

# PRICING DRINKING WATER-IS IT ETHICAL? - TEACHING NOTE

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## **Abstract:**

*Existence on earth cannot be visualized without water and it is evident from the fact that two-third of the earth's surface comprises of water alone which makes it significant in growth of any country. In India, demand has increased rapidly, supply has not kept pace and the country is facing acute shortage. Shortages are reported hindering agricultural and manufacturing production. According to recent reports, major cities in India will face a zero-water day in the not too distant future and may even become uninhabitable. It is also estimated that approximately two-third of Indian cities are short of water and if it is depleted, it's the end of the city.*

*Policy makers working on behalf of the Government of India are of the opinion to increase the price of drinking water. The drinking water has been available for almost free, many Indians inadvertently waste water. Policy makers have stated that they will increase the price of water but the problem lies with 15% of population in India that is financially weak. Will they be able to afford drinking water? Water being the fundamental right; is increase in price a fair solution? Is it ethical to price the water which is necessitating for people? The case presents ethical dilemma for policy maker whether to price the water or not.*

*Key words-drinking water, water shortage, water pricing, ethics*

## **CASE POSITIONING**

This case can be used for teaching the students at post Graduate level, applicable to following courses:

- Management Ethics.
- Environmental Management.
- Public Policy.

## **EXPECTED LEARNING OUTCOMES**

This case is expected to reflect the importance of water in life.

- To forecast / foresee the consequences of depletion/scarcity of water in future.
- It aids/helps in understanding of water management and waste water management.

- This creates the awareness about social, environmental, economical impacts of abusive usage of water.
  - It is expected to bring ethical concerns with respect to public policy in water pricing.
  - It is aimed to provide meaningful insights into management ethics and principles of ethics.
  - It is also aimed to provide understanding that how ethical dilemmas are formed and how they could get resolved through various principles of ethics.
- Water standards which require upgraded systems.
  - Water storage systems for growing population.
  - Unpredictable droughts & floods.
  - Socio-economic measures.

**2. *What are the other alternative options available to government of India to address the above problem?***

Challenges in the management and development of water resources have emerged in the past few years. There are various reasons why water infrastructure needs constant maintenance and repairs. We have to resort raising money through new billing systems and fee structures for updating of water systems in various cities is overwhelming some utilities. Installing prepaid water meters is another effective way to address the above problem. In the prepaid water meter system, a base price is assigned for certain amount of water and the user can pay and then use according to his needs through internet or recharge booths.

Although the water crises have grown, the local initiatives in the water conservation are slowly responding to these challenges. At the time of investment, the government needs to encourage end-users to install water-saving devices. It could be when they build a factory or house. End-users should be made aware of the options available for saving water. Promotion of cost savings benefits should be done. By revised changes by-laws and codes of building practices, the end-users

### **TEACHING METHODS**

- Circulation of case studies prior to the lecture being conducted.
- Distribution of case in the class for better understanding amongst the students.
- Case discussion in the class.
- Explanation of case by the instructor.

### **QUESTIONS FOR DISCUSSION:**

**1. *Is Increase in price of water the solution to this problem?***

Pricing decisions involves consideration of efficiency along with equity and lower middle-class income households, especially those served by high-cost systems. Affordability problems might be faced by those households if prices go up. A common example is the “lifeline rates”. Lower-class income households or lower middle class are charged lesser rates on water consumption within certain limit & more on water used beyond that limit. Other factors which impact the price of water are as:

should to be encouraged to invest in water-efficient systems. Behavioural changes have the tendency to equally divide water consumption, however assuming rational actors; the mindsets of people will change only when it is for their benefit and can be done by raising awareness.

**3. Indian industries are highly inefficient and generate 5-10 times more quantum of waste water from their process compared to the developed world. Suggest policy options.**

It is necessary to have a water policy which addresses the problem we face and are going to face in the upcoming years. It will not only help us to regulate the negative impacts of overuse and misuse of water but also ensure that the water resource is optimally used to decrease poverty and achieve human and economic development. The policies should be made with broader guidelines and have flexible conditions suitable for each water resource. Certain environmental laws form basis for policies of wastewater management. Few legal provisions and policies are as follows:

- Constitutional Provisions on sanitation and water pollution.
- National Environment Policy, 2006.
- National Sanitation Policy, 2008.
- Hazardous waste (Management and Handling) Rules, 2016.
- Municipalities Act, District Municipalities Act etc.

Many Water Act throws light on proper utilization of treated sewage

but State Governments ignores such regulations. To encourage industries/investors to invest in pollution control, certain policies which will give fiscal incentives are mentioned below:

1. To diminish pollution and to end the congestion of cities, industries should be encouraged to relocate from urban space.
2. Investment allowances at a higher rate will be allowed for devices and systems mentioned under depreciation allowances.
3. Depreciation allowances at a higher rate will be allowed on devices and systems installed for diminishing pollution & also for conservation of natural resources.
4. Procuring the pollution control equipment by reducing central excise duty. Subsidies should be given to industries for installing pollution control devices.
5. As long as the industries predominantly commissions an effluent treatment plant and functions effectively, cess on water used by industries should be rebated.
6. Based on the pollution control activities, awards should be given to industries.

