

# **Model bill for the protection, conservation, management and regulation of groundwater**

Draft of 29 July 2011

## **Preamble**

Recognizing that all life and the geological processes that shape the Earth are driven by the hydrological cycle;  
Recognizing that groundwater is an integral component of the hydrological cycle and must be treated as such;  
Recognizing that all natural resources constitute an integral whole and must be treated as such;  
Recognizing the link between groundwater and surface water bodies and affirming the need for their conjunctive use;  
Recognizing the need to promote a scientific understanding and knowledge of groundwater in the body politic;  
Recognising the need to realise all constitutional guarantees linked to groundwater and whereas the Supreme Court of India has recognised the right to water as integral to the right to life; and further specified variously the corresponding duties of the State;  
Recognizing that diverse conditions and needs require different specific solutions and recognising the need to differentiate rural and urban areas while providing a single legal framework;  
Based on the need for protection from depletion, deterioration, biological and chemical pollution;  
Recognising the need to resolve contestation and conflict not only between users of groundwater but also between different types of uses;  
Recognizing the need to strengthen the regulatory powers of gram sabhas, panchayats and municipal bodies;  
Acknowledging that groundwater sanctuaries need to be established and protected, they shall be accorded the highest priority in both planning and management;

## **An Act**

to provide for conservation, protection, distribution, regulation, and equitable use of groundwater to ensure water security, food security and ecological security through effective conservation and management, thus ensuring ecological sustainability and social equity.  
Be it enacted by the State Legislature in the \_\_\_ year of the Republic of India, as follows:

## **Chapter 1 – Preliminary**

### **1. Short Title, Extent and Commencement**

1. This Act may be called the \_\_\_ Groundwater (Protection, Conservation, Management and Regulation) Act, 2011.
2. It extends to whole of the State of \_\_\_.
3. It shall come into force ninety days after its adoption by the state legislature.

## 2. Objectives

1. The objectives of this Act are to:
  - a) ensure that groundwater is protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors:
    - i. Meeting basic human needs;
    - ii. Facilitating social and economic development through equitable distribution of groundwater;
    - iii. Redressing the results of past inequalities and gender discrimination;
    - iv. Promoting the sustainable and beneficial use of water in the public interest;
    - v. Promoting sustainable water use based on a long-term protection of available groundwater resources;
    - vi. Reducing and preventing pollution and degradation of groundwater;
    - vii. Protecting ecosystems and their biological diversity;
  - b) ensure that present and future generations have the necessary access to groundwater of a quality adequate for their various uses;
  - c) prevent and protect against water crises due to either natural causes or the inappropriate use of natural resources.

## 3. Definitions

1. In this Act, unless the context otherwise requires:
  - a) 'Aquifer' is a geological formation that stores and transmits sufficient quantities of water.
  - b) 'Appropriate authority' is the lowest possible public authority, including gram sabhas, gram panchayats, block panchayats, district panchayats, municipal authorities and the state government.
  - c) 'Basic water' means the basic water requirements of a human being for drinking, cooking, bathing, sanitation, and related personal or domestic uses, with an additional requirement for women for their special needs; as also the basic water requirements of all non-human forms of life for their survival;
  - d) 'Groundwater' means water which exists below the ground surface in the zone of saturation and can be extracted through wells or any other means or emerges as springs and base flows in streams and rivers.
  - e) 'Groundwater sanctuary' refers to specific areas requiring attention due to their criticality in maintaining basic recharge and discharge functions of the aquifer. Aquifers have ascertainable boundaries and groundwater sanctuaries are special areas (aligned to aquifers) which must be protected in an appropriate manner so as to ensure sustainability to groundwater resources in respective aquifers. Groundwater sanctuaries will be clearly demarcated by the appropriate authority under Section 12, in order to:
    - i. Protect the natural identity of the aquifer and the needs of groundwater dependant ecosystems, both present and future;
    - ii. Protect the natural recharge and discharge areas of the aquifer from threats such as physical deterioration, including loss of exposed surface area, chemical and other pollution and land-use change;
    - iii. Provide the quality and quantity of water required to supply the basic water supply for human and animal needs; and
    - iv. Provide for basic water needs for livelihood;
  - f) 'Municipality' refers to a Municipality, a Municipal Corporation or similar body of local urban governance by any other name;

- g) 'Pollution' will have the same meaning as that given under the Water (Prevention and Control of Pollution) Act, 1974;
- h) 'Pollutant' means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to groundwater;
- i) 'Rainwater harvesting' means the technique of collection and storage of rainwater for future use or for recharge of groundwater

## **Chapter 2 – Principles for Protection, Conservation, Management and Regulation of Groundwater**

### **4. Equality and Equity**

1. Every person shall have access to groundwater without any discrimination, including as to caste, creed, economic status, land ownership, place of birth, race, religion and sex.
2. The appropriate authority shall ensure equitable distribution and access to groundwater based on a scheme made for this purpose strictly in compliance with priorities prescribed under Section 17 of this Act.
3. The appropriate authority shall ensure the sustainable use of the available groundwater without compromising the needs of future generations.

### **5. Subsidiarity and Decentralisation**

1. Conservation, use, management and regulation of groundwater are based on the principle of subsidiarity.
2. This Act follows the spirit and letter of constitutional provisions for decentralisation of powers and functions in urban and rural areas as its basic organising principle.
3. Different use, conservation and management measures may be desirable in different parts of the state according to the availability of groundwater in a specific aquifer.

