The Ministry of Rural Development and Panchayati Raj have jointly developed JALDOOT Mobile App to capture the water level of selected 2-3 open wells in villages across the country. Gram Rojgar Sahayak (GRS) will measure the Water level and document the same at Central server using the Jaldoot mobile app.
Ensuring adequate water availability and supply in the rural parts of the country is a National priority, and in this regard various water management measures such as watershed development, afforestation, waterbody development and renovation, rainwater harvesting etc are being promoted across all states. Despite these initiatives, the ground water level in various parts of the country has depleted precariously causing distress to the community in general. In order to observe the depleting water table on a significant scale, measurement of levels of water tables on extensive basis is necessary. However, compared to the vast size of the country, presently the number of places where the water table is monitored are very few.

The augmentation of ground water levels would require systematic measurement of the existing depths of ground water levels on extensive basis throughout the rural landscape of the country.

At present CGWB monitors ground water levels in the country through nearly 23,000 monitoring wells which are spread across the country and has also proposed to additionally create 11000 Piezometers (monitoring wells) to improve the ground water monitoring activity during 2021-26,

However, involving larger number of measurements through the Panchayati Raj Institutions would be conducive to bringing evidence-based decision making related to water, which could go a long way in promoting appropriate water management and utilize practices.

In this regard, measures have to be taken by the States/UT's by involving the Gram Panchayats towards systematically collecting ground water level data and assimilation of the same in the central digital database for analysis.

https://nregarep1.nic.in/jaldootweb/home.aspx
The existing Gram Rojgar Sahayak (GRS) employed in Mahatma Gandhi NREGS work in a Gram Panchayat (GP) may be provided with the additional responsibility as 'Jaldoots' who will be entrusted with the responsibility of measuring the ground water levels at the selected locations in the villages. In case of absence of regular GRS for a GP, the Panchayat Secretary or Panchayat Secretary in-charge of that GP will be ‘Jaldoot’ for such GP.

In every village, adequate number of measurement locations (2-3 open wells) need to be selected as samples of the ground water level in that village. Sample has to be taken up from open well rather than tube or bore well. The Jaldoots have to be facilitated to enter the measurement data of ground water levels through a mobile app twice in a year (pre-monsoon and post-monsoon). They should also upload the geo-tagged photographs through the app on every occasion of measurement.

The ground water data would be utilised as part of the Gram Panchayat Development Plan (GPDP) and Mahatma Gandhi NREGA planning exercises. Further, the utilisation of this data will be by research, planning and other purposes can also be envisaged.

### Water Level Measurements Criteria

- Few observation points (2-3 open wells) are chosen in every village in discussion with community and the ground water authorities which are treated as representative of aquifer status in the area which could both be in residential areas/ agricultural fields.

- For water level measurements at Panchayats, the measuring stations (wells) should be fixed (the same wells need to be monitored over a period of time). These would be open wells rather than tube or borewells.

- A few basic details like the depth of wells, diameter, its geo-coordinates etc are required to be collected as one-time information (static data) and conveyed to the central database.

[https://nregarep1.nic.in/jaldootweb/home.aspx](https://nregarep1.nic.in/jaldootweb/home.aspx)
Procedural Guideline

1. Manual monitoring of water levels in an open well are best done using a graduated steel tape with a metallic knob at one end, for reliable and accurate measurements. However, if the same is not available, a rope with markings, and with a weight tied to one end may be improvised for the purpose.

2. The measurement of the wells will be taken up twice in a year. One reading will be taken up prior to the monsoon season and another will be taken up after the monsoon season.

3. "A resource book for grassroots level functionaries- Jaldoots" which can be accessed at http://cgwb.gov.in.(JalDootResourceBook.pdf). This can serve as a source material for the trainers. In addition to this, specific guidelines for selection of monitoring stations, measurement of water levels, units of measurement, modes of reporting etc can also be prepared.

4. The data entry of the measurements can be facilitated with the help of a custom made mobile app in which specific formats are made available for data entry. The data so generated by Gram Panchayats can be integrated with the database of Gram Manchitra maintained by NIC of MoPR, or the National Water Informatics Centre (NWIC) for dissemination through a common platform, India-WRIS, being maintained by them after necessary validation. Multiple reporting formats for analysis and reporting of the data through app, SMS, website etc could also be developed, so that the status could be conveyed with ease for decision making.

https://nregarep1.nic.in/jaldootweb/home.aspx
Steps that Gram Rojgar Sahayak (GRS) has to follow to use JALDOOT Mobile app when visiting gram panchayat observation well.

