



**ENVIRONMENTAL LAW  
RESEARCH SOCIETY**

## **A PRIMER ON WATER LAW AND POLICY IN INDIA**

This draft publication is circulated for comments and contributions.  
Draft publication not to be cited.

**January 2012**

**ENVIRONMENTAL LAW RESEARCH SOCIETY (ELRS)**  
C-48, 3<sup>rd</sup> Floor, Old Double Storey, Lajpat Nagar – IV, New Delhi – 110 024  
Tel: +91 (011) 4282 8324 Email: [info@elrs.in](mailto:info@elrs.in) Website: [www.elrs.in](http://www.elrs.in)

## TABLE OF CONTENTS

Glossary	iii
List of Boxes	iv
List of Tables	iv
Acknowledgements	v
<b>INTRODUCTION</b>	<b>1</b>
<b>I. WHAT IS WATER LAW?</b>	<b>2</b>
<b>II. WHAT ARE THE KEY FEATURES OF WATER LAWS?</b>	<b>3</b>
<b>II.1 Fundamental Human Right to Water</b>	<b>3</b>
<b>II.2 Source-Based and Use-Based Rules</b>	<b>5</b>
<b>II.3 Public Trust Doctrine</b>	<b>6</b>
<b>II.4 Inter-Sectoral Allocation</b>	<b>7</b>
<b>II.5 Devolution of Powers to Democratically Elected Local Bodies</b>	<b>8</b>
<b>III. WHAT ARE THE BASES FOR WATER SECTOR REFORMS?</b>	<b>9</b>
<b>III.1 Conservation</b>	<b>9</b>
<b>III.2 Water as an Economic Good</b>	<b>9</b>
<b>III.3 Shrinking Role of the Government</b>	<b>9</b>
<b>III.4 Decentralisation and Participation</b>	<b>9</b>
<b>III.5 Private Sector Participation</b>	<b>10</b>
<b>IV. WHY ARE WATER SECTOR REFORMS INTRODUCED?</b>	<b>10</b>
<b>IV.1 Global Influences on Domestic Reform Agenda</b>	<b>10</b>
<b>IV.2 ‘Efficient’ and Financially Sustainable Water Management</b>	<b>11</b>
<b>IV.3 Imposition of Law Conditionality</b>	<b>11</b>
<b>IV.4 Domestic Push for Reforms – Water Law is often Outdated and/or Incomplete</b>	<b>12</b>
<b>V. WHAT ARE THE KEY ASPECTS OF LAWS GOVERNING WATER RESOURCES?</b>	<b>13</b>
<b>V.1. Drinking Water</b>	<b>13</b>
<b>V.2. Water Quality</b>	<b>19</b>
<b>V.3. Sanitation</b>	<b>24</b>
<b>V.4. Irrigation</b>	<b>31</b>
<b>V.5. Groundwater</b>	<b>34</b>
<b>V.6. Regulatory Authorities</b>	<b>39</b>
V.6.1 State regulatory authorities	39
V.6.2 Urban regulatory bodies	40

<b>VI. WHAT ARE THE CHALLENGES?</b>	<b>41</b>
<b>VI.1 Water is a Tradable Economic Good</b>	<b>41</b>
<b>VI.2 Disconnection Becomes a Feature of Water Law</b>	<b>41</b>
<b>VI.3 Public Sources of Water</b>	<b>42</b>
<b>VI.4 Negative Impact On Weaker Groups</b>	<b>42</b>
<b>VI.5 Limited Understanding of Decentralisation and Participation</b>	<b>42</b>
<b>VI.6 Conservation is A Front for Environment-Unfriendly Reforms</b>	<b>43</b>
<b>VI.7 Democratic Ideals are not Fully Realised</b>	<b>43</b>
<b>VII. WHAT IS THE AGENDA FOR FURTHER ACTION?</b>	<b>43</b>
<b>VII.1 Right to Information, Transparency and Accountability</b>	<b>43</b>
<b>VII.2 Implementation and Enforcement of the Human Right to Water And Sanitation</b>	<b>44</b>
<b>VII.3 Drinking Water Legislation</b>	<b>44</b>
<b>VII.4 Effective Devolution Of Power To Democratically Elected Local Bodies</b>	<b>44</b>
<b>VII.5 Revisiting Water Law Reforms</b>	<b>45</b>
<b>ANNEXES</b>	<b>46</b>
<b>Annex I: Division of Powers in Respect of Water</b>	<b>46</b>
<b>Annex II: Private Sector Participation</b>	<b>48</b>
<b>Annex III: Incentive Schemes - <i>Nirmal Gram Puraskar</i></b>	<b>50</b>
<b>Annex IV: Right to Information Act, 2005</b>	<b>51</b>
<b>Annex V: Indicative List of Networks and Practitioners in the Water and Sanitation Sector</b>	<b>52</b>

## Glossary

command area	area around the dam where the benefits of the irrigation project reach
common law	law developed by judges through decisions of courts and similar tribunals
dalit	term describing people formerly called 'untouchables' or 'outcastes'
gram (or village)	village council
gram sabha	a body consisting of persons registered in the electoral role relating to a village comprised within the area of a panchayat at the village level (Article 243(b) of the Constitution)
groundwater	water located beneath the ground surface
panchayat	institution of self-government constituted under Part IX of the Constitution riparian right holders landowners whose property is adjacent to a body of water having the right to make reasonable use of it
SC	scheduled castes
ST	scheduled tribes
surface water	includes rivers, lakes and streams
panchayat	comprises of the duly elected presidents of a certain number of villages in an area

### **List of Boxes**

- A. Right to Water and the Supreme Court of India
- B. Right to Water and various State High Courts
- C. Right to water in international documents
- D. Public Trust Doctrine and the Courts: *M.C. Mehta v. Kamal Nath*
- E. Dublin Principles
- F. World Bank's Law Conditionality
- G. Right to Sanitation and Courts in India
- H. National Urban Sanitation Policy, 2008
- I. Plachimada and Coca-Cola Case
- J. Devolution of Powers to Local Bodies: Porto Alegre, Brazil

### **List of Tables**

Table 1 Source Based Rules (Surface Water and Groundwater)

Table 2 Inter-sectoral Prioritisation under Water Policies

## **Acknowledgements**

This primer is a part of the ongoing water law and capacity building project funded by Arghyam, Bangalore, an Indian public charitable foundation set up with an endowment from Rohini Nilekani, and focusing on water and sanitation since 2005. The Environmental Law Research Society (ELRS) gratefully acknowledges the support of Arghyam, Bangalore.

## INTRODUCTION

Water is indispensable to sustain life. The availability, access to, and quality of, water are crucial factors for determining the quality of life of human beings as well as other living beings. Water is also essential for overall economic development. Water is a basic necessity for food production and it is also required for various industrial and commercial activities. Thus, water plays a critical role in poverty eradication.

Historically water was seen as a plentiful resource and its availability and quality were not considered major problems.<sup>1</sup> This is not the case anymore. Instances of problems relating to availability and quality of water are too many to describe. People queue in front of water tankers for hours and women walk long distances to collect drinking water. The controversial issue of over-exploitation of groundwater by water-based industries (e.g. Coca-Cola in Plachimada, Kerala) provides an example of over-use by one person (or industry) affecting the life and livelihood of an entire community. The recurring inter-State disputes over sharing key rivers in the country sometimes lead to public unrest (e.g. the Cauvery River dispute).

These situations and problems demand water laws. However, there is no comprehensive water legislation in India. Instead, there are a number of water laws and policies and different government agencies dealing with water-related issues. The existence of a number of laws and policies and their technical nature makes it difficult for practitioners, activists and other stakeholders to understand and use law for the benefit of the society and environment.

The objective of this primer is to introduce the water law and policy framework in India, including the ongoing water sector/ law reforms, to members of the public, civil society organisations, and government representatives. The primer encapsulates water laws, the current water law reforms; their impacts and issues for further advocacy. It is hoped that the contents of this primer will raise more questions about the ongoing reform process, which will facilitate dialogue and a better understanding of the problems plaguing the sector, and eventually result in more effective and equitable solutions.

The readers who are interested in a more detailed account may take note that this primer is based on the following books:

- Philippe Cullet, *Water Law, Poverty, and Development* (Oxford: Oxford University Press, 2009).
- Philippe Cullet, Alix Gowlland-Gualtieri, Roopa Madhav & Usha Ramanathan (eds.), *Water Governance in Motion: Towards Socially and Environmentally Sustainable Water Laws* (New Delhi: Cambridge University Press, 2010),
- Philippe Cullet, Alix Gowlland-Gualtieri, Roopa Madhav & Usha Ramanathan (eds.), *Water Law for the Twenty-First Century – National and International Aspects of Water Law Reform in India* (Abingdon: Routledge, 2009).

---

1 However, the issue of access to water especially for socially-marginalised communities, such as dalits and low castes, received inadequate attention.

## I. WHAT IS WATER LAW?

Generally speaking, water law is the area of law dealing with ownership, access to, and control of water. In the Indian context, it also addresses the inter-state and transboundary dimensions of water, the division of powers between the Government of India (or the ‘Central government’), State governments, local bodies (municipalities in urban areas and panchayats in rural areas), the public and private actors, as well as the issue of water quality together with its environmental and health implications.

The main objectives of water law include:

- allocation of water for different uses;
- setting up of priorities among different uses of water;
- conservation of water resources;
- implementation of the fundamental human right to water;
- maintaining the quality of water sufficient for its various uses; and
- ensuring water for human survival and poverty eradication.

A comprehensive legal framework for the water sector is absent in India. Instead the sources of water laws in India include:

- Constitution of India
- legislations or Acts (sometimes referred to as ‘laws’)
- decisions of the Supreme Court of India, High Courts, district courts and *nyay panchayats*<sup>2</sup>
- common law or law developed by English judges through judicial decisions, as applied in India
- customary norms or rules of behaviour that may be unwritten but are established by long practice or usage<sup>3</sup>

Further, in a departure from the usual practice, where laws are adopted by the legislature (the Parliament), development of water laws in India has been influenced by policies that are adopted by the executive (the Central government). Further, in several cases, it is policies rather than laws that attempt to regulate water. But the scope of these policies is often restricted. They do not consider the various aspects of water regulation, such as the different dimensions of water (human rights, environment etc.), prioritise the different uses of water and address issues concerning the links between water and food, health, agriculture, and energy. These policies cannot set out the general regulatory framework. They do not create binding rights and obligations and they are non-enforceable through a court of law. The defining characteristics of laws include consistency,

---

2 However, judgments do not reflect day-to-day practice in the exercise of rights. They constitute a final recourse to protect or uphold rights through specific litigious action, on a case-by-case basis.

3 Local law or customary law incorporates locally evolved norms, institutions and behaviour.

predictability and enforceability. On the other hand, policies can be easily modified at any time.

## **II. WHAT ARE THE KEY FEATURES OF WATER LAWS?**

### **II.1 FUNDAMENTAL HUMAN RIGHT TO WATER**

Over the past couple of decades, the legal framework concerning water has been complemented by a human rights dimension. The core message is that all human beings are entitled to equal and non-discriminatory supply of a sufficient amount of water. This has led to the demand for legal recognition of the right to water and corresponding changes in water-related laws and policies.

The Constitution of India does not specifically recognise a fundamental right to water. Instead, this right has been asserted on the basis of the fundamental right to life enshrined in Article 21 of the Constitution. The Supreme Court of India [Box A] and various High Courts [Box B] have confirmed this right and the obligation of the government to provide water.

#### **BOX A: RIGHT TO WATER AND THE SUPREME COURT OF INDIA**

- *Subhash Kumar v. State of Bihar*, AIR 1991 SC 420: “[T]he right to live is a fundamental right under Article 21 of the Constitution and it includes the right of enjoyment of pollution free water and air for full enjoyment of life” [para 7].
- *State of Karnataka v. State of Andhra Pradesh*, (2000) 9 SCC 572: “[T]here is no dispute that under the constitutional scheme in our country right to water is a right to life and thus a fundamental right”.

#### **BOX B: RIGHT TO WATER AND VARIOUS STATE HIGH COURTS**

- *F.K. Hussain v. Union of India* (1990): The right to life is much more than the right to animal existence and its attributes are many fold, as life itself. A prioritisation of human needs and a new value system has been recognised in these areas. The right to sweet water, and the right to free air, are attributes of the right to life, for, these are the basic elements which sustain life itself [para 7].
- *Hamid Khan v. State of Madhya Pradesh* (1996): The state “is also covered by Article 21 of the Constitution of India and it is the right of the citizens of India to have protection of life, to have pollution free air and pure water...Therefore, it was the duty of the state towards every citizen of India to provide pure drinking water” [para 6].
- *Vishala Kochi Kudivella Samarkshana Samithi v. State of Kerala* (2006): The “...failure of the state to provide safe drinking water to the citizens in adequate quantities would amount to a violation of the fundamental right to life enshrined in Article 21 of the Constitution of India and would be a violation of human rights. Therefore, every government, which has its priorities right, should give foremost importance to providing safe drinking water even at the cost of other development programmes” [para 3].

Besides the judgments of courts, however, there is relatively little in the legal and policy framework that recognises the fundamental right to water.

- The National Water Policy, 2002 calls water a ‘basic human need’ rather than a ‘right’ (para 1.1).
- The National Rural Drinking Water Programme is concerned with the provision of safe water for ‘basic needs’ rather than water as a ‘fundamental right’.
- There are a large number of laws relate to water and water-based resources but they pay scant attention to the implementation of the right to water.

Therefore, it may not be possible to hold the government legally liable for the failure to respect, protect and fulfil the fundamental human right to water.

Unlike India, however, the constitutions of some countries expressly include access to water as a fundamental human right.

- South Africa (1996): Everyone has the right to have access to...sufficient food and water (Article 27(1)).
- Uruguay (1967) (amended in 2004): Access to drinking water and access to sanitation constitute fundamental human rights (Article 47).

The existence of a human right to water is also recognised in several international documents [Box C].

