



International Journal of Home Science

ISSN: 2395-7476
IJHS 2017; 3(3): 262-265
© 2017 IJHS
www.homesciencejournal.com
Received: 11-07-2017
Accepted: 12-08-2017

Reema
Chandra Shekhar Azad
University of Agriculture and
Technology, Kanpur,
Uttar Pradesh, India

Anchal Sharma
Chandra Shekhar Azad
University of Agriculture and
Technology, Kanpur,
Uttar Pradesh, India

Neelma Kunwar
Chandra Shekhar Azad
University of Agriculture and
Technology, Kanpur,
Uttar Pradesh, India

Correspondence
Reema
Chandra Shekhar Azad
University of Agriculture and
Technology, Kanpur,
Uttar Pradesh, India

Problems faced in saving of waste water by Indian women

Reema, Anchal Sharma and Neelma Kunwar

Abstract

The standard sanitation technology in urban areas is the collection of wastewater in sewers, its treatment in wastewater treatment plants for reuse or disposal in rivers, lakes or the sea. Sewers are either combined with storm drains or separated from them as sanitary sewers. Combined sewers are usually found in the central older parts or urban areas. Heavy rainfall and inadequate maintenance can lead to combined sewer overflows or sanitary sewer overflows, i.e more or less diluted raw sewage being discharged into the environment. Industrial often discharge wastewater into municipal sewers, which can complicate wastewater treatment unless industries pre-treat their discharges. The high investment cost of conventional wastewater collection systems are difficult to afford for many developing countries. Some countries have therefore promoted alternative wastewater collection systems such as condominium sewerage, which uses pipes with smaller diameters at lower depth with different network layouts from conventional sewerage.

Keywords: Problems, saving, waste water

Introduction

The human brain is made up of about 85 percent water. Imagine the consequences of depriving it of the water it needs everyday. Every part of the human body is associated with this elixir of life. Consuming the recommended 8 or more glasses is essential for their smooth functioning. When we say water, we mean purified H₂O involving use of an advanced water filter. They cannot assure herself of drinking pure H₂O unless it flows from the faucet of a hi-tech water filter. If they consider technology, innovation, purification effectiveness, they can well bank upon the Aqua Guard water purifier from the house of Eureka Forbes. It has been for thirty years now that the brand has been a trusted name in the India market. Aqua Guard water purifier series also happens to be the first brand of domestic systems to be introduced in India. Coming back to the benefits of consumption of water, the list goes on and on. Human blood is approximately 79 percent water. It is blood that transports oxygen to our lungs and nutrients to various parts of our body. If they think bones are devoid of H₂O, Bones are about 22 percent water. Think of your kidneys; the waste materials that find passage out of your body happen when they function well. They are twin machines entrusted to clean your body and water is its fuel. There are many people who are hardly aware of the benefits of consuming H₂O from the faucet of an advanced water filter.

Objectives

- To assess the source of waste water such as aqua guard, kitchen, washing machine etc. and ways of recycling adopted.
- To assess the problems faced in saving of wasted water.

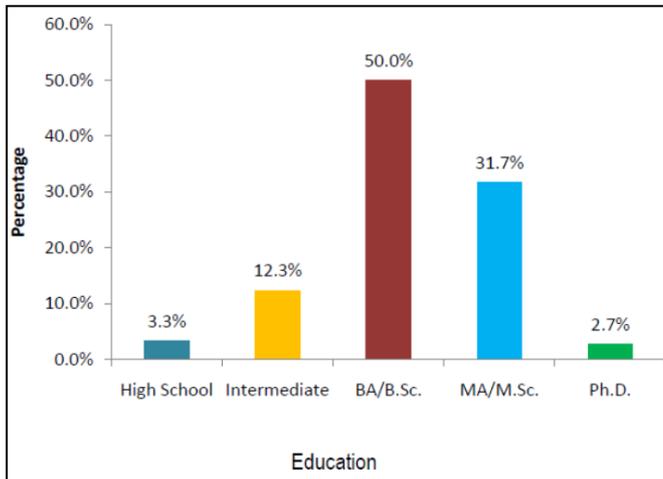
Methodology

The study was conducted in Kanpur district of Uttar Pradesh. Six localities were selected from 6 zones of Kanpur district. Total 300 women were randomly selected in this study. The dependent and independent variables were used such as age, education, religion, technique, brand, knowledge, recycling etc. The statistical tools were used such as percentage, rank and correlation.

