

Human Powered Well Drill

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A project report submitted towards the partial fulfilment of the requirements

for the award of the degree of

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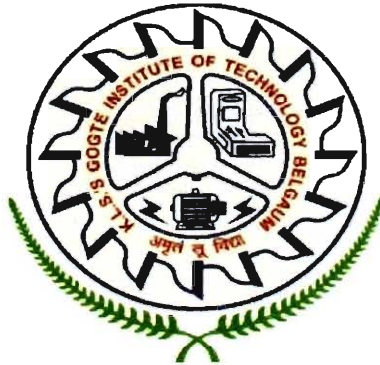
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Abstract

Despite all the efforts to date to improve access to safe domestic water supply and sanitation in less developed countries, the following bitter facts still exist

- *780 million people lack access to an improved water source; approximately one in nine people.*
- *3.41 million people die each year from water, sanitation and hygiene-related causes each year.*
- *People living in informal settlements (i.e. slums) often pay 5-10 times more per liter of water than wealthy people living in the same city.*
- *The water and sanitation crisis claims more lives through disease than any war claims through guns.*

The causes of this situation are complex, and are not to be resolved through technology alone. However, it is widely accepted that two broad sets of conditions need to be in place in order for the situation to improve – technologies which are affordable and manageable by user communities, and the arrangements by which communities can gain access to such technologies.

“Human powered well drill” is a sincere attempt in order to address the above issues in the most effective way.

Key words: Drilling rig, swivel, Drag drill bit, Analysis of the Steel frame, Fabrication, Hand winch, Kelly bar.