#### **BOX C: RIGHT TO WATER IN INTERNATIONAL DOCUMENTS**

- General Comment (No. 15) on the right to water adopted by the United Nations Committee on Economic, Social and Cultural Rights in 2002: The human right to water “entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses”.
- Convention on Elimination of Discrimination Against Women, 1979: Article 14(2)(h) explicitly mentions about provision of water and sanitation to women.
- Convention on the Right of the Child, 1989: Article 24 (2) (c) mentions right to safe drinking water of a child from a non-polluted source.
- United Nations General Assembly Resolution 64/292, 2010: The General Assembly recognizes “the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights”.
- United Nations Human Rights Council Resolution on Human rights and access to safe drinking water and sanitation, 2010: “[T]he right to water and sanitation is derived from the right to an adequate standard of living, which is contained in several international human rights treaties.”

## Issues in a Nutshell

- raise awareness about fundamental human right to water
- introduce capacity building programmes for individuals and communities to improve access to the right to water
- protect the right (especially of vulnerable communities)
- facilitate monitoring and surveillance of implementation of the right

## **II.2 SOURCE-BASED AND USE-BASED RULES**

A distinct feature of water laws in India is the development of different rules for different sources and uses of water. The rights of individuals and powers of government are also different. Table 1 explains the different *source-based rules* by taking the example of surface water and groundwater.

**Table 1: Source Based Rules (Surface Water and Groundwater)**

	<b>Surface Water</b>	<b>Groundwater</b>
<b>Powers</b>	government control and responsibility for allocation	individual control
<b>Rights of individual</b>	The link between access to surface water and land rights is recognised and the principle of riparian rights is applied. Landowners do not own but can use surface water passing through or bordering their lands for private use.	Groundwater is part and parcel of the land. The landowner has the right to collect and dispose of all the water under his/ her land.
<b>Laws</b>	Most irrigation laws link land holdings and surface water rights. Surface water rights are transferred with land rights. Section 25 of the Limitation Act, 1963 confirms the principle of riparian rights. <sup>4</sup>	There is no comprehensive groundwater law in India. However, several State groundwater laws have been enacted. Section 17(d) of the Indian Easements Act, 1882 recognises landowner's rights over groundwater.

The link between water rights and land rights, which determined the rights related to surface water and groundwater, remains an important feature of water law.

The development of *use-based rules* can be explained with the example of irrigation and drinking water. There are a number of irrigation laws at the state level (e.g. Bihar Irrigation Act, 1997 and Assam Irrigation Act, 1983). On the other hand, there is no specific law in the case of drinking water. Instead, there are a number of policies and other initiatives at the national and state level. These

---

4 In *Secretary of State v. S. Subbarayudu*, AIR 1932 Privy Council 46 (at 48-49), the court defined a riparian owner as “a person who owns land abutting on a stream and who as such has a certain right to take water from the stream...Further, the right is a natural right...”.

include the Draft Guidelines for Preparation of Legislation for Framing Drinking Water Regulations, 2007; the National Rural Drinking Water Programme, 2010 and the Karnataka Urban Drinking Water and Sanitation Policy, 2003.

### II.3 PUBLIC TRUST DOCTRINE

The government exercises control over surface water resources in India. However this control is not absolute and the government continues to owe a responsibility to the people in relation to surface water resources. The legal basis for this obligation is derived from the public trust doctrine. The doctrine states that the government is not an owner but a trustee of natural resources (such as water) and it is responsible for their protection and preservation for and on behalf of the beneficiaries (i.e. the public). The government is required to manage and develop water without depriving any individual or group of access or significantly affecting ecosystem needs. Neither the government nor individuals can exercise absolute rights over water.

The Supreme Court of India has applied the public trust doctrine to redefine the relationship between water and the government. The doctrine has been discussed extensively in *M.C. Mehta v. Kamal Nath*, (1997) 1 SCC 388 [Box D].

#### **BOX D: PUBLIC TRUST DOCTRINE AND THE COURTS: *M.C. MEHTA V. KAMAL NATH***

A private company, Span Motels, built a motel on the bank of the River Beas on land leased by the Government of India in 1981. Span Motels also encroached upon an additional area of land adjoining this area, which was later leased out to Span Motels. The motel used earthmovers and bulldozers to turn the course of the River Beas, create a new channel and divert the course of the river to save the motel from future floods.

25. The public trust doctrine primarily rests on the principle that certain resources like air, sea, waters and the forests have such a great importance to the people as a whole that it would be wholly unjustified to make them a subject of private ownership. The said resources being a gift of nature, they should be made freely available to everyone irrespective of the status in life. The doctrine enjoins upon the government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial purposes.
33. ...We see no reason why the public trust doctrine should not be expanded to include all ecosystems operating in our natural resources.
34. Our legal system - based on English common law - includes the public trust doctrine as part of its jurisprudence. The state is the trustee of all natural resources which are by nature meant for public use and enjoyment. Public at large is the beneficiary of the sea-shore, running waters, airs, forests and ecologically fragile lands. The state as a trustee is under a legal duty to protect the natural resources. These resources meant for public use cannot be converted into private ownership.
35. ...[I]n the absence of any legislation, the executive acting under the doctrine of public trust cannot abdicate the natural resources and convert them into private ownership or for commercial use. The aesthetic use and the pristine glory of the natural resources, the environment and the ecosystems of our country cannot be permitted to be eroded for private, commercial or any other use unless the courts find it necessary, in good faith, for the public goods and in public interest to encroach upon the said resources.
39. We, therefore, order and direct as under:
  1. The public trust doctrine, as discussed by us in this judgment is a part of the law of the land.

Subsequently, the doctrine has been affirmed in other cases, including *M.I. Builders Pvt. Ltd. v. Radhey Shyam Sahu*, AIR 1999 SC 2468, *State of West Bengal v. Kesoram Industries*, (2004) 10 SCC 201, *Intellectual Forum, Tirupathi v. State of Andhra Pradesh*, (2006) 3 SCC 549 and *Karnataka Industrial Areas Development Board v. C. Kenchappa and others*, AIR 2006 SC 2038. It, therefore, forms a part of the water law of India.

The application of the public trust doctrine may influence the type of rights and privileges that can be claimed over surface water. However, the applicability of the doctrine to other sources of water, such as groundwater, remains unclear (see Box P below).

## II.4 INTER-SECTORAL ALLOCATION

Inter-sectoral allocation of water resources has several dimensions. These include allocation of water resources between urban and rural areas, as well as between different sectors or uses such as drinking, irrigation and industrial use. The latter also involves the priority allotted to each sector or use in times of water scarcity.

Inter-sectoral allocation is a feature of water policies in India. The National Water Policy, 2002 and most State water policies include a priority list in which drinking water comes first and irrigation second, followed by other sectors such as industrial use or navigation. Table 2 provides an indicative list of priorities envisaged under the National Water Policy, 2002 and selected water policies from three states.

**Table 2: Inter-sectoral Prioritisation under Water Policies**

	<b>National Water Policy, 2002</b>	<b>Karnataka State Water Policy, 2002</b>	<b>Uttar Pradesh State Water Policy, 1999</b>	<b>Maharashtra State Water Policy, 2003</b>
1.	Drinking water	Drinking water	Drinking water	Domestic use for drinking, cooling, hygiene and sanitation needs including livestock
2.	Irrigation	Irrigation	Irrigation	Industrial, commercial use and agro-based industrial use
3.	Hydro-power	Aquaculture	Hydro and Thermal Power	Agriculture and hydropower
4.	Ecology	Agro-industries and non-agricultural industries	Agro-industries non-agricultural industries	Environment and recreation uses
5.	Agro-industries and non-agricultural industries		Navigation and other uses	All other uses
6.	Navigation and other uses			

However, this order of priority is not binding and state governments can adopt a different priority list. The National Water Policy states that the priorities can be modified with reference to area/ region specific considerations. The Maharashtra State Water Policy prioritises industrial, commercial and agro-based industrial use over agriculture. The Punjab State Water Policy (2008) (Draft) allows for modification of all priorities except drinking water. On the other hand, the Orissa State Water Policy (2007) specifically prohibits the re-ordering of priorities. Any alteration in priorities requires formulation of a new policy.

Nevertheless, the modification of the priority list should not be at the expense of drinking water supply. The Model Bill for groundwater mandates the authority to take into account the purpose for which groundwater is to be drawn. Although it does not prioritize domestic use of water over other uses, basic drinking water needs are implicitly considered since, even in notified areas, permission is not required for hand-operated devices. Thus, the importance of drinking water is recognized.

#### Issues in a Nutshell

- legally binding priority list, which prioritizes drinking water and irrigation for subsistence crops
- restrict power to modify priorities

### **II.5 DEVOLUTION OF POWERS TO DEMOCRATICALLY ELECTED LOCAL BODIES**

Since the adoption of the Constitution of India, the first attempt to give a new constitutional status to Panchayats and Municipalities was made in the 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendment Acts respectively. With respect to rural local government institutions, the 73<sup>rd</sup> constitutional amendment mandates the formation of a three-tier Panchayat system in every State, whose members are directly elected (Article 243G). However, there are no mandatory provisions for devolution of powers on Panchayats. This has been left to the discretion of the States. The position of Municipalities under the 74<sup>th</sup> constitutional amendment is identical (Article 243W).

The subject matters listed in the Eleventh Schedule and the Twelfth Schedule (for the functioning of the Panchayats and Municipalities respectively) include water and sanitation. For example, under the Bihar Panchayati Raj Act 2006, the gram panchayat is responsible for the construction, repair and maintenance of sources of drinking water. However the constitutional devolution of any new powers on the Panchayats and Municipalities cannot be presumed. The list in the Eleventh and Twelfth Schedules is advisory in nature. Whether or not States devolve powers and to what extent is entirely a matter of the State's choice, enabled by the legislative powers conferred on them by the Constitution. Whatever powers or functions are devolved will be subject to the provisions in existing enactments. This implies that the powers of local bodies to manage water are subsidiary to those of the States and the Central Government.

### **III. WHAT ARE THE BASES FOR WATER SECTOR REFORMS?**

Water sector reforms are informed by a relatively narrow set of concerns and objectives.

#### **III.1 CONSERVATION**

Environmental considerations have played a central role in water sector reforms, which are largely premised on ongoing and forthcoming scarcity of clean freshwater. The environment is used as the starting point for a set of economic and policy measures that form the core of the reforms. Sustainability is equated with cost recovery and financial viability.

#### **III.2 WATER AS AN ECONOMIC GOOD**

Water is viewed as an economically valuable and finite good. It is therefore argued that water demand should be managed and the efficiency of all water uses should be increased. A price is attached to all water services and the principle of full cost recovery is introduced.<sup>5</sup> Further water is turned into a tradable good, in which rights can change hands for consideration. This was the case where the Chennai Metropolitan Water Supply and Sewerage Board (Metrowater) purchased water from farmers in the area. A system of well-defined private property rights over water resources is also advocated.

#### **III.3 SHRINKING ROLE OF THE GOVERNMENT**

Traditionally, the government has performed a number of different roles - supplier, regulator, financier and engineer – in the water sector. Water sector reforms seek to minimize the role of the government to ‘facilitator’ and transfer several of the existing functions of the government to new bodies at the local and State level.

#### **III.4 DECENTRALISATION AND PARTICIPATION**

Decentralization is generally defined as the transfer of authority from a central to a local government in the context of a constitutionally defined system of governance. Under the water sector reforms, however, decentralisation involves the transfer of responsibilities to water users and private companies.

Participation is generally understood as a procedural human right. It extends from project planning and design to its implementation and management of water infrastructure, as well as to the preparation of plans, policies, and legally binding instruments. Effective participation depends on access to information, and access to justice ensures accountability in the participatory process. In the case of water sector reforms, participation is understood as a way to make water users (and not the public at large) more responsible for water management. This involves introduction of additional responsibilities for the users.

---

5 The principle of full-cost recovery allows water service providers to pass all costs of production and services onto consumers.

### **III.5 PRIVATE SECTOR PARTICIPATION**

Water sector reforms encourage private sector participation, particularly in urban water supply, as a means to ensure more efficient management and delivery of water services, and to provide the necessary investment. It can take different forms.

- (i) Privatisation: This involves the complete or partial transfer of ownership (assets) from the government to the private company.
- (ii) Public-private partnerships: The government retains ownership of assets and major responsibilities while certain responsibilities are transferred to private companies for a specified period.
- (iii) Corporatization and commercialization of operations of public utilities: The provision of water supply is dissociated from other services administered by the public utility and market principles (such as full cost recovery) are imposed on the operation of water services.
- (iv) Privatisation of water resources: The State of Chhattisgarh permitted a private company to build a dam over the river Sheonath to provide water to users and assert rights over fishing in the area close to its dam. The issue became controversial as the company began to stop farmers living near the river from pumping water from the river.

A number of policy documents promote and/ or provide the basis for private sector participation in water supply in particular and all other municipal services generally. Annex II highlights the relevant provisions of some of these documents and a case of public-private partnership in the urban water sector.

## **IV. WHY ARE WATER SECTOR REFORMS INTRODUCED?**

### **IV.1 GLOBAL INFLUENCES ON DOMESTIC REFORM AGENDA**

Water sector reforms are largely built around non-binding documents adopted at international conferences. The Dublin Principles, which represent a key outcome of the International Conference on Water and the Environment 1992, expressly promote the economic perspective on water [Box E].

#### **BOX E: DUBLIN PRINCIPLES**

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment;
2. Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels;
3. Women play a central part in the provision, management and safeguarding of water;
4. Water has an economic value in all its competing uses and should be recognized as an economic good: Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.

The water sector reforms in India have been mostly guided by the fourth Dublin principle that conceives water as an economic good or tradable commodity that is economically valuable and finite.

## **IV.2 ‘EFFICIENT’ AND FINANCIALLY SUSTAINABLE WATER MANAGEMENT**

Traditionally, government departments (such as irrigation department, public works department etc.) were responsible for the development and management of water resources and for the provision of water. Water was viewed as a free natural resource that only needs to be collected from a source and supplied. For this purpose, the government encouraged the construction of water-related infrastructure such as irrigation canals, dams and water treatment plants. The government adopted a supply-oriented approach, which focused on supplying more and more water in the belief that it will satisfy needs and lead to progress. However, the failure of this approach to deliver results led to the search for alternatives.