**BACKGROUND STUDIES:**

DELHI, BENGALURU, CHENNAI AMONG 21 CITIES TO RUN OUT OF GROUNDWATER BY 2020

Currently we are facing insufficient access to clean drinking water and it is only going to get worse. According to reports, by 2020 groundwater will be

depleted in 21 cities. The deficiency of water in South Asian nations are more acute, as demand goes up 1.4 billion population increasing at the rate of one percent. “By 2030, the country’s water-demand is estimated to be twice the accessible supply,” reported Niti Aayog <sup>[1]</sup>.

Water Management Scores, By State (1)		
State	Score (%)	water Quality Index Performance
Gujart	76	High
Madhya Pradesh	69	High
Andhra Pradesh	68	High
Karnataka	56	Medium
Maharashtra	55	Medium
Punjab	53	Medium
Tamil Nadu	51	Medium
Telangana	50	Medium
Chhattisgarh	49	Low
Rajasthan	48	Low
Goa	44	Low
Kerala	42	Low
Odisha	42	Low
Bihar	38	Low
Uttar Pradesh	38	Low
Haryana	38	Low
Jharkhand	35	Low
Tripura	59	Medium
Himachal Pradesh	53	Medium
Sikkim	49	Low
Assam	31	Low
Nagaland	28	Low
Uttarakhand	26	Low
Meghalaya	26	Low

<sup>[1]</sup>Source:[http://www.niti.gov.in/writereaddata/files/document\\_publication/2018-05-18-Water-index-Report\\_vS6B.pdf](http://www.niti.gov.in/writereaddata/files/document_publication/2018-05-18-Water-index-Report_vS6B.pdf) (accessed on August 24, 2019)

It is anticipated that six per cent loss in India’s gross domestic product will be due to degree of water scarcity.

During the summer season, Indian towns cities often run out of water due to the unavailability of infrastructure to deliver piped water to homes. In Indian slums queues for public taps and government water tankers are already a common view. People are dependent on such services and the overhanging disaster would put this provision even more thinly stretched. In addition to this where people are similarly affected by a lack of access to safe water, irregular rainfall could also causes chaos in villages. The gap between demand and supply is 70% in Jamshedpur making it the worst hit city. The crisis is acute in Meerut, Asansol, Faridabad, Madurai, Visakhapatnam, Dhanbad, Hyderabad and Kanpur as supply fails to meet almost 30% of the demand. This data is provided by Urban Development Ministry. It is also observed that Delhi and Mumbai which have the highest demand of water among all cities. The shortfall is 17% for Mumbai and 24% for Delhi. The river Yamuna which is the lifeline of Delhi, when enters into the territory of the city becomes polluted because of industrial effluence and sewages produced by domestic waste. There is the lack of knowledge in the people to reduce the pollutants by their end and the government also shows minimum interest in water management systems which has failed the city’s water condition.

Water Quality Index (WQI) could be described as the composite influence of different water quality parameters. Water quality information is conveyed

<sup>1</sup>[http://www.niti.gov.in/writereaddata/files/document\\_publication/2018-05-18-Water-index-Report\\_vS6B.pdf](http://www.niti.gov.in/writereaddata/files/document_publication/2018-05-18-Water-index-Report_vS6B.pdf) (accessed on August 24, 2019)

to the legislative and public decision makers. Thus, it is one of the effective ways to interpret the quality of water. As seen from the table below most of the states have attained a score below 50%. This shows that there is the need to improve practices of water resource management.

## FUNDAMENTAL PRINCIPLES OF ETHICS

Ethics includes how to defend, systematize and to recommend the basic fundamentals of correct and incorrect behaviour. Present day philosophers usually diversify ethical theories into the following areas:

- Meta Ethics
- Normative Ethics
- Applied Ethics

**Meta Ethics:** Meta ethics deals with the evolution of the principles of ethics and their true meaning.

**Normative Ethics:** Normative ethics deal with standardisation of the ethics in order to make regulations for the right and wrong conduct. In simple words, it can be considered as finding the best litmus test of genuine behaviour.

**Applied Ethics:** Applied ethics deals with the analysis of issues that are controversial and morally unacceptable [2].

This study comes under normative ethics and applied ethics. The basis of the study is the principles that are

given by the philosophers for decision making. The principles are as under:

## Utilitarianism

It deals with the calculation of costs and benefits. According to this, an action can be said to be morally right if the net profit over cost or benefits is greatest for the majority. Moreover, the greatest good should be the consequence of the action and that too for the majority of the masses. Utilitarian concepts are widely practiced by government policy makers, economists, and business professionals. It is a useful principle for conducting a stakeholder analysis, since it forces decision makers to

- consider collective as well as particular interests
- formulate alternatives based on the greatest good for all parties involved in a decision
- estimate the costs and benefits of alternatives for the affected groups [2; 3].

