

# Water saving practices : A comparison of rural and urban homemakers of Ludhiana district

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■ **ABSTRACT** : The objective of the present investigation was to study the different water saving practices followed by rural and urban homemakers, in home and while performing various personal care activities. The study was conducted on 60 rural and 60 urban homemakers of Ludhiana district. The results showed that higher number of urban respondents were following different water management practices, such as turning off water when brushing teeth, sharing water saving tips with others, etc. as compared to their rural counterparts.

■ **KEY WORDS** : Water conservation, Water shortage, Water saving practices

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Only 0.1 per cent of the total water present on earth is available as fresh water in rivers, lakes and streams, which is suitable for human consumption. This highlights the significance of the need to preserve our fresh water resources (Ramakrishna and Babu, 1999). It has been estimated that with available technologies and better operational practices, agricultural water demand could be cut by about 50 per cent, and that in urban areas by about 33 per cent without affecting the quality or economics of life. But, most governments do not have adequate laws or regulations to protect their water systems (Anonymous, 2003).

India is expected to face critical levels of water stress by 2025. The UN has estimated that by the year 2050, 4 billion people will be seriously affected by water shortages. This will lead to multiple conflicts between countries over the sharing of water. Around 20 major cities in India face chronic or interrupted water shortages (Bharucha, 2005).

Water conservation cannot be done without the involvement and training of women so the present research was planned to study the water saving practices followed, by rural and urban homemakers, in home and during various personal care activities.

Ludhiana city and two villages of Ludhiana district. For the selection of the urban respondents, out of four zones of Ludhiana city, west zone was randomly selected. From the west zone two localities namely; Punjab Agricultural University Campus and Kitchlu Nagar were randomly selected. From each of these localities, 30 households were randomly selected; thus the urban sample comprised of 60 households.

For selection of rural sample, Sidhwan Bet block was randomly selected out of 11 blocks of Ludhiana district. From this block, two villages namely; Sawaddi Kalan and Birk were randomly selected out of the total list of 92 villages. Further, thirty randomly selected households were taken from each of the two selected villages, Sawaddi Kalan and Birk, thus selecting the rural sample of 60 households.

For collecting the relevant data as per the objectives of the study, a self-structured interview schedule was prepared. The well-structured interview schedule was pre tested before using it for actual data collection. For this purpose, 20 respondents were selected from a non-sampled area to determine its suitability and accuracy. After pre-testing of interview schedule, necessary modifications were made and the final interview schedule was prepared.

## ■ RESEARCH METHODS

The study was conducted in two urban localities of

## ■ RESEARCH FINDINGS AND DISCUSSION

Table 1 indicates that 75 per cent rural and 90 per cent

**Table 1: Distribution of respondents according to water saving practices and frequency of their use for personal care activities**

| Water saving practices               | Usage        |              |          |               | Frequency of use |             |       |             |       |      |
|--------------------------------------|--------------|--------------|----------|---------------|------------------|-------------|-------|-------------|-------|------|
|                                      | Rural (n=60) | Urban (n=60) | Z- value | Total (n=120) | Rural            |             | Urban |             | Total |      |
|                                      | Mean scores  | S.D.         | t- value | Mean scores   | S.D.             | Mean scores | S.D.  | Mean scores | S.D.  |      |
| Turn off water while washing hair    | 45 (75.00)   | 54 (90.00)   | 2.16*    | 99 (82.50)    | 1.7              | 0.85        | 1.85  | 0.56        | 1.77  | 0.76 |
| Turn off water when brushing teeth   | 42 (70.00)   | 56 (93.33)   | 3.30**   | 98 (81.67)    | 1.47             | 0.80        | 1.84  | 0.58        | 1.65  | 0.69 |
| Turn off water while lathering hands | 24 (40.00)   | 40 (66.67)   | 2.93**   | 64 (53.33)    | 1.5              | 0.81        | 1.5   | 0.82        | 1.5   | 0.82 |
| Turn off water while shaving         | 23 (38.33)   | 44 (73.33)   | 3.86**   | 67 (55.83)    | 1.74             | 0.90        | 1.97  | 0.89        | 1.85  | 0.90 |
| Short shower bath                    | 0 (0.00)     | 11 (18.33)   | -        | 11 (9.17)     | 0.00             | 0.00        | 1.47  | 0.61        | 0.73  | 0.31 |

Note: Figures in parentheses indicate percentages  
 Multiple responses,  
 Scores: Never=0,  
 Sometimes=1,  
 Always=2,  
 \*\* and \* Indicate significance of values at P=0.01 and 0.05, respectively

