameter Unit	Target (2014-15)	Achievement (2014-15)	Target (2015-16)
3.	Development of Jalmarg Vikas (NW-I) (Project Duration : 6 years)	Completion of DPR Year 1 (2014-15) ***Outcome: 1000 T Barges can ply between Haldia-Varanasi by June 2016***	▪ Work commenced for Environment and Social Impact Assessment	▪ DPR by 31.10.2016. ▪ Construction of New Navigational lock at Farakka to start by 28.2.2016. ▪ Automated information centre for safe navigation work to start by 31.1.2016.

		Activity	Target (2015-16)
4.	**Development of Inland Waterways**	Construction of Multimodal terminals	Award and Commencement of work ▪ Varanasi (31.10.2015); ▪ Haldia (28.2.2016) ▪ Sahibganj (28.2.2016)
		Transport 3 MMTPA coal for NTPC Plant at Barh (Bihar): ***(Second such project after 3 MTPA to Farakka)***	▪ Signing of Tripartite agreement between IWAI, NTPC and successful bidder by 31.8.2015
		Ro-Ro service between Dhubri and Nathsingimari on Brahmaputra in Assam	▪ To commence by 28.2.2016.
		First Phase Development of NW-5 (River Brahmani in Orissa)	▪ Work on fairway (2.5 m LAD) in Dhamra/Paradeep - Erada section to commence by 31.11.2015.

Ports & Inland Waterways (4)
Tracking Critical Projects

Sr. No.	Parameter Unit	Target (2014-15)	Achievement (2014-15)	Target (2015-16)	Work proposed in 2015-16
5.	Sagarmala Project	2014-15: Sagarmala Project was approved by the Cabinet on 25.3.2015.			▪ Finalisation of National Perspective Plan with traffic forecast, Port capacity required till 2030, potential for transhipment, bunkering and coastal & Inland waterways. ▪ Techno-economic feasibility report for selected 3 new Port locations. ▪ Formation of Sagarmala Development Company and Port Rail Company. ▪ Implementation of strategy for setting up Transhipment Hub(s). ▪ Implementation of at least 10 projects for Port led development, evacuation, light house tourism and skill development. ▪ Preparation of development plan for Islands & Palm cultivation.

Ports & Inland Waterways (5)
Monitoring Delayed Projects

Sl. No.	Name of Project	Status
1.	Sethusamudram Project	Project implementation stayed by Hon’ble Supreme Court . Matter put up for consideration of CCPA.
2.	Development of Offshore Container Terminal, Mumbai	Partly completed. Defence objections to Chinese cranes on the verge of resolution. Facility proposed to be put up for alternate use on pilot basis

Railways (1)
Progress of Parameters

S. No.	Parameter	Target 2014-15	Achievement 2014-15	Growth in 2014-15 over 2013-14 (%)	Target for Completion 2015-16	Remarks	Target for Completion Upto 2020
1	New Line (KMS)	300	313 (104%)	(-) 30.4	300	GBS allocation to infrastructure projects and DFC has increased from Rs. 25,320 Cr. In 2013-14 to Rs. 37,538 Cr. In 2014-15 allocation to doubling increased by 84% and electrification by 15%. Physical Target for doubling gone up by 70% and electrification by 16%.	1900
2	Doubling (KMS)	700	705 (101%)	(-) 0.4	1200		11,100
3	Gauge Conversion (KMS)	450	527 (117 %)	(+)30.4	500		3700
4	Electrification (Route KM)	1,300	1375 (106%)	(+)1.85	1600		10,000

