**SMART PUBLIC RESTROOMS**

**ABSTRACT**

In our nation, sanitation has always been a major issue. Most significantly, this issue is not just concentrated to the rural areas but is also wide spread in urban and semi urban areas. People do not show the same level of concern when it comes to keeping the public sanitation systems clean as they show towards the ones at their homes. Right to good health and sanitation is one of the goals to be achieved as per the Millennium Development Goals of the United Nations Organisation, 2000. However in India, the scenario of public toilets is still dismal. One of the reasons for this is that the people do not bother to clean up after they use the toilet. These places are thus the breeding grounds of bacterial germs like Escherichia coli and many deadly diseases. Many people sometime prefer discomfort to using these toilets. Looking at such troubles, the decision to construct a self flushing toilet was made that simply utilizes the weight of the person using it as its working mechanism. The system consists of a platform supported on springs and the lever arrangement that flushes after use. The lever is pivoted in such a way that it will lower itself when weight is applied downward and when the load is released, this will strike the flush and hence in this way water is flushed out to clean the toilet. The design is robust and cost effective. Sensors or any kind of electrical transducers are not required in the construction of these toilets. As the old saying goes "cleanliness is next to godliness", this is a public welfare project which aims to propagate a cleaner and hygienic society and hence, take our nation to the heights of glory.

**PROBLEM DEFENITION**

Most of the public toilets are not clean due to the irresponsible peoples who often forget to flush the toilet after using it. In India all the state and central government are allotting numerous funds for constructing public toilets. The central government under “SWACH BHARAT MISSION” has built a vast amount of new toilets to provide the citizens a healthy and hygienic environment. Therefore cleaning of public toilets is equally important as cleaning of household toilets. So we have developed a mechanism to flush the toilets automatically by utilizing the human weight. The mechanism does not require any external power or human concern. Rather, it just works mechanically utilizing the weight of the person sitting on it.

**DESIGN AND THINKING**

In rural areas, there is scarcity of electric power and hence our design will be best suitable. This design utilizes the weight of the person in flushing the toilet and hence is a rather simple mechanism.