### **6. Prevention, Precaution and Prior Assessment**

1. All necessary precautionary steps shall be taken by the appropriate authority to prevent and/or reduce adverse impacts on the environment due to the use of groundwater.
2. Every person who extracts groundwater shall take all precautions to prevent waste of water.
3. Effective schemes and measures shall be formulated and implemented to conserve groundwater by effective measures for replenishing and recharging the same.
4. Any use of groundwater, surface water or land and forest resources or activity in relation to these resources, which is likely to have significant negative impacts on local sources of groundwater must be subjected to an environmental and social impact assessment.

### **7. Joint Consideration of Ground and Surface Water**

1. The protection, conservation, management and regulation of groundwater shall be undertaken in such a way that it is integrated with the protection, conservation, management and regulation of surface water.
2. The appropriate authority shall endeavour to ensure that conjunctive use of surface and groundwater sources is undertaken for all uses of groundwater.

## **8. Scientifically Informed Planning and Management**

1. Accurate and adequate scientific information is the key to appropriate planning and management. Groundwater information systems shall be set up at appropriate levels to support planning and management. Groundwater information collection and management shall be adapted to changing, improving technologies, changing understanding of resource dynamics, environmental conditions and changing societal attitudes and needs.

## **Chapter 3 – Right and Duties, Public Trust, Groundwater Sanctuaries and Water Use**

### **1. Right and duties**

#### **9. Right to Water**

1. Every person shall have the right to water from groundwater sanctuaries.
2. Every person shall have the right to be provided access to basic water.
3. Access to sufficient quantity of water required for leading a healthy and dignified life shall be ensured to every person.

#### **10. Duties**

1. Every natural and legal person shall refrain from actions prejudicial to the availability of sufficient quantity and quality of basic water.
2. The quality of basic water shall be maintained according to prescribed standards.
3. Every natural and legal person shall take all possible measures to prevent waste of groundwater.

### **2. Legal status of groundwater**

#### **11. Legal Status of Groundwater**

1. Groundwater is a common heritage of the people of India held in trust, subject to reasonable restrictions to protect the environment and eco-systems. It cannot be owned by the state, communities, individuals or legal persons.
2. The state at all levels is the public trustee of groundwater. The appropriate authority must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and the environment, and in accordance with their respective constitutional mandate.
3. Without limiting subsection (2), the appropriate authority is ultimately responsible for ensuring that water is allocated and used equitably in the public interest, while promoting environmental values.

### **3. Groundwater sanctuaries**

#### **12. Identification and Declaration of Groundwater Sanctuaries**

1. Groundwater sanctuaries will be decided on the basis of groundwater understanding developed in all the areas of the country, using aquifers as a basis for demarcation.
2. The appropriate authority may, after due notification in the Gazette, declare any area as a groundwater sanctuary. The intention to declare any area as a groundwater sanctuary shall be

notified to the public by a preliminary notice in the Gazette and in at least one vernacular newspaper circulating in the area concerned.

3. Objections, if any, against the proposed declaration of any area as a groundwater sanctuary, shall be made before the appropriate authority within a period of sixty days from the date of publication of a notice. The person preferring the objection shall provide the grounds of objection supported, where possible, by the technical data and evidence supporting the same. The technical data will be made available to such persons before the objection is filed.
4. The appropriate authority may call for technical data and evidence from the groundwater information cells at the appropriate level and/or from scientific institutions to assess the existing status and use patterns of the groundwater aquifer and justification for determining the boundaries of the sanctuary and their fit with the aquifer boundaries.
5. If no objections or representations referred to in subsection (2) have been filed within the period referred to in that subsection, the appropriate authority may act in terms of subsection (1) and declare an area to be a groundwater sanctuary.

### **13. Groundwater Sanctuaries**

1. A groundwater sanctuary shall form a part of overall water reserves and no extraction or use of water shall be allowed without a valid permit as prescribed under this Act and its Rules. The permit will include the precise nature of use permitted and/or prohibited, specifying conditions under which flexibility will be accorded.
2. Where an area has been demarcated and declared as a groundwater sanctuary, the groundwater shall be allocated and extracted, so as to maintain the water balance at the sanctuary and also in the aquifers related to the sanctuary. To achieve this, the appropriate authority shall:
  - a) Determine the safe yield of any aquifer for the purpose of guiding determinations concerning the abstraction and use of water from the aquifer coming under the purview of the sanctuary;
  - b) Require that an aquifer be used on an equitable and sustainable basis, including restricting abstractions so that they do not, individually or collectively, exceed the safe yield of the aquifer;
  - c) Carry out programmes for the recharge of aquifers; and
  - d) Protect specific areas in their natural form, appropriately take measures especially to protect natural recharge and/or discharge from such areas and ensure that human-induced changes will not adversely affect groundwater resources under the influence of the sanctuary.

Explanation: For the purposes of this section, safe yield means the amount of water which may be abstracted from an aquifer at a rate that will not reduce the supply to such the extent that it would not be recharged to the original level by the natural recharging process of that locality and as such rendering such abstraction harmful to the aquifer, quality of the water or environment.