Results

Table 1: Distribution of women according to education
N = 300

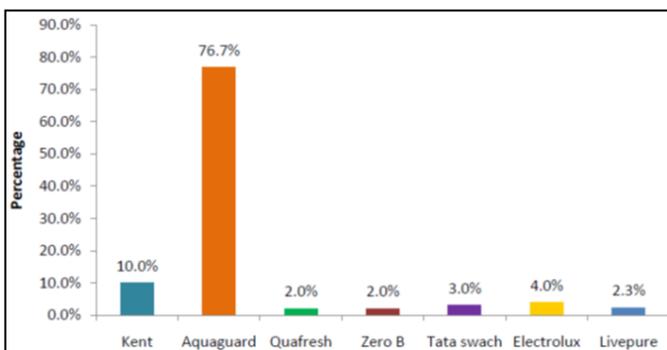
Sl. No.	Education	Frequency	Per cent
1	High School	10	3.3
2	Intermediate	37	12.3
3	B.A./ B.Sc.	150	50.0
4	M.A./ M.Sc.	95	31.7
5.	Ph.D.	8	2.7
	Total	300	100.00



Education plays important roles in our day to day life. If the people are educated than it leads to the better understanding of the water problem. Because educated or the literate people are more conscious about the conservation of water.

Table 2: Distribution of women according to possession of Aquaguard brand in their house
N = 300

Sl. No.	Brand	Frequency	Per cent
1.	Kent	30	10.0
2.	Aquaguard Revina	230	76.7
3.	Quafresh	6	2.0
4.	Zero-B	6	2.0
5.	Tata Swach	9	3.0
6.	Electrolux	12	4.0
7.	Livepure	7	2.3
	Total	300	100.00

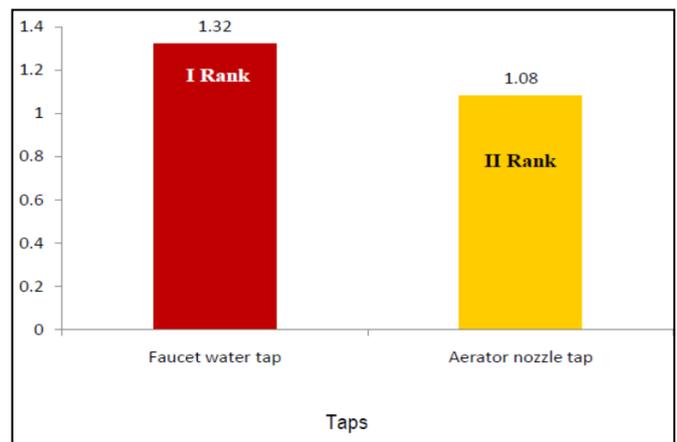


The population of India comprises more than 700 million people residing in about 1.42 million habitations spread over 15 diverse ecological regions. It is true that providing drinking water to such a large population is an enormous challenge. Our country is also characterized by non-uniformity in level of awareness, socio-economic development, education, poverty, practices and rituals which add to the complexity of providing water. Water contains

important nutrients and minerals like Calcium, Sodium, Potassium, Magnesium, Iron, Zinc and many more, which are essential for human health. Therefore, in present time different brands RO use increasingly in every home. In present time there is a huge demand of ROs. Different RO companies launch variety of RO systems in the market according to the economic status of Indian people.

Table 3: Distribution of women according to installation of faucet water tap in their kitchen

Sl. No.	Water tap	Frequency		Per cent		Mean scores	Rank
		Yes	No	Yes	No		
1.	Faucet water tap	95	205	31.7	68.3	1.32	I
2.	Aerator nozzle tap	25	275	8.3	91.7	1.08	II



Taps are normally connected to the water supply by means of a swivel tap connector, which is attached to the end of the water pipe using a soldered or compression fitting, and has a large nut to screw onto the threaded tail of the tap, which hangs down underneath the bath, basin or sink. A fibre washer is used between the connector and the tap tail. Tap tails are normally 1/2" in diameter for sinks and 3/4" for baths. The same connection method is used for a ball cock. There are used two types of water taps for saving the water. When installed in a home, sensor faucets alleviate the need for parents to ensure that children have turned off the faucet. They can also benefit the elderly and those suffering from arthritis or other mobility limiting conditions since there are no handles to twist or pull. These water saving devices will control the amount of water that flows through the tap without affecting the water pressure as they mix the water with air. While oil and water don't mix, air and water certainly can which will save water and money.