The demand-oriented approach focuses on controlling the demand for water. Water is no longer perceived as a social right to be provided by the government. It is a natural resource with economic value. This has led to the call for water to be ‘managed’ in a more ‘efficient’ and financially ‘sustainable’ manner. Local institutions are given the responsibility for water supply with community participation and capital cost sharing, and the application of water pricing, including the principle of full-cost recovery, and trading of water rights. Water pricing is expected to reduce waste and pollution and lead to efficiency in water use. This is expected to ensure financial viability and sustainability.

## **IV.3 IMPOSITION OF LAW CONDITIONALITY**

Since the 1990s, the changing international political economy context and the spread of globalisation have influenced water regulation in India. The reform agenda of international financial institutions, such as the World Bank and the Asian Development Bank, which is influenced by the Dublin Principles, has largely paved the course of water sector/law reforms in India.

Several State governments have accepted loans from international financial institutions for projects in the water sector. The institutions have taken advantage of their superior bargaining power throughout the negotiation process to impose introduction of new, or amendment of existing, water laws and policies as conditions for loan disbursements. This practice is known as law conditionality. Although the World Bank does not explicitly promote law conditionality, its use is indirectly justified and fostered to ensure that borrowing countries implement water sector/ law reforms. Box F highlights some such World Bank projects.

#### **BOX F: WORLD BANK'S LAW CONDITIONALITY**

- Uttar Pradesh Water Sector Restructuring Project: The State government was required to set up a Water Tariff Regulatory Commission and prepare a draft legislation specifying the functions and responsibilities of the Regulatory Commission. This led to the adoption of the Uttar Pradesh Water Management and Regulatory Commission Act, 2008.
- Maharashtra Water Sector Improvement Project: The State government was praised for having 'taken a number of bold and path-breaking actions' between 2003 and 2005'. The Maharashtra Water Resources Regulatory Authority Act, 2005 was adopted just before the signing of the agreement although this was not part of project conditionality.
- Madhya Pradesh Water Sector Restructuring Project: The State government was required to adopt legislation to establish the State Water Tariff Regulatory Commission.

Source: [http://www.ielrc.org/water/doc\\_condition.htm](http://www.ielrc.org/water/doc_condition.htm).

Due to law conditionality, some States have introduced new rules/ laws or amended existing rules/ laws. In some cases, the State legislature played little or no role in the development/ modification of rules/laws. For instance, the Maharashtra State Assembly passed the Maharashtra Water Resources Regulatory Authority Act in April 2005 following limited debates.

Some State governments were required to engage the services of consultants approved by international financial institutions. Such private consultants have been involved in the substantive drafting of water laws for State governments as well as their implementation. For example, the Delhi Water and Wastewater Reforms Bill, 2004 was drafted by Price Waterhouse Coopers as part of the Delhi Water Supply and Sewerage Project. Similarly, the Bill that gave legal basis to the Madras Metropolitan Water Supply and Sewerage Board (Metrowater) was drafted by consultants, introduced in the State legislature in January of 1978, approved in April, and passed in June. This also raises concerns about the level of debate and discussion that has preceded the finalisation of these new water laws.

#### **IV.4 DOMESTIC PUSH FOR REFORMS – WATER LAW IS OFTEN OUTDATED AND/OR INCOMPLETE**

The Constitution of India vests the power to make laws relating to water in State governments. As a result, a comprehensive water law is absent. The existing legal framework is characterized by a number of different principles, rules and laws for the different uses and different sources/ bodies of water, which are often unclear and difficult to understand.

The existing water laws are largely outdated and insufficient to address new challenges.

- Irrigation laws are based on laws developed during the colonial period.

- The traditional land rights-based framework that grants rights to surface water and groundwater to land owners or occupiers is unsuitable.
- The availability of mechanized pumping devices has led to a dramatic increase in groundwater use and contributed to its depletion and contamination.

## **V. WHAT ARE THE KEY ASPECTS OF LAWS GOVERNING WATER RESOURCES?**

This section identifies the recent and ongoing water law reforms relating to drinking water, water quality, sanitation, irrigation, groundwater and regulatory authorities and highlights some of the key issues that ought to be addressed. Further, in recent years, the Planning Commission has been involved in the development of a new water strategy. This has triggered a series of new initiatives some of which are also discussed in this section.

### **V.1. DRINKING WATER**

There is no specific legislation concerning drinking water either at the Central or State level. Instead, its regulation is based at the Union level on a patchwork of policy documents, which are legally non-enforceable and subject to governmental discretion. Additionally, rules and regulations are adopted in the context of specific legislations defining the rights and responsibilities of local bodies.

The issue of drinking water is also addressed in national laws that are not water specific, such as the Disaster Management Act, 2006. The Central Government is also considering drinking water regulation by making suitable provision in the integrated Food Law Bill or through a separate law.

The issue of drinking water and/ or the responsibility of a rural or an urban body for its provision has not been raised explicitly before courts in India. Instead it is usually discussed in the context of other issues such as water pollution, rights of a community to access water, riparian rights etc.

Article 243G and Article 243W of the Constitution of India were inserted as a result of the 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments. These provisions envisage the devolution of power and responsibilities to panchayats/ municipalities respectively to enable them to function as institutions of self-government in relation to drinking water (in the case of panchayats, Eleventh Schedule, Entry 11) and water supply for domestic purposes (in the case of panchayats, Twelfth Schedule, Entry 5). However, the devolution is not automatic and depends on the enactment of specific legislation by State governments.

#### **RURAL WATER SUPPLY**

The policy framework governing rural water supply has undergone a dramatic change since the mid-1990s. The reforms include changes in existing policies, and adoption of new policies, by the Central Government, adoption of new policies by

the State governments, as well as development of projects supported by external agencies, such as the World Bank.

## Central Government

### *Institutions*

The Department of Drinking Water Supply, which was formed in 1999, under the Ministry of Rural Development is the key Central Government agency dealing with rural supply and sanitation. It was renamed as the Department of Drinking Water and Sanitation in 2010 and conferred ministry status in 2011. It is now known as the Ministry of Drinking Water and Sanitation.

### *Policies*

The State governments are primarily responsible for the provision of drinking water. However, the Central Government has played an important role in fashioning the policies that States apply and provided significant funding to ensure access to water in rural areas.

The Rajiv Gandhi National Drinking Water Mission (RGNDWM) is the key institution with regard to the development of policies and the administration of the rural drinking water sector.<sup>6</sup> It functions within the Department of Drinking Water Supply.

The Accelerated Rural Water Supply Programme (ARWSP) served as the basis for the Central Government's interventions in rural drinking water from 1972 to 2009. The Programme was equally funded by the Government of India and State Governments. The ARWSP Guidelines (1999-2000 version) were an early indication of the Central Government's reform-oriented approach. The key policy elements were:

- different levels of coverage – non-covered (less than 10 lpcd), partially covered (10 to 40 lpcd) and covered habitations (more than 40 lpcd)<sup>7</sup>
- criterion to determine covered habitation
  - minimum level of coverage (quantity): 40 lpcd (3 litres for drinking, 5 litres for cooking, 15 litres for bathing, 7 litres for washing utensils and the house and 10 litres for ablutions)
  - public or private source of water within 1.6 kms or at 100 metre elevation in mountain areas
  - a public source of water (e.g. hand pump) should not be used to serve more than 250 people

---

6 The Technology Mission on Drinking Water and Related Water Management, or the National Drinking Water Mission, was renamed as RGNDWM in 1991.

7 A habitation is defined as a locality within a village where a cluster of around twenty families (or 100 people) reside. See *Norms for Providing Potable Drinking Water in Rural Areas*, <http://www.megphed.gov.in/knowledge/standards/guiderural.pdf>.

The Eleventh Five-Year Plan (2007-2012) identified a host of issues relating to water and sanitation in rural areas. In order to address these issues, the entire rural water supply programme and guidelines were revised as the National Rural Drinking Water Programme (NRDWP) in 2010. The major features of the NRDWP are:

- promotes a broad conception of drinking water by linking drinking water schemes with other schemes such as sanitation, health policy, education and the National Rural Employment Guarantee Scheme<sup>8</sup>
- shift from specific individual measure (40 lpcd) constituting the minimum level of access to concept of drinking water security at the household level, which lacks any specific per capita measurement
- increased focus on the need to provide water on a sustainable basis
  - source sustainability - ensure availability of water
  - system sustainability - optimise cost of production and capacity building
  - financial sustainability – at least 50% cost recovery

In 2002, the Ministry of Rural Development introduced the *Swajaldhara* scheme and extended the key ingredients of the World Bank-sponsored pilot project, the Uttar Pradesh Rural Water Supply and Environmental Project or Swajal,<sup>9</sup> to the whole country during the Tenth Five-Year Plan (2002-2007). 20 percent of funds allocated to the ARWSP were directed to reform projects under the Swajaldhara Guidelines.

Swajaldhara was premised on the following principles:

- introduction of a demand-focused approach, which involved some community participation
- devolution of ownership of drinking water assets to panchayat; power to plan, implement, operate, maintain and manage scheme
- provision of 90% of project cost as Central Government grant
- community contribution of at least 10% of capital costs (cash/kind/labour/land or combination)
- 100% user responsibility for operation, maintenance & management costs

---

8 Guidelines have been introduced for convergence of water conservation/irrigation works taken up under the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 and the programmes of the Ministry of Water Resources.

9 Swajal introduced a demand-driven approach for drinking water in rural areas. The important features included user participation, cost recovery, creation of Village Water and Sanitation Committees and change in role of government – from provider to facilitator. Swajal was implemented between 1996 and 2002.

- change in government’s role from direct service delivery to planning, policy formulation, monitoring and evaluation, and partial financial support

However, the implementation of the reforms faced several difficulties and setbacks.

- The government agencies involved in implementation of drinking water supply policies were reluctant to surrender their powers to users.
- Some of the proposals, such as imposition of a part of capital costs on villagers, were politically unattractive.
- Panchayats lacked the capacity to take up the responsibility immediately.

Nevertheless, the Eleventh Five-Year Plan (2007-2012) retains the commitment to demand-led reforms and the Swajaldhara principles are upheld.

The Department of Drinking Water and Sanitation has prepared ‘Ensuring Drinking Water Security in Rural India - Strategic Plan 2011-2022’ to help operationalize the NRDWP. The aspiration of the Strategic Plan is that “[A]ll rural households have access to piped water supply in adequate quantity with a metered tap connection providing safe drinking water, throughout the year, that meets prevalent national drinking water standards...”. Its goal is “[t]o ensure that every rural person has enough safe water for drinking, cooking and other domestic needs as well as livestock throughout the year including during natural disasters”. For this purpose, the Department has identified five strategic objectives:

- (i) Enable participatory planning and implementation of schemes and source sustainability
- (ii) Water quality management
- (iii) Sustainable service delivery (operation and maintenance)
- (iv) Strengthen decentralized governance
- (v) Build professional capacity

### State Governments

Historically, the issue of rural drinking water supply has been addressed within existing state-wide legislation or ad hoc policy frameworks have been developed. Since the insertion of Article 243G in the Constitution, some States have attempted to address the issue of decentralisation, as reflected in amendments to existing, or enactment of new, panchayat-related laws. For example, under the Uttar Pradesh Panchayat Raj Act 1947 (amended in 2007), the gram panchayat is responsible for the construction, repair, maintenance and regulation of sources of drinking water supply. However, the exercise of this responsibility may be curtailed by conditions imposed by the State government.

## URBAN WATER SUPPLY

The regulatory framework governing water supply in urban areas is even more complex than that for rural areas.

### Central Government

#### *Institutions*

The Ministry of Urban Development formulates policies and strategies, frames guidelines, and assists States by providing financial assistance. Since 1973, the Central Public Health and Environmental Engineering Organisation (CPHEEO) functions as the technical wing of the Ministry and it deals with matters related to urban water supply and sanitation.<sup>10</sup> The Ministry of Urban Development & Poverty Alleviation formulates policies, supports and monitors programs, and coordinates activities relating to urban water supply and sanitation, among others.

#### *Laws*

There is no comprehensive national law dealing with urban water supply. The 74<sup>th</sup> constitutional amendment was followed by a comprehensive review of municipal laws. The Ministry of Urban Development & Poverty Alleviation prepared a Model Municipal Law in October 2003, which *inter alia* identified various core municipal functions, including the provision of water supply for domestic purposes, on its own or through any agency (section 47). The Department of Drinking Water Supply has prepared Draft Guidelines for Preparation of Legislation for Framing Drinking Water Regulations, 2007, for the regulation of drinking water.

CPHEEO has developed the Manual on Water Supply and Treatment 1999, which specifies standards of water supply in quantitative terms. Similarly, the Manual on Operation and Maintenance of Water Supply Systems, 2005 provides systematic guidelines that aim at improving the operation and maintenance services. These documents are not binding but they are a source of reference for government agencies involved in the urban water sector.

#### *Policies*

Over the years, the Ministry of Urban Development has adopted policies and programmes that include an urban water supply component.

The twofold objectives of the Accelerated Urban Water Supply Programme (AUWSP), which was launched during 1993-1994, were to provide safe and adequate drinking water; and to adopt appropriate and cost effective technologies to supply drinking water for towns having population less than 20,000 (as per the 1991 Census). The Scheme for Infrastructure Development in Mega Cities was also initiated during 1993-1994 to provide project-related finance for urban infrastructure including water supply in five metro cities - Mumbai, Kolkata, Chennai, Bangalore and Hyderabad.

---

<sup>10</sup> CPHEEO handled both urban and rural water supply until the NDWM (now RGNDWM) was set up in 1986 to take over rural water supply.

