



Prayas (Energy Group)

Electricity Supply Monitoring Initiative (ESMI)

Watch Your Power Quality

www.watchyourpower.org

Summary Analysis - January 2017

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 198 locations (56 Rural and 142 Urban) for January 2017. 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 January 2017

45%

ESMI locations experienced outages for more than 15 hours

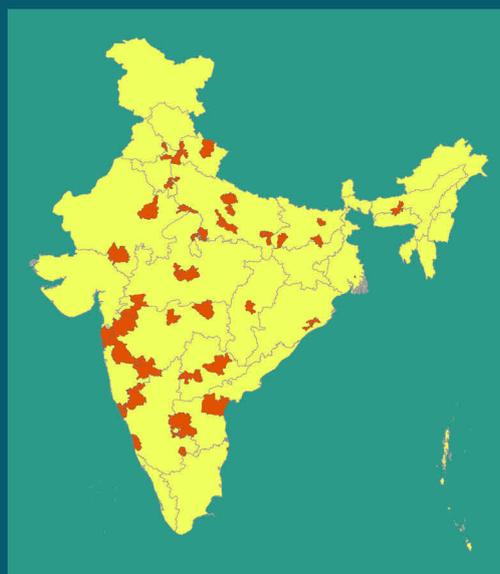
27%

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

18%

ESMI locations experienced average 30 min of outage during evening hours

Map showing current ESMI expanse at district level



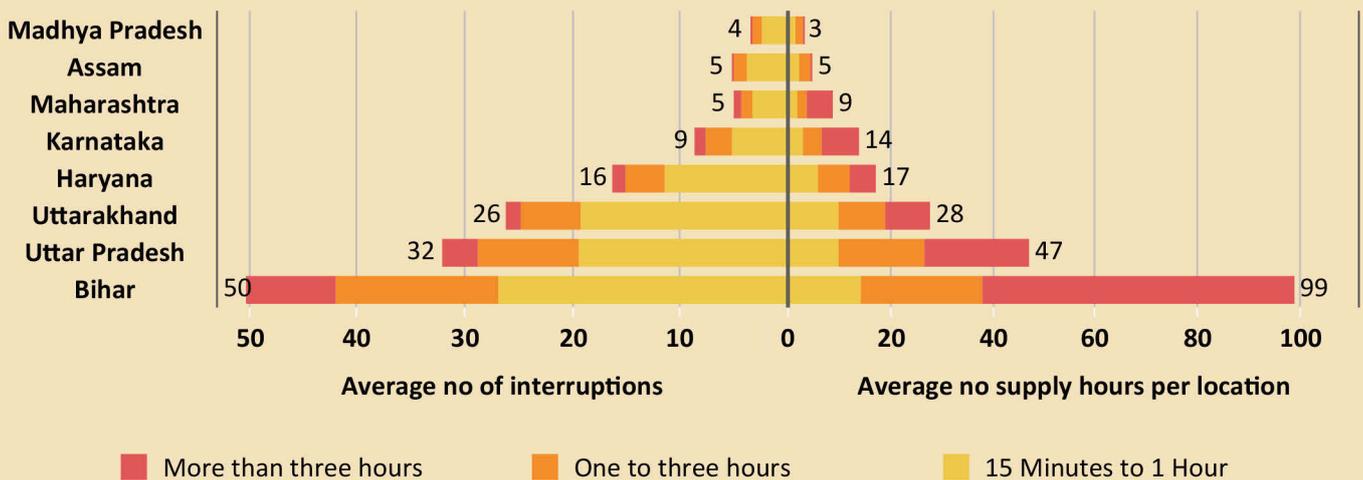
Supply Quality in Mega Cities - January 2017

Average number of interruptions per location

Megacity	ESMI locations	Short - 15 Minutes to 1 Hour	Long - 1 hour and more	Average no supply hours per location
Nagpur	4	2	1	1
Delhi	5	2	1	3
Pune	5	4	1	4
Chandigarh	4	2	2	4
Jaipur	6	5	2	8
Hyderabad	7	6	2	8
Bengaluru	8	7	3	8
Kanpur	7	9	6	22

