



National Conference on Advances in Engineering and Applied Science (NCAEAS)

29<sup>th</sup> January 2018

Organized by : Anjuman College of Engineering and Technology (ACET) Nagpur,

Maharashtra, India, In association with

International Journal of Scientific Research in Science and Technology



# WaSH Services International Journal of Scientific and Research Publications

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## ABSTRACT

Public sanitation, as a health hazard, is one of the most critical discrepancies faced by the nation in today's time. Also hygiene and cleanliness is another critical aspect. According to the research about 1/7th of world's population still defecated in the open, of which 60% lives in INDIA. Finding these requisites in a local area can be quite tricky as majority of people are oblivious of their location & also they are not made available on any navigation application and/or tool. According to a UN study on how to improve sanitation globally, more people have access to mobile phone than to a toilet. In this paper, an attempt is been made to provide a tool (WaSH services) that will aid in finding the basic sanitation services according to proximity of our location for effective and timely assistance and a way encouraging people to be a part of "Swachh Bharat Abhiyan" for the people of Nagpur. WaSH services is comprised of three domains Drinking Water Index (DWI), Public Washroom Index (PWI) and Garbage disposal Index (GDI). Every index containing the information of the WaSH service, their location and route from your current location.

Keywords : GDI, WaSH Services, DWI

## I. INTRODUCTION

Hygiene, sanitation and cleanliness are the factors that remain unattended and cause major health risks. In India, pneumonia and diarrhoea are the two leading causes of death due to overlapping risk factors. Moreover, there exists an underlying issue regarding awareness and lack of information.

WaSH "Water, Sanitation and Hygiene" – are essential for good health and well-being. It includes several interrelated public health issues that are of particular interest to international development programs. Affordable access to WaSH is a key public health issue, especially in developing countries. Information and communication technologies (ICTs) have the potential to address the information gaps in the WaSH sector by transforming the way data is generated and

utilizing it accordingly while making it accessible to general public. WaSH is a web application with a heavy mobile compatibility.

Nowadays, mobile phones have become ubiquitous in the developing world. Mobile phones are increasingly being used as cost-effective tools for collecting data and disseminating information. In the past decade, water and sanitation practitioners have begun deploying mobile phones as tools to improve water, sanitation, and hygiene (WaSH) services. The WaSH includes intermediate information about accessibility, ease and portability of the aforementioned in a geographical area.

#### **Features of WaSH Services:**

1. WaSH services will help in identifying existing water infrastructure that specifically provides clean drinking water free of cost. This not only encourages people to utilise such a resource, but also motivate people to clamor for services that are equivalently exceptional as the ones we pay for.
2. **Healthy Hygiene Practices** Simple actions can make a huge difference to people's health. WaSH works to promote essential self and community hygiene practices, that include proper usage of public washrooms/lavatories and dump-yards, whenever the need arises.
3. **Empowerment, Integration, and Sustainability** Helping the society to self-organize and define their priorities when it comes to adapting personal hygienic habits, and empowering them to encourage habits as such to others in the community.
4. **Maintainability of Services** Once cognizance of WaSH services reaches greater audience, communities become more resilient by

supporting maintenance and sustenance of these services.

## **II. RESEARCH ELABORATIONS**

### **Problem Definition**

Public sanitation, as a health hazard, is one of the most critical discrepancies faced by the nation in today's time. Also hygiene and cleanliness is another critical aspect. Finding these requisites in a local area can be quite tricky as majority of populace are oblivious of their location & also they are not made available on any navigation application and/or tool.

The WaSH (water, sanitation, and hygiene) sector globally has some considerable challenges— both short term and long term:

1. Billions of the world's people still lack access to basic water and sanitation services.
2. In regions where water and sanitation services are being extended, many projects have a high failure rate, but the extent is unknown due to lack of transparency by implementing organizations.
3. Even where formal water supply and sanitation services exist, the service is often unreliable and of poor quality for the most vulnerable populations.
4. Fourth, water systems (and therefore sanitation) everywhere face long-term sustainability threats from over-extraction, climate change, urbanization, and pollution.

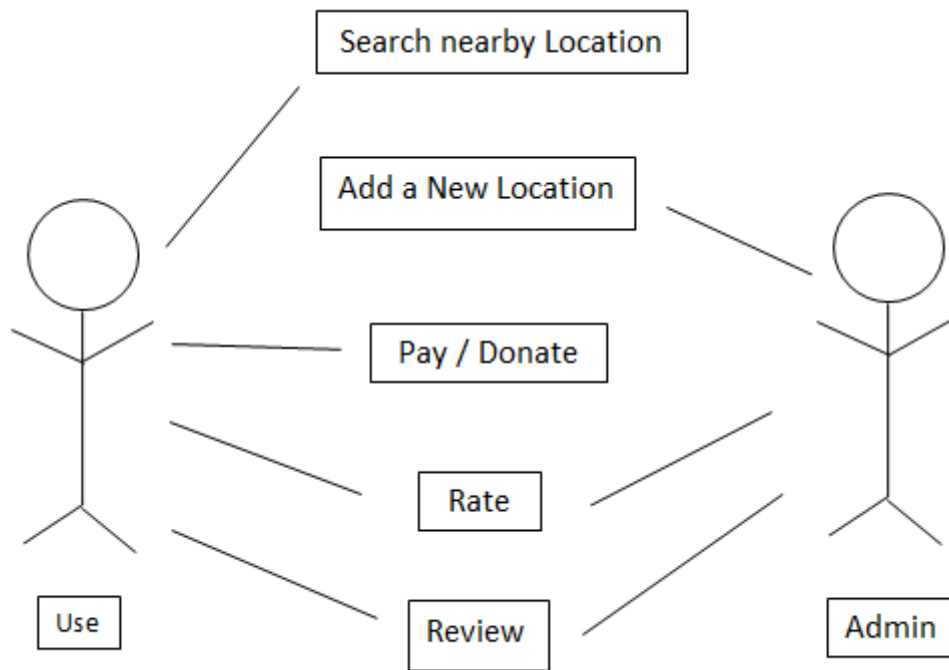
### **Proposed System**

WaSH, web application, contains the information of washrooms, garbage disposal/dump yards, and drinking water booths in different tabs which the

user can access as required. Along with the complete information it will help you in finding the nearest one.

It is a fast and simple garbage washrooms, disposal/dump yards, and drinking water booths finder. The database of tens of hundreds of public toilets, dump yards, and drinking water booths is stored on the phone for fast and offline access! Search for a location as well as pan on the map and

it will show the user the nearest service. Tap on the map to get directions provided by Google Maps. Or if user just really need to find any service, tap the directions button and it will give directions to the closest service, no need to fiddle about with anything. The database is constantly expanding and it will tell user whether there is a fee, whether require a key and whether or not they provide disabled access if admin know it.



**Figure 1.** WaSH Services

### III. CONCLUSION

From the various research factors and challenges the conclusion is:

- ✓ The ease of access that the user gets makes the tool more user-friendly.
- ✓ Aids in progressing our nation to a better future while reducing access barriers to basic civic services.

- ✓ Encourages people to be a part of “*Swachha Bharata Abhiyana.*”
- ✓ Provide updated information in the Google maps for more efficient access to information.
- ✓ Analysis of the water and sanitary information can help to identify regions and communities with greater needs and thereby help to design more pro- interventions.

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