



Prayas (Energy Group)

Electricity Supply Monitoring Initiative (ESMI)

Watch Your Power Quality

www.watchyourpower.org

Summary Analysis - November 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 168 locations (45 Rural and 123 Urban) for November 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 November 2016

30%

ESMI locations experienced outages for more than 15 hours

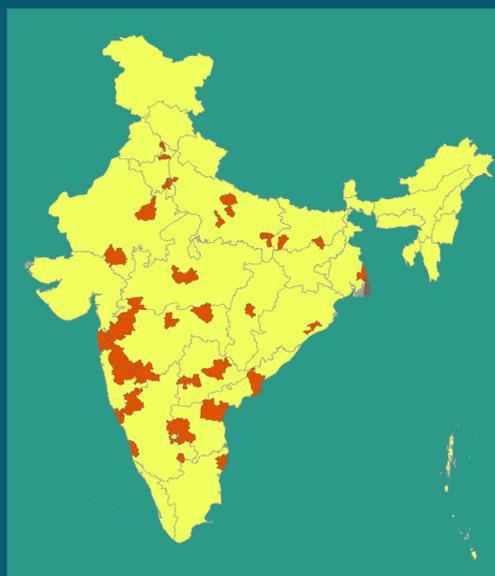
13%

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

15%

ESMI locations experienced average 30 min of outage during evening hours

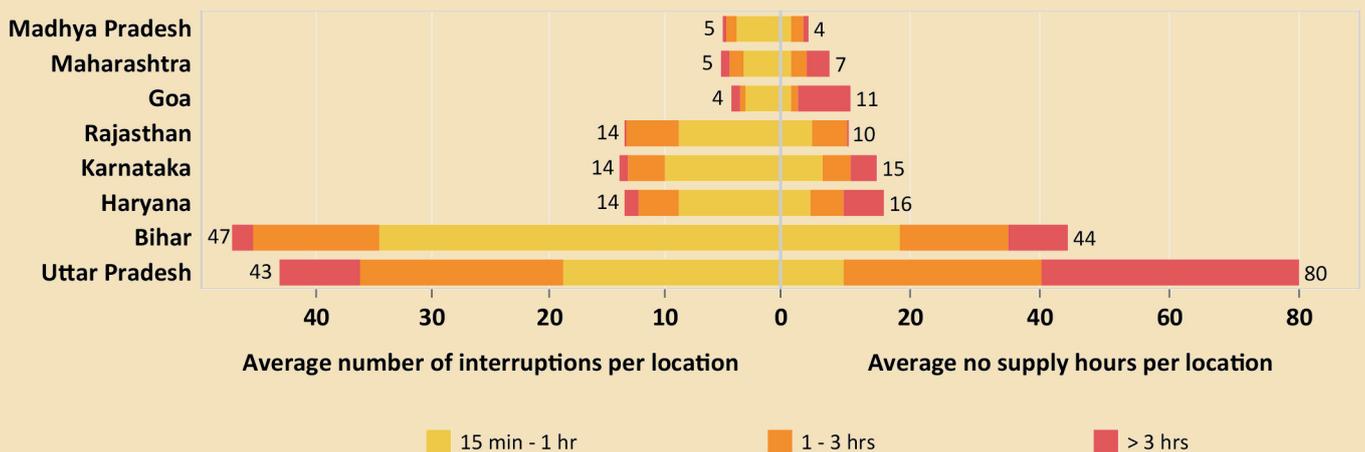
Map showing current ESMI expanse at district level



