# **Multi-Function Washing Machine**

Jagdish Ahire<sup>1</sup>, Shadab Khan<sup>2</sup>, Shubham Chaudhari<sup>3</sup>, Harshwardhan Jagtap <sup>4</sup>, Prof .K.P.Suryawanshi<sup>5</sup>

1, 2, 3, 4, 5 Dept of Mechanical Engineering

1, 2, 3, 4, 5 Guru Gobind Singh Polytechnic, Nashik, India

Abstract- The way of the developing world, washing laundry is a difficult, time-consuming task that falls solely on women. Mothers and daughters typically spend 8 hours each week scrubbing each piece of their family's clothing and wringing out the harsh washing solution by hand.

Powered washing machines exist, but they are impractical in rural regionsbecause running water and electric are expensive or unavailable. Several groups already tried to build machines for these regions but they have been unsuccessful. Their machines were either expensive to build and repair because they require imported parts or they do not wash effectively.

# I. INTRODUCTION

Usually, new technology improves people's efficiency, washing the cloths It generally takes at least 8 hours of washing time, not including the extra time needed to walk to the public washing reservoir or hang up clothes to dry. Additionally, while washing clothes by hand, women spend hours leaning over a concrete basin. Clothes are washed by laboriously scrubbing each section of cloth over a cement washboard with their hands immersed in detergents that are harmful to the skin.





II. MULTI - FUNCTION WASHING MACHINE