3. The appropriate authority shall take all possible measures to conserve and protect groundwater sanctuaries.

### **14. Uses of Groundwater Sanctuaries**

1. Groundwater sanctuaries shall serve the basic water needs of individuals served by the water resource in question.
2. Groundwater sanctuaries are maintained to preserve the sanctity, quantity and quality of the water in the identified area over and above ensuring sustained groundwater quality and quantity to which these are connected and the ecosystems that rely on it.
3. Primacy shall be given for basic human and ecological needs of water in utilizing water from groundwater sanctuaries. Other uses of water shall be allowed only after fulfilling human and

ecological needs and ensuring that such uses do not adversely affect groundwater resources in the short and long run.

#### **15. Groundwater Sanctuary Conservator**

1. The appropriate authority shall appoint a Groundwater Sanctuary Conservator for the area declared to be a groundwater sanctuary.
2. Qualification of the Groundwater Conservator and procedure for her/his appointment will be described in rules to this Act.
3. The Groundwater Sanctuary Conservator shall:
  - a) Visit and inspect the groundwater sanctuary regularly;
  - b) Monitor, analyse and report to the District Panchayat Groundwater Council on:
    - i. The reserves available and the quality of groundwater;
    - ii. The rate of extraction of groundwater compared with sustainable yields of groundwater resources;
    - iii. Water quality parameters;
    - iv. Water pollutants and land use activities, in or near the sanctuary.

#### **16. Participation of Citizens in the Protection of Groundwater Sanctuaries**

1. The appropriate authority shall, by rules prescribed, enable the effective participation of citizens and citizen bodies such as water users' associations, non-governmental organisations or traditional community bodies in the protection of groundwater sanctuaries.

### **4. Uses of groundwater**

#### **17. Water Use Prioritisation**

1. The appropriate authority shall abide by the following water use prioritisation while discharging of its duties as trustee of groundwater.
2. In an effort to ensure the socially equitable and environmentally sustainable use of water, the very first priority shall be meeting the right to basic water for all. In addition, the use of water for sustaining aquifers and ecosystems shall be given priority since they are indispensable to the long-term maintenance of the resource.
3. Other priorities will be allocated among primary and secondary uses. Primary water uses, besides basic water and ecology, shall include in no order of priority:
  - a) Water for livestock;
  - b) Municipal use; and
  - c) Water for food security, including traditional or community fishing;Secondary water uses shall include in no order of priority:
  - a) Irrigation;
  - b) Power generation;
  - c) Commercial fisheries;
  - d) Industrial uses;
  - e) Recreational uses; and
  - f) Other purposes.
4. The use or appropriation of water for secondary purposes such as irrigation, power generation, commercial fisheries, industrial, recreational and other purposes is subject to specific permission from the appropriate authority based on an impact assessment as mentioned in Section 6 of this Act.

## **Chapter 4 – Institutional Framework**

### **1. Rural areas**

#### **1. Gram Panchayat Groundwater Committee**

##### **18. Constitution and Membership of the Gram Panchayat Groundwater Committee**

1. The Gram Sabha shall, by resolution, recorded by the Gram Panchayat, elect a Gram Panchayat Groundwater Committee.
2. The number of members and the term of office of members shall be decided by the Gram Sabha.
3. The membership of this committee shall include representatives of all occupational groups, caste, tribe and gender.
4. The Gram Panchayat shall submit to the Block Panchayat the details of the Committee as soon as it is formed and keep the Block Panchayat informed of any changes in the constitution of the committee, along with reasons thereof.

##### **19. Functions of the Gram Panchayat Groundwater Committee**

1. The functions of the Gram Panchayat Groundwater Committee shall include:
  - a) Preparation and implementation of the Panchayat Groundwater Security Plan;
  - b) Determination of groundwater sanctuaries within the territory of the panchayat and adopting norms for their management and regulation;
  - c) Registration of all wells for whatever purpose used – tube wells, dug wells, shallow wells within the gram panchayat boundaries. The format for registration and details of wells shall be decided in consultation with the Block Level Groundwater Information and Monitoring Cell;
  - d) Inventory of surface water sources, catchments, and forests;
  - e) Management of database through regular updates;
  - f) Regulation of well use within the gram panchayat boundaries;

##### **20. Gram Panchayat Groundwater Security Plan**

1. The Gram Panchayat Groundwater Committee shall prepare and oversee the implementation of the Gram Panchayat Groundwater Security Plan in consultation with local elected bodies and in consultation and coordination with the Block Groundwater Information and Monitoring Cell.
2. The aquifer-based plan shall provide for groundwater conservation and augmentation measures, socially equitable use and management of groundwater, and priorities for conjunctive use of surface and groundwater. The plan shall be based on scientific maps and database provided by the Block level Groundwater Information and Monitoring Cell.
3. The plan shall be based on the principle that transfers of water outside of the area coming under the jurisdiction of the Committee are prohibited, unless the gram sabha agrees by a three-fourth majority.
4. The plan shall be prepared at the gram panchayat level, with separate plans for each micro watershed within the gram panchayat boundary, where there is more than one micro-watershed within such boundary, and integrated at gram panchayat level. The gram panchayat plans shall be integrated at mili-watershed with the assistance of the Block level Groundwater Information and Monitoring Cell and at the macro-watershed levels with the assistance of the District Groundwater Information and Monitoring Cell and the State Groundwater Board, in consonance

with groundwater aquifer boundaries and surface river basin boundaries. It shall be based on a determination by the respective cells and committees of the estimated average annual recharge of groundwater.