Supply Quality in Mega Cities - November 2016

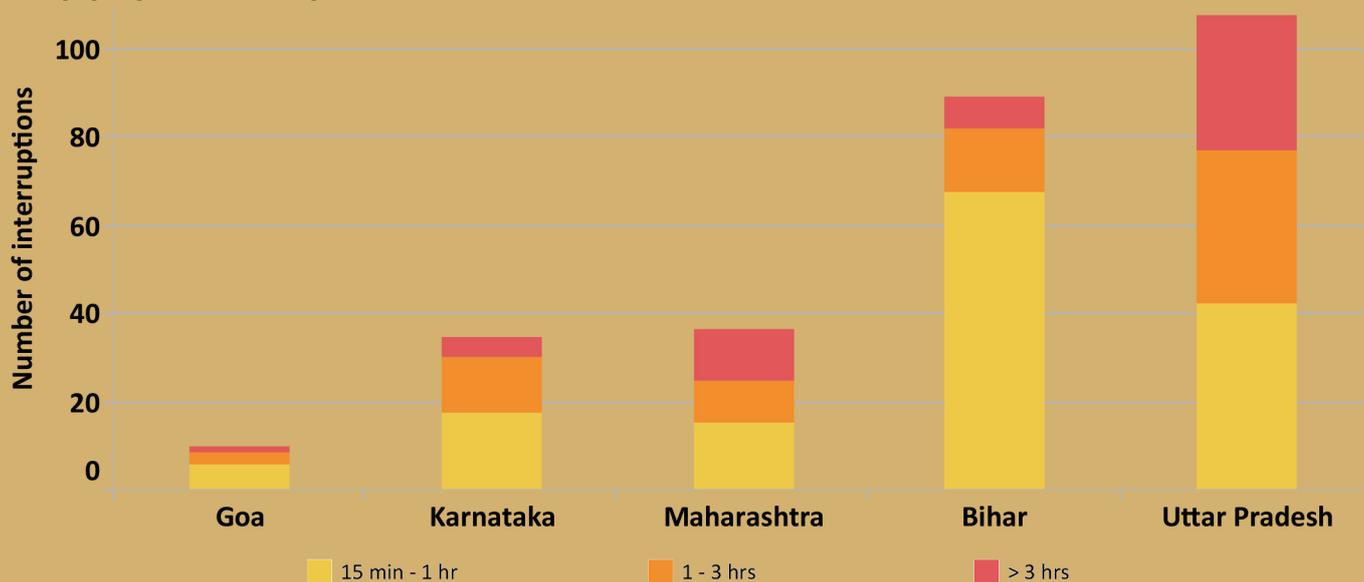
Mega city	Average number of interruptions per location			Average no supply hours per location
	ESMI locations	Short 15 min - 1 hr	Long more than 1 hr	
Chandigarh	5	1	0	1
Jaipur	6	1	1	2
Delhi	5	1	1	3
Kanpur	5	7	1	7
Chennai	4	3	2	5
Pune	7	2	1	4
Hyderabad	10	7	2	11
Bengaluru	7	5	4	10

Supply Quality in Other Cities - November 2016



State	Cities covered	ESMI locations
Goa	3	4
Madhya Pradesh	2	4
Maharashtra	10	22
Haryana	2	4
Rajasthan	2	4
Karnataka	3	9
Uttar Pradesh	4	6
Bihar	3	6

Supply Quality in Rural Areas - November 2016



	Goa	Karnataka	Maharashtra	Bihar	Uttar Pradesh
ESMI locations	5	4	11	5	13
Average no supply hours	17	57	136	102	296

ESMI Locations Receiving Entire Six Hours of Evening Supply



85%
Mega Cities

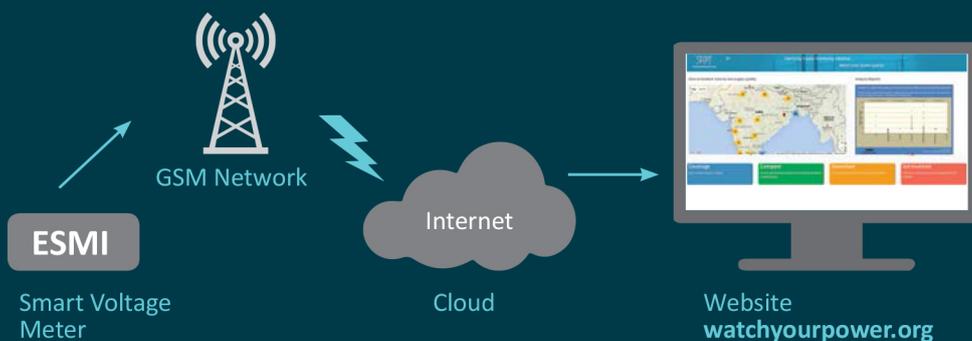


64%
Other Cities



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



Electricity Supply
Monitoring Initiative

www.watchyourpower.org
esmi@prayaspune.org

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.



Prayas (Energy Group)

www.prayaspune.org/peg