Railways (2)
Tracking Critical Projects

<table>
<tr><th>S. N.</th><th colspan="2">Activity</th><th>Milestone</th><th>Target Completion Date</th><th>Achievement/ Status</th></tr>
<tr><td rowspan="4">5</td><td rowspan="4">Coal Connectivity Projects</td><td>▪ Jharsuguda-Barpalli-Sardega (Odisha)</td><td>53 Kms</td><td>June, 2016</td><td>Project is on schedule. Entire land has been acquired, except balance of 14 acres.</td></tr>
<tr><td>▪ Bhupdevpur/ Kharsiya to Korichapar-Dharamjaigarh (Chattisgarh)</td><td>64 Kms</td><td>March, 2017</td><td><table><tr><th>Land Requisitioned (hectares)</th><th>Acquired/ Handed over</th><th>Balance</th><th>Remarks</th></tr><tr><td>520.203</td><td>NIL</td><td>520.203</td><td>LA process for Govt., private and forest land in process.</td></tr></table></td></tr>
<tr><td>▪ Tori - Shivpur (Jharkhand)</td><td>44 Kms</td><td>July, 2017</td><td><table><tr><th>Land Requisitioned (acres)</th><th>Acquired/ Handed over</th><th>Balance</th><th>Remarks</th></tr><tr><td>1053.85</td><td>463.275</td><td>590.214</td><td>55 % is yet to be given</td></tr><tr><td colspan="4">Govt. of Jharkhand to take action.</td></tr></table></td></tr>
<tr><td>▪ Shivpur – Kathautia (Jharkhand)</td><td>53 Kms</td><td>December, 2018</td><td><table><tr><th>Land Requisitioned (acres)</th><th>Acquired/ Handed over</th><th>Balance</th><th>Remarks</th></tr><tr><td>1034.458</td><td>NIL</td><td>1034.458</td><td>Stage I clearance to be filed by 30.04.15. LA yet to start.</td></tr></table></td></tr>
</table>

Railways (3) Tracking Critical Projects

S. N.	Activity	Milestone	**LA & Civil Contract Award Status**	**Commissioning Targets**
6(a)	**Eastern DFC**	Commissioning of Sonenagar (Bihar)-Mughalsarai(UP)-Ludhiana (Punjab) 1305 km Target Completion Date: December, 2019	LA Completed: 79% Balance by December, 2015 Award Completed: 66% Balance Schedule: 225 Km – 31.03.2015 222 Km – 30.06.2016	
6(b)	**Western DFC**	Full Commissioning Dadri (UP) to JNPT (Maharashtra) 1499 km Target Completion Date: December, 2019	LA Completed : 79% Balance by December, 2015 Award Completed : 43% Balance Schedule: 320 Km – 31.05.2015 237 Km – 31.12.2015 308 Km – 31.03.2016	

Annual Targets for Commissioning (Km) (Combined for EDFC and WDFC)	
2015-16	56
2017-18	957
2018-19	1340
2019-20	485

Railways (4)
Tracking Critical Projects

<table>
<tr><th>S. N.</th><th colspan="2">Activity</th><th>Milestone</th><th>Target Completion Date</th></tr>
<tr><td rowspan="3">7</td><td rowspan="3">Completion of projects in North-East and hill region</td><td rowspan="3">Guage Conversion/New Line</td><td>Tripura to be brought on BG network: Complete Badarpur-Kumarghat-Agartala Project</td><td>31.03.2016</td></tr>
<tr><td>Manipur to be brought on BG network: Complete Arunachal (Railway Station)-Jiribam section</td><td>31.03.2016</td></tr>
<tr><td>Mizoram to be brought on BG network of Indian Railways by completing Katakal-Bhairabi section</td><td>31.03.2016</td></tr>
<tr><td rowspan="2">8</td><td rowspan="2">Completion of other projects</td><td rowspan="2">Ganga Bridge in Bihar</td><td>Patna Bridge</td><td>31.03.2016</td></tr>
<tr><td>Munger Bridge</td><td>31.03.2016</td></tr>
<tr><td rowspan="2">9</td><td rowspan="2">High Speed/ Semi High Speed Corridor</td><td>(a) DPR Mumbai – Ahmedabad</td><td>Completion of Indo-Japanese Feasibility Study</td><td>30.06.2015</td></tr>
<tr><td>(b) Diamond quadrilateral projects of high speed rail (Total 10,000 kms)</td><td>Operation of one semi-high speed train from Delhi-Agra</td><td>June 2015</td></tr>
<tr><td>10</td><td>Station Redevelopment (RFQ for 7 Stations)</td><td colspan="2">

RFQ invited for Habibganj station on 03.0.2014. Award by 31.12.2015
For other Stations, RFQ issue dates are as follow:

<table>
<tr><th>1</th><th>Chandigarh</th><th>29.09.2015</th></tr>
<tr><td>2</td><td>Shivajinagar</td><td>29.01.2016</td></tr>
<tr><td>3</td><td>Bijwasan</td><td>29.09.2015</td></tr>
<tr><td>4</td><td>Anand Vihar</td><td>29.08.2015</td></tr>
<tr><td>5</td><td>Gandhinagar</td><td>31.10.2015</td></tr>
<tr><td>6</td><td>Surat</td><td>31.07.2015</td></tr>
</table>

Targets for finalization of bids for 3 station (Habibganj, Gandhinagar and Surat) is 2015-16 and remaining in 2016-17.

</td><td>March 2016</td></tr>
</table>

Railways (5)
Monitoring Delayed Projects

- There are 84 projects, valued at more than 1000 crores, which are under various stages of completion.

- 15 projects, out of 84 have been identified for directed monitoring during the current year to speed up their completion.

Roads (1)
Progress of Parameters

Sr. No.	Parameter & Unit	2014-15		% Growth in 2014-15 over 2013-14	2015-16	Remarks
		Target	Achievement		Target	
1	Road Length to be Awarded (KM)	8500	7980 (94%)	152%	8500	GBS increased from Rs. 27,750 Cr. In 2013-14 to Rs. 42913 Cr. In 2015-16. Increased allocation will be required to meet pre-project expenditure for the length awarded in 2014-15. Construction Targets also higher than 2014-15 achievement by 31%.
2	Completion of Construction (KM)	6300	4340 (69%)	2%	6300	
3	Highway Length Tolled (KM)	1450	1488 (103%)	31%	2000	
4	Toll Collection (Rs. In Crore)	6500	5927 (91%)	13%	7000	
5	Bharatmala Pariyojna	New Schemes			Approval of Scheme-June-2015/Award for DPR-December, 2015	These schemes will require additional resources. Concentration on on-going schemes to ensure timely completion may be beneficial strategy
6	SARDP-NE Phase-B				Approval of Scheme-June, 2015/Award for DPR-March, 2016	

Roads (2)
Monitoring Delayed Projects

- Ministry identified 77 languishing projects covering 8400 km of length. Efforts made to put all these projects on track.

Sl. No.	Projects	Number	Length
1	Project where issues have been resolved	24	2710 kms
2	Projects terminated	35	4190
3	Projects being sorted out	18	1508

Key Constraints

Sr. No.	Sector	Issues
1.	Airports	By 2020 India likely to be third largest Aviation Market. Following issues to be addressed. ▪ Uniform rate of tax of 4% on Aviation Turbine Fuel (ATF) in proposed GST regime. ▪ Indigenous Maintenance, Repair and Overhaul (MRO) by reducing tax to match foreign MRO taxation levels.
2	Ports & IWT	▪ Evacuation Constraints – Inadequate rail and road capacity, last mile connectivity, and inadequate supply of rolling stock to evacuate cargo from ports. ▪ Post award negotiation issues in PPP projects.
3	Railways	▪ Severe Capacity Constraint which requires doubling and traffic facility works. ▪ Constrained Growth in Freight Traffic – 8% target for 2015-16.
4	Highways	▪ Pre-construction activities made smooth ▪ Financing of Development plan ensured in 2015-16 through higher GBS – needs further support.

स्वच्छ भारत

एक कदम स्वच्छता की ओर

Team India
Together in Infrastructure