



Prayas (Energy Group)

# Electricity Supply Monitoring Initiative (ESMI)

Watch Your Power Quality

[www.watchyourpower.org](http://www.watchyourpower.org)

## Summary Analysis - July 2018

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](http://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 55 districts across India.

This report presents a summary analysis of supply quality data from 215 locations (59 Rural and 156 Urban) for July 2018. 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 July 2018

62%

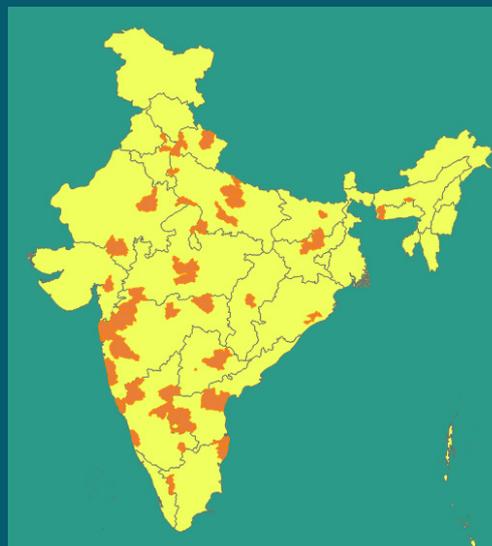
ESMI locations experienced outages for more than 15 hours

42%

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

33%

ESMI locations experienced average daily outage of 30 min or more during evening hours



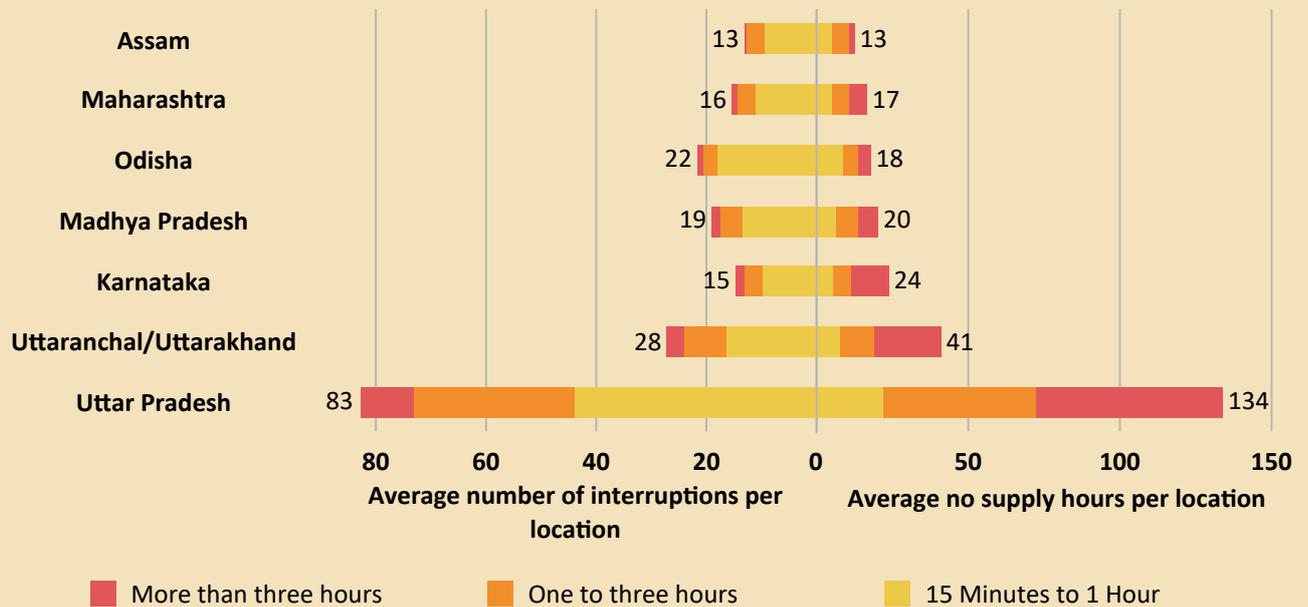
Map showing current ESMI expanse at district level

