

# Model Bill for Regulation of Ground Water Development

**Y.B.Kaushik**

Regional Director

Central Ground Water Board

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# GW Scenario- Need for Management

- GW is a major source of water to meet >60% irrigation requirements, >85% drinking water requirements in rural area and >50% requirements in urban areas and industries.
- GW development is privately owned.
- More than 25 million GW abstraction structures.
- Indiscriminate GW development
  - Decline of GW levels in pockets of ~350 districts.
  - Increase in number of Over Exploited & Critical assessment units from ~ 250 (1985) to 1288 (2011) out of 6607 assessment units.
  - Drying up of shallow drinking water sources.
  - Increase in GW lifting cost.
  - Sea water ingress in coastal areas.
- Deterioration in GW quality
- Water logging & Soil salinity in irrigation command area.

# GW Management Strategies - Approach

- GW management is key to combat the emerging problems of water scarcity & quality deterioration.
- Being a hidden resource, often developed without adequate understanding.
- Need for scientific planning of GW development in different hydrogeological set ups to evolve effective management practices.
- It requires both **supply side and demand side management** and integration of both as well.
- **Regulation of GW development** is component of demand side management.

# Model Bill to Regulate GW Development circulated by MoWR, RD & GR

- To protect GW regime and take safeguards against over-exploitation, Govt. of India, in 1970, framed a Model Groundwater (Control and Regulation) Bill for adoption by the states.
- Revised in 1972, 1996 and 2005, the Bill provides the framework to regulate indiscriminate extraction of GW.
- In 2005, new chapter on rainwater harvesting was introduced which provide for implementation of GW recharge measures.
- It is based on Common Law Rules and legislation.
- It provides for constitution of State Ground Water Authority for regulation of ground water development.
- Regulation is limited to areas notified by the Authority.

# Salient features of Model Bill, 2005

- The Model Bill, 2005 proposes following actions in notified areas—
  - Grant of permit for sinking a new bore well.
  - Registration of existing bore well-owners.
  - Registration of Drilling Agencies
  - Restrictions on the depth and diameter of bore wells.
  - Restriction on purpose of use of ground water.
  - Registration of new users in non-notified areas.
  - Adoption of rainwater harvesting.
  - Penalty for offences- Fine up to Rs. 5,000/-, Compounding of offences may lead to more fine and imprisonment up to 6 months.
  - Cognizance and trial of offences to be in the court of Metropolitan Magistrate.

# Latest status of enactment of GW legislation by States

	States/UT's which have enacted legislations	States/UT's which have initiated their legislations	States which do not intend to enact legislation
1	Andhra Pradesh	Chhattisgarh	Arunachal Pradesh
2	Assam	Gujarat	Manipur
3	Bihar	Haryana	Nagaland
4	Goa	Jharkhand	Sikkim
5	Himachal Pradesh	Madhya Pradesh	Tripura
6	Jammu & Kashmir	Meghalaya	
7	Karnataka	Mizoram	
8	Kerala	NCT Delhi (regulation through Govt. orders)	
9	Maharashtra	Odisha	
10	Telangana	Punjab	
11	West Bengal	Rajasthan	
12	Chandigarh (Regulations through Byelaws)	Tamilnadu (regulation done through Govt. orders)	
13	Dadra and Nagar Haveli	Uttar Pradesh	
14	Lakshadweep	Uttarakhand	
15	Pondicherry	Andaman & Nicobar	
16		Daman & Diu	

# Status of Implementation

- Implementation in general is yet to be satisfactory.
- In some of states, enactment made but SGWA still to be constituted.
- After creation of SGWA, suitable infrastructure not provided and duties are being performed additionally by irrigation, PHED etc. departments where domain experts are few or non existent.
- Database required for regulation is also not available/created.

## Model Bill for the Conservation, Protection and Regulation of GW, 2011 prepared by Planning Commission

- The principle that water, and Groundwater specifically, is a public trust as put forward by the Supreme Court.
- The recognition of the fundamental right to water by the Supreme Court.
- The principle of subsidiarity, as explicated in the 73rd and 74th amendments to the Constitution (Articles 243G and 243W).
- The Protection principles, such as the prevention and precautionary principles, most recently statutorily recognized in the National Green Tribunal Act, 2010 (Section 20).
- Also builds on existing laws and schemes and contextualizes them to GW. This is, for instance, the case of:
  - The Right to Information Act, 2005.
  - The Environmental Impact Assessment Notification, 2006 under the Environment (Protection) Act, 1986.
  - Social audits called for under various schemes and policies of the Government.

# Institutional Framework in the Model Bill, 2011

- Institutional framework proposed is based on the principle of subsidiarity and framed around existing administrative units of village/panchayat.
- It provides for an institutional framework to ensure appropriate management of GW from the local to the state level.
- Institutions to support the new local level institutions in implementing the legislation.
- To be adopted at the State level in a form that suits the specific conditions and its needs.
- To be adapted to suit the existing institutional and legal framework of the State to avoid duplication.