**Table 2: Distribution of respondents according to water saving practices and frequency of their use for other activities in home**

| Water saving practices  | Usage        |              |          | Frequency of use |       |             |       |             |       |      |
|---|--------------|--------------|----------|------------------|-------|-------------|-------|-------------|-------|------|
|   | Rural (n=60) | Urban (n=60) | Z- value | Total (n=120)    | Rural |             | Urban |             | Total |      |
|   | Mean scores  | S.D.         | t- value | Mean scores      | S.D.  | Mean scores | S.D.  | Mean scores | S.D.  |      |
| Don't use the toilet as a waste basket                          | 60 (100.00)  | 57 (95.00)   | 1.75     | 117(97.50)       | 2.00  | 0.00        | 1.98  | 0.45        | 1.99  | 0.23 |
| Avoid recreational water toys                                   | 42 (70.00)   | 31 (51.67)   | 2.06*    | 73(60.83)        | 1.96  | 0.92        | 1.84  | 0.96        | 1.90  | 0.94 |
| Share water saving tips with others                             | 11 (18.33)   | 49 (81.67)   | 6.94**   | 60(50.00)        | 1.09  | 0.44        | 1.42  | 0.72        | 1.25  | 0.58 |
| Capture and use the water that runs while waiting for hot water | 0 (0.00)     | 54 (90.00)   | -        | 54(45.00)        | 0.00  | 0.00        | 1.75  | 0.67        | 0.87  | 0.34 |
| Use a commercial vehicle wash that recycles water               | 0 (0.00)     | 3 (5.00)     | -        | 3(2.50)          | 0.00  | 0.00        | 1.40  | 0.31        | 0.70  | 0.16 |

Note: Figures in parentheses indicate percentages,  
 Multiple responses,  
 Scores: Never=0,  
 Sometimes=1,  
 Always=2,  
 \*\* and \* Indicate significance of values at P=0.01 and 0.05, respectively

urban respondents turned off the water while washing hair. Mean scores for rural and urban respondents were 1.70 and 1.85, respectively, which means they followed this practice 'almost always'. It may be concluded that most of the respondents are following water saving practices for performing this activity. Seventy per cent rural respondents turned off water when brushing teeth. However, the mean score was 1.47, which means they practiced it only 'sometimes', while in case of urban respondents 93.33 per cent respondents followed this practice and the mean score for them was 1.84 which means most of them 'almost always' practiced it. This is a good practice being followed by the respondents as it can lead to a saving of up to 112.5 litres of water per month. Forty and 66.67 per cent rural and urban respondents respectively don't let the water run while they lather when washing their hands. Mean scores for rural and urban respondents were 1.50 each, which means they followed this practice only 'sometimes'. In 38.33 per cent rural families and 73.33 per cent urban families, all the males turned off the water while shaving. Mean scores for rural and urban respondents were 1.74 and 1.97, they followed it 'almost always'. Only 18.33 per cent urban respondents sometimes shortened their shower bath. The mean scores were 1.47 which means they sometimes followed this practice.

So, on the whole, it can be concluded that more urban respondents were conscious and aware about these water saving practices and they were more frequently following these as compared to their rural counterparts.

The perusal of Table 2 indicates that all the rural respondents with mean score of 2.00 'never use the toilet as a waste basket'. In case of urban respondents, 95.00 per cent respondents with mean score of 1.98 'almost never' use the toilet as a waste basket. Seventy per cent rural and 51.67 per cent urban respondents with mean scores of 1.96 and 1.84, respectively almost always avoid recreational water toys for their kids. This difference in the response was found to be statistically significant. Only 18.33 per cent rural respondents sometimes (mean score= 1.09) share water saving tips with their kids, neighbours and friends whereas, 81.67 per cent urban respondents almost always (mean score=1.42) shared such tips. This difference in the response was found to be statistically significant at 1 per cent level. This difference may be attributed to the fact that urban respondents have more

awareness and consciousness about this aspect. Ninety per cent urban respondents were found to capture and use the water that runs while waiting for hot water and the mean score of 1.75 indicates that most of them do so always as against nil from rural category. Only 5 per cent of urban respondents were sometimes using a commercial vehicle wash that recycles water.

It may be concluded from the above mentioned results that urban respondents were more conscious of water saving practices than their rural counterparts. Hence, it can be said that there is a need to educate them regarding various water saving practices.

### Conclusion :

Water scarcity in India is predominantly a manmade problem; therefore if India makes significant changes in the way, it thinks about water and manages its resources soon, it could ward off, or at least mollify, the impending crisis. It is high time to think about maintaining a balance between environment and development so that both present and future generations can derive proper benefits out of this resource. Women need to be educated on the value, management and sustainability of this resource.

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