The focus of the JNNURM is on efficiency in urban infrastructure and service delivery mechanisms, community participation and accountability of ULBs/parastatal agencies towards citizens in a set of identified large cities. The duration of the Mission is seven years beginning from the year 2005-2006. Under JNNURM, the main-thrust of the sub-Mission on Urban Infrastructure and Governance is major infrastructure projects including those relating to water supply. The Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) (2005-2006) aims to improve urban infrastructure (including water supply) in all cities/towns as per 2001 census, except those covered under JNNURM. It subsumed the existing schemes of Integrated Development of Small and Medium Towns (IDSMT) and AUWSP. UIDSSMT is in operation until 2012. In 2008, the Central Government instituted the National Urban Water Awards for urban local governments and water boards to recognize, inspire and celebrate excellence in urban water management.

## State Government

### *Institutions*

Urban water supply falls within the purview of State governments. This means that they are authorised to make laws governing urban water supply and the Central Government has minimal or no role. However, there is no binding obligation on State governments to provide water supply to everyone.

State governments allocate water resources, generate funds and frame policies while Urban Local Bodies (ULBs) are responsible for planning, designing, and executing water supply projects.<sup>11</sup> They are also responsible for distribution and supply through piped networks, augmentation of water supplies, purification, operation and maintenance and collection of water charges. In some large cities, such as Delhi, separate agencies are in-charge of water and sanitation.

### *Laws*

Municipal legislations are the primary source of the powers, functions and duties of ULBs relating to urban water supply. These may take the form of Municipalities Act, Municipal Corporation Act, Water Supply and Sanitation Act etc. For ease of reference, they are collectively referred to as 'municipal acts'. Almost all municipal acts contain more or less similar provisions regarding water supply and sanitation, usually in a chapter on water supply and sewerage. The provisions generally specify the powers of ULBs, and the conditions of water supply to users.

Water supply is an obligatory function and, therefore, it is the legal duty of ULBs to provide water supply. However, the obligation is not absolute. Its fulfilment is made contingent on various other factors, such as proximity of the source, reasonableness of costs, etc. For example, the New Delhi Municipal Council's obligation to provide a sufficient supply of pure and wholesome water is qualified by the fact that it must only do what is practicable and at a reasonable cost. Similarly, the Andhra Pradesh Municipalities Act, 1965 states that a municipal

---

<sup>11</sup> Urban Local Bodies are classified into Municipal Corporations, Nagar Palika Parishads and Nagar Panchayats, depending on the size of the population.

council shall ‘so far as the funds at its disposal may admit, provide a sufficient supply of water fit for the use of inhabitants’ (section 138).

Further, different cities may be governed by different rules. In the State of Uttar Pradesh, for example, urban water supply is regulated partly by the Uttar Pradesh Water Supply and Sewerage Act, 1975 and partly by specific regulations applying to the type of cities, usually categorised according to population size. Certain major cities, such as Kolkata, have their own water supply and sanitation legislation. In some cases, different areas of the same city may be governed by different laws. Delhi is divided into three different areas - cantonment area, New Delhi area and rest of Delhi - which are governed by three different legislations relating to water supply, namely Cantonments Act, 2006, New Delhi Municipal Council Act, 1994 and Delhi Jal Board Act, 1998 respectively. As a result, the criterion of quantity, quality and regularity may vary and result in discriminatory treatment/ inequity.

### *Policies*

There has been renewed interest in specific state-level urban water policies. The objective of the Karnataka Urban Drinking Water and Sanitation Policy 2003 is to ensure universal coverage of water and sanitation services. All citizens are to be provided with a ‘minimum level of service’, which is not defined in the policy and must be inferred from CPHEEO guidelines.

## **V.2. WATER QUALITY**

The term ‘water quality’ is defined as “those physical, chemical and biological characteristics of water by which the user evaluates the acceptability of water”. The common causes of water quality problems in India are excessive fluoride, nitrate, arsenic, iron and salinity. Water quality regulation aims to ensure the quality of water for various uses. The National Water Policy 2002 emphasizes the need for regular monitoring of surface water and ground water quality (para 14). However, India does not have uniform and comprehensive water quality norms or standards. The water quality regulatory framework consists of a number of instruments with varying status in law.

### *Institutions*

A few national level institutions directly address water quality regulatory issues. However, their powers and functions are mostly directory in nature. The implementation of water quality regulation takes place at the local level, and the mode of implementation largely depends upon the nature of water resources and their prevailing uses. The relevant authorities at the national and state level include:

National level		State level	water sources
Ministry of Water Resources	Central Ground Water Board	State groundwater authorities	ground water
	Water Quality Assessment Authority (constituted in 2001)		standardise methods for water quality monitoring; ensure quality of data generated, including water quality management aspects
Ministry of Drinking Water and Sanitation (earlier part of the Ministry of Rural Development)		State Drinking Water Mission under RGNDWM and sanitation departments, through Public Health Engineering Departments, water authorities, locally constituted statutory agencies or panchayati raj institutions	drinking water in rural areas
Ministry of Urban Development and Poverty Alleviation	CPHEEO	municipal corporations, municipal authorities, water authorities, water boards or developmental authorities	urban water supply
Ministry of Environment and Forests	Central Pollution Control Board	State Pollution Control Boards	main rivers and big water bodies
Ministry of Health and Family Welfare			limited role; may change with the inclusion of drinking water under food category

However, the lack of inter-sectoral coordination has led to overlapping of functional areas and duplication of efforts.

#### *Laws*

The water quality regulatory framework in India is highly fragmented and complex. It is made up of a variety of instruments – statutes, rules, administrative regulations and guidelines – with varying scope and application. Further, different

standards apply in different contexts and they are not necessarily binding. Judicial decisions may also provide some assistance. For example, the right to water under Article 21 of the Constitution has been read to include a duty upon the State to provide its citizens with ‘clean drinking water’/ ‘clean and adequate drinking water’. The obligation of States vis-à-vis water quality regulation can also be derived from the right to health, which has been read under Article 21 of the Constitution.

### Central Government

#### *Laws & Policies*

The Water (Prevention and Control of Pollution) Act, 1974 represents the key legal framework addressing the issue of water pollution in India. In order to control discharge of effluents into rivers and streams, the Act prescribes two kinds of regulatory tools: permit system or the consent procedure and prescription of standards for discharge of effluents. The Central Pollution Control Board and State Pollution Control Boards have been constituted to maintain or restore the wholesomeness of water resources in India. They are also responsible for implementation of the Act.<sup>12</sup>

The regulation of water quality is also included in the rules, regulations and notifications issued under the Environment (Protection) Act, 1986.

Regulations	Uniform Protocol on Water Quality Monitoring Order 2005 issued by the Ministry of Environment and Forests
Notifications	Coastal Regulation Zone Notification, 1991
Rules	Hazardous Wastes (Management and Handling) Rules, 1989 (amended in 2000 and 2003)

The quality regulation of packaged ‘drinking water’ and ‘water used in the food during its manufacture’ is included within the scope of the Food Safety and Standards Act, 2006 (section 2(j)).

In addition, institutions (at the Central and State level) have prepared their own water quality norms and standards, which are different from each other. Some guidelines, standards and manuals prescribe standards only for drinking water quality. These include:

- (i) The Bureau of Indian Standards<sup>13</sup> (BIS)’s IS: 10500-1991 assesses the quality of water resources and monitors the effectiveness of water treatment and (piped) supply by the concerned authorities in rural areas. The standards are based on the WHO Guidelines. The standards are not absolute and it is difficult to hold actors accountable for violation of a specific standard.

<sup>12</sup> CPCB is also responsible for water quality regulation in the Union Territories.

<sup>13</sup> The Bureau of Indian Standards (BIS) is the national agency responsible for developing guidelines for drinking water quality standards in India.

Other relevant BIS standards include IS: 2488 for sampling methods, IS: 3025 for testing procedures, IS:14543 for quality of packaged drinking water, and IS: 13428 for quality of packaged natural mineral water.

(ii) CPHEEO's Manual on Water Supply and Treatment, 1999 recommends drinking water quality standards in urban areas and describes the parameters, such as turbidity, chlorides, fluorides, arsenic, cadmium, pesticides etc.

The major shortcoming of these instruments is that they are not mandatory/ legally binding; they merely constitute best practices. Nevertheless, government agencies directly or indirectly dealing with water quality issues have been using them for reference.

Other instruments address water quality from a broader perspective by including all sources of water and all uses. These include:

Ministry of Rural Development	National Rural Drinking Water Programme, 2009	
Central Pollution Control Board	Guidelines for Water Quality Management, 2008	cover different aspects of water quality regulation; highlight steps in preparation of water quality management plan
Central Pollution Control Board	Guidelines for Water Quality Monitoring, 2008	implement Guidelines for Water Quality Management; highlight steps in water quality monitoring
RGNDWM	Draft Guidelines for Preparation of Legislation for Framing Drinking Water Regulations, 2007	partially codifies drinking water standards; state authorities are responsible for ensuring that water intended for human consumption does not constitute a danger to public health and complies with IS 10500

## State Governments

### *Laws*

Water supply and public health fall within the legislative competence of State governments (Article 246(3) read with Schedule VII, List II, entries 6 and 17, Constitution of India). Consequently, they are also responsible for water quality regulation.

References to water quality standards can be found in a number of municipal laws. However, they do not use a uniform criterion to determine the acceptable standards of water quality. Instead, the criteria include vague terms such as 'fit for human consumption', 'wholesome drinking water',<sup>14</sup> 'pure and wholesome

<sup>14</sup> Karnataka Municipal Corporations Act 1976, section 197(1)

water',<sup>15</sup> 'sufficient supply of pure and wholesome', 'proper and sufficient', 'insufficiency and unwholesomeness', 'defective and insufficient', 'pure and fit for human consumption', etc. The criterion is highly discretionary and its meaning and scope is easily contestable. Further, implementation is usually subject to exceptions, such as 'reasonable costs'.

In some cases, municipal laws (e.g. Bengal Municipalities Act, 1932 and Bihar and Orissa Municipal Act, 1922) empower the State governments to adopt rules specifying exact quality standards. These rules are binding upon municipalities.

Even assuming the adequacy of water quality standards, there are no legal provisions which make it mandatory for agencies to conduct proper, effective and periodic monitoring and surveillance. As a result, monitoring and surveillance is discretionary, highly localised and fragmented (given the number of responsible institutional mechanisms). It also suffers from resource constraints (limited infrastructure, financial and human resources).

### *Policies*

The preservation of water quality in rural areas was one of the primary objectives of the Accelerated Rural Water Supply Programme (ARWSP). The ARWSP Guidelines mention water quality concerns and classify rural habitations with water resources of inadequate quality as 'not covered/ no safe source' habitations. However, there were no specific standards for determining quality.

The *Sub-Mission Projects on Water Quality* was launched under ARWSP in 1991-1992. Preventive and remedial measures were initiated to address water quality problems and to ensure safe drinking water to quality-affected habitations. The funding pattern between the Centre and State was 75:25. From April 1998, powers were delegated to States to plan, sanction and implement Sub-Mission Projects and 15 percent of the allocated ARWSP funds were earmarked for tackling water quality problems.

RGNDWM accorded high priority to water quality. The Mission document lays down parameters and safety standards on water quality. The Executive Guidelines for the Implementation of Water Quality Testing Laboratories were prepared for this purpose. The revised Sub-Mission Project on Water Quality (February 2006) directs States to increase the share of ARWSP funds used for tackling water quality problems to 20 percent. In exceptional cases, this ceiling can be exceeded to provide focused funding to tackle severe water contamination. NRDWP, which is ARWSP's successor, also emphasizes water quality standards.

The *National Rural Drinking Water Quality Monitoring and Surveillance programme* (launched in February 2006) seeks to institutionalize community participation and involvement of Panchayati Raj Institutions (Gram Panchayats and Village Water and Sanitation Committees) at the grassroots level for monitoring and surveillance of the quality of all rural drinking water sources. The positively tested samples will be checked at the district and state level laboratories.

---

15 New Delhi Municipal Council Act 1994, section 11(d)

### General outstanding issues

- lack of inter-sectoral coordination
- collection and transportation of water samples from remote rural areas to district laboratories for sampling and analysis
- financial outlay for trained staff, infrastructure and physical facilities etc. in laboratories
- data consolidation to convey meaningful information at district/ village level
- capacity building and public awareness for community-based programmes

### Issues in a Nutshell

- national water quality standards and procedures as part of a framework national drinking water law
- continuous water quality monitoring at source point and consumption point by local authorities
- establishment of water quality testing laboratories at local level
- effective and sustainable water quality monitoring - local participation with special consideration for women

## **V.3. SANITATION**

Earlier, sanitation used to describe the disposal of human excreta by different means such as cesspools, open ditches and pit latrines. The meaning of the term has expanded in recent years. Today, it is a comprehensive concept which includes liquid and solid waste disposal, food hygiene, and personal, domestic and environmental hygiene. The wider definition of sanitation has been adopted by the key policy documents on sanitation in India, such as the Total Sanitation Campaign Guidelines 2007 and the National Urban Sanitation Policy 2008.

### *Institutions*

Local government bodies – panchayats in rural areas and municipalities or corporations in urban areas – are primarily responsible for the provision of sanitation facilities. They are supported by the Central government and State governments, through enabling policies, budgetary support and capacity development.

The Department of Drinking Water Supply, which was formed in 1999, under the Ministry of Rural Development was the key Central Government agency dealing with sanitation in rural areas. It was renamed as the Department of Drinking Water and Sanitation in 2010 and conferred ministry status in 2011. It is now known as the Ministry of Drinking Water and Sanitation. The Ministry of Urban Development & Poverty Alleviation formulates policies, supports and monitors programs, and coordinates activities relating to urban water supply and sanitation,

among others. Similarly, the Ministry of Housing and Urban Poverty Alleviation is concerned with issues of urban employment, poverty and housing, including sanitation. The Department of Health and Family Welfare in the Ministry of Health and Family Welfare is responsible for the National Rural Health Missions, which has a sanitation component.

### *General Laws*

The judiciary has declared sanitation as a part of fundamental right to life under Article 21 of the Constitution of India [Box G].

