

## Emerging Trends and Rural Environmental Sanitation Issues in India

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**Abstract:** The present paper have been assess to emerging trends and rural environmental sanitation issues in India. Safe water is one of the most important felt without sustainable access to safe drinking water needs in public health in developing countries in and sanitation by 2015. In India every year large number of deaths of children under the age of five is attributed to poor quality of drinking water. Apart from health effects, inadequate quantity of water supply and sanitation services leave adverse impacts on the environment mainly leading to contamination of soil and water due to stagnation of sewage. A recently published World Health Organisation report places diarrhoeal diseases at sixth place in the list of global killers and third in the list of morbidity. This paper attempts on to find out to assess the issues and environmental in sanitation in India. To find out the allocation amount of rural water supply and sanitation expenditure pattern to improve the basic amenities. To suggest to improve the Environmental Sanitation in India.

**Keywords:** Emerging Issues, Environmental Sanitation and Rural Water Supply

### Introduction

The Government with increased plan allocations ensured access to safe water supply to the people of the State, rural as well as urban. Statistics show a significant increase in the coverage, but compared to the increasing demands, full coverage still remains an eluding factor. The problem lies within as the cause for the water crisis lies in over-exploitation of surface as well as sub surface waters. The water bodies are dependent on rain for the flow and the failure of monsoons successively has resulted in inadequate flows in the river courses. Deforestation over the years has also contributed to the reduced water availability in the State. Evaporation of surface water is generally very high. Surface water gets contaminated, particularly in areas close to the sea coast, through upward movement of the saline underground water. In such a hostile environment, potable drinking water is the first casualty.

### Objective

- To assess emerging trends and rural environmental sanitation issues and rural water supply in India.
- To find out the allocation amount of rural water supply and sanitation expenditure pattern.
- To suggest to improve the issues in environmental sanitation in India.

### Methodology

The present study attempts on rural water supply and sanitation in India allocation of expenditure and achievements to improve the basic amenities. This study based on secondary data. To collect from 12th Five year plan report and the computed data from NSSO data have been used for this present study. Year wise allocation amount and expenditure pattern of the percentage in all over India. The year wise state wise data have been used for rural water supply and sanitation coverage. So far it is clearly understand the charts used for this paper.

### **Water Supply, Sanitation, and Health**

Water, which is essential for life, growth and health, can also be a source of spread of disease and cause of ill-health, if contaminated or improperly handled and stored. Safe drinking water and improved sanitation play a major role in the overall well-being of the people, with a significant bearing on the infant mortality rate, death rate, longevity and productivity. The poor, both in rural and urban areas, bear a disproportionate burden of non-availability of water, as well as of poor quality. They often supplement public sources of water with supplies obtained at high prices from other sources. Women bear the physical burden of fetching water. Women and children are particularly vulnerable to the effects of water contamination.

Water-Borne Diseases: 70-80 per cent of illnesses are related to water contamination and poor sanitation. The national objectives of reducing morbidity and mortality largely depend on the reduction of diarrhoea and jaundice. In fact, Lack of water supply and sanitation programme can be successful if water-related illnesses are not reduced. It is a matter of concern that despite the progress made with water supply, the level of water-related sickness continues to be high. Causes of contamination of water are indiscriminate use of chemical fertilisers and chemicals, poor hygienic environment of the water sources, improper disposal of sewage and solid waste, pollution from untreated industrial effluents, over-exploitation leading to quality degradation. Thus, the supply of additional quantity of water by itself does not ensure good health; proper handling of water and prevention of contamination are also equally important. Among the most important elements of the rural sanitation package are:

- ❖ Safe handling of drinking water.
- ❖ Disposal of waste water.
- ❖ Safe disposal of human excreta. Human excreta is associated with more than 50 per cent of diseases.
- ❖ Safe solid waste disposal.
- ❖ Home sanitation and food hygiene.
- ❖ Personal hygiene, particularly washing hand with soap.
- ❖ Sanitation in community.

Recent studies have shown the importance of washing one's hands with soap as it reduces diarrhoeal disease by 43 per cent. Respiratory problems such as sniffles and coughs were also brought down by 45 per cent when hands were washed five times a day. Safe sanitation practices should be made a compulsory part of school curricula, and of all programmes where women are trained in community, economic and health issues affecting the household.

### **Emerging Trends and Rural Environmental Sanitation Issues**

Status of rural sanitation in India is basically different from that of water due to socio- cultural habits in widely spread out rural India. However, to assess the problem of poor sanitation is more acute in densely populated urban squatter settlements. Rural sanitation is neither perceived by the majority as a basic need nor provided as a public good.

#### **I. Socio- Cultural Aspects**

- ❖ Verifying perception of people and community at local level regarding personal hygiene and public health, eg: cleanliness and hygiene among rural communities.
- ❖ Limited knowledge on sanitation related diseases, particularly among school going children.
- ❖ Literacy levels and community hygiene.
- ❖ Low emphasis on IEC (Information Education and Communication).
- ❖ High density vs low density population.

