

# Now, an app for solar energy data in any ar

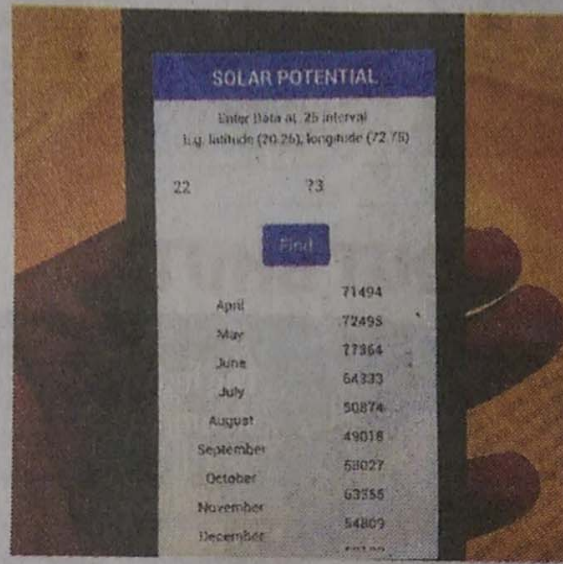
GERMI researchers also prepare solar energy generation map for the entire country

dna correspondent @dnaahmedabad

**Gandhinagar:** Considering the immense scale of harnessing solar energy the country looks forward to in view of prime minister Narendra Modi's goal of achieving a solar power generation target of 100 GW by 2020, a new mobile phone application promises significant help in measuring solar power generation.

The Gujarat Energy Research and Management Institute (GERMI), a prominent research centre in the field of energy promoted by Gujarat State Petroleum Corporation Ltd (GSPC), on Saturday launched a mobile Android application that can provide data of solar energy generation in a particular area.

Researchers at GERMI have prepared a solar energy generation map for the entire nation with emphasis on

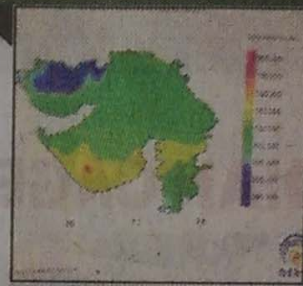


developments at the regional levels and also detailed energy maps of Gujarat, Andhra Pradesh and Telangana.

The mobile application for Android devices can provide digital values of solar energy generation in a particular area within moments. Using the maps created by GERMI, solar power developers can plan their plants in an optimized way. Earlier one required a solar specialist to make basic estimation work through modeling, which often took as long as a week.

"The application is based on ten

## JUNAGADH HAS MAXIMUM SOLAR POTENTIAL IN



**The map** prepared by GERMI shows that Junagadh has the maximum solar potential in Gujarat despite the Kutch region receiving maximum amount of solar radiation. This is, as GERMI researchers explain, because the efficiency of solar cells (photovoltaic cells) decreases as temperature rises. These cells work at their highest efficiency at around 25 degrees Celsius, whereas Kutch normally has temperatures around 35 degrees Celsius. Junagadh, being at a high altitude, has cooler atmosphere which raises the efficiency of the photovoltaic cells, thus endowing it with maximum potential for solar power generation.

Right now, the application calculates the amount of solar generation for an acre of land. In near future, we are going to develop it for use in rooftop solar power generation. We are also thinking of connecting the application with the GPS-provided coordinates," said Professor T Harinarayana, the director of GERMI.

The mobile app requires a user to feed latitudinal and longitudinal coordinates in order to get data of solar energy generation in a particular area within moments. The app was created

narayana. "The data we have generated by this application has also been verified with the actual generation of the areas where solar plants are already established," said G

The application also features a feedback link so that the developer can receive feedback for future improvements. Besides solar power generation, GERMI is also conducting research on other renewable energy sources. "In the future, we will be launching a solar energy map for the entire nation," said Harinarayana.