#### **BOX G: RIGHT TO SANITATION AND COURTS IN INDIA**

- *Virender Gaur v. State of Haryana*, (1995) 2 SCC 577 (Supreme Court of India)  
“Article 21 protects the right to life as a fundamental right. Enjoyment of life and its attainment including their right to life with human dignity encompasses within its ambit, the protection and preservation of the environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Environmental, ecological, air, water, pollution, etc. should be regarded as amounting to violation of Article 21. Therefore, hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.”
- *L.K. Koolwal v. State of Rajasthan*, AIR 1988 Rajasthan 2 (High Court of Rajasthan)  
“preservation of the sanitation and environment falls within the purview of Article 21 of the Constitution as it adversely affects the life of the citizen and it amounts to slow poisoning and reducing the life of citizen because of the hazards created, if not checked.”

However, the legal framework governing sanitation remains underdeveloped in India; there is no specific law on sanitation. The regulatory framework relating to sanitation comprises laws, and different national and state-level policies and programmes, which are not legally binding and susceptible to modification/withdrawal.

### **RURAL SANITATION**

#### *Laws*

The Constitution gives State governments the authority to address sanitation (Seventh Schedule, List II, Entry 6). Further, Article 243G of the Constitution read with Eleventh Schedule, Entry 23 provides for the devolution of powers and responsibilities regarding health and sanitation to panchayats. A number of panchayat/ panchayati raj laws identify sanitation as one of the responsibilities of panchayats/ gram sabhas. However, the duty is usually framed in narrow terms and the broader issues, such as collection, transportation, treatment and disposal (and reuse), receive little or no attention.

## *Policies*

Although it lacks a specific mandate, the Central Government has been involved in the development and implementation of sanitation policies for rural areas. ARWSP represents the earliest effort to streamline rural sanitation initiatives. However the *Central Rural Sanitation Programme (CRSP)* (1986) was the first country-wide sanitation initiative. It adopted a supply-driven approach, focused on provision of infrastructure (household pour-flush toilets) and relied on subsidies to generate demand. This approach was based on the erroneous assumption that provision of sanitary facilities would lead to increased coverage and usage. It also did not pay adequate attention to ‘total’ sanitation, which includes improved hygiene behaviour, school and institutional sanitation, solid/liquid waste management and environmental sanitation. As a result CRSP failed to motivate and sustain high levels of sanitation coverage. It was restructured as the Total Sanitation Campaign in 1999.

The *Total Sanitation Campaign (Sampoorna Svachta Andolan)* is a demand-driven, community-led programme to ensure sanitation facilities in rural areas with broader goal to eradicate the practice of open defecation. The objective is to achieve open defecation-free villages by 2012. The major features are:

- demand-driven approach - users get the service they want and are willing to pay for
- encourages selection of location-specific technologies to match paying capacity
- idea of subsidy almost discarded - replaced with incentives
- Information, Education and Communication (IEC) and Capacity Building and Hygiene Education campaigns to create awareness and behaviour change and to generate demand for sanitation facilities
- participation of Panchayati Raj Institutions, co-operatives, women’s groups, Self Help Groups, CBOs and NGOs for implementation

In 2003, Nirmal Gram Puraskar, an incentive scheme, was introduced to incentivise 100 percent achievement of total sanitation by a Panchayati Raj Institution (see [Annex III](#)). In order to facilitate implementation of the Total Sanitation Campaign, the Ministry of Rural Development issued the Total Sanitation Campaign guidelines in 2004 (revised in 2007 and 2010). The revised TSC Guidelines (2007) called for convergence of efforts and integration with activities of other Departments like Education, Health and Women & Child Development. Accordingly, in 2011, the Ministry of Rural Development prepared draft guidelines expanding the scope of work under schedule 1, para 1 (ix) of Mahatma Gandhi National Rural Employment Guarantee Scheme to include access to sanitation facilities.

In addition to the existing provisions under the Total Sanitation Campaign, the Rural Sanitation and Hygiene Strategy (2011-2020) provides a framework to realize the vision of Nirmal Bharat, an environment that is clean, healthy and contributes to the economic and social wellbeing of all rural citizens. The three goals of the Strategy are creation of totally sanitized environments by 2017 (end of open defecation and

safe containment and disposal of human waste), adoption of improved hygiene practices by 2020, and solid and liquid waste management by 2022.

In addition to the above, the Ministry of Health and Family Welfare's National Rural Health Mission (NRHM) envisaged the formation of *Village Health and Sanitation Committees* (VHSCs) for every village in India by 2008. The committees function within the overall framework of Gram Sabha. Every hamlet within a revenue village is represented to reflect needs of weaker sections. Women constitute at least 50 percent of members whereas the non-governmental sector forms 30 percent of membership. However, the overall composition and nomenclature is left to the State government. The committees will receive an annual untied grant from the Central Government. The Village Health and Sanitation Committees guidelines were issued in May 2010.

## URBAN SANITATION

The regulatory framework governing urban sanitation is more complex than that for rural areas.

### Central Government

#### *Laws*

The provision of sanitation facilities (usually in the form of latrines and urinals) forms part of national laws, such as the Factories Act, 1948; Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996; Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979; Contract Labor (Regulation and Abolition) Central Rules, 1971; and Mines Rules, 1955, as well as laws addressing other issues, such as the Disaster Management Act, 2005. In October 2003, the Ministry of Urban Development and Poverty Alleviation developed a model municipal law, which addresses issues relating to drainage and sewerage and solid wastes.

The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 prohibits the employment of manual scavengers or construction of dry latrines, not connected to proper drainage channels. The law has been gradually adopted in many States. However, while the States have denied the existence of dry latrines and manual scavenging and claimed that most of them had been rehabilitated in alternative professions, there exists a large body of evidence that documents the continuing marginalization of manual scavengers.

The National Building Code of India, 2005 includes a section on 'Water Supply, Drainage and Sanitation'. The Bureau of Indian Standards (BIS) has also prescribed sanitation standards but these instruments are not legally binding. CPHEEO's Manual on Sewerage and Sewage Treatment, 1993 sets out technical norms for best practice in on-site sanitation and wastewater management. Although these norms are not mandatory, they provide guidance for engineers.

#### *Policies*

The Central Government's involvement in the urban sanitation sector is a relatively recent development. The National Urban Sanitation Policy 2008 has

been formulated to comprehensively deal with the challenges in urban sanitation. Its vision is that “all Indian cities and towns become totally sanitized, healthy and liveable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sanitation facilities for the urban poor and women”. The important features of the Policy are highlighted in Box H.

<b>BOX H: NATIONAL URBAN SANITATION POLICY 2008</b>	
<ul style="list-style-type: none"> <li>▪ comprehensive definition of sanitation</li> <li>▪ policy goals               <ul style="list-style-type: none"> <li>○ awareness generation and behaviour change</li> <li>○ achieving open defecation free cities</li> <li>○ integrated city-wide sanitation</li> </ul> </li> <li>▪ measures to achieve policy goals</li> <li>▪ State Level Urban Sanitation Strategies and State Reward Schemes – implementation monitoring by State-level apex body</li> <li>▪ model City Sanitation Plans (CSP) to operationalize State strategies               <ul style="list-style-type: none"> <li>○ community participation in creation and maintenance of infrastructure</li> <li>○ effective institutional arrangements at the city level</li> <li>○ central role of ULBs (or their equivalent structures) in sanitation activities</li> <li>○ public-private partnerships in key projects/activities</li> </ul> </li> <li>▪ technical assistance and support for awareness generation and capacity building</li> <li>▪ periodic rating of 423 Class 1 cities in respect of various sanitation-related parameters; best performers will be awarded Nirmal Shahar Puraskar</li> </ul>	

The Tenth Five-Year Plan (2007-2012) recommended an enhanced scope for the Accelerated Urban Water Supply Programme to include sanitation. This was followed by the inclusion of a sanitation component in a number of Central Government sponsored schemes.

Accelerated Urban Water Supply Programme (AUWSP)	subsumed under UIDSSMT
Mega City scheme	subsumed under JNNURM
scheme for Integrated Development of Small and Medium Towns (IDSMT)	subsumed under UIDSSMT
JNNURM	
UIDSSMT	
Scheme of Urban Infrastructure Development in Satellite Towns (UIDSST)	

Additionally the Ministry of Urban Development has formulated benchmarks for service delivery in the sanitation sector. These benchmarks will be used to appraise projects which are proposed for assistance under various schemes of the

Ministry as well as externally aided projects. The extent to which ULBs achieve the benchmark will be monitored.

Other ministries have also been involved in the development of sanitation-related policies/programmes/schemes. The Centrally Sponsored Scheme of Low Cost Sanitation for Liberation of Scavengers (now known as the Integrated Low Cost Sanitation (ILCS) Scheme) was initiated in 1980-81 to convert dry latrines into low cost pour flush latrines, rehabilitate workers engaged in the occupation of manual cleaning, and eliminate the practice of open defecation. The Ministry of Housing and Urban Poverty Alleviation has issued revised guidelines for the ILCS Scheme in 2008. Community toilet seats have also been constructed under the Valmiki Ambedkar Awas Yojana (VAMBAY, a successor to the National Slum Development Program).

### State Governments

#### *Institutions (parastatals)*

In some states, laws have been adopted to constitute a separate authority with full control over all aspects of water supply and sanitation (also known as parastatals). The requirement for an integrated organisation to regulate and develop water supply and sewerage was recognised during the 1960s to meet the scale of requirements, particularly in large cities and expanding urban areas. This approach was also encouraged by international organisations like the World Health Organization and the World Bank.

- Tamil Nadu Water Supply and Drainage Board Act, 1970
- Karnataka Urban Water Supply and Drainage Board Act, 1973
- Uttar Pradesh Water Supply and Sewerage Act, 1975
- Assam Urban Water Supply and Sewerage Board Act, 1985
- Kerala Water Supply and Sewerage Act, 1986
- Punjab Water Supply and Sewerage Act, 1986
- Orissa Water Supply and Sewerage Board Act, 1991

- Tamil Nadu Water Supply and Drainage Board Act, 1970
- Karnataka Urban Water Supply and Drainage Board Act, 1973
- Uttar Pradesh Water Supply and Sewerage Act, 1975
- Assam Urban Water Supply and Sewerage Board Act, 1985
- Kerala Water Supply and Sewerage Act, 1986
- Punjab Water Supply and Sewerage Act, 1986
- Orissa Water Supply and Sewerage Board Act, 1991

Special purpose authorities were also established by law in some metropolitan areas. These include Calcutta Metropolitan Water and Sanitation Authority, 1966; Chennai Metropolitan Water Supply and Sewerage Act, 1978; Hyderabad Metropolitan Water Supply and Sewerage Act, 1989 and Delhi Water Board Act, 1998.

## Limitations

- In theory, the parastatals are expected to prepare and implement schemes at the instance of the local authority. In practice, the parastatals determine the scope and coverage of the scheme and the local authority becomes a supplicant for the scheme.
- The laws do not specify quantum of water supply/ criteria according to which such quantum will be worked out.
- Parastatals are rarely accessible to the consumers; only accountable to state departments and their ministries.

There are separate laws and authorities for water and sanitation in cantonment areas (e.g. Cantonments Act, 2006).

Under public health laws and rules, the public health officers can issue directions to local authorities with regard to maintenance of public drains, provision of sanitary conveniences and abatement of nuisance. Examples include the Andhra Pradesh (Andhra Area) Public Health Act, 1939; the Assam Public Health Act, 2010; and the Goa, Daman and Diu Public Health Act, 1985.

## *Laws*

The Constitution gives State governments the authority to address sanitation (Seventh Schedule, List II, Entry 6). Further, Article 243W of the Constitution read with Twelfth Schedule, Entry 6 provides for the devolution of powers and responsibilities regarding public health and sanitation to municipalities. Most of the municipal/ municipality/ municipalities laws contain a chapter dealing with 'water supply and sanitation', and local authorities are responsible for the provision of these services. Judicial decisions have endorsed this duty of the local bodies. For instance, in *L.K. Koolwal v. State of Rajasthan*, AIR 1988 Rajasthan 2, the High Court of Rajasthan held:

“...Chapter VI deals with three of duties of the Municipality namely, primary duty, secondary functions and special duty. Cleaning public streets, places and sewers, and all spaces, not being private property which are open to the enjoyment of the public, whether such spaces are vested in the Board or not, removing noxious vegetation and all public nuisances are the primary duties of the Municipality. Furthermore, it provides that it is the primary duty of the Municipal Council to remove filth, rubbish, night-soil, odour or any other noxious or offensive matter. The primary duties will have to be performed by the Municipal Board and there cannot be any plea whether the funds are available or not; whether the staff is available or not.”

In most municipal laws, the mandate of the local authorities' duties is limited to the construction/ provision and maintenance of latrines and urinals and drainage. This, however, is subject to the availability of funds. Broader issues, such as collection, transportation, treatment and disposal (and reuse), receive little or no attention.

## *Policies*

The National Urban Sanitation Policy 2008 encourages the States to prepare State Sanitation Strategies taking into account their historic legacy with reference to sanitation, climate and physiographic factors, economic, social and political parameters and institutional variables, etc. Nine States have formulated their State Sanitation Strategies - Andhra Pradesh, Madhya Pradesh, Karnataka, Kerala, Uttarakhand, Uttar Pradesh, Maharashtra, Orissa and Chattisgarh. The State governments are also required to monitor the performance of cities using instruments such as citizens report cards, citizens monitoring committees, self-assessment systems, inter-city computations etc.

The recognition of the importance of sanitation by State governments is illustrated by the development of water and sanitation policies in some states, e.g. Karnataka Urban Drinking Water and Sanitation Policy, 2003, and specific sanitation policies in other states, e.g. Uttar Pradesh (Draft) Urban Sanitation Policy, 2009.