# Mandatory Principles for Model Bill, 2011

- **Non-discrimination and Equity**
  - Every person to have access to water, ensure equitable distribution and sustainable use.
- **Subsidiarity and Decentralisation**
  - Decentralisation of powers and functions in urban and rural areas and different regulation measures in different parts of the state based on availability.
- **Protection, Precaution and Prior Assessment**
  - Aquifers to be protected from such impacts that affect the equity of access and sustainability of the resource, from depletion, deterioration in quality etc.
  - Plan management measures to conserve, replenish and recharge GW.
- **Integrated approach for management of water resources**
  - Protection, conservation and regulation of GW integrated with surface water resources on a watershed basis, land and forest.

# Institutional Framework

- **Rural Areas**

- Gram Panchayat Groundwater Committee.
- Block Panchayat Groundwater Committee

- **Urban Areas**

- Ward Groundwater Committee
- Municipal Groundwater Committee

- **At district level**

- District Groundwater Council

- **At State level**

- State Groundwater Advisory Council
- Ground Water Grievance Redressal Officer to be nodal officer for implementation of Act.
- Information and Monitoring Cells and Supporting Institutions at all levels

## Offences, Penalties, Liability & Dispute Resolution

- Penalties/fine which may extend to Rs. 10 lakhs and imprisonment upto three years have been proposed for various offences/non-compliances.
- Appointment of Grievance Redressal Officer at all levels.
- Offences under this Act shall be cognizable and triable by a magistrate of first class or by any other judicial forum created/empowered in this behalf.
- Provision of dispute resolution by mediation and reconciliation.

# Review of Model Bill,2011 by Expert Committee

- MoWR, RD & GR constituted an Expert Committee under Sh. Sushil Gupta, Ex. Chairman, CGWB to review the provisions of Model Bill, 2011. The Committee was of the view that -
  - The provisions of this Model Bill are in general more relevant.
  - Provision of fundamental Right to Water needs policy decision and change in the legal status of GW.
  - Provisions of draft Model Bill and draft National Water Framework Law or any other legal document to be in uniformity.
  - Provision of Four level regulatory authority is not practical at present.
  - As per provisions of Model Bill, there is large requirement of trained manpower at all levels as well as strengthening of SGWBs which is not available at present.
  - Considers availability of surface water quantity also for which authority is different.
  - More clarity on mechanism from where authorities created will draw their powers.

## Re-drafting of Model Bill,2011 by MoWR, RD & GR

- MoWR, RD & GR constituted a committee under Dr. Mihir Shah, Ex. Member, Planning Commission to redraft the Model Bill on following aspects –
- Justification of the proposed model bill should bring out linkages with various aspects/principles that-
  - Water is held in public trust.
  - River basin approach.
  - Elaborate provisions of rainwater harvesting.
  - Polluter pays principle may be taken into account
  - Conservation of water through agriculture practices and land use.
  - Technological developments including space technology and IT etc.

# Review of Model Bill,2011 by MoWR, RD & GR

(Contd..)

- Pricing of precious ground water resource.
- Water as a right can form part of the Bill keeping in view constraints/availability of water.
- Four level institutional framework which has been proposed in the draft Bill to be simplified.
- Participatory management based on principles of data sharing and transparency on a watershed basis should be aimed for.
- Chapter “Basic Water from ground water sources in the draft Bill may be specifically re-examined.
- Committee is also examining National Water Framework Law, River Basin Management Bill and other State Acts to bring harmony.

# Central Ground Water Authority (CGWA)

- CGWA has been constituted under Section 3 (3) of the Environment (Protection) Act, 1986.
- **Functions:**
  - To regulate and control, management and development of ground water in the country and to issue necessary regulatory directions for the purpose.
- **Powers:**
  - Exercise of powers under section 5 of the Environment (Protection) Act, 1986 for issuing directions and taking such measures in respect of all the matters referred to in sub-section(2) of section 3 of the said Act.
  - To resort to penal provisions contained in sections 15 to 21 of the said Act.
  - Exercise of powers under section 4 of the Environment (Protection) Act, 1986 for the appointment of officers.

# Central Ground Water Authority (CGWA) Contd..

- Activities
  - Regulate GW abstraction by industries, infrastructure and Mining projects.
    - NOC for GW withdrawal is accorded as per guidelines effective from time to time, latest implemented from 15.11.2012.
    - Proposals are evaluated based on Dynamic GW Resources latest done in 2011.
    - Mandatory recharge to GW based on category of assessment unit (block/mandal/taluka).
    - No NOC for water based/intensive industries in OE assessment units.
  - Notification of assessment units/areas for regulation of GW development
    - Has notified 162 areas in 13 states/UTs for regulation of GW development and management.
    - NOC for GW withdrawal is accorded only to meet drinking and domestic requirements.
    - For regulation, Advisory Committees have been constituted under DC/DM/Collector which issues NOCs.

# International Experience

- In countries where regulation of GW development is successful, GW is owned by State viz. Israel, China, Australia, Spain, Mexico, parts of EU and USA.
- Even if it is privately owned, strong laws exist for reasonable use.
- Database is very strong and every user needs license/ concessions for the use and is closely monitored.
- Adequate infrastructure and manpower is available for regulation.

# Way Forward

- Strengthening of –
  - State Ground Water Departments and CGWB
    - Manpower and Infrastructure
- Strong database on the availability of GW, number of abstraction structures, quantity of withdrawal.
  - Registration of GW structures through centralized website with access to all stakeholders.
- Strengthening of regulatory mechanism at all levels and Coordination between SGWA and CGWA.

Thanks