

**MEMORANDUM OF UNDERSTANDING (MoU)**  
**BETWEEN**  
**CENTRAL GROUND WATER BOARD (CGWB)**  
**AND**  
**NATIONAL INSTITUTE OF URBAN AFFAIRS (NIUA)**  
**TO COLLABORATE ON URBAN AQUIFER MAPPING INITIATIVE**

This Memorandum of Understanding (MoU) is entered into on **16<sup>th</sup> April 2025** by and between the Central Ground Water Board (CGWB), under the Ministry of Jal Shakti, Government of India, with its headquarters at Bhujal Bhawan, NH IV, Faridabad – 121001, Haryana, hereinafter referred to as the 'First Party,' and the National Institute of Urban Affairs (NIUA), an autonomous body under the Ministry of Housing and Urban Affairs, Government of India, located at 1<sup>st</sup> and 2<sup>nd</sup> Floor, Core 4B, India Habitat Centre, Lodhi Road, New Delhi – 110003, hereinafter referred to as the 'Second Party.' The First Party and the Second Party are collectively referred to as the 'Parties' and individually as a 'Party.'

**1. Background**

**1.1 National Institute of Urban Affairs (NIUA)**

NIUA is India's apex institution for research, training, and advisory services in urban affairs. It works closely with government agencies, urban local bodies, and stakeholders to promote sustainable urban development. Its activities include urban planning, policy development, capacity building, and research, with a focus on addressing urban challenges and improving the quality of urban life.

**1.2 Central Ground Water Board (CGWB)**

The Central Ground Water Board (CGWB) is the national apex agency under the Ministry of Jal Shakti, Government of India, responsible for the scientific exploration, management, assessment, monitoring, augmentation, and regulation of the country's groundwater resources. CGWB's mandate includes developing and disseminating technologies, monitoring, and implementing national policies for the scientific and sustainable development and management of India's groundwater resources.

**1.3 SAM 2.0 (Shallow Aquifer Management 2.0)**

SAM 2.0 is an advanced initiative integrating geological, geomorphological, hydrological, and remotely sensed data, land use land cover changes to create urban aquifer maps to identify recharge, and discharge zones and help in implementing variety of recharge structures. Focused on technology, innovation, and capacity building, SAM 2.0 aims to enhance the precision of groundwater assessments in urban areas and improve water management strategies. This initiative encourages collaborative research and knowledge exchange between NIUA and CGWB.





## 2. Objectives

The primary objective of this MoU is to formulate and implement urban aquifer mapping and management plans across selected cities in India to facilitate sustainable urban water management and ensure sustainable groundwater management by leveraging strengths of NIUA and CGWB.

## 3. Roles and Responsibilities

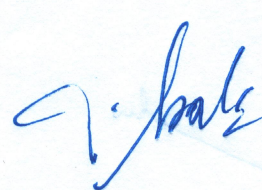
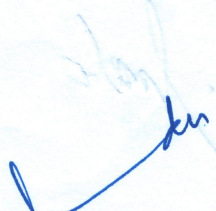
A representative/s from each institution may be nominated to oversee the cooperative program. The nominees of both parties shall jointly plan and oversee individual work programs under this Memorandum.

### 3.1 Responsibilities of CGWB

- **Training and Capacity Building**
  - Develop and deliver training modules on urban aquifer mapping/management.
  - Organize capacity-building sessions for National Institute of Urban Affairs (NIUA) professionals and collaborators associated with the Shallow Aquifer Management (SAM) initiative, ensuring proficiency in aquifer mapping techniques and tools.
- **Data Provision & Access**
  - Facilitate NIUA's access to pertinent groundwater data and available aquifer mapping reports prepared by the Central Ground Water Board (CGWB) as required.
  - Share comprehensive reports and research findings with NIUA to support urban aquifer management strategies.
- **Collaboration on Research Projects**
  - Partner with NIUA on selected pilot research projects in identified urban cities to refine methodologies for urban aquifer mapping and enhance practical applicability.
- **Facilitation and Coordination**
  - Assist NIUA in coordinating with state and UT departments engaged in water sector activities to promote an integrated approach to urban water management.
  - Provide technical support and guidance during urban aquifer mapping exercises.
- **Focal Point**
  - The **Rajiv Gandhi National Ground Water Training and Research Institute (RGNGWT&RI), Raipur**, will serve as the focal point for all CGWB activities under this MoU.