### Issues in a Nutshell

- recognition and realisation of basic right to sanitation
- comprehensive sanitation law and monitoring mechanism
- implementation of sanitation laws and policies with special emphasis on women, SCs/STs, children and other vulnerable sections
- improve inter-sectoral coordination
- capacity building measures and financial assistance to strengthen implementation and management powers of PRIs
- judicial mechanisms to compel local bodies to perform their mandatory duties related to sanitation

## **V.4. IRRIGATION**

Most of the surface and groundwater in India is used for irrigation. Therefore, irrigation law is one of the oldest and most developed areas of water law since the colonial period. According to the Constitution of India, State governments are responsible for the development of irrigation. Therefore, irrigation laws vest control and ownership over water resources in the State government. However, there is considerable variation in the nature of State irrigation laws. Some are broad-based while others address specific issues.

#### Broad-based statutes

- Karnataka Irrigation Act, 1965
- Maharashtra Irrigation Act, 1976
- Bihar Irrigation Act, 1997

#### Legislations focusing on specific topics

- minor irrigation: Rajasthan Minor Irrigation Works Act, 1953
- canals: Bengal Canals Act 1864, Punjab Minor Canals Act, 1905
- tanks: Tamil Nadu Irrigation Tanks (Improvement) Act, 1949 and West Bengal Tanks (Acquisition of Irrigation Rights) Act, 1974
- embankments: Assam Embankment and Drainage Act, 1953

#### *Reforms in irrigation laws*

Historically, the government has been responsible for construction and maintenance of irrigation canals and allocation of water to farmers. The reforms attribute the failure of irrigation schemes to this practice of administrative centralization and therefore seek to reduce the role of the government. They emphasise a specific issue – decentralization and participation – and propose a specific policy measure – transfer of part of control of irrigation systems to water user associations at the local level.

This reflects the concept of Participatory Irrigation Management (PIM), which envisages greater involvement of farmers in the management of irrigation systems. PIM was accepted as a policy by the Government of India and included in the National Water Policy of 1987. In April 1987, the Ministry of Water Resources issued guidelines for farmers' participation in water management, primarily for areas under the Centrally Sponsored Command Area Development Programme. In 1998, the Ministry formulated and circulated a model act to be adopted by the State Legislatures for enacting new irrigation acts/amending the existing irrigation acts for facilitating PIM.

The National Water Policy of 2002 encouraged the formation of water users' associations with authority and responsibility to facilitate management including maintenance of irrigation system (section 23(3)). Specific laws transferring some responsibilities of irrigation management from government agencies to Water User Associations (WUAs or farmers' organisations) at the primary level of the canal system were passed by several States.

#### Features

- Three-tiered structure - WUA or *pani panchayat* (primary level), distributory committee (secondary level) and project committee (project level)<sup>16</sup>
- Distribution - One WUA for every water user area
- Membership - all water users who are landowners in the area (usually men); reservation for women, scheduled castes and scheduled tribes in exceptional cases

---

<sup>16</sup> Some laws also provide for a state committee at the state level. For example, see Orissa Pani Panchayat Act, 2002 (section 9).

- Functions - regulation and monitoring of water distribution among members, assessment of water shares, equitable water supply, collection of service charges and user charges, operation and maintenance, and dispute resolution
- Rights - assured water supply, control over allocated water, and right to use groundwater in command area in addition to entitlement from canals

### Shortcomings

Most irrigation legislation needs updating – to reflect principles of water regulation and to recognise the changes that have resulted with the massive introduction of mechanised devices to pump groundwater. However, irrigation law reforms focus on one specific aspect of irrigation – management of water infrastructure by landowning farmers. The laws adopt a uniform model of WUAs and do not consider the diversity of conditions in different States.

WUAs are not permanent and stable as their existence depends on decisions taken at a higher level. For instance, the Maharashtra Water Resources Regulatory Authority or other designated authorities determine the command area of an irrigation project for which a WUA must be constituted. The Authority can also amalgamate or divide existing WUAs on a hydraulic basis. However, this exercise of power by government authorities is not counterbalanced by effective accountability mechanisms.

Further, the involvement of farmers is limited to management of irrigation infrastructure at the local level. They are responsible for ensuring the collection of water rates from farmers, passing on the backlog of maintenance works onto WUAs, and the recovery of operation and maintenance costs (a function that the government has failed to perform in the past). The ownership of water resources continues to vest in the State government. As a result, WUAs have little say about many aspects that are relevant for local-level decision-making such as the allocation of water across different uses in surface water sources.

The other shortcomings of the irrigation law reforms include:

- WUAs are not linked to democratically elected panchayati raj institutions
- binding nature of WUAs
- exclusion of water users who are not landowners but all farmers are not landowners and irrigation water use impacts domestic water use
- limited participation – specific water management tasks
- many responsibilities, few rights
- inadequate sharing of information between irrigation and revenue departments and WUAs
- reluctance of bureaucracy to surrender powers and functions to farmers

## Issues in a Nutshell

- delink water rights from land rights
- participatory governance – access to water and investment decisions at local level - political, socio-economic, gender-specific, religious and caste compositions
- individual farmer’s rights against WUA or the State
- equity and sustainability of water distribution
- accountability and transparency – right to information
- linkages between WUAs and traditional water rights regimes

## **V.5. GROUNDWATER**

Groundwater is an important source of freshwater in India. It accounts for around 58 percent of the total irrigated area and satisfies around 80 percent of drinking water need.<sup>17</sup> However, owing to indiscriminate exploitation, depletion and contamination of groundwater has become a serious problem in almost all parts of India. As early as 1987, the National Water Policy (revised in 2002) recognised need for regulation of groundwater.

### *Institutions*

The Central Groundwater Board, set up under the Ministry of Agriculture in 1972, and now a subordinate office in the Ministry of Water Resources, is responsible for groundwater investigation, exploration, development and management. Some States have established a State Groundwater Board, e.g. Andhra Pradesh.

The Central Groundwater Authority (CGWA) regulates and controls the management and development of groundwater resources in India. It identifies critical/ over-exploited areas for regulation and control of groundwater, and issues policy guidelines to state governments to take measures for the development and augmentation of groundwater. The creation of CGWA was the result of the directions of the Supreme Court in *M.C. Mehta v. Union of India*, (1997) 11 SCC 312.

### *Laws*

Legal regulation of groundwater is necessary to prevent further depletion and contamination and to augment the resource and restore its quality. However, in the absence of an exclusive law to regulate or control groundwater use, the legal framework in India comprises common law, and (formal) groundwater laws and (informal) customary laws at the state-level.

---

17 Planning Commission of India, Report of the Expert Group on ‘Groundwater Management and Ownership’ (Delhi: Government of India, Planning Commission, 2007).

### Common Law:

The regulation of groundwater resources in India is primarily based on the outdated rule of common law (or law developed through decisions of English courts) that considers groundwater as part and parcel of the land and grants preferential rights over groundwater to landowners. This rule ignores the nature and depth of groundwater aquifer, and that the shape and spread of groundwater aquifer has no relation to the property boundaries of the land on the surface.

This common law rule was endorsed by the courts during the pre-independence period.

*Karathigundi Keshava Bhatta v. Sunnanguli Krishna Bhatta*, AIR 1946 Madras 334

“[t]he general rule is that the owner of a land has got a natural right to all the water that percolates or flows in undefined channels within his land and that even if his object in digging a well or a pond be to cause damage to his neighbour by abstracting water from his field or land it does not in the least matter because it is the act and not the motive which must be regarded. No action lies for the obstruction or diversion of percolating water even of the result of such abstraction is to diminish or take away the water from a neighboring well in an adjoining land.” [p. 335]

This rule is also reflected in some laws dealing with land rights. According to illustration (g) to section 7 of the Indian Easements Act, 1882, every owner of land has the right “to collect and dispose within his own limits of all water under the land which does not pass in a defined channel and all water on its surface which does not pass in a defined channel”.

However, the common law rule should not be a dominant part of the legal framework governing groundwater in India.

- (i) It evolved when the knowledge of groundwater hydrology was minimal or nil. The possibility of over-extraction as limited and legal regulation was not required. These reasons have now become obsolescent.
- (ii) The right to pollution-free water is a part of the fundamental right to life (Article 21 of the Constitution). Over-exploitation of groundwater resources by one person is likely to affect availability for others. The application of the rule may violate the right to life.
- (iii) It ignores the inequity in access, use and ownership rights to land resources.

### State Groundwater Laws:

The state governments are responsible for the regulation and control of groundwater resources, including their use, conservation, management and development. In order to provide guidance to the state governments, the Ministry of Water Resources drafted the Model Bill to Regulate and Control the Development and Management of Groundwater (the ‘Model Bill’) in 1970, which was revised in 1972, 1992, 1996 and last in 2005, and circulated it to the States. The main features are:

- establishment of a State Groundwater Authority under direct control of the State government<sup>18</sup>
- authority regulates every groundwater user in notified area
- registration of existing groundwater uses in notified areas and of all wells, even in non-notified areas
- authority has power to grant or refuse, alter, amend or vary the terms of, or cancel permit/ license to groundwater users in notified area

Since 2002, some of the States have introduced separate laws to regulate and conserve groundwater resources. These laws extend State control over groundwater use by imposing registration of groundwater infrastructure, introducing permits for groundwater extraction in over-exploited regions and licensing requirements.

The State governments of Nagaland, Sikkim, Tripura, Punjab, Chandigarh, Manipur and Arunachal Pradesh have considered that it is not necessary to enact separate legislation.

#### Limitations

- application to particular geographical areas specified as notified areas
- access to groundwater linked to land; non-landowners/ occupiers are excluded
- continuance of existing groundwater users
- absence of specific prioritisation of uses
- limited concern for sustainability of groundwater use
- power to notify/ denotify area vests with state government - groundwater authorities only have advisory power – no public participation
- institutional multiplicity - other authorities are already involved in groundwater regulation
- overlapping mandates with CGWA/ State Pollution Control Boards

In addition to State groundwater laws, some metropolitan areas have enacted additional laws relating to groundwater extraction. These include the Chennai Metropolitan Area Groundwater (Regulation) Act, 1987 and the Delhi Groundwater Regulation Direction, 2010.

As previously mentioned, conservation is one of the bases for the introduction of water sector reforms. Some of the groundwater laws have incorporated the objectives of water conservation and development. For example, the preamble of

---

18 The West Bengal Groundwater Resources (Management, Control and Regulation) Act, 2005 provides for a decentralised institutional mechanism by setting up groundwater regulatory authorities at the state, district and corporation levels.

the Kerala Ground Water (Regulation and Control) Act, 2002 recognises the need for conservation. The title of the Andhra Pradesh law – the Andhra Pradesh Water, Land and Trees Act 2002 - also indicates the emphasis on ‘protection and conservation’. However, the laws do not mandate environmentally sustainable groundwater use by landowners. The groundwater laws also continue the sectoral treatment of surface water and groundwater. The Andhra Pradesh Land, Water and Trees Act, 2002 directly links surface water and groundwater in the context of environmental conservation but it addresses groundwater in the same manner as other laws.

### *Rainwater harvesting*

Rainwater harvesting to augment groundwater has received significant policy attention. The National Water Policy 2002 as well as the Karnataka State Water Policy 2002 recognise the role of traditional water conservation practices like rainwater harvesting, including rooftop rainwater harvesting to further increase the utilisable water resources (para 3(2) and section 6(21) respectively). The Model Groundwater Bill, 2005, recognises the adoption of rainwater harvesting as a method to improve the groundwater situation in critical areas (section 19).

In the absence of a comprehensive statutory framework for rainwater harvesting, legal provisions addressing rainwater harvesting are found in different water-related laws.

- Municipal laws: Tamil Nadu Municipal Laws Second Amendment Act 2003
- Groundwater laws: Bihar Groundwater (Regulation and Control of Development and Management) Act, 2006
- Building regulations: Kerala Municipality Building Rules, 1999 (amended in 2004)
- Statutes concerning parastatal bodies: Bangalore Water Supply and Sewerage Act, 1964 (amended in 2009)
- Water regulatory authority acts: Uttar Pradesh Water Management and Regulatory Commission Act, 2008

In 2008, the Ministry of Water Resources introduced the Groundwater Management and Regulation Scheme to demonstrate the efficacy of artificial recharge and rainwater harvesting techniques. The Ministry has also announced the Groundwater Augmentation Award (Bhoomijal Samvardhan Puraskar) and the National Water Award (Rashtriya Jal Puraskar) for Innovative Practices of Ground Water Augmentation through Rainwater Harvesting and Artificial Recharge/promoting Water Use Efficiency/Recycling & Re-use of water/Awareness creation.

### *Public Trust Doctrine*

The applicability of the public trust doctrine to groundwater was discussed in *Perumatty Grama Panchayat v. State of Kerala*, 2004 (1) KLT 731 and *Hindustan Coca-Cola Beverages (P) Ltd. v. Perumatty Grama Panchayat*, 2005 (2) KLT 554. The issue is not yet resolved and the appeal against the decision of the High Court of Kerala is pending before the Supreme Court [Box I].

### **BOX I: PLACHIMADA AND COCA-COLA CASE**

The Plachimada panchayat decided not to renew the exploitation license granted to the Coca Cola Company because of the lowering of the water table and decreasing water quality. The panchayat also ordered the closure of the plant on the ground that over-exploitation of water had resulted in acute shortage of drinking water. The company challenged the panchayat's authority before the High Court of Kerala.

The major legal issue was the right of a landowner to extract groundwater from his land and the power of the panchayat (or local bodies in general) to regulate the use of groundwater by private individuals.

The Single Judge observed that even without groundwater regulation, the existing legal position was that groundwater is a public trust and the state has a duty to protect it against excessive exploitation. The judge also made a link between the public trust and the right to life and thus recognised that a system which leaves groundwater exploitation to the discretion of landowners can result in negative environmental consequences. However, on appeal, the Division Bench asserted the primacy of landowners' control over groundwater in the absence of a specific law prohibiting extraction. The issue is now pending before the Supreme Court.