5. If any area is over-exploited, the plan shall include remedial measures. These shall include:
  - a) Sanctions for extraction or deep drilling in areas notified as over-exploited;
  - b) Incentives and sanctions against water-intensive crops;
  - c) Incentives for the adoption of water-conserving technologies, such as drip irrigation and sprinklers;
  - d) Setting up of artificial recharge structures.
6. The panchayat groundwater security plan shall be binding once it is formally approved by the Gram Panchayat Groundwater Committee and endorsed by the District Panchayat Groundwater Council.
7. The panchayat groundwater security plan shall be valid for a period of 5 years. It shall be revalidated or amended after every 5 years. Where compelling reasons, such as significant hydrological changes or drought, warrant it, revision or amendment may be made before the expiry of 5 years.

## **2. Block Panchayat Groundwater Committee**

### **21. Constitution and Membership of the Block Panchayat Groundwater Committee**

1. Every block panchayat shall form a Block Panchayat Groundwater Committee.
2. The Block Panchayat Groundwater Committee shall be assisted by the Block Groundwater Information and Monitoring Cell in effective monitoring of groundwater extraction and groundwater quality, protection and recharge of groundwater aquifers.
3. The constitution of the Block Panchayat Groundwater Committee shall be done by the Block Panchayat, which shall decide the number of members, qualification of members and term of office.
4. The representatives of state agencies and departments in the committee, if any, shall be advisory and they will not have the right to vote.

### **22. Functions of the Block Panchayat Groundwater Committee**

1. The functions of the Block Panchayat Groundwater Committee shall include:
  - a) Consolidation of gram panchayat groundwater security plans into a Block Groundwater Security Plan on a mili-watershed and macro-watershed basis, with the assistance of the Block Groundwater Information and Monitoring Cell;
  - b) Monitoring and supervision of implementation of gram panchayat groundwater security plans in terms of the block level plan;
  - c) Advising and recommending changes and modifications of gram panchayat groundwater security plans on the basis of information provided by the Block level Groundwater Information and Monitoring Cell;
  - d) Ensuring that the groundwater security plan of a panchayat does not restrict the options of another panchayat;
  - e) Determination of groundwater sanctuaries straddling more than one panchayat within the territory of the block and adopting norms for their management and regulation;
  - f) Supervising the functioning of the Block Groundwater Information and Monitoring Cell;
  - g) In times of groundwater scarcity, ensure that groundwater security plans do not come in the way of the sharing of available groundwater among panchayats in the block.

### **3. District Panchayat Groundwater Council**

#### **23. Constitution and Membership of the District Panchayat Groundwater Council**

1. Every district panchayat shall form a District Panchayat Groundwater Council, which will be a committee of the panchayat.
2. The District Panchayat Groundwater Council shall be assisted in its functioning by the District Groundwater Information and Monitoring Cell.
3. The District Panchayat Groundwater Council shall include such members as the District Panchayat may decide. The term of office of the members shall also be decided by the District Panchayat.
4. The representatives of state agencies and departments in the committee, if any, shall be advisory and they will not have the right to vote.
5. The District Panchayat shall provide information about the District Panchayat Groundwater Council to the State Groundwater Board.

#### **24. Functions of the District Panchayat Groundwater Council**

1. The functions of the District Panchayat Groundwater Council shall include:
  - a) Endorsing block panchayat groundwater security plans;
  - b) Preparing a consolidated district level groundwater security plan based on block plans for the same, on a macro-watershed basis;
  - c) Determination of groundwater sanctuaries straddling more than one block within the territory of the district and adopting norms for their management and regulation;
  - d) Coordinating measures taken at the block level;
  - e) Maintaining a database of groundwater resources in conjunction with surface water, land and forest resources at the district level, with the assistance of the District Groundwater Information and Monitoring Cell;
  - f) Supervising the functioning of the District Groundwater Information and Monitoring Cell.

## **2. Urban Areas**

### **1. Ward Groundwater Committee**

#### **25. Constitution and Membership of the Ward Groundwater Committee**

1. Every ward of a municipality shall form a Ward Groundwater Committee.
2. The number of members and the term of office of members shall be decided by the Ward.
3. The membership of this committee shall include representatives of all occupational groups, caste, tribe and gender.
4. The Ward shall submit to the municipality the details of the Ward Groundwater Committee as soon as it is formed and keep the municipality informed of any changes in the constitution of the committee, along with reasons thereof.

#### **26. Functions of the Ward Groundwater Committee**

1. The functions of the Ward Groundwater Committee shall include:
  - a) Preparation and implementation of the Ward Groundwater Security Plan;

- b) Determination of groundwater sanctuaries within the territory of the ward and adopting norms for their management and regulation;
- c) Registration of all wells for whatever purpose used – tube wells, dug wells, shallow wells within the ward boundaries. The format for registration and details of wells shall be decided in consultation with the Municipal Groundwater Information and Monitoring Cell;
- d) Inventory of surface water sources and catchments;
- e) Management of database through regular updates;
- f) Regulation of well use within the ward boundaries;

#### **27. Ward Groundwater Security Plan**

- 1. The Ward Groundwater Committee shall prepare and oversee the implementation of the ward groundwater security plan in consultation with local elected bodies and in consultation and coordination with the Municipal Groundwater Information and Monitoring Cell.
- 2. The aquifer-based plan shall provide for groundwater conservation and augmentation measures, socially equitable use and management of groundwater, and priorities for conjunctive use of surface and groundwater.
- 3. The Ward Groundwater Security Plan shall be binding once it is formally approved by the Ward Groundwater Committee and endorsed by the Municipal level Groundwater Committee.
- 4. The Ward Groundwater Security Plan shall be valid for a period of 5 years. It shall be revalidated or amended after every 5 years. Where compelling reasons, such as significant hydrological changes or drought, warrant it, revision or amendment may be made before the expiry of 5 years.