# Supply Quality in Mega Cities - July 2018

Megacity	ESMI locations	Average number of interruptions per location		
		Short - 15 min to hour	Long - 1 hour and more	Average no supply hours per location
Kolkata	4	2	1	2
Nagpur	4	1	2	3
Delhi	4	4	1	4
Hyderabad	6	5	2	4
Pune	7	5	2	6
Chennai	13	6	3	11
Lucknow	5	16	4	14
Bengaluru	4	11	5	19

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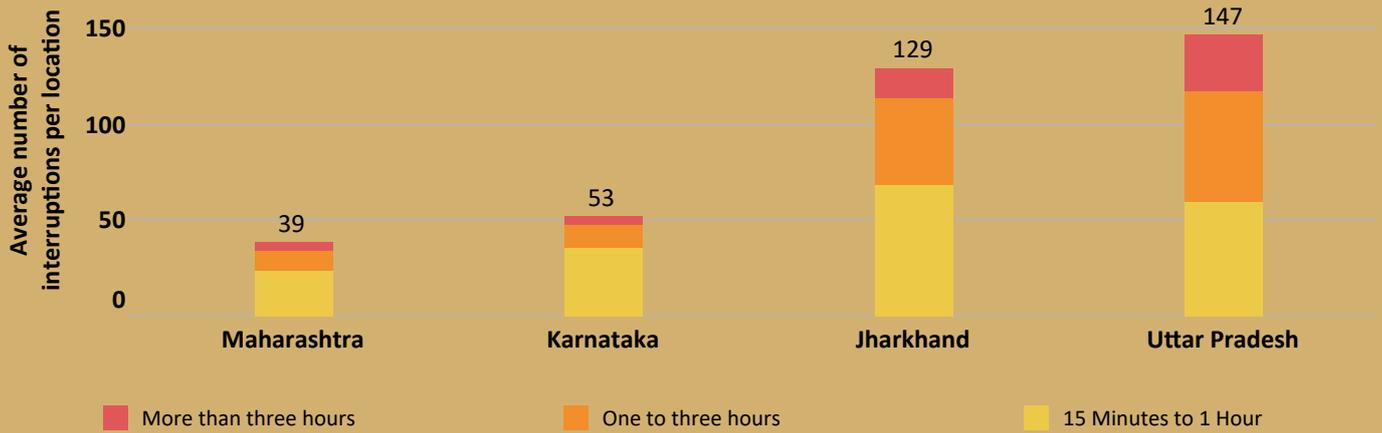
# Supply Quality in Other Cities - July 2018



State	Towns covered	ESMI locations
Assam	1	6
Maharashtra	10	18
Odisha	1	5
Madhya Pradesh	3	8
Karnataka	4	11
Uttaranchal/Uttarakhand	3	6
Uttar Pradesh	14	31

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# Supply Quality in Rural Areas - July 2018



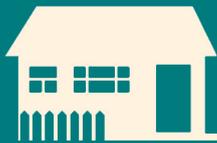
	Maharashtra	Karnataka	Jharkhand	Uttar Pradesh
ESMI locations	11	4	5	29
Average no supply hours per location	58	73	207	333

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## ESMI Locations Receiving Entire Six Hours of Evening Supply



**70%**  
Mega Cities



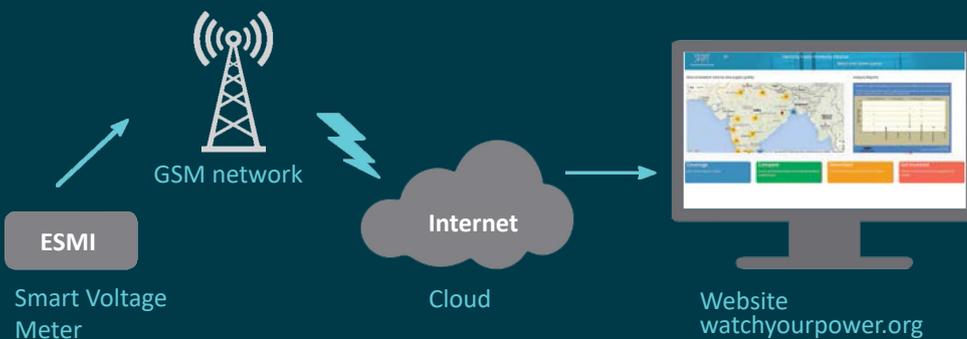
**21%**  
Other Cities



**7%**  
Rural Areas

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

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### 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
- Analyses, except evening hours of supply consider interruptions of more than 15 minutes



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