

Lightning Location Network and DAMINI Mobile APP

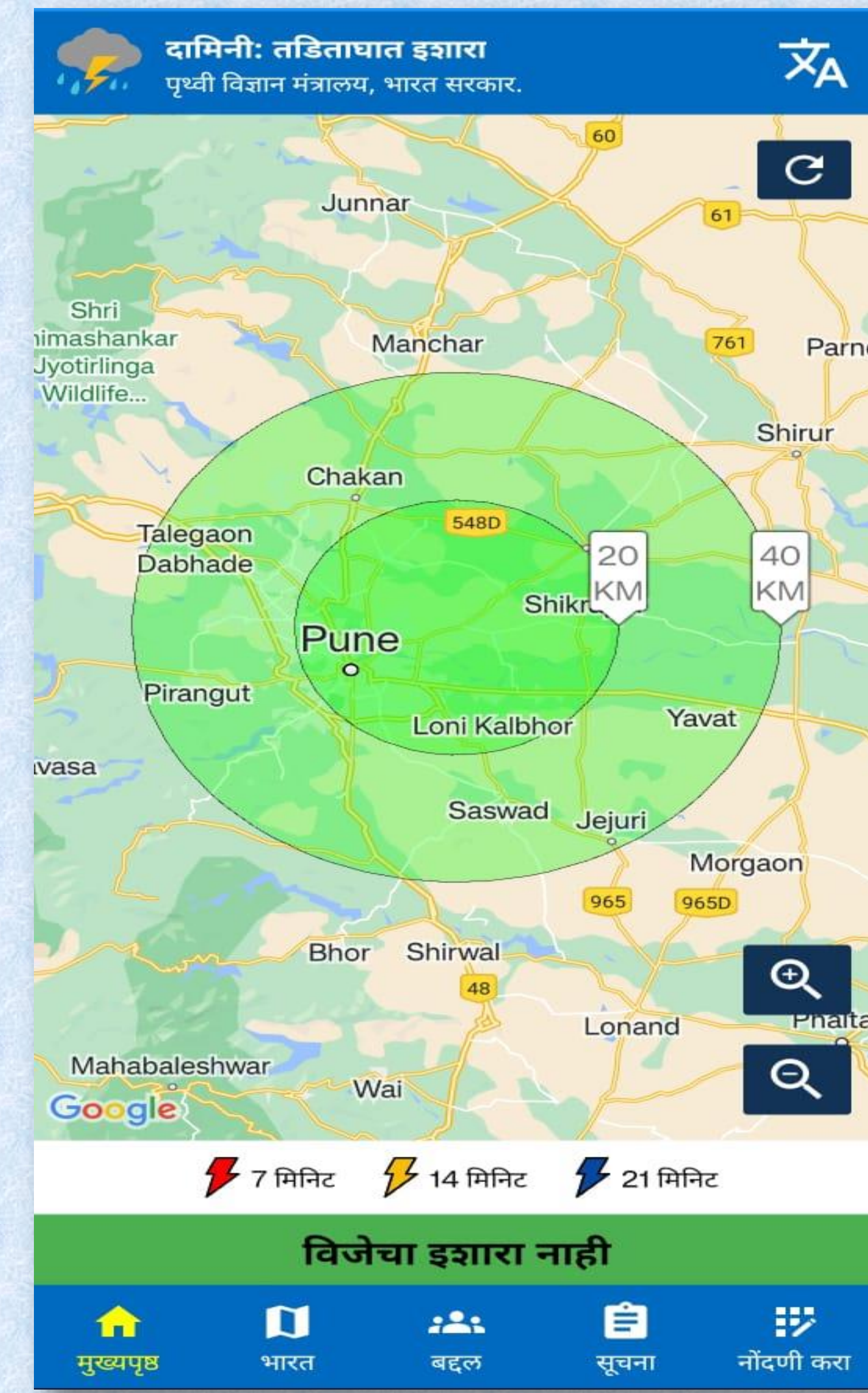