#### New Initiatives

Having recognised the adverse implications of the existing groundwater laws, the Planning Commission of India has undertaken an initiative to trigger changes in groundwater laws. In April 2011, the Planning Commission constituted a Sub-group under its Working Group on Water Governance to prepare a new Model Groundwater Bill addressing the flaws of the existing groundwater laws. The Sub-group has prepared a draft Model Groundwater Bill and submitted it to the Planning Commission in November 2011. Two public consultations were organised in July 2010 and September 2011 for comments and suggestions from a wider range of stakeholders. The final document as submitted by the Sub-group envisages various fundamental changes in the groundwater law, which include:

- abolition of groundwater rights based on ownership of land
- declare groundwater as a public trust and prevent groundwater from becoming a natural resource in private control
- legal protection of groundwater sources
- regulation and management of groundwater at the local level
- enhanced role for Panchayat Raj Institutions
- community participation in groundwater management

#### Further Advocacy

- circulation of the new groundwater model bill by the Central Government

- implementation of the new model groundwater bill by the states either by making changes in the existing law or by enacting a new law

## **V.6. REGULATORY AUTHORITIES**

Though in a nascent stage, regulatory authorities constitute an important part of institutional reforms in India. They are autonomous of the government in their day-to-day administration; yet they remain accountable to the government and ultimately to the State Legislature. They are responsible for balancing the interests of users and the market. Examples include the Securities and Exchange Board of India, the Telecom Regulatory Authority of India and State Electricity Regulatory Commissions. More specifically, the institutional reforms in the electricity sector provided the broad model for the new water regulatory authorities in India.

### ***V.6.1 State regulatory authorities***

The establishment of state-level regulatory authorities constitutes a key change in the institutional framework of the water sector. The rationale is to insulate water regulation from politics and vested political interests. The regulatory authorities are supposed to take over some of the functions of States. The earliest initiative was the Andhra Pradesh Water Resources Development Corporation Act 1997, which led to the establishment of a new water corporation. However, the corporation was headed by a minister and its members were mostly from the government. Therefore, it cannot be considered as an example of complete de-politicisation of water regulation.

The Maharashtra Water Resources Regulatory Authority (MWRRA) was established as an independent regulatory authority under the Maharashtra Water Resources Regulatory Authority Act 2005. MWRRA will regulate water resources within the State, facilitate and ensure judicious, equitable and sustainable management, allocation and utilization of water resources, fix the rates for use of water for agriculture, industrial, drinking and other purposes, etc. Separation from the executive branch of the government is a pre-requisite for the independent functioning of the regulatory authority. Unlike the Andhra Pradesh water authority, MWRRA is headed by a retired bureaucrat and consists of an ‘independent’ panel of experts.

The powers and functions of MWRRA include:

- establish a regulatory system for water resources, regulate use and apportion water entitlements between different uses
- promote efficient water use, minimize wastage and fix reasonable use criteria
- allocate specific amounts to specific users or groups of users according to water availability
- establish a water tariff system and fix criteria for water charges based on the full cost recovery principle

- sever link between control over land and control over water - lay down criteria for issuance of, and trading in, water entitlements/ quotas

Following the establishment of MWRRA, some other states have enacted similar laws to establish state-level water resources management/ regulatory authorities. These include the Arunachal Pradesh Water Resources Management Authority Act, 2009, the Uttar Pradesh Water Management and Regulatory Commission Act, 2008 and the Andhra Pradesh Water Resources Regulatory Commission Act, 2009.

The water regulatory authorities cannot replace government departments. In most cases, they lack the power to set criteria for all water uses and/ or to determine tariff rates, develop and manage groundwater resources, implement the human right to water, and set out environmental requirements for water regulation.

### **V.6.2 Urban regulatory bodies**

In October 2011, the Government of Delhi announced its plan to revamp the entire water management and distribution system in Delhi under the guidance of the Planning Commission. This includes a proposal to create a 'new administrative regime' involving an urban water regulatory body on the lines of the Delhi Electricity Regulatory Commission to streamline the water management system and to fix water tariffs.

#### Issues in a Nutshell

- existing model is inadequate
  - The complete de-politicization of water allocation may limit the avenues for public participation in the decision-making process.
  - accountability: The authorities are not a part of the electoral process.
  - Powerful land owners, industrialists, large scale farmers etc. may influence the authority in water allocation. This may adversely affect the interests of poor and disadvantaged groups.
  - absence of mandate for water quality and its conservation
  - absence of defined criterion of equitable sharing
  - implications of potential trading in water entitlements

#### Future Advocacy

- promote an alternative model

The Planning Commission has also constituted a Sub-group under its Working Group on Water Governance to prepare a new framework water law. Some of the features of the proposed law include:

- explicit recognition of the human right to water

- declaration of water as a public trust
- prioritisation of water allocations
- emphasis on water quality
- emphasis on decentralisation and participation as guiding principles of institutional framework

## **VI. WHAT ARE THE CHALLENGES?**

### **VI.1 WATER IS A TRADABLE ECONOMIC GOOD**

A majority of the water sector reforms are based on the view that water is a tradable economic good. This has led to the introduction of private sector participation and concepts such as water rights and entitlements, and user charges for cost recovery. This may lead to the denial of access to water for those lacking the financial capacity to pay for water or the weaker sections of society.

### **VI.2 DISCONNECTION BECOMES A FEATURE OF WATER LAW**

The reforms view water as an economic good and therefore, the authorities can disconnect private water supply in case of non-payment of bills. Such provisions are included in the Uttar Pradesh Water Supply and Sewerage Act, 1975 (section 72), the New Delhi Municipal Council Act, 1994 (section 169) and the Mumbai Municipal Corporation Act, 1988 (section 279). This may facilitate the implementation of reforms by bringing in revenue and ensuring financial sustainability of operations. But the possibility of disconnection may also adversely affect the realisation of the human right to water. In the United Kingdom, the Water Industry Act, 1991 specifically provided for the possibility to disconnect a service pipe to an occupier who failed to pay the charges due to the operator. A number of households were disconnected as water bills increased significantly. However, following a legal challenge, the UK Parliament adopted amendments to the law in 1999 that specifically prohibit disconnection for non-payment of water charges to someone's main home.

The possibility of disconnection is particularly significant in India, where many villages are dependent on groundwater for drinking water supply and tube-wells have become a necessity in response to a rapid fall in the water table. In these villages, disconnections would lead to denial of access to water. Further, a reduced role for the government in the water sector will lead to situations where the government ceases to invest in, and in some cases withdraws from, the operation and management of the existing infrastructure that provides public access to water. As a result, future disconnections will have a more severe impact on affected individuals.

### **VI.3 PUBLIC SOURCES OF WATER**

Rural drinking water schemes provide for private water connections as well as public stand posts (e.g. hand pumps). However, public stand posts are usually closed soon after the operationalization of the scheme either because of repeated non-payment of charges or the desire to promote membership of schemes. In the urban context, some laws such as the Calcutta Metropolitan Water Supply and Sanitation Authority Act, 1966 (section 45(2)) and the New Delhi Municipal Council Act, 1994 (section 154) specifically provide that the relevant authority has the power to provide public stand posts free of charge. However, in the course of implementing urban water sector reforms, and in order to reduce revenue losses, the JNNURM and UIDSSMT schemes envisage phasing out of public stand posts. The Ministry of Rural Development's Strategic Plan 2011-2022 also seeks to ensure that by 2022, less than 10 percent of rural households use public taps and less than 10 percent use handpumps.

This may adversely affect the poor who, in several cases, rely on groundwater to meet their drinking water needs. However, the reforms do not provide alternatives to ensure access to water.

### **VI.4 NEGATIVE IMPACT ON WEAKER GROUPS**

The water law reforms have led to differential, and often discriminatory, treatment of certain groups of people. Irrigation law reforms usually restrict the membership of WUAs to landowners. These laws are not concerned with allocation of water to non-members (including the poor and/or landless farmers). Urban water supply reforms, which focus on relatively affluent areas with lesser water shortage issues, may reinforce the socio-economic inequalities in access to water to the poor and/or those residing in areas with a lower water table. In urban and rural areas, the removal of public stand posts, which are the only alternative source of water supply in many cases, has also emerged as a feature of the reforms.

However, in some cases, the reforms may provide access to water to individuals who are otherwise excluded. Private water companies may provide water services to slums/jhuggis/settlements that have been refused access by the government on ground of non-regularisation. In Delhi, there have been cases where politicians have used their allotted quotas to supply water to slums, which fall outside the jurisdiction of the Delhi Jal Board. However, such cases are an aberration rather than the rule and the reforms fail to remedy lack of regularisation.

### **VI.5 LIMITED UNDERSTANDING OF DECENTRALISATION AND PARTICIPATION**

The water law reforms conceive a very limited form of decentralisation and participation. In irrigation law reforms, decentralisation has translated into formation of local water user associations (comprising of landowners), rather than giving more powers and resources to democratically elected/constituted bodies (village panchayats and gram sabhas).

Water law reforms limit participation to the tail end of the process rather than democratizing the decision making process. Under irrigation law reforms as well as rural drinking water schemes, for example, community participation translates into few rights and several new obligations and responsibilities. The users/beneficiaries of the schemes only include the people who pay part of the capital costs of the scheme. Therefore, it represents only a segment of the public.

## **VI.6 CONSERVATION IS A FRONT FOR ENVIRONMENT-UNFRIENDLY REFORMS**

Environmental concerns formed the basis for the introduction of water sector reforms. However, conservation and protection of water are the source of operative principles rather than the outcome. The reforms sideline the more substantive contribution that integration of the environment can bring to addressing water issues. The environmental content of water policies is not reconsidered, for example, in terms of the inclusion of the precautionary principle.

Environmental issues have received very little consideration in the implementation of the reforms. On the contrary, the reforms' focus on water as an economic good may result in higher water use because private actors may encourage water users to use more rather than less water where the capital costs of investments are to be recovered through user charges.

## **VI.7 DEMOCRATIC IDEALS ARE NOT FULLY REALISED**

Water law reforms suffer from a serious democratic deficit. They have failed to incorporate key democratic procedures - access to information regarding the proposed reforms, public participation in the decision-making process, and access to courts for grievance redressal. This lacuna can be addressed by ensuring free flow of information about proposed/ ongoing reforms, greater public/ civil society involvement from early stages of the reform process, and discussion and debate among elected public representatives before adoption of reforms.

## **VII. WHAT IS THE AGENDA FOR FURTHER ACTION?**

### **VII.1 RIGHT TO INFORMATION, TRANSPARENCY AND ACCOUNTABILITY**

Water sector reforms have led to the development of new water laws and policies. But they often lack provisions for procedural rights, including the right to information about the activities that are being undertaken as part of the reform process, which is required to ensure transparency and accountability of water reforms. This is ironical as one of the reasons for the introduction of water law reforms was the lack of accountability of the government. The devolution of powers to local bodies at the lowest level (such as Gram Sabhas) can provide a forum for airing public grievances and ensure their redressal. This will promote

greater transparency and accountability. Annex IV includes some information on the Right to Information Act, 2005.

## **VII.2 IMPLEMENTATION AND ENFORCEMENT OF THE HUMAN RIGHT TO WATER AND SANITATION**

The judicial recognition of a human right to water is a significant development. However, in the absence of express legal provisions that define the fundamental right to water, water cannot be guaranteed to every individual irrespective of caste, gender, land rights and financial ability to pay. The exclusion of certain individuals and groups will create further problems where they can no longer rely on public sources of water either. It is, therefore, necessary to improve access to information about, and access to justice for the enforcement of, the human right to water.

Similarly a number of efforts are underway to improve the sanitation scenario in India. The government's investment has increased considerably and various policies and schemes are being implemented. The Delhi Declaration, which is an important outcome of the Third South Asian Conference on Sanitation (SACOSAN III) held in Delhi in 2008, recognises access to sanitation as a basic right, which should be accorded national priority. It also affirmed the commitment to achieve the national goal and the Millennium Development Goals on total and sustainable sanitation in a time-bound manner. However despite India's moral commitment to recognise sanitation as a basic right after the Delhi Declaration, serious efforts to recognise/ incorporate the human right to sanitation into the relevant laws and policies are missing.

## **VII.3 DRINKING WATER LEGISLATION**

A drinking water law is necessary to ensure the implementation and enforcement of the fundamental right to water. Critics may point to the non-implementation of existing laws and argue that a drinking water law will not provide the solution. Nevertheless, such a law can curb the dismantling of drinking water policies that were introduced by the government before the beginning of the reform process; and counteract the negative impacts of some of the water law reforms.

## **VII.4 EFFECTIVE DEVOLUTION OF POWER TO DEMOCRATICALLY ELECTED LOCAL BODIES**

The 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments envisage greater devolution of powers to local bodies. However, water law reforms promote limited and ineffective devolution of some powers and several responsibilities to local institutions. In order to promote effective regulation of water resources, the State governments must devolve functions, finances and functionaries, in accordance with the Constitution. An example of successful devolution from Porto Alegre, Brazil is discussed in Box J.

#### **BOX J: DEVOLUTION OF POWERS TO LOCAL BODIES: PORTO ALEGRE**

The city council of Porto Alegre, Brazil transformed its water department into the Departamento Municipal de Agua e Egesto (DMAE) or the Municipal Department of Water and Sanitation Sewage. DMAE is wholly owned by the municipality but it has operational autonomy and financial independence. DMAE can make its own decisions on how to invest the collected revenues. DMAE does not receive subsidies from, or makes payments to, the municipality except for services provided by other public departments. DMAE can also borrow money without involving the municipality.

DMAE's accountability is ensured through a well-defined management structure. Additionally, DMAE is subject to audit and it is expected to reflect the popular will on the allocation and reinvestment of its revenues. All decision-making processes are open and transparent and the management is accountable to civil society groups.

### **VII.5 REVISITING WATER LAW REFORMS**

Water sector reforms provide the policy context for water law reforms. They are not concerned with addressing the shortcomings of existing water laws. Moreover, the sectoral nature of water law reforms reflects a 'cherry-picking' approach. Usually, water law reforms have the effect of superimposing new rights and obligations on existing legal frameworks. They also fail to recognize the need for solutions tailored to local circumstances.