Table 4: Distribution of women according to their use of techniques to save rain water

Sl. No.	Rain water storage	Yes	No	Mean Score	Rank
1.	Pond	75(25.0)	225(75.0)	1.25	II
2.	Tub	125(41.7)	175(58.3)	1.42	I
3.	Pits	60(20.0)	240(80.0)	1.20	III

(Figures in parenthesis indicate percentage of respective values)

Humans use over half of all accessible water runoff total water use less than 10per cent is used for domestic use. Households are the smallest consumers of water, but have a large potential impact. Users have the most influence at the household level and can experiment with strategies to develop

water saving habits to implement outside of the home. There are many benefits to having a backyard garden pond that extend well beyond creating a natural, relaxing and picturesque landscape. Ponds are also tremendously beneficial to local ecosystem. Pond water contains more nutrients than the water from garden hose. It can be used to water other plants throughout the yard. During the dry season, they can position drainpipes or any water run-off might have to flow right into the pond, creating a natural reservoir. Generally using big tubs for collection of the rain water for harvesting purpose is common. Rain water harvesting is one of the most effective methods of water management and water conservation. This is a very useful method for a developing country like India in reducing the cost and the demand of treated water and also economizing the treatment plants operation, maintenance and distribution costs. Pits are made in ground floor and collecting water in rainy seasons and municipal board. Pits storage water is used for kitchen garden purpose.

Table 5: Distribution of women according to knowledge about problems of safe waste water

Sl. No.	Problems	Yes	No	Mean score	Rank
1.	Lack of knowledge	145 (48.3)	155 (51.7)	1.48	III
2.	Lack of technology to treat water	204 (68.0)	96 (32.0)	1.68	I
3.	Inadequate financial resources	165 (55.0)	135 (45.0)	1.55	III
4.	Adequate treatment infrastructure	128 (42.7)	172 (57.3)	1.43	V
5.	Adequate indoor sanitation	130 (43.3)	170 (56.7)	1.43	V
6.	Improper drainage system	98 (32.7)	202 (67.3)	1.33	VI
7.	Lack of sewage treatment	136 (45.3)	164 (54.7)	1.45	IV

(Figures in parenthesis indicate percentage of respective values)

Women play a major role in domestic water management in areas where safe water and drainage are not available in the house. In these settings, women are typically responsible for collecting, storing, and using water and for disposing of wastewater. Most studies of women's water management and the health benefits of safe water and sanitation examine the effect of protected water sources, such as covered wells or pumps, and basic sanitation. For most women, those who lived in houses without a drainage system, the biggest problem was that all water used in the house had to be carried outside and thrown into the street or canal. Clean water is an essential resource for people and their environments throughout the world. Operational-Challenges-Wastewater-Treatment-Energy-Consumption-Staff-Hours-Sludge-Production-Those who provide effective solutions for wastewater treatment play a major role in returning clean, safe water back to its source. One of the major problems with wastewater treatment methods is that none of the available technologies has a direct economic return. Due to no economic return, local authorities are generally not interested in taking up wastewater treatment. With the greater awareness of the need and importance of wastewater treatment among the general public, authorities and policy makers, it is hoped that soon a larger share of wastewater would start getting proper treatment with the help of latest technologies and not just a new source of usable water would be seen on the