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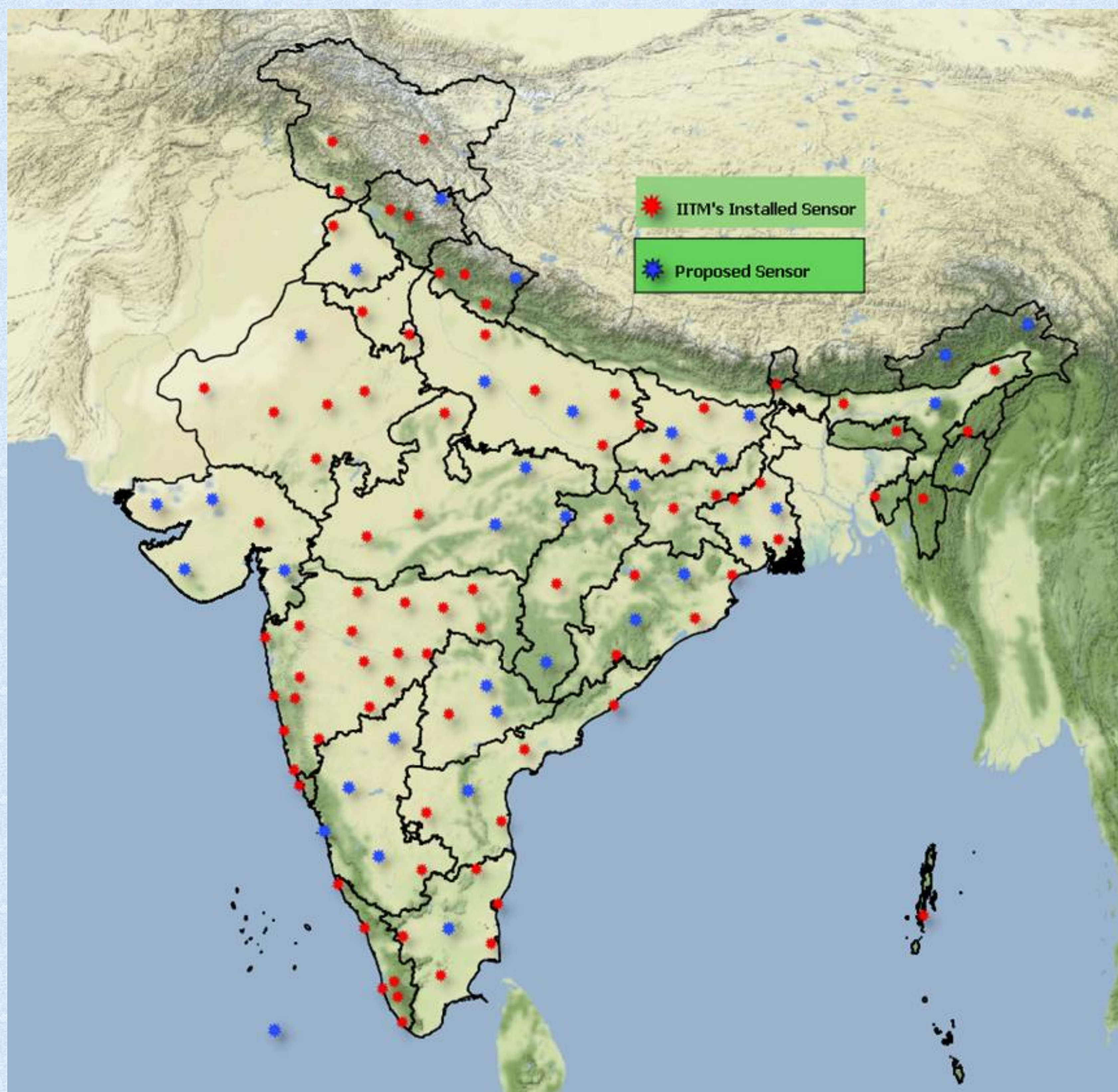
Introduction