The water law reforms may take the form of legislation in new fields and legislation updating or amending existing acts. This is supplemented by a host of other measures, including government orders, guidelines and related instruments, which are sometimes just as significant as legislation in their impacts. The Swajaldhara Guidelines, which provided the framework for completely restructuring drinking water supply in rural areas, were adopted in the form of an administrative decision of the Ministry of Rural Development without a specific parliamentary mandate, and without discussing the appropriateness of the mechanism with the elected public representatives.

## ANNEXES

### **ANNEX I: DIVISION OF POWERS IN RESPECT OF WATER**

Constitution of India: Article 246 and Seventh Schedule

List I – Union List – Parliament has exclusive power to make laws

List II – State List – State Legislature has exclusive power to make laws

List III – Concurrent List – Parliament and State Legislature have exclusive power to make laws

<b>STATE GOVERNMENTS</b>	
	Primary responsibility for lawmaking in respect of water supplies, irrigation and canals, drainage and embankments, water storage and water power [Entry 17 of List II of the Seventh Schedule of the Constitution of India]
<b>CENTRAL GOVERNMENT</b>	
1.	<p>Power to regulate and deal with inter-state rivers and river valleys [Entry 56 of List I of the Seventh Schedule]</p> <p>River Boards Act, 1956</p> <ul style="list-style-type: none"><li>• framework for the establishment of river boards by the Central Government to advise state governments concerning the regulation or development of an inter-state river or river valley</li><li>• not been applied in practice and boards have not been established</li><li>• The river boards could not have provided a framework for river basin-wide planning because of their advisory nature.</li></ul>
2.	<p>Power to frame laws on subjects that are not within its powers, if two or more State legislatures decide that the Centre should pass such laws [Article 252]</p> <p>Water (Prevention and Control of Pollution) Act, 1974</p> <ul style="list-style-type: none"><li>• elaborate administrative scheme through a licensing system to prevent, and protect against, water pollution and maintain and restore the wholesomeness of water</li><li>• The Central Pollution Control Board and the State Pollution Control Boards set standards and regulations for prevention and control of pollution.</li></ul>

3.	Power to frame laws to resolve inter-state water disputes [Article 262]	Inter-State River Water Disputes Act, 1956 <ul style="list-style-type: none"> <li>• establishment of specific tribunals to adjudicate inter-state river disputes that have not been solved through negotiations</li> <li>• used in several cases, including the Narmada Water Disputes Tribunal</li> </ul>
----	---	--

## **RIGHTS AND DUTIES UNDER THE CONSTITUTION OF INDIA**

### *Part III*

#### *Fundamental Rights*

Article 14: The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India.

Article 15(2): No citizen shall on grounds only of religion, race, caste, sex, place of birth or any of them, be subject to any disability, liability, restriction or condition with regard to the use of wells, tanks, bathing ghats...

Article 21: No person shall be deprived of his life or personal liberty except according to procedure established by law.

### *Part IV*

#### *Directive Principles of State Policy*

Article 37: The provisions contained in this Part shall not be enforceable by any court, but the principles therein laid down are nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws.

Article 39(b): The State shall, in particular, direct its policy towards securing that the ownership and control of the material resources of the community are so distributed as best to subserve the common good.

Article 47: The state shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties.

### *Part IVA*

#### *Fundamental Duties*

Article 51-A(g): It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures.

## ANNEX II: PRIVATE SECTOR PARTICIPATION

<p>National Water Policy 2002 [para 13 – Private Sector Participation]</p>	<p>PSP should be encouraged in planning, development and management of water resources projects for diverse uses, wherever feasible. PSP may help in introducing innovative ideas, generating financial resources and introducing corporate management and improving service efficiency and accountability to users. Depending upon the specific situations, various combinations of PSP, in building, owning, operating, leasing and transferring of water resources facilities, may be considered.</p>
<p>JNNURM Guidelines 2005</p>	<p>PSP in development, management and financing of Urban Infrastructure would be clearly delineated. (para 3.iii)</p> <p>Projects with PSP “will be given priority over projects to be executed by Urban Local Bodies/Parastatals themselves, as this will help leverage private capital and bring in efficiencies”. (para. 14.4)</p> <p>The optional reforms that need to be implemented at the state level and at the level of para-statal agencies include “encouraging Public-Private Partnership”. (para 2.10)</p>
<p>Model Municipal Law 2003</p>	<p>Every Municipality shall provide on its own or arrange to provide through any agency the following core municipal services – water supply for domestic, industrial and commercial purposes (section 47(1)(a)(i)).</p> <p>“[S]ubject to the provisions of any State law relating to planning, development, operation, maintenance and management of municipal infrastructure and services, a Municipality may, in the discharge of its functions specified in section 47...promote the undertaking of any project for supply of urban environmental infrastructure or services by participation of a company, firm, society, trust or any body corporate or any institution, or government agency or any agency under any other law for the time being in force, in financing, construction, maintenance and operation of such project of a Municipality irrespective of its cost (section 167(a)).</p>

The urban local bodies in several cities have directly entered into partnerships with private companies to undertake some or all of the functions involved in the provision of drinking water.

#### **PPP IN THE TIRUPUR WATER SUPPLY AND SANITATION PROJECT**

The Tirupur Water Supply and Sanitation Project, which was implemented in Tamil Nadu in 2005, is the first experiment in PPP in the water sector in India. The Government of Tamil Nadu, along with the Tamil Nadu Corporation for Industrial Infrastructure Development Limited and the Tirupur Exporters Association, approached the Infrastructure Leasing and Financial Services, a non-banking financial services company, for assistance to raise finances for the project to develop infrastructural facilities relating to water treatment and supply and sewage treatment in order to enhance their productivity and export potential.

The Government of Tamil Nadu and the Tirupur Municipality jointly granted a contract to the New Tirupur Area Development Corporation Ltd. (NTADCL) to develop, finance, design, construct, operate, maintain and transfer on strictly commercial principles, on an integrated basis, the water treatment and supply facilities and sewage treatment facilities including the right to draw water from the river Cauvery.

Following an international competitive bidding process, NTADCL selected a consortium comprising of the Mahindra Group, Bechtel Enterprises and the United Utilities International, UK for the design and construction of the project facilities and their operation and maintenance.

### ANNEX III: INCENTIVE SCHEMES - *NIRMAL GRAM PURASKAR*

In order to strengthen the Total Sanitation Campaign, the Ministry of Rural Development launched the ‘Nirmal Gram Puraskar’ (clean village prize), in October 2004. This incentive scheme promotes sanitation in rural India with a cash reward. The main objectives are:

- (i) to bring sanitation to the forefront of social and political discourse for development in rural India;
- (ii) to develop open defecation free and clean villages that will act as models for others to emulate;
- (iii) to give incentive to Panchayati Raj Institutions (PRIs) to sustain the initiatives taken by them to eliminate the practice of open defecation from their respective geographical area by way of full sanitation coverage; and
- (iv) to increase social mobilisation in TSC implementation, by recognising the catalytic role played by organisations in attaining universal sanitation coverage.

PRIs that achieve 100 percent sanitation coverage of individual households and schools, freedom from open defecation and environmental cleanliness are eligible for the award. In addition, individuals and organizations, who have been the driving force for effecting full sanitation coverage in their respective geographical areas are also eligible. The incentive pattern (in Rs. lakh) was based on population criteria as follows:

Particulars	Gram Panchayat					Block		District	
	Less than 1000	1000 to 1999	2000 to 4999	5000 to 9999	10000 and above	Up to 50000	50001 and above	Up to 10 lakh	Above 10 lakh
<b>PRI</b>	<b>0.50</b>	<b>1.00</b>	<b>2.00</b>	<b>4.00</b>	<b>5.00</b>	<b>10.00</b>	<b>20.00</b>	<b>30.00</b>	<b>50.00</b>
<b>Individuals</b>	<b>0.10</b>					<b>0.20</b>		<b>0.30</b>	
<b>Organisation/s other than PRIs</b>	<b>0.20</b>					<b>0.35</b>		<b>0.50</b>	

However, following the Nirmal Gram Puruskar Guidelines 2010, these incentive amounts will only be offered to PRIs, and organisations and officials will receive citations and mementos in recognition of their efforts.

#### **ANNEX IV: RIGHT TO INFORMATION ACT, 2005**

The Right to Information Act, 2005 provides citizens the right to access ‘information’<sup>19</sup> that is already held by or is under the control of a ‘public authority’. However, the right is not absolute and certain categories of information are exempt from disclosure, unless it is in public interest. The procedure for obtaining information is as follows:

- The application should be written in Hindi, English or the official language of the area.
- The applicant is required to provide his/her name and complete postal address in the application; not the reasons for seeking the information.
- The application should be submitted to the designated Public Information Officer of the public authority by post or through electronic means or personal delivery.
- The application must be accompanied by the prescribed application fee, which is payable in cash or through a demand draft or a banker’s cheque or an Indian Postal Order payable to the Accounts Officer of the public authority. No fee is to be paid by applicants below the poverty line or if the information is provided after the prescribed period of thirty days. The applicant may be required to pay further fee for providing the information.
- The particulars can be found on the website of the public authority or the RTI portal ([www.rti.gov.in](http://www.rti.gov.in)).

In the context of the ongoing water law reforms, the right to information has been invoked to seek information that can draw attention to the external pressures that are shaping the reform agenda. In Delhi, activists, led by a NGO called *Parivartan*, used the Delhi Right to Information Act, 2001 to seek information about the World Bank’s Delhi Water Supply and Sewerage Project. The resulting disclosure of information about the involvement of the World Bank in appointment of Price Waterhouse Coopers as a consultant led to intense public criticism of the project. Finally, the Delhi government withdrew its loan application to the World Bank and the project has been dropped.

---

19 ‘Information’ is defined as any material in any form and includes information relating to any private body which can be accessed by the public authority under any law in force.

**ANNEX V: INDICATIVE LIST OF NETWORKS AND PRACTITIONERS IN THE WATER AND SANITATION SECTOR**

	<b>Name of organization</b>	<b>Contact details</b>
1.	ACWADAM	Plot No.4, Lenyadri Cooperative Housing Society, Sus Road, Pashan, Pune 411021, Maharashtra Tel: +91-20-25871539 Email: acwadam@vsnl.net Website: www.acwadam.org
2.	Arghyam	2nd Floor, 840, 5th Main, Indiranagar 1st stage, Bangalore 560038, Karnataka Tel: +91-80-41698941/42 Fax: +91-80-41698943 Email: info@arghyam.org Website: http://www.arghyam.org/
3.	Bharatiya Agro Industries Foundation (BAIF) Development Research Foundation	Dr. Manibhai Desai Nagar, Warje, Pune 411058, Maharashtra Tel: +91-20-25231661 Fax: +91-20-25231662 Email : baif@vsnl.com Website : www.baif.org.in
4.	Biocon Foundation	20th KM Hosur Road, Electronic City, Bangalore 560100, Karnataka Tel: +91-80-28082808 Email: contact.us@bioconfoundation.com Website: www.bioconfoundation.org
5.	Centre for World Solidarity	12-13-438, Street No.1, Tarnaka, Secunderabad 500017, Andhra Pradesh Tel: +91-40-2700 7906/2701 4300/2701 8257 Fax: +91-40-2700 5243 Email: info@cfsy.org Website: www.cwsy.org
6.	Development Alternatives	111/9-Z, Kishangarh, Vasant Kunj, New Delhi 110070 Tel: +91-11-26134103/26890380 Fax: +91-11-26130817 Email: tara@devalt.org Website: http://www.devalt.org/
7.	Gramalaya	No.12, 4th Cross West, Thillainagar, Tiruchirappalli 620018, Tamil Nadu Tel: +91-431-4021563/2740263 Email: gramalaya@hotmail.com Website: www.gramalaya.in
8.	Jal Bhagirathi Foundation	D-66 (B), Sawai Madho Singh Road, Jaipur 302 016, Rajasthan Tel: +91-141-2280964/4025119 Fax: +91-141-4025119 Email: jal@jalbhagirathi.org Website: www.jalbhagirathi.org
9.	JalaSpandana, South Indian	72, 7th Cross, C.T. Street, Vasanthnagar, Bangalore

	Farmers' Organization for Water Management	560 052, Karnataka Tel: +91-80-41130222 Email: info@jalaspandana.org Website: www.jalaspandana.org
10.	Mysore Relief and Development Agency (MYRADA)	#2, Service Road, Near Domlur Post Office Domlur, Bengaluru 560071, Karnataka Tel: +91-80-2535 2028 Email: myrada@bsnl.in Website: www.myrada.org
11.	Naandi Foundation	502, Trendset Towers, Road No 2 Banjara Hills, Hyderabad 500034, Andhra Pradesh Tel: +91-40-23556491/92 Fax: +91-40-23556537 Email: info@naandi.org Website: www.naandi.org
12.	Outreach	109, Coles Road, Fraser Town, Bangalore 560005, Karnataka Tel: +91-80- 5545365,5307532,5306089 Fax: +91-80- 5307533 Email: outreach@vsnl.com Website: www.outreachindia.org
13.	Samarthan Centre for Development Support	36, Green Avenue, Behind Sagar Campus, Chunna Bhatti, Bhopal 462016, Madhya Pradesh Tel: +91-755-2467625/5273713/5293147/2420918 Fax: +91-755-2468663 Email: smarth_bpl@sancharnet.in Website: www.samarthan.org
14.	Society for Promoting Participative Ecosystem Management (SOPPECOM)	16, Kale Park, Someshwarwadi Road, Pashan, Pune 411 008, Maharashtra Tel: +91-20-25880786/6542 Fax: +91-20-25886542 Email: soppecom@gmail.com Website: www.soppecom.org
15.	Tarun Bharat Sangh	Tarun Ashram, Bheekampura-Kishori, Thanagazi, Alwar 22, Rajasthan Tel: +91-1465-225043 Email: info@tarunbharatsangh.org Website: www.tarunbharatsangh.org
16.	WaterAid	C-3, 1st Floor, Nursery School Building, Nelson Mandela Marg, Vasant Kunj, New Delhi 110070 Tel: +91-11-46084400 Fax: +91-11-46084411 Email: waindia@wateraid.org Website: www.wateraid.org