The Design, Development and Transfer of a Sanitation Hand Washing Dispenser to Rural Areas in South Africa

In South Africa, a country of 43 million people, many rural households lack basic services such as water and sanitation. It is estimated that 3.5 million South Africans do not have access to basic water services, while 27/10 million lack basic sanitation services. South Africa launched the WASH programme with one of the main being to increase the coverage of hand washing facilities at the right time and space to significantly reduce the incidence of water-related diseases. This paper looks at hand washing behaviour in villages in two municipalities in South Africa and the technology development which emerged as a result of the difficulties experienced by households in the country in terms of basic hand washing requirements.

**INTRODUCTION**

It is estimated that 3.5 million people in South Africa do not have access to basic water services, while 273/10 million lack basic sanitation services. In the Mpumalanga study, hand washing behaviour was linked to the availability of sanitation facilities within the yard, availability of potable water for hand washing, and the constraints that it presents to evaluation. Aldemom (1997) notes the private nature of these activities and the difficulty in assessing their absolute frequency and duration. However, the study concluded that new general purpose measures need to be used to investigate the hand washing activities of households. According to what the interviewers expect, and do not always reflect the truth. Aldemom (1997) also notes the private nature of these activities and the difficulty in assessing their absolute frequency and duration.

**A STUDY INVESTIGATION OF HAND WASHING IN THE MPUMALANGA PROVINCE OF SOUTH AFRICA**

The CSIR embarked on an initiative to design and develop a hand washing device for use in rural hand washing facilities. The programme had been carried out in the villages, one could expect that a low percentage of households washed their hands after these activities. However, in the assessment of the availability of hand washing facilities to carry out hand washing activities, more than 65% of Msogwaba respondents and over 80% of Nkomazi respondents were found to have a hand washing facility. The CSIR felt that the assembly could be done at a village level, which could encourage entrepreneurs to set up small businesses around the operation of the device. This prevents cross-contamination of hand washing water.

**Table 1**

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<tbody>
<tr>
<td>Respondents with no Hand Washing Facility</td>
<td>33%</td>
<td>49.2%</td>
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<tr>
<td>Respondents with an Open Basin or Bucket Hand Washing Device</td>
<td>49.2%</td>
<td>49.7%</td>
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<tr>
<td>Respondents with a Built-in Hand Washing Facility</td>
<td>49.7%</td>
<td>49.7%</td>
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</tbody>
</table>

**REFERENCES**


**CONCLUSION**

Although, the South African government promotes hand washing as part of good hygiene practices, no guidance is given on the device that could be installed to wash with provision of clean water for hand washing. The CSIR hand washing device is designed to assist rural households with washing of hands with clean water. This is one option available to households. Hopefully, the development of this device will stimulate the government to use the device instead of others, which should be adapted as alternative options to rural households.