Step 1 (a):

GRS in every panchayat will be registered by block/Panchayat level officer on the portal https://nregarep1.nic.in/jaldootweb/home.aspx by entering their details. Login credentials will be sent to GRS via SMS.
Step 1 (b):

If GRS is already registered, then they can simply download the app and use the mobile number for logging into the Jaldoot mobile app.

https://nregarep1.nic.in/jaldootweb/home.aspx

To capture the water level of a well, GRS has to go to a selected well and measure the water level of the well and take photographs of the well along with witnesses in the picture. Photographs will be taken on eyeblink to ensure the live photograph. This app will also capture date, time, and GEO coordinates of photograph and witness details.

Step 2:
Pre Monsoon measurements

Post Monsoon measurements

https://nregarep1.nic.in/jaldootweb/home.aspx
The water level will be measured from 1st May to 31st May as pre-monsoon water level and from 1st Oct to 31st Oct for post-monsoon water level for the same well.

**Step 4**

The water level will be measured from 1st May to 31st May as pre-monsoon water level and from 1st Oct to 31st Oct for post-monsoon water level for the same well.

**Step 5**

This mobile app will work in both online and offline mode. So, water level can be captured even without internet connectivity and captured data will be stored in mobile and when mobile comes in the connectivity area, data will synchronize with the central server.

https://nregarep1.nic.in/jaldootweb/home.aspx
i. Registration of GRS or any other person authorized to capture the water level of selected 2-3 open wells in a village.

https://nregarep1.nic.in/jaldootweb/home.aspx
ii. Record of the monsoon period of the state

[Image of a calendar showing monsoon periods: Pre Monsoon from 1 May to 31 May, Regular Monsoon from 1 Oct to 31 Oct]

iii. Photo Gallery to showcase the photographs of wells captured by GRS time to time.

[Image of a web interface with a login page and a drop-down menu for selecting reports]

https://nregarep1.nic.in/jaldootweb/home.aspx
The report section of the dashboard will provide the details captured by GRS and analytics over change in water level.
Frequently asked Questions (FAQs) on JALDOOT Mobile App

- **What is JALDOOT Mobile App?**

  JALDOOT mobile app has been developed to capture the water level of wells in villages for pre-monsoon and monsoon season.

- **Who can use JALDOOT Mobile App?**

  Admin at center or state can register users at Gram Panchayat level. Registered users at GP level can capture well water level for all villages under that GP.

- **What is pre-monsoon and monsoon season?**

  Admin at state or center level must set period for Pre-Monsoon and Monsoon in every calendar year.

- **How will admin add pre-monsoon and monsoon period?**

  Admin at state or center have to login into the web portal https://nregarep1.nic.in/jaldootweb/Home.aspx and select Pre-monsoon and monsoon period.

https://nregarep1.nic.in/jaldootweb/home.aspx
Frequently asked Questions (FAQs) on JALDOOT Mobile App

- **How will admin register users at GP level?**

  After login into the web portal https://nregarep1.nic.in/jaldootweb/Home.aspx admin can register users for selected district, Block, GP. Other details like Name, Father name, designation of user, Mobile number will also require.

- **How can someone download JALDOOT Mobile App?**

  JALDOOT mobile app can be downloaded from https://nregarep1.nic.in/jaldootweb/Home.aspx or from download mobile app section at https://nrega.nic.in/Nregahome/MGNREGA_new/Nrega_home.aspx

- **What all the fields' users at GP level will capture in the mobile app?**

  Users at GP level will capture require village name, Season for which details is being captured (monsoon or Pre-monsoon), Well details (i.e well name, landmark, well diameter, Geo-Coordinates), depth of water level and well image.

- **What all type of reports available?**


https://nregarep1.nic.in/jaldootweb/home.aspx
Ministry of Rural Development and Panchayati Raj
Government of India

GRS can download Jaldoot mobile app from:

https://nrega.nic.in/Nregahome/MGNREGA_new/Nrega_home.aspx