## **2. Municipal Groundwater Committee**

#### **28. Constitution and Membership of the Municipal Groundwater Committee**

- 1. Every Municipality shall form a Municipal Groundwater Committee.
- 2. The Municipal Groundwater Committee shall include such members as the Municipality may decide. The term of office of the members shall also be decided by the Municipality.

#### **29. Functions**

- 1. The functions of the Municipal Groundwater Committee shall include:
  - a) Endorsing ward groundwater security plans;
  - b) Preparing a consolidated municipal level groundwater security plan based on ward plans for the same, on mili- and macro-watershed basis;
  - c) Determination of groundwater sanctuaries straddling more than one ward within the territory of the municipality and adopting norms for their management and regulation;
  - d) Coordinating measures taken at the ward level;
  - e) Maintaining a database of groundwater resources in conjunction with surface water, land and forest resources at the municipality level, with the assistance of the State Groundwater Board.

### **3. State Groundwater Advisory Council**

#### **30. Constitution and Membership of the State Groundwater Advisory Council**

1. A State Groundwater Advisory Council shall be formed. It shall be supported by the state groundwater department, the water department in the absence of the former or any other department dealing with water resources.
2. The State Groundwater Advisory Council shall include:
  - a) One representative of the Central Groundwater Board;
  - b) One representative of the State Groundwater Board;
  - c) One representative of the state pollution control board;
  - d) One representative of the irrigation department;
  - e) Two representatives from gram panchayat groundwater committees;
  - f) Two representatives from block panchayat groundwater committees;
  - g) Two representatives from district panchayat groundwater councils; and
  - h) Two representatives from ward groundwater committees;
  - i) Two representatives from municipal groundwater committees;
  - j) Two independent experts having experience in law/policy/hydrology.

#### **31. Functions**

1. The State Groundwater Advisory Council shall provide advice and support to all groundwater bodies constituted under this Act.
2. The State Groundwater Advisory Council shall in particular:
  - a) Ensure that the conservation and use measures adopted in rural and urban areas do not contradict each other;
  - b) Determination of groundwater sanctuaries straddling more than one district within the territory of the state and adopting norms for their management and regulation;
  - c) Prepare and maintain with the assistance of the State Groundwater Board, groundwater maps on a macro-watershed level;
  - d) Maintain and monitor a database on the implementation of block and gram panchayat groundwater security plans;
  - e) Advise and recommend to district councils and municipalities changes and modifications in district and municipal groundwater security plans;
  - f) Conduct awareness enhancement programmes at the district and block levels;
  - g) Conduct capacity building programmes at the district and block levels;
  - h) Assimilate and publish state level groundwater data and information;
  - i) Revise such data and information every 5 years;
  - j) Communicate such data and information to the Central Groundwater Board.

### **4. Groundwater Information and Monitoring System**

#### **32. Groundwater Information and Monitoring System**

1. Aquifer-based information emerging out of research and study, as well as compilation of statistics shall be stored in a centralised database.
2. The water level and quality of every aquifer shall be conducted at aquifer level and the data generated shall be fed into the centralised database. This data shall be made available for

drawing plans specific to each aquifer for monitoring the implementation of this Act. Continued monitoring of water levels and water quality, fed into the centralised database will be useful to articulate specific modalities for the implementation of this Act.

3. Information in the centralised database will be validated from time to time so that it can be used for official purposes. Decentralised databases linking to the centralised database will also be maintained to foster effective implementation of this Act at the local level.

### **33. State Groundwater Board**

1. The State Groundwater Board shall:
  - a) Prepare integrated river basin maps including surface water, groundwater, land and forest resources by compiling data from district level;
  - b) Conduct studies and surveys where required;
  - c) Monitor and update; and
  - d) Provide information on groundwater to local authorities for planning purposes.

### **34. District Groundwater Monitoring and Information Cell**

1. The District Groundwater Monitoring and Information Cell shall:
  - a) Compile information from block cells;
  - b) Make available data to authorities, the public and the State Groundwater Board;
  - c) Conduct surveys where required; and
  - d) Monitor quality.

### **35. Block Groundwater Information and Monitoring Cell**

1. The Block Groundwater Information and Monitoring Cell shall:
  - a) Prepare groundwater/surface water digital maps for all villages and urban areas within the block;
  - b) Organise groundwater surveys to ascertain the status of groundwater and the user profile;
  - c) Monitor quality;
  - d) Set up a groundwater digital database;
  - e) Set up a natural resource database management system;
  - f) Compile watershed maps and the micro- and mili-watershed levels;
  - g) Collect demographic and institutional data;
  - h) Provide data and information for the planning process at local authority level; and
  - i) Provide information and data to the public when required.