horizon but also the rivers and lakes in the country would continue to not just support but also help enrich a varied aquatic life. Sanitation is the means of promoting hygiene through the prevention of human contact with hazards of wastes especially faeces, by proper treatment and disposal of the waste, often mixed into wastewater. These hazards may be physical, microbiological, biological or chemical agents of disease. Wastes that can cause health problems include human and animal excreta, solid wastes, domestic wastewater, industrial wastes, and agricultural wastes. Hygienic means of prevention may involve engineering solutions simple technologies, or even simply by behaviour changes in personal hygiene practices, such as hand washing with soap. Sources of wastewater include homes, farms, factories, hospitals and businesses. Faeces and urine from both humans and animals carry many disease-causing organisms. Wastewater may also contain harmful chemicals and heavy metals known to cause a variety of health problems. With the greater awareness of the need and importance of wastewater treatment among the general public, authorities and policy makers, it is hoped that soon a larger share of wastewater would start getting proper treatment with the help of latest technologies and not just a new source of usable water would be seen on the horizon but also the rivers and lakes in the country would continue to not just support but also help enrich a varied aquatic life.

Table 6: Correlation coefficient between problems waste water and independent variables

Variables	Correlation coefficient
	Problems save waste water
Age	-0.1820
Education	-0.2063
Family size	0.1619
Monthly income	-0.2023
Type of house	-0.1665
Social participation	-0.0842

The perusal of Table 6 reveals that correlation coefficient between constraints of save waste water and independent variables, age, education, monthly income, house type and social participation was negatively correlated with constraints faced by women respondents about same waste water in the study area while family size of the women respondents was non-positive correlated with constraints of same waste at 5.0 per cent level of significance.

Conclusion

A water crisis is a situation when the supply of water is less than the demand due to non-availability of water or mismanagement of water resources. According to the United Nations Water Development Report 2016, one of the most serious problems the humanity is facing today is the scarcity of potable water for drinking and domestic use. This crisis is feared to worsen dramatically in the coming decade. But we Indians are still not ready to accept the seriousness of the water problem in the country. Water is everywhere but not a drop to drink – true to this paradox, this single crisis can hit us the hardest in the near future. In the agriculture sector, a significant percentage of farm lands are still not irrigated. As a result, the underground water resources like well and tube wells are overused which has led to a tremendous decrease in the level of underground water. Also, due to global warming, rainfalls have become erratic, unpredictable and highly insufficient, severely affecting the process of farming. All this

has resulted in creating an enormous strain on the available resources for catering to water needs of the country.

Recommendations

- It's World Water Day. Time to wake up and take shorter showers. That is, if we are fortunate enough to have them. Water scarcity and pollution are persistent global problems. According to End Water Poverty, some 663 million people around the world have absolutely no reliable access to clean, safe water year round. And two thirds of the world population faces water scarcity for at least one month every year.
- Our daily consumption of water affects future supply, of course. Right now, according to researches wasteful irrigation systems on farms consume about 70 per cent of the world's freshwater, over double that of any other industry. But contrast, municipal water represents a mere 8 per cent of global use. Bad irrigation practices in farming can hurt our water in other ways, washing pollutants into rivers, streams or other freshwater ecosystems.
- The nonprofit water is life makesw and distributes portable water filters that look like big straws. The components inside the straws are "membranes, iodized crystals and active carbon," which eliminate harmful bacteria and viruses including typhoid, cholera, E. coli and reduces other harmful particles so people can drink safely wherever they go. Water is life also creates educational campaigns and even a VR game to teach kids why and how they should clean or filter water before they drink from a potentially unsafe source.

References

1. Vasugi M. Advance in water treatment methods and conservation of waste water to irrigation using solar pump/Vasugi an Open Access, Online International Journal Available at <http://www.cibtech.org/jet.htm>. 2015; 5(1):48-55
2. Willis RM, Stewart RA, Giurco DP, Talebpour MR, Mousavinejad A. End use water consumption in households: impact of socio-demographic factors and 3 efficient devices. *Journal of Cleaner Production*, 2011. doi:10.1016/j.jclepro.2011.08.006.
3. Yashoda Saini, Shipra Sharma, Preeti Srivastava, Yadav Rajesh, Rawat Shalini. Waste Water treatment and its Eco- Friendly Use - A Case study Pinjarpole Gaushala, Nawalgarh, RajasthanSSRG International Journal of Civil Engineering (SSRG-IJCE) 2016; 3(5)2016ISSN: 2348-8352. www.internationaljournalssrg.org