Policy makers in government usually tend to follow utilitarianism as they need to take decisions for masses. But in pursuit of following utilitarianism, policy makers very often avoid the principles of justice and right. The principle of justice is concerned with the distribution of goods, not the amount of total good in a decision. The principle of rights is concerned with individual entitlements, regardless of the collective benefits [3].

Given all these limitations, utilitarianism is still useful especially

<sup>2</sup> Stanwick, P.A. and Stanwick, S.D. (2011). Understanding business ethics. Pearson publication.

<sup>3</sup> Weiss, J.W. (2003). Business ethics. South western Cengage learning publication.

when resources are fixed, lacking, or scarce; when there are conflicting priorities; and when no clear choice or solution fulfils everyone's needs and goals.

## **Rights**

They are entitled to each and every individual respectively. Individual right mean entitlements and unquestionable claims. Rights are based on and viewed from an individual perspective, rather than a societal or group point of view. Individual freedom, welfare, safety, health, and happiness are the essential core value of individual rights.

Rights can override utilitarian principles and vice versa. While addressing the requirements of mass according to utilitarianism, individual rights might be violated. Similarly, while addressing the rights of an individual, welfare of mass might be at stake.

The limitations of principle of rights include the following <sup>[3]</sup>:

- The entitlement justification of individual rights can be used by certain individuals and groups to disguise and manipulate selfish, unjust political claims and interests.
- Protection of rights can exaggerate certain entitlements in society at the expense of others. c. The limits of rights come into question. To what extent should industrial and governmental practices that may benefit the entire society, but threaten certain individual or group rights, be permitted to occur?

## **Justice**

It deals with equity and fairness. According to this, an act is morally right if it involves equal distribution of opportunities, funds, benefits, problems and burdens in a fair proportion among one and all. If it is unfair to someone than how well the unfair party is compensated. The process of distribution should be unbiased and transparent. The principle of distributive justice refers to the fair distribution of benefits and burdens. The principle of justice raises following concerns:

- When a decision or action is being taken, it should be assessed how equally costs and benefits will be distributed to every stakeholder.
- It should be assessed how far the procedures used for distributing costs and benefits of the decision were clear and fair.
- It should be assessed if an individual or group are unfairly affected because of the decision. If it is the case then how they will be compensated.

## **Beneficence**

According to this, the focus of an act should be in improving the lives of others [2]. It is more like a social virtue for the benefit of others rather than focussing on self-interests. If the action is of social good with which the whole society would be benefited then the action is considered as morally right.

## **Universalism (Principle of duty)**

The principle of duty doesn't take into account consequences of decision take. This principle is mainly based

on universal principles like rights, justice, fairness, honesty, respect etc. Unlike utilitarianism, the principle of duty emphasizes on an individual's duty towards other individuals and humanity. The principle was given by Immanuel Kant, hence popularly known as Kant's principle. The principle of duty raises following concerns:

- It is a duty of policy maker whether there are individuals whose needs and welfare may be at risk because of the policy or action.
- It is a duty of policy maker or decision maker or concerned responsible person to see whether there was any use or misuse of manipulation, force or coercion that may be harmful to individuals.
- c. It is a duty to determine whether the decision would be acceptable to individuals if the decision is implemented [2].

Reviewing the issue of water pricing from the perspective of these above-mentioned principles of ethics, the policy maker would certainly find themselves at crossroads. Each principle giving different perspective to the issue of water pricing turns into creating ethical dilemma for policy makers. As mentioned earlier, in case of policy making for mass, policy makers usually tend to follow utilitarianism. As policymakers have to decide a policy or action which has consequences over large number of people, they tend to choose an action which benefits majority of

the people. But doing so would very often violate rights of an individual or group. Choosing an action that is beneficial for majority or mass may leave handful of people disappointed. Here in this case, water pricing may be suitable to those who may afford to pay water bills but not suitable to those belonging to economically weaker section of society. According to the principles of right and beneficence, water is necessitate and becomes the right of all. Even looking this case from the perspective of principle of justice, water is a resource that should be divided among all the citizens equally without any discrimination. In addition to this, the principle of duty emphasizes responsibility on the part of policy makers not to choose an action or decision which may be harmful or unacceptable to particular individual or groups [4]. But having said all these, there are real constraints or obstacles to follow these principles as far as water pricing is concerned. Water pricing may not be an ideal solution as per principles of duty, right, and justice. But then the question arises how to preserve the water and reduce its wastage. Water pricing may be right to some extent as per utilitarianism, but other principles of ethics doesn't approve of it. This creates classic ethical dilemma. This can be left to class participants for further discussion and exploration of some more useful perspectives on the issue of water pricing.

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<sup>4</sup><http://www.iep.utm.edu/ethics/> (accessed on August 25, 2019)