### **36. Municipal Groundwater Information and Monitoring Cell**

1. The Municipal Groundwater Information and Monitoring Cell shall:
  - a) Compile groundwater and surface water digital maps for all wards within the municipality;
  - b) Organise groundwater surveys to ascertain the status of groundwater and the user profile;
  - c) Monitor quality;
  - d) Set up a groundwater digital database;
  - e) Set up a natural resource database management system;
  - f) Compile watershed maps and the micro- and mili-watershed levels;
  - g) Collect demographic and institutional data;
  - h) Provide data and information for the planning process at local authority level; and

- i) Provide information and data to the public when required.

## **Chapter 5 – Groundwater Conservation and Augmentation**

### **1. Conservation**

#### **37. Conservation and Protection**

1. Every user of groundwater shall ensure that:
  - a) Groundwater is not wasted in any manner;
  - b) Groundwater is not depleted or contaminated;
  - c) No substance that pollutes groundwater is discharged into the ground;
  - d) Groundwater is conserved through appropriate agricultural and industrial practices;
  - e) Measures are taken to replenish or recharge groundwater.
2. Every natural and legal person who uses and manages surface water and land resources in a way that is harmful to the protection of the quality and quantity of groundwater has the duty to phase out such activities within a reasonable time period not exceeding two years.
3. The stipulations of this section are in addition to existing provisions under the Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986.
4. Authorities must, in addition to provisions found in this Act, abide by groundwater quality standards adopted under the Environment (Protection) Act, 1986, section 6(2)(a).

### **2. Groundwater Augmentation**

#### **38. Rainwater Harvesting**

1. The appropriate authority shall encourage roof-based rainwater harvesting and land-based rainwater harvesting.
2. Notwithstanding anything contained in the relevant laws, the gram panchayat groundwater committee or ward groundwater committee as the case may be, may impose stipulated conditions for providing roof top rainwater harvesting structures in the building plan of an area of 500 m<sup>2</sup> or more. Such stipulations shall be binding on concerned government agencies sanctioning or approving building plans. Permanent water and electricity connections shall be extended only after compliance of the directions given in this regard.
3. Land-based rainwater harvesting shall be done by using appropriate groundwater recharge structures or pits depending on the nature of the terrain.

## **Chapter 6 – Basic Water from Groundwater Sources**

#### **39. Basic Water from Groundwater**

1. Everyone is entitled to the same quantity of basic water regardless of, among others, caste, class, gender, economic status, land ownership and place of residence. This quantity shall in no case be less than seventy litres per capita per day.
2. Every basic/drinking water supply agency extracting groundwater shall follow the CPHEEO Manual/BIS Guidelines as modified or revised from time to time.
3. Where basic/drinking water is not provided by any drinking water supply agency, and people rely on groundwater, it shall be the duty of the appropriate authority at the local level or any other authority entrusted with maintaining water quality by law to take measures to ensure that

such drinking water, at the source point as well as at the consumption point, is safe in accordance with the CPHEEO Manual/BIS Guidelines modified or revised from time to time.

4. Supply of basic water from any groundwater source requires consultation and concurrence of the Gram Panchayat Groundwater Committee/Ward Groundwater Committee.

## **Chapter 7 – Irrigation from Groundwater**

### **40. Irrigation from Groundwater**

1. Irrigation for livelihood crops – Farmers owning or tilling less than one acre for their own livelihood needs are statutorily entitled to use groundwater for irrigation:  
Provided that in case of severe drought or where the area has been notified as overexploited, limits may be imposed by restricting water use by the appropriate authority.  
Provided further that the cut-off landholding size can be increased according to local circumstances by the appropriate authority.
2. Irrigation for cash crops and water-intensive crops – Irrigation of cash crops and water-intensive crops will be based on a permit system allocated by the appropriate authority taking into account the need for promoting the least water-intensive crops.
3. Irrigation for cash crops and water-intensive crops may be subject to paying a water cess to the panchayat/gram sabha, as determined by the gram panchayat groundwater committee.
4. In any area where groundwater is or becomes overexploited, where water intensive crops like paddy and sugarcane are grown, an undertaking shall be obtained for a change from water-intensive crops and such undertaking must be incorporated in the permit.

## **Chapter 8 – Industrial Use of Groundwater and Industries Related to Groundwater**

### **41. Permits to Abstract Groundwater for Industrial Use**

1. Groundwater for any industrial use, including bottling plants, shall only be used as per the terms of a permit issued under this Act, which shall fix the maximum quantity of water per day that can be extracted. Extraction of water exceeding the limit fixed under the permit shall be prohibited.
2. Permits will be granted by the gram panchayat groundwater committee/ward groundwater committee with support from the municipal/district and state level bodies set up under this Act.
3. A permit for industrial, commercial or other bulk uses of groundwater may only be granted after studying/considering the impact assessment report submitted by the applicant and after conducting a public consultation whose information shall be provided through concerned gram/block panchayat offices-ward/municipal offices and also through vernacular news papers having circulation in the concerned areas.
4. Permits will be valid for at least one year and for no more than five years. The renewal of a permit shall require a fresh application. Permits are granted to a specific person and are inalienable.
5. The appropriate authority shall keep a register containing the particulars of permits granted.
6. Permits shall be granted subject to the applicant undertaking groundwater recharging measures, and water quality protection measures, as prescribed by the appropriate authority.