#### **II. Technology Issues**

- Individual vs community types.
- Types of latrines and acceptability.
- Septic tanks.

- Dry and wet types & Technology upgradation.

### III. Policy Issues

- Sharing of costs & State vs centre.
- Community vs Government
- O&M costs sharing (Organisation& Management)
- linkage with related programmes, such as water supply, sanitation, public health, nutrition to commence from school going children upwards.

#### Financial Progress In Bharat Nirman Period

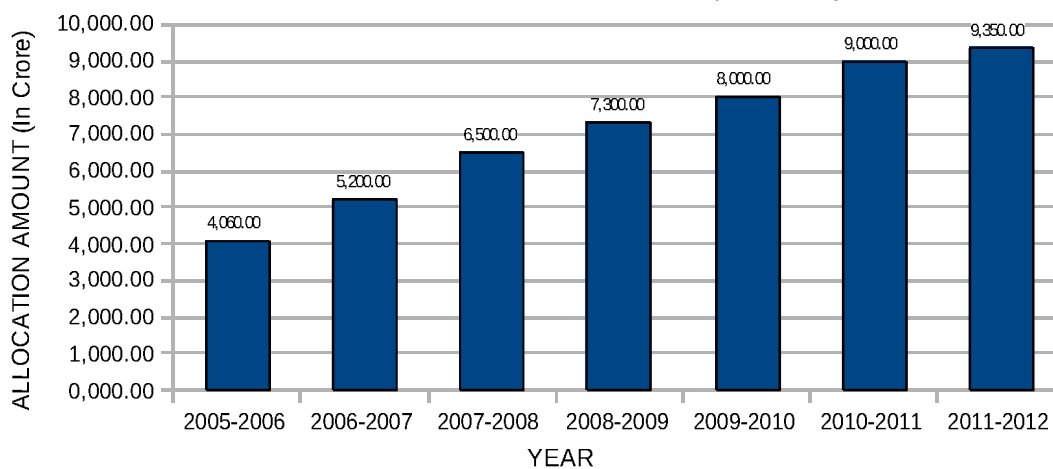
**Table: 1 Allocation under Arwsp/Nrdwp**

Allocation under ARWSP/NRDWP (in Crore)	
YEAR	Allocation Amount
2005-2006	4060.00
2006-2007	5200.00
2007-2008	6500.00
2008-2009	7300.00
2009-2010	8000.00
2010-2011	9000.00
2011-2012	9350.00

Source: 12<sup>th</sup> Five year planning Report

**FIGURE: 1**

#### Allocation Under ARWSP/NRDEP(in crore)



Source: 12th Five year planning Report

The above table and figure 1 depicts that the rural water supply, component of Bharat Nirman, it is allocated that the during the period of from 2005 to 2012. Though the allocation of of every year the amount has been increased 2005-2006 Rs.4060 to 2011-2012 9,350 crore would be required as Central share during 4 years. The year wise allocations for ARWSP (Under the Accelerated Rural Water Supply Programme (ARWSP)/NRDWP (National Rural Drinking Water Programme) (Rural water supply component) of Bharat Nirman.

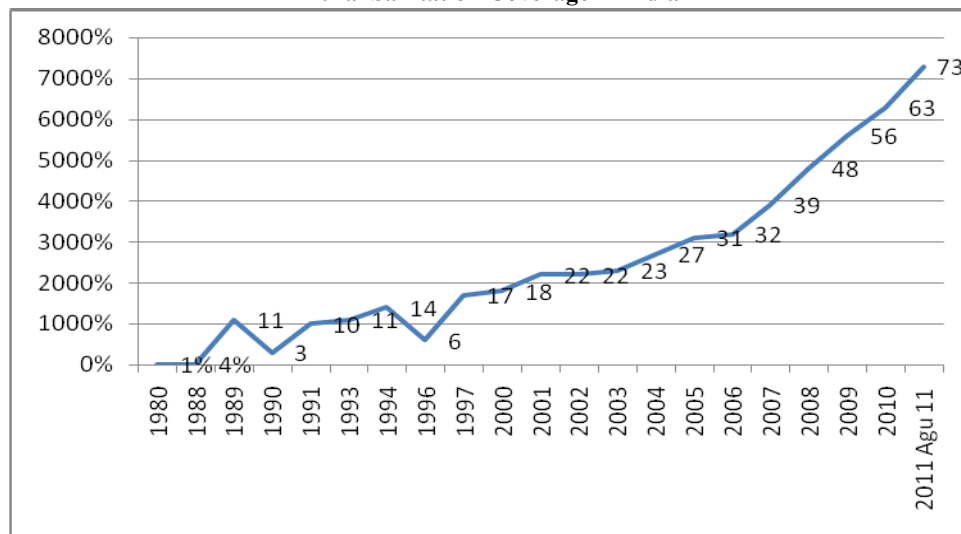
**TABLE: 2**  
**Sanitation Coverage in Rural Areas**

Year	Percentage Sanitation Coverage in Rural Areas
2000-2001	21.92
2001-2002	22.38
2002-2003	22.86
2003-2004	27.34
2004-2005	30.56
2005-2006	32.02
2006-2007	39.03
2007-2008	48.02
2008-2009	56.03
2009-2010	63.78
2010-2011	63.78
2011-2012(Aug'11)	71.65

Source: Computed from NSSO

However, there have been wide variations among States to arrive at the average of 73.67% as mentioned above.