- ❖ Even though lightning and thunderstorm is a short-time phenomenon which last for few minutes to few hours, the loss associated lightning is very huge.
- ❖ It is now ranked as the single most killer among all natural disasters. Over 20,000 people get affected by lightning all over the world and several thousand die due to lightning strike every year.
- ❖ In India every year more than 2000 people loss their life due to lightning.
- ❖ IITM has established lightning network with 83 sensors over India in 2018 to accurately detect and locate lightning strike and to disseminate the information in real time for mitigation.
- ❖ Studies on characteristics of lightning associated with damages caused are being made.

DAMINI: Lightning Alert

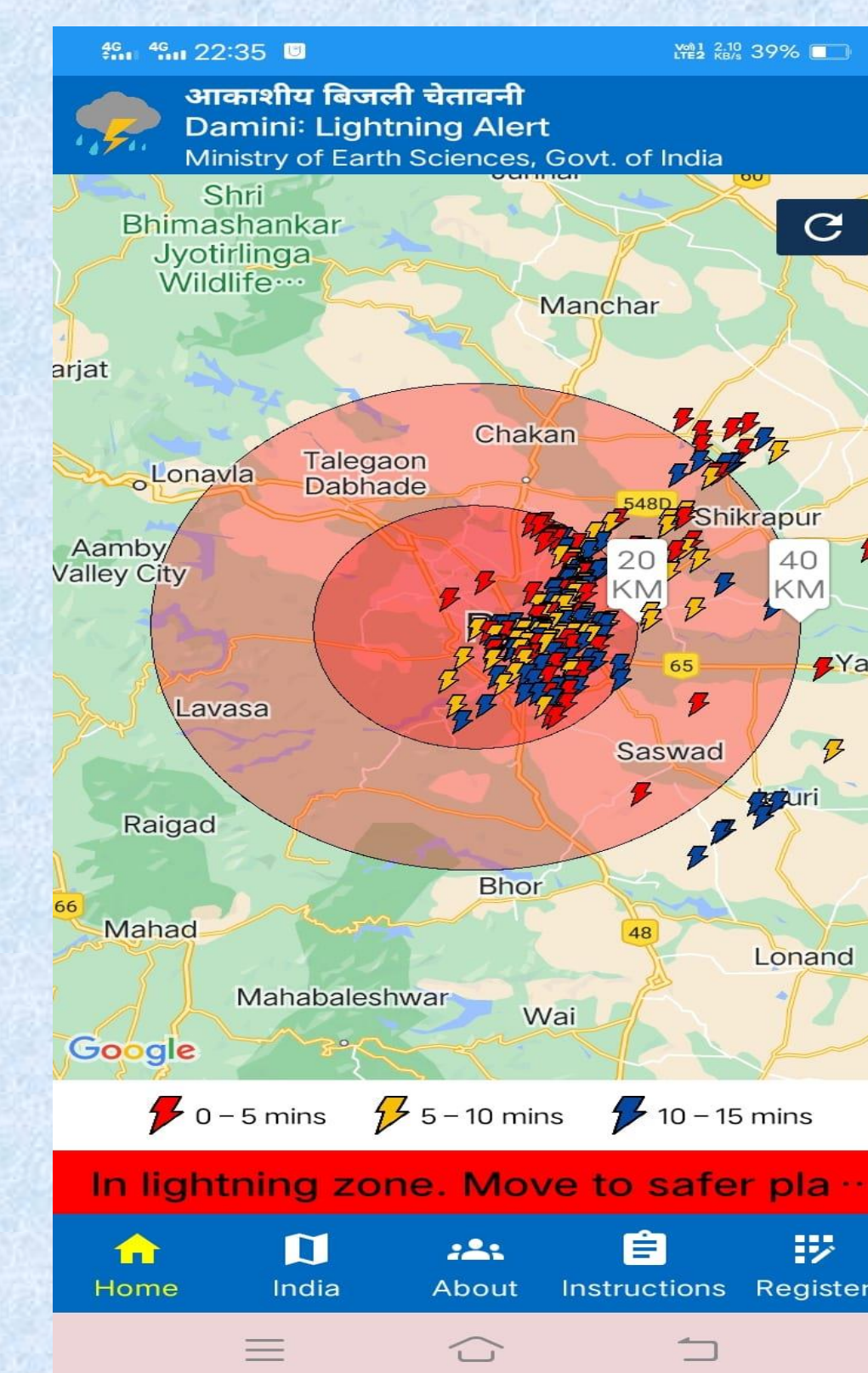


No lightning zone

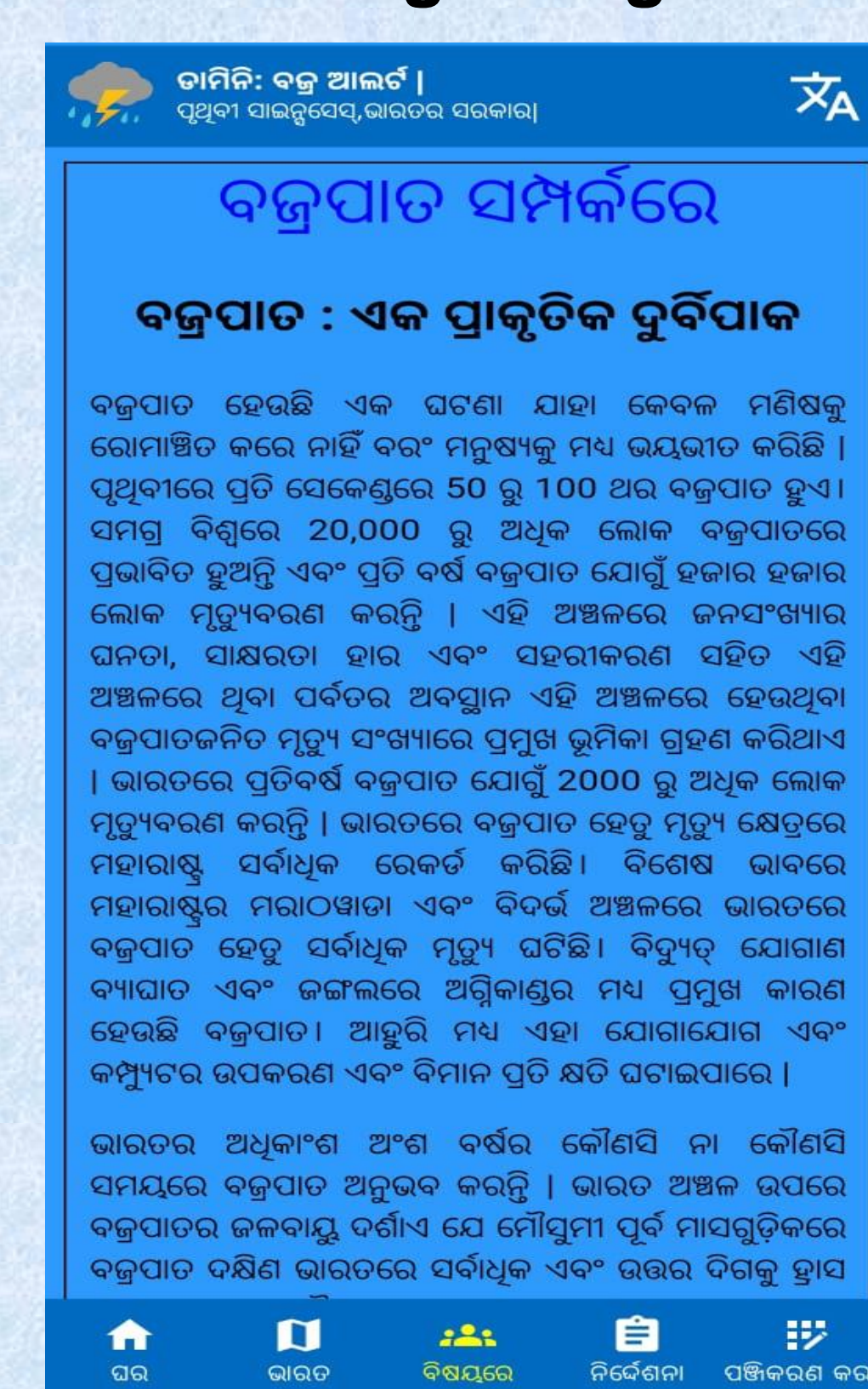


Location of Lightning Detection Sensor