#### **42. Pricing of Industrial Use of Groundwater**

1. Industrial groundwater use shall be priced and a water cess, as prescribed by the appropriate authority shall be charged.

Note: This provision is in addition to the stipulations of the Water (Prevention and Control of Pollution) Cess Act, 1977.

#### **43. Mining**

1. The holder of a prospecting licence must prepare and file a prospecting plan with the appropriate authority of the area concerned indicating steps proposed to be taken for protection of surface and groundwater to minimise the adverse effect of prospecting operations on groundwater and the environment in general.
2. The holder of a prospecting licence must take immediate measures, in such manner as may be prescribed, to restore, as far as possible and at least to the extent given in the prospecting plan, water regimes and the ecosystems in general.
3. The holder of a mining lease for a major mineral or a minor mineral shall carry out their operations in accordance with the approved mining plan and take immediate measures in such manner as may be prescribed to restore the areas in which mining operations have been conducted, including replacement of soil cover, removal of contaminants and pollutants introduced during mining operations, restoration of local flora, and water regimes.

#### **44. Drilling Agencies**

1. Drilling agencies must be registered with the State Groundwater Advisory Council.
2. Drilling agencies must provide the appropriate authority will full details of the drilling activities planned and undertaken.

## **Chapter 9 – Transparency and Accountability**

#### **45. Duty to Establish Transparency Systems**

1. It will be the duty of the appropriate authority at all levels to create an effective, appropriate and citizen-friendly transparency regime for the present Act.
2. Access to information as defined in this Act shall extend to all persons.
3. The minimum content, periodicity, and other details of the information to be put out proactively shall be specified in the rules.
4. The transparency regime for provision of information to any person shall include, but will not be restricted to:
  - a) Proactive mandatory disclosure;
  - b) Inspection of all documents and offices;
  - c) Making accessible the copies of documents, records and samples of material;
  - d) Ensuring the transparency of the decision-making processes.
5. All requests for information within a district shall be fulfilled within seven days and those outside the district within 15 days. If an applicant is unable to apply for information and/or any request for information is not complied with within the time period specified, it shall be considered a deemed refusal.

#### **46. Duties of Proactive Disclosure**

1. All appropriate authorities shall proactively disclose information to people without their seeking it, or needing to apply for it, of key documents listed in Rules.
2. Such pro-active mandatory disclosure shall include the dissemination of records in such a manner that a layperson can understand the information; including the dissemination of information in a consolidated and summarized form, wherever appropriate.
3. Proactive disclosure shall include but not be restricted to:
  - a) The reading out aloud of essential information as per the prescribed formats to be specified in the schemes.
  - b) Through hanging/putting up information on notice boards at the Gram Panchayat, Block, and District levels and the establishment of painted wall boards at prescribed locations and in the prescribed formats as specified in the schedule and/or rules.
  - c) The publishing of information through newspaper advertisements, press releases, or the printing of leaflets and reports and by making announcements through the audio-visual media, such as, community radio, radio and television.
  - d) Key records shall also be made available on the Internet. There shall be free and open access to the websites related to the Act where, as much of the information as prescribed, including summaries and consolidated information, shall be uploaded regularly.

#### **47. Social Audits**

1. The gram sabhas and urban local bodies shall conduct social audits every three years of activities undertaken within the gram panchayat or municipal ward.
2. The relevant authorities shall make available all relevant documents including the tender documents, bills, vouchers, copies of sanction orders and other connected papers to the Gram Sabha or Municipal Ward for the purpose of conducting the social audit.
3. These statutory periodic social audits shall be organised by an independent directorate/body of social audit set up under the Act responsible for facilitating the social audit, so that it is based on full information, carried out free of any interference by the implementing agency, and in an atmosphere free of fear and intimidation; the directorate will be responsible for the training, schedule and conduct of the facilitators.
4. The directorate of social audits shall publicize the date of the social audit one month in advance and invite suggestions for the agenda for the audit.
5. The findings of the audit shall be read out in the gram sabha and shall also be circulated to the State Groundwater Advisory Council and, as appropriate, to the District Panchayat Groundwater Council or Municipal Groundwater Committee.
6. The appropriate authority shall encourage independent audits, carried out by civil society or citizens groups.
7. All social audits shall be universal and open, allowing for ongoing social audit (concurrent) as well as post facto social audits.
8. Independent audits carried out by civil society, or citizens groups must be taken cognizance of by the directorate, and facilitated to the extent possible.
9. The District Groundwater Council will take necessary action on the findings of all social audits, including initiating criminal action, and imposing fines and awarding compensation.