### 3.2 Responsibilities of NIUA

- **Mainstream groundwater management in urban planning agenda**
  - Collaborate with the Central Ground Water Board (CGWB) to operationalize urban aquifer mapping initiatives, develop management plans and mainstream them in urban planning, leveraging CGWB's technical support as needed.
  - Ensure that CGWB's contributions are acknowledged in all relevant publications, reports, and presentations.
- **Impact Assessment**
  - Seek CGWB's assistance in evaluating the effectiveness of implemented management plans and their impact on urban water resources.





- Utilize CGWB's expertise to refine and enhance urban aquifer management strategies based on assessment outcomes.
- **Reciprocal Training**
  - Organize specialized training sessions for Central Ground Water Board (CGWB) professionals focusing on principles of urban planning and aquifer mapping and lessons learnt, to foster mutual capacity development and knowledge sharing.

#### 4. Intellectual property rights

- The intellectual property rights that are generated out of this collaboration shall be jointly owned by NIUA & CGWB.
- Any publications, including but not limited to articles in national or international journals, conference proceedings, workshop presentations, symposium papers, and research findings, arising from this collaboration or utilizing data shared under this Memorandum of Understanding, shall duly acknowledge both Parties by providing authorship in the said publication(s).

#### 5. Duration

This MoU shall remain in force for a period of **Two** years from the date of signing, with the possibility of extension upon mutual written consent by both parties. Any time may be used to review this MOU, its renewal, and the actions conducted in accordance with it. Any modification or extension to the agreement may be made by mutual consent, and it may be formalized by the two parties exchanging letters. The parties shall deliberate before amending or terminating this agreement; however, if the discussion fails to produce a course of action that both parties can agree upon, either party may do so with thirty (30) days' written notice.

#### 6. Review and Amendments

- The MoU shall be reviewed annually by both parties to assess progress and address emerging challenges.
- Any amendments or changes to the MoU must be mutually agreed upon in writing by both parties.

#### 7. Confidentiality

Both parties agree to treat all shared data, reports, and training materials as confidential and to use them exclusively for the purposes outlined in this MoU.

- Information shall not be shared with any third party without mutual written consent, except where legally mandated. The confidentiality and restricted usage of the shared data shall survive the termination of this Memorandum of Understanding.

#### 8. Force Majeure

- Any event or circumstance beyond the reasonable control of either Party shall release it from any liability for any delay or failure to perform under this Agreement, including but not limited to acts of God, war, fire, insurrection, strikes, lockouts, epidemics, pandemics, or other major labor disputes, riots, earthquakes, floods, explosions, or other natural disasters.



## 9. Dispute Resolution

- In the event of any dispute or difference arising out of or in relation to this Memorandum of Understanding, the Parties shall endeavor to resolve such dispute through mutual consultations between the Chairman, Central Ground Water Board (CGWB), or their authorized representative, and the Director, NIUA or their authorized representative, who shall be the designated authorities for dispute resolution. If the dispute remains unresolved, it shall be referred to arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996, as amended from time to time. The cost of arbitration shall be shared equally by both Parties, with each bearing 50% of the total expenses.

## 10. Funding and Financial Commitments

- Each party shall bear its own expenses for activities undertaken under this MoU, ensuring that there are no financial commitments on either side.

## 11. Non-Binding Agreement

This MoU reflects the intent of both parties to collaborate on the specified initiatives and does not constitute a legally binding agreement.

## 12. Signatures

In witness whereof, the duly authorized representatives of the **National Institute of Urban Affairs (NIUA)** and the **Central Ground Water Board (CGWB)** have signed this MoU as of the date first written above.

**For National Institute of Urban Affairs (NIUA):**

Name: Dr. Debolina Kundu

Title: Director, NIUA

Signature: Debolina Kundu

Date: 16.04.25

Witnesses

1.

Rajiv Ranjan Mishra  
(Rajiv Ranjan Mishra)



**For Central Ground Water Board (CGWB):**

Name: Dr. A. Asokan

Title: Member, CGWB

Signature: A. Asokan

Date: 16/04/2025

2.

Syed Khaja Mohiddin  
(Syed Khaja Mohiddin)

सदस्य / Member  
भारत सरकार / Government of India  
जल शक्ति मंत्रालय / Ministry of Jal Shakti  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
Department of Water Resources, River  
Development and Ganga Rejuvenation  
केन्द्रीय भूमि जल बोर्ड / Central Ground Water Board  
एनएच-IV, फरीदाबाद / NH-IV, Faridabad