**FIGURE: 2**  
**Rural Sanitation Coverage in India**



Source: Computed from NSSO

After sluggish progress throughout the eighties and nineties, rural sanitation coverage received a fillip with the implementation of the TSC. As can be seen from Figure below, individual household latrine coverage at present is around 71% as of April 2011 as per the data reported by State through the online monitoring system maintained by the Ministry. In terms of progress made during the XI Plan, the coverage has progressively moved from 39% approximately in the beginning of the XI Plan to 73% as of August, 2011. The sanitation coverage in rural areas of the country was estimated at **21.9%** as per census 2001. The year-wise growth of sanitation coverage in the country as per progress reported by the States through online monitoring system of the Ministry since the inception of Total Sanitation Campaign is as under.

**Financial Performance in the 11th Plan**

The following table indicates that the total Plan outlay for 11th Plan was Rs.7816 crore against which the total allocation received by the Ministry for TSC is Rs.6690 crore. Outlay for the current financial year is Rs 1650 crore. The year wise outlay and expenditure has been as follows:

**TABLE: 3**  
**Financial Performance in the 11th Plan**

Financial Year	Total Outlay(Incrore)	Total Expenditure (In crore)
2007-2008	1060	908.91
2008-2009	1200	980.13
2009-2010	1200	1200
2010-2011	1580	1579.84
2011-2012	1650	791.01
<b>Total(in crore)</b>	<b>6690</b>	<b>5459.89</b>

Source: Computed from NSSO

**TABLE: 4**  
**The Variation among States in Rural Sanitation Coverage**  
**(As of August, 2011)**

S.N.	State	Sanitation Coverage
1	ANDHRA PRADESH	78.74
2	ARUNACHAL PRADESH	71.98
3	ASSAM	68.62
4	BIHAR	39.68
5	CHHATTISGARH	57.26
6	GOA	90.48
7	GUJARAT	86.07
8	HARYANA	95.49
9	HIMACHAL PRADESH	100
10	JAMMU & KASHMIR	49.94
11	JHARKHAND	46.03
12	KARNATAKA	73.02
13	KERALA	100
14	MADHYA PRADESH	78.74
15	MAHARASHTRA	174.5
16	MANIPUR	64.14
17	MEGHALAYA	72.73
18	MIZORAM	81.22
19	NAGALAND	75.32
20	ORISSA	55.19
21	PUNJAB	93.98
22	RAJASTHAN	59.38
23	SIKKIM	100
24	<b>TAMIL NADU</b>	<b>82.93</b>
25	TRIPURA	100
26	UTTAR PRADESH	82.93
27	UTTARAKHAND	80.84
28	WEST BENGAL	78.83
29	A & N ILANDS	42.33

30	CHANDIGARH	68.53
31	D & N HAVELI	70.06
32	DAMAN & DIU	32.02
33	DELHI	62.89
34	LAKSHADWEEP	93.14
35	PUDUCHERRY	52.99
	Total	73.67

Table 4 explain that it can be seen that while States like Himachal Pradesh, Kerala and Sikkim are reporting 100% progress against progress against project objectives under TSC, States like Bihar, Jammu & Kashmir and Jharkhand have yet to achieve 50% of their project objectives for Individual Household Toilets under TSC.

### Suggestions

- Awareness of sanitation standards and health impact of unsanitary conditions continues to be low and to avoid rural open defecation.
- School sanitation (providing toilets) should be given highest priority to inculcate safe hygienic habits among school children.
- Safe sanitation practices should be made compulsory part of school curricula, and of all programmes where women are trained in community, economic and health issues affecting the household.
- The sanitation mission has to make the entire village community dynamic and provide employment opportunity for certain number of people. Every family and teachers of Montessori schools should take up this responsibility as a family task.
- The recommendations made with regard to urban low cost sanitation also apply to the rural segment.

### Conclusion

Now day's very crucial problems Environmental sanitation and issues with related to emerging trends of sustainable development. Most of the rural and urban peoples were affected due to the poor sanitation. The emerging issues status of rural sanitation is basically different from that of water due to socio- cultural habits in widely spread out rural India. However, to assess the problem of poor sanitation is more acute in densely populated urban squatter settlements. Rural sanitation is neither perceived by the majority as a basic need nor provided as a public good. Thus, rural sanitation programme envisages promoting "Environmental Sanitation" as a package aiming at addressing the issues to reduce the probability of people's exposure to diseases and providing hygienic environment and taking measures to break the cycle of diseases by suggest to improve the emerging trends and rural environmental sanitation issues.

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