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RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE, AND PRACTICES ABOUT WATER CONSERVATION IN GWALIOR: A QUESTIONNAIRE BASED SURVEY

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ABSTRACT

Water scarcity is an everyday problem in the city of Gwalior, Madhya Pradesh, India, and it greatly intensifies during the summers. The present survey was performed to understand the level of public awareness and the general perception of the residents of Gwalior with regard to water as a resource today and in future. A questionnaire comprising of 30 questions was given to the respondents to generate qualitative and quantitative data. The questions also asked for demographic background including age, gender, education and monthly income. The survey was conducted from April 2017 to June 2017. Out of 120 respondents, 100 (83.33%) completed the survey. Maximum participants were male (65%), belonging to 31-40 years of age group (60%), 54% were 12th pass and 30% were house wives. Most of them believed that water supply is the government responsibility (82%). Maximum participants consumed 50-100 liters of water daily (56%). A significant fraction was not serious about the scarcity of water (32%), though the majority of them believed that water should be conserved for future generation (54%). Maximum participants perceived water as a human right (43%). To conclude, water needs to be considered as important part of life and methods to conserve water in our area must be adopted that can prevent water shortage mainly in summer.

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INTRODUCTION

The present survey aimed to highlight what an average individual feels about his/her responsibility in water supply and its short age and to study the impact of this view point on actions toward water conservation, both on the individual and large scale. Responsibility towards water supply means up to what extent individuals identify fresh water as an exhaustible resource, and whom do they hold accountable for shortages. Present survey is unique as it offers aninsight into the public opinion of water itself and comparesit to the need for water conservation. Little data exists related to the outlook of Indian populace on water conversation. Hence, present survey was designed to fill the void; find out what water means to the Indian commonman.

MATERIALS AND METHODS

Methods: The present survey was designed to identify public perceptions and attitudes towards water conservation. A questionnaire consisting of 30 questions was given to the entire respondent to generate qualitative and quantitative data using door-to-door visit method.

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No inclusion and exclusion criteria were used; therefore all of the responses from all of the participants were used for data analysis.

Survey Design: The questionnaire comprises of the following: (a) perceptions about water as a resource; (b) personal water consumption habits and beliefs regarding conservation; (c) responsibility of government agencies to provide clean water; and (d) water supply regulations including water pricing, as well as attitudes. Questionnaires included single-answer, multiple choice, and ranking scale questions. There were questions regarding demographic information including age, gender, education and monthly income. Data collection was conducted from April 2017 to June 2017. Results were recorded in a spreadsheet format. Survey responses were analyzed using IBM SPSS Ver. 20. Data were expressed as percentages.

RESULTS

A total of 120 individuals responded to the survey, of which 100 (83.33%) completed the survey and were included in the analysis. Of the participants, 65 were male, most of the responders (60%) belong to age group of 31-40 years followed by 20% respondents who belonged to 41-50 years. Qualitative comments provided by respondents revealed that the study area

was typically water deficient. Most of the respondents were 12th pass (54%) followed by graduates (36%) and post-graduates (10%). Maximum respondents were self-employed (40%), 34% were workers in private or government organization, 13% were farmers, 8% were Postgraduate students and 5% were performing other responsibilities. Maximum respondents believed that it is the responsibility of the government to ensure access to clean water (82%) and only 18% reported that it is the responsibility of the individual.

Table 1. Responses recorded for different question themes

Question Survey		Response rate (%)
Daily water consumption (liters)	20-50	20
	51-100	56
	>100	24
Concern about water scarcity	Yes, very concerned	30
	No, not in this life	32
	May be, but not for a long time	20
	Not sure	18
Value of water	Compare the condition of those who have clean water to those who do not have clean water	54
	Water does not have a value	12
	Water is very precious	34
Need for water conservation	It is not required, we have plenty	46
	Required for future generation	54
Perception of water	A natural source	23
	A human right	43
	A public resource	14
	A commodity	12
	A private resource	8

Data are expressed as percentages

DISCUSSION

Responsibility

The data revealed that maximum participants held the governmentliable to ensure adequate water supply. These results are consistent with those of the study conducted by Morton and Missouri *et al* which found that 66% of the respondents believed it to be the local government's responsibility to protect water quality. (Morton and Brown, 2007) In a similar study from Pakistan, 78.4% participants felt that government has all the control on water resources. (Ahmad and Sattar, 2010) One potential reason for this shared belief of government's charge of water situation is that conserving water has not been inducted into the Indian social norm. This reduces water conservation to an elective task, up to our will. Thus, when an individual finds that people around him/her are not bothered about conserving water, he/she experiences little motivation to save water. The survey done by Observer research foundation in India revealed that 82.7% of the respondents were dissatisfied with water management and blamed poor governance for India's water conservation scene. (Saran *et al*., 2014)

Scarcity

Households in the study area revealed that they faced wide seasonal fluctuations in municipal tap water supply, with a general consensus that shortage in water supply becomes acute during summers. In turn, this seasonal variation in municipal tap water supply leads to excessive ground water exploitation by individual households. (Shaban and Sharma, 2007; Corral-Verdugo *et al*., 2002; Disaster and Drought Assistance, 2013) The data demonstrated that there was very little concern among the participants regarding the shortage of clean water in their area, much less about ground water recharging or water table degradation, with a significant number of people believing that water is plenty or that water conservation would not be needed in present generation. The government was held responsible for any and all water supply issues. (2010 British Columbia Drought Response Plan Environment, 2017; Water. Environment Canada, 2013)

Conclusion

The present survey brings out how water issues are not given their due attention, even though with increasing temperatures and drying water bodies, the situation worsens every year. Further, there is an urgent requirement of proper public education and better enforcement of existing laws against water wastage. Water is essential for all life and the world is coming to the end of the golden age of water (Fishman, 2011), only greater awareness and understanding of water use and management will ensure the survival of water as a resource and human beings as a species.

REFERENCES

2010 British Columbia Drought Response Plan Environment. Available online: http://livingwatersmart.ca/drought/docs/2010/bc_drought_response_plan_june-2010.pdf (accessed 12June 2017).

Ahmad I, SattarA. Factors Determining Public Demand for Safe Drinking Water (A Case Study of District Peshawar); Pakistan Institute of Development Economics Working Papers & Research Reports: Islamabad, Pakistan, 2010.

Corral-Verdugo V, Frias-Armenta M, Pérez-Urias F, Orduña-Cabrera V, Espinoza-Gallego N. Residential water consumption, motivation for conserving water and the continuing tragedy of the commons. Environ. Manag, 2002; 30: 527-35.

Disaster and Drought Assistance. Available online: http://www.usda.gov/wps/portal/usda/usdahome?navid=DISASTER_ASSISTANCE (accessed 19 September 2013).

Fishman C. The Big Thirst: The Secret Life and Turbulent Future of Water; Simon and Schuster: New York, NY, USA, 2011

Morton LW, Brown S. Water Issues in the Four State Heartland Region: A Survey of Public Perceptions and Attitudes About Water—Iowa, Nebraska, Kansas, Missouri; The Heartland Regional Water Coordination Initiative Bulletin# SP289; Iowa State University Extension: Ames, IA, USA, 2007.

Saran S, Mittra S, Hasan S. Attitude towards water. Observer Research Foundation. 2014; 1-49.

Shaban A, Sharma RN. Water Consumption Patterns in Domestic Households in Major Cities. Economic and Political Weekly 2007;2190-7.

Water. Environment Canada. Available online: http://www.ec.gc.ca/eau-water/ (accessed 19 September 2013).

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