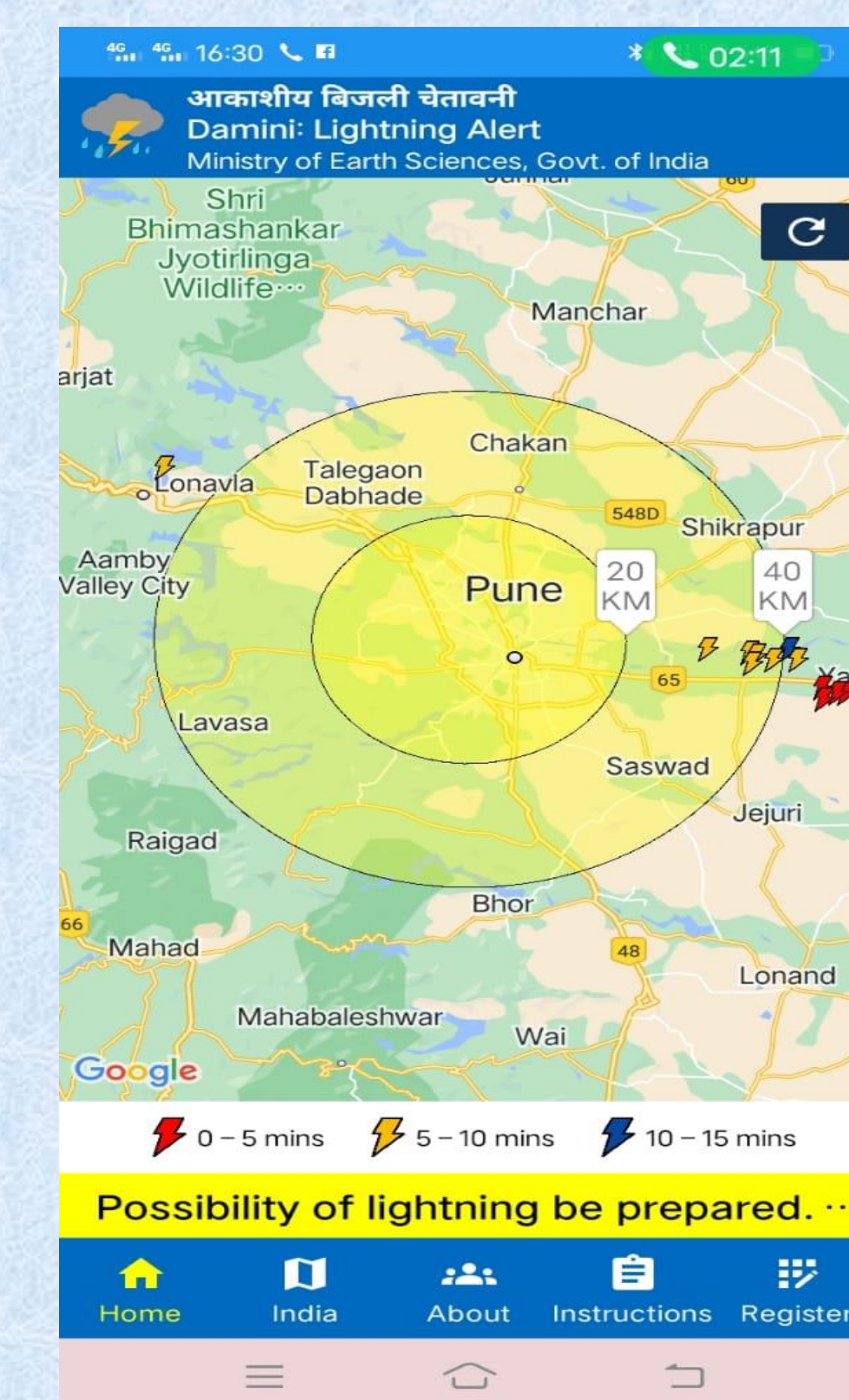
- ❖ Various government agencies given access to online lightning visualization for nowcasting.
- ❖ Data shared with IMD and superimposed with INSAT 3D cloud top temperature.
- ❖ Lightning network data is being used in thunderstorm forecasting model and data assimilation (IITM/IMD/NCMRWF).
- ❖ Additional 25 sensors are proposed for proper augmentation of network over India.