## Chapter 10 – Offences and Penalties

### 48. Offences and Penalties

1. If any user of groundwater, except commercial/bulk users, contravenes or fails to comply with the provisions of this Act or any rules and regulations issued as per the Act, on conviction be punishable with a fine which may extend to 10,000 rupees.  
Explanation: the term commercial/bulk user here includes, but is not restricted to farmers cultivating cash crops, groundwater extracting industries and industries consuming more than 10 kl of groundwater a day, as well as agencies responsible for water supply using groundwater.
2. Any commercial user of groundwater that contravenes or fails to comply with provisions in this Act shall be punished with imprisonment, which may extend to 2 years or with a fine, which may extend to 1 lakh rupees, or with both.
3. Commercial users shall be strictly liable for damage caused to individuals, property and the environment. The appropriate authority at the block/municipal level may provide for restitution of property damaged and for restitution of the environment for such area or areas as it may think fit. It will also determine the amount of compensation.
4. If an offence punishable under this Act is committed at any time by a company, every person who is in charge of and responsible to the company for the conduct of its business at the time of the commission of the offence and the company shall be deemed to be responsible for the offence and shall be liable to be proceeded against and punished accordingly. This also includes criminal liability.  
Provided that where any offence under this Act has been committed by a company and it is proved that the commission of the offence is with the consent and connivance or attributable to any neglect on the part of any Director, Manager, Secretary of other officer of the company such Director, Manager, Secretary of other officers shall be deemed to be responsible for that offence and shall be liable to be proceeded against and punished accordingly.  
Explanation: For the purpose of this section:
  - a) 'Company' means any body corporate and includes a firm or other association or individuals; and
  - b) 'Director' in relation to a firm means the partner in the firm.
5. The appropriate authority may initiate proceedings either suo moto or on information/complaint by any individual or group of individuals or organizations.
6. If any user is convicted under this section more than once, the maximum fine shall be doubled. Any subsequent conviction will attract a fifty percent increase in the maximum fine. If any commercial user is repeatedly convicted under this section, the maximum term of imprisonment for subsequent offences will be 3 years.

## **Chapter 11 – Dispute Resolution**

### **49. Dispute Resolution Avoidance, Mediation and Conciliation**

1. Amicable settlement of disputes shall be promoted, assisted and persuaded, to the maximum extent possible. Adjudication shall be last preference when all efforts to settle amicably have proved to be ineffective.
2. Gram panchayat groundwater committees and ward groundwater committees will facilitate mediation and conciliation of any dispute that arises in their territory.

### **50. Appointment of a Groundwater Grievance Redressal Officer**

1. The State Government shall appoint in every block a Block Groundwater Grievance Redressal Officer and in every municipality a Municipal Groundwater Grievance Redressal Officer, who shall be selected by the State Public Service Commission or any appropriate independent appointing body within the State.
2. The qualification for appointment as Groundwater Grievance Redressal Officer shall be experience and qualification in the field of law, hydrology, science and technology, social service, management, water policy, human rights or public administration.
3. Every Groundwater Grievance Redressal Officer shall hold office for a term of five years. The Groundwater Grievance Redressal Officer shall be eligible for re-selection for a second term, and shall not be eligible for any further terms.

### **51. Disqualification for appointment as Groundwater Grievance Redressal Officer**

1. The Groundwater Grievance Redressal Officer shall not be eligible for appointment if she or he is:
  - a) A public servant or a non-official holding any office of profit or carrying on any business or pursuing any profession during the period of appointment;
  - b) Has been charged with or convicted and sentenced to imprisonment for an offence involving moral turpitude or corruption under the Prevention of Corruption Act, 1988;
  - c) Has been suspended, removed or dismissed from the service of the Government or a body corporate owned or controlled by the Government;
  - d) Has, in the opinion of the appropriate authority, such financial or other interest as is likely to affect prejudicially the discharge of his/her functions as a Groundwater Grievance Redressal Officer; or
  - e) Has such other disqualification as may be prescribed by the State Government.

### **52. Nyaya Mitra**

1. There shall be in every district a person called a Nyaya Mitra having at least a three-year law degree from a recognised institution or university to assist the Groundwater Grievance Redressal Officer in the discharge of his/her duties.
2. Such Nyaya Mitra shall be appointed in the prescribed manner.

### **53. Jurisdiction and Procedure**

1. The Groundwater Grievance Redressal Officer shall have jurisdiction over all complaints arising under this Act.

2. Any individual, group, community, local body, or non-governmental organization, can file a complaint before the Groundwater Grievance Redressal Officer in relation to violation of the provisions of this Act.
3. For the purposes of this section, the Groundwater Grievance Redressal Officer shall have the same powers as are vested in a civil court under the Code of Civil Procedure, 1908 while trying a suit in respect of the following matters, namely:
  - a) The summoning and enforcing attendance of any defendant or witness and examining the witness on oath;
  - b) The discovery and production of any document or other material object producible as evidence;
  - c) The reception of evidence on affidavits;
  - d) The requisitioning of the report of the concerned analysis or test from the appropriate laboratory or from any other relevant source;
  - e) Issuing of any commission for the examination of any witness; and
  - f) Any other matter which may be prescribed.
3. The Groundwater Grievance Redressal Officer shall pronounce his/her decision in public immediately after finishing the hearing or at any subsequent time, not exceeding fourteen days.
4. Copies of the decision shall be given to the parties immediately free of cost and a copy shall be sent to the concerned gram panchayat aquifer committee/ward groundwater committee.

#### **54. Power to Impose Penalty**

1. The Groundwater Grievance Redressal Officer shall have the power to impose penalty in accordance with Chapter 10 of this Act.
2. The Decision of the Groundwater Grievance Redressal Officer shall be binding on all parties to the complaint.

#### **55. Appeals**

1. Appeals from the decisions of the Block Groundwater Grievance Redressal Officer can be preferred to the Gram Nyayalya set up under Section 3 of the Gram Nyayalayas Act, 2008.
2. Appeals from the decisions of the Municipal Groundwater Grievance Redressal Officer can be preferred to the district court.