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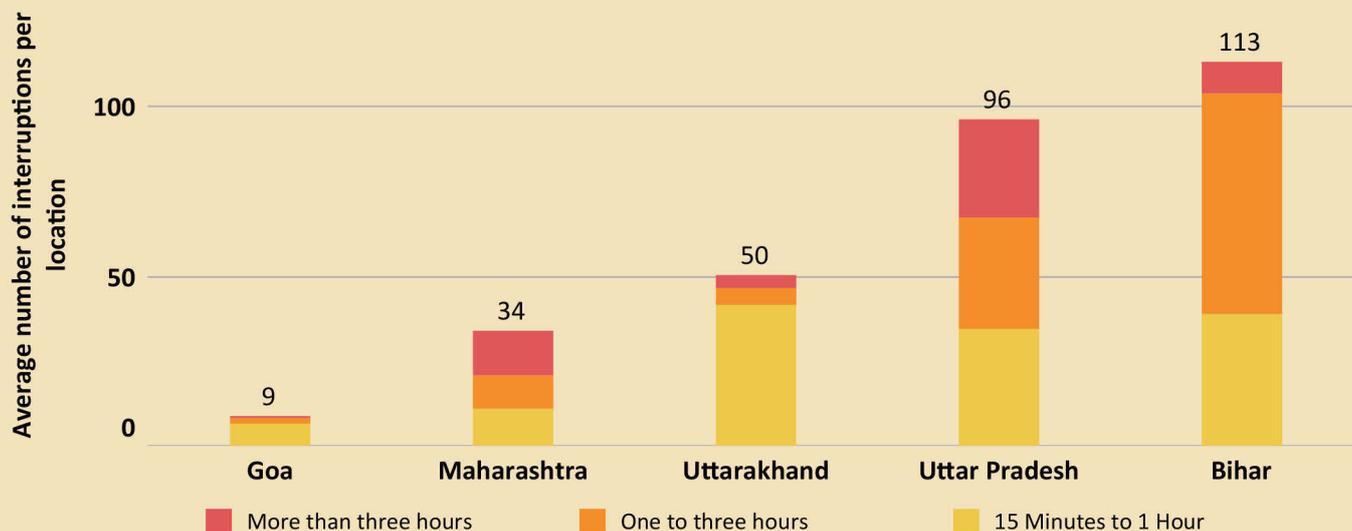
Supply Quality in Other Cities - January 2017



State	Towns covered	ESMI locations
Madhya Pradesh	2	4
Maharashtra	10	19
Karnataka	3	10
Uttarakhand	4	7
Haryana	2	4
Uttar Pradesh	7	16
Bihar	3	5
Assam	1	10

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Supply Quality in Rural Areas - January 2017



	Goa	Maharashtra	Uttarakhand	Uttar Pradesh	Bihar
ESMI locations	5	11	5	22	4
Average no supply hours per location	9	132	55	271	203

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ESMI Locations Receiving Entire Six Hours of Evening Supply



83%
Mega Cities



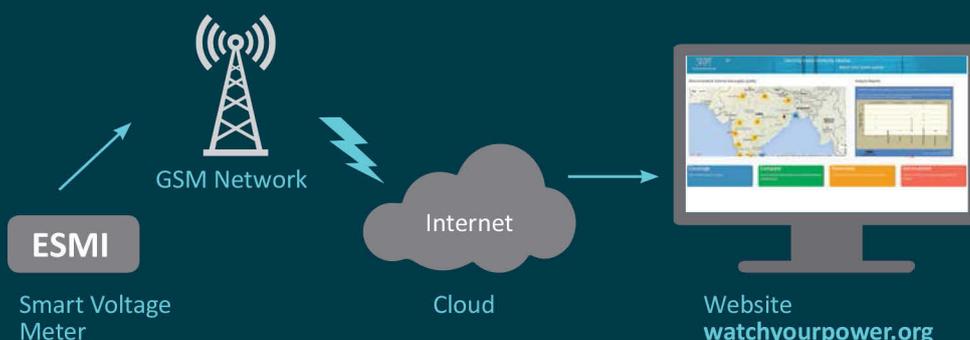
52%
Other Cities



16%
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

ID: AVGEHS170104



Electricity Supply Monitoring Initiative

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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.



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