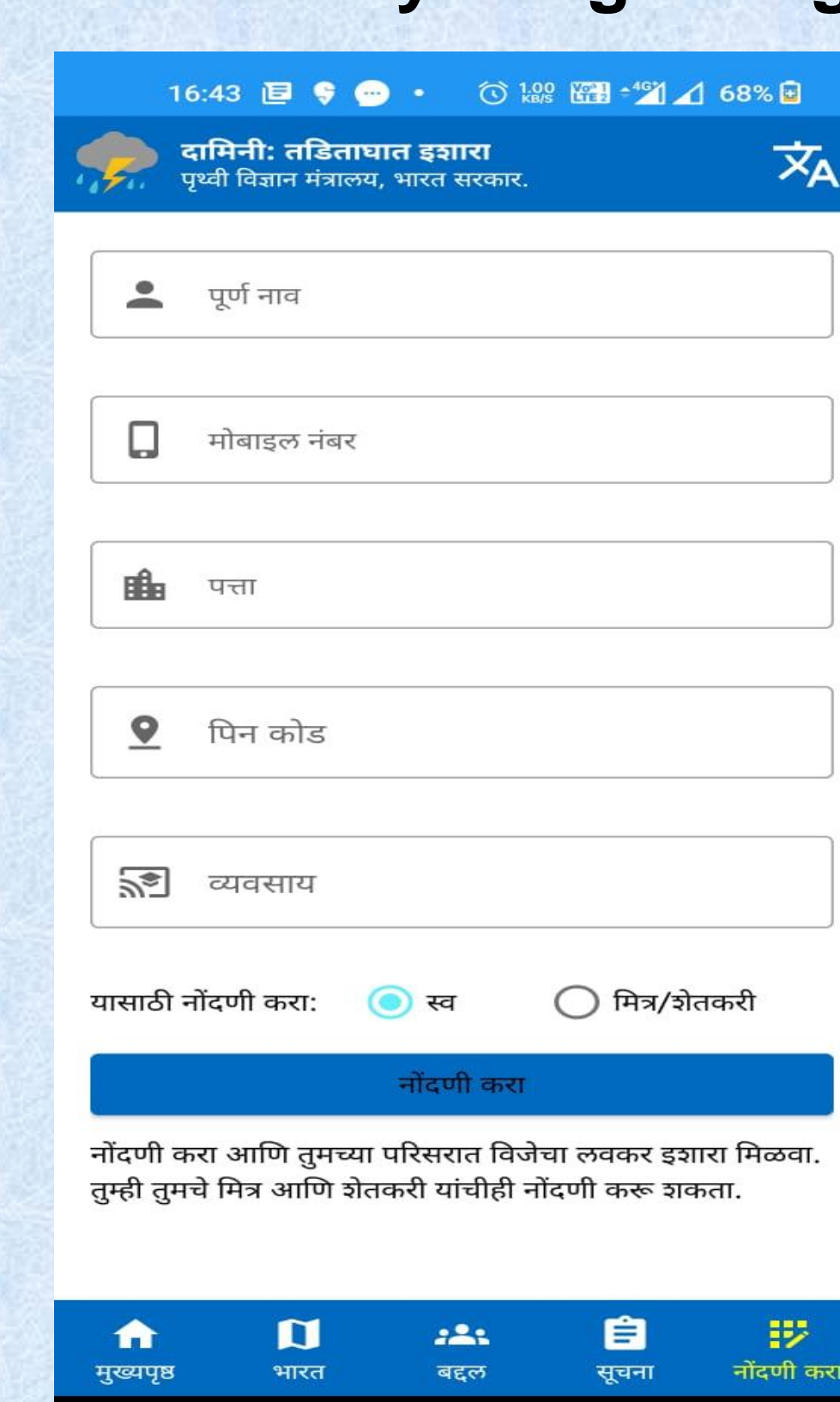
When in lightning zone



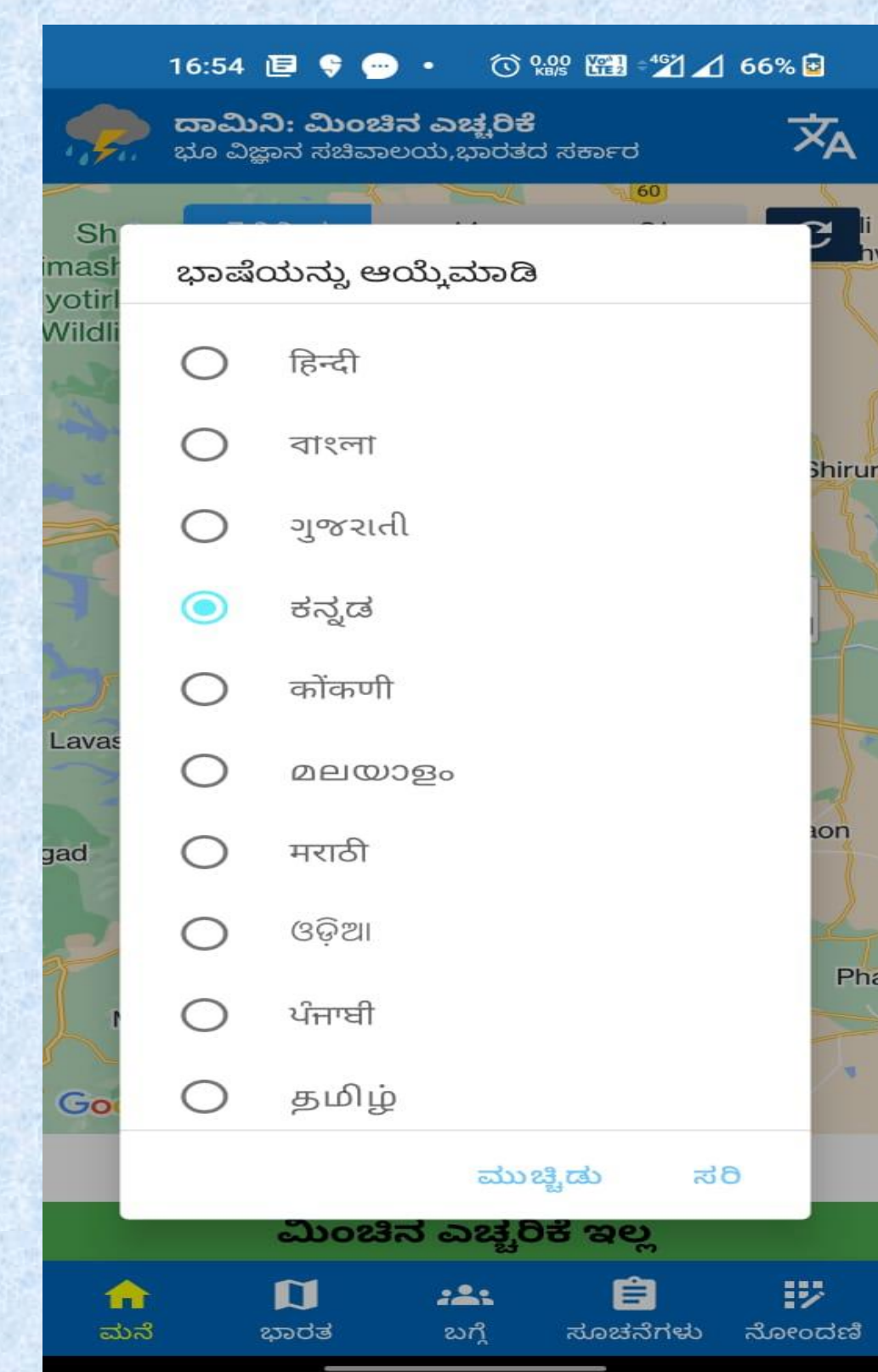
Information in selected language



Possibility of lightning



User Registration



Language selection



Precautions information

- ❖ By using Valuable information from lightning location network, a Mobile App named DAMINI: Lightning Alert is developed.
- ❖ This App gives exact location of current lightning strikes around user location and issues the lightning warning for 20 and 40 sq.km radius.
- ❖ Currently App information available in 16 different languages of India.(As per user selection).
- ❖ This App also lists various precautionary steps that should be adopted during lightning.