Summary Analysis - December 2016

Electricity Supply Monitoring Initiative (ESMI) is a program being implemented by Prayas (Energy Group). It aims to improve transparency and provide evidence based feedback about the quality of electricity supply. Under ESMI, specially designed, mobile data enabled monitors are being deployed at each location, and supply quality data is published daily at watchyourpower.org. ESMI was selected as a finalist for Google Impact Challenge, India 2013, given to NGOs using technology for social impact. It was launched in March 2015, and currently covers over 50 districts across India.

This report presents a summary analysis of supply quality data from 176 locations (45 Rural and 131 Urban) for December 2016. This analysis covers three main parameters of supply quality: i) no supply hours, ii) number of interruptions, and iii) evening hours of supply. The analysis is carried out for mega cities, other cities, and rural areas. See notes at the end for more details and explanation.

In December 2016

41%

ESMI locations experienced outages for more than 15 hours

21%

ESMI locations experienced more than 30 interruptions each greater than 15 min

14%

ESMI locations experienced average 30 min of outage during evening hours


Map showing current ESMI expance at district level
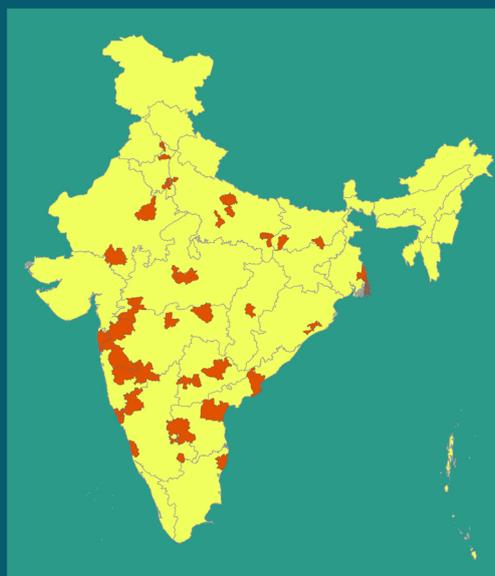
Supply Quality in Mega Cities - December 2016

Megacity	ESMI locations	Average number of interruptions per location		Average no supply hours per location
		Short - 15 Minutes to 1 Hour	Long - 1 hour and more	
Jaipur	6	4	1	3
Chandigarh	5	2	1	6
Delhi	5	2	1	5
Hyderabad	9	5	1	5
Pune	6	3	2	3
Kanpur	6	9	4	18
Bengaluru	9	11	5	18

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Supply Quality in Other Cities - December 2016

Average number of interruptions per location   Average no supply hours per location

- More than three hours
- One to three hours
- 15 Minutes to 1 Hour
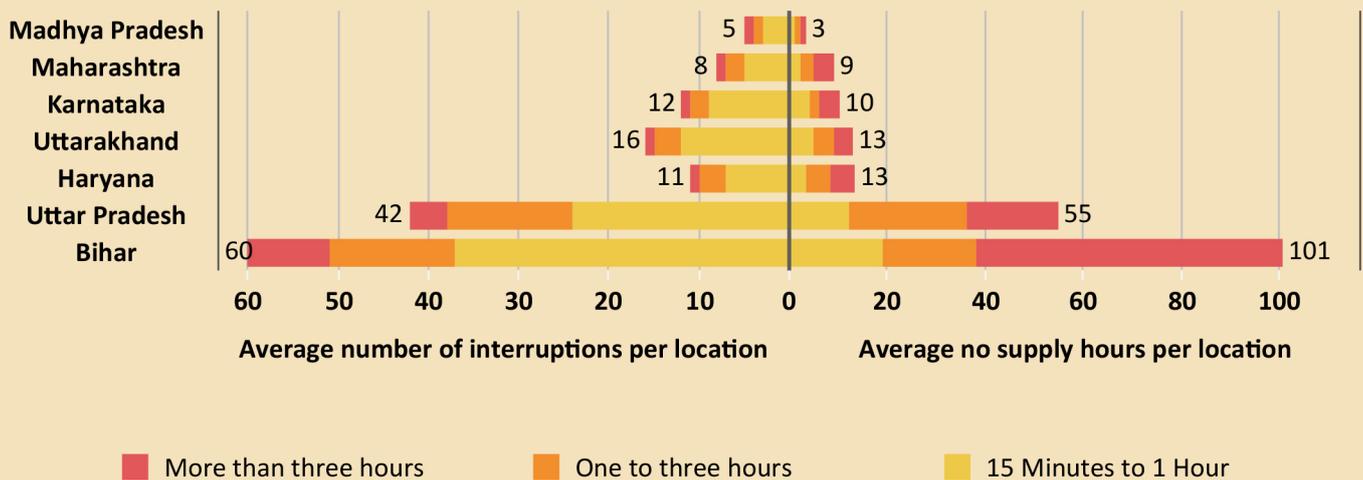
State	Towns covered	ESMI locations
Madhya Pradesh	2	4
Maharashtra	12	22
Karnataka	3	12
Uttarakhand	3	4
Haryana	2	4
Uttar Pradesh	4	9
Bihar	3	6

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Supply Quality in Rural Areas - December 2016

Average number of interruptions per location

	Goa	Maharashtra	Uttar Pradesh	Bihar
(total)	9	38	98	100

Legend:
- More than three hours
- One to three hours
- 15 Minutes to 1 Hour
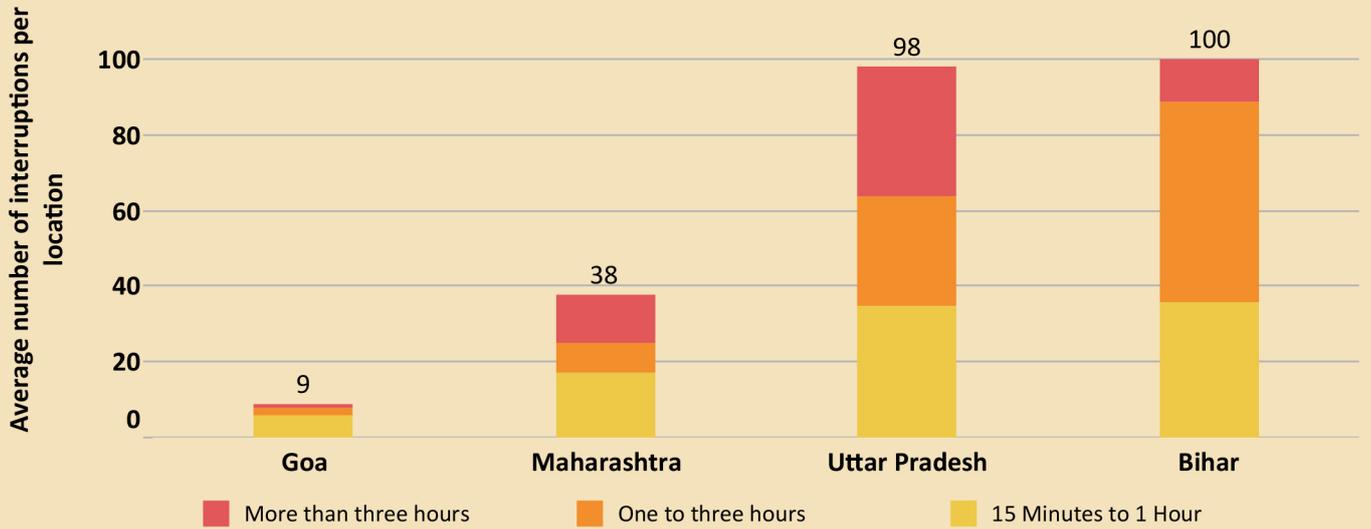
	Goa	Maharashtra	Uttar Pradesh	Bihar
ESMI locations	4	11	11	4
Average no supply hours per location	8	130	324	189

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## ESMI Locations Receiving Entire Six Hours of Evening Supply

75%
Mega Cities
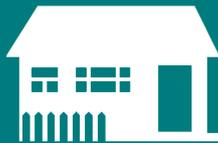
71%
Other Cities

22%
Rural Areas

Evening supply hours considered is between 5 pm to 11 pm and this analysis ignores upto 2 hours of total evening supply interruptions during the month

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ESMI
Smart Voltage Meter

GSM Network

Internet
Cloud

Website
watchyourpower.org
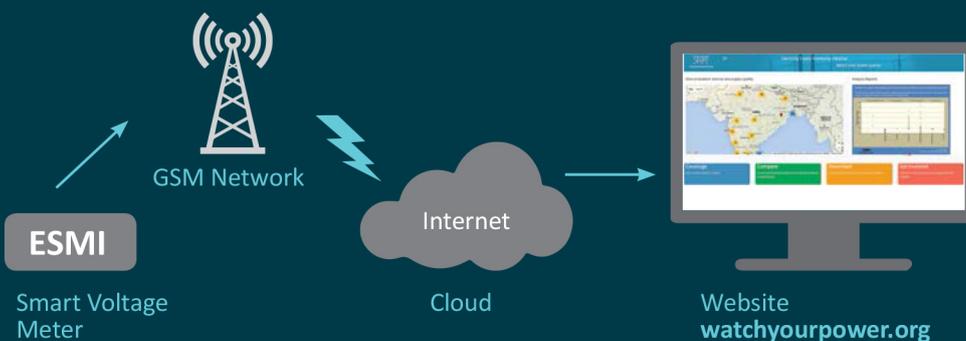
Electricity Supply Monitoring Initiative

www.watchyourpower.org
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Notes:
- Analysis in this report covers locations with more than 90% data availability during the month
- Urban locations are State Capitals, District Headquarters and Other Municipal Areas.
- Mega Cities are urban locations as defined by Central Electricity Authority (typically with population more than 20 lakh)
- Other cities are urban locations that are not mega cities
- Rural areas are those governed by Gram Panchayats (village councils)
- Agricultural locations covered under ESMI are excluded from this analysis
- Analysis, except evening hours of supply, consider interruptions of more than 15 minutes.

प्रयास

Prayas (Energy Group)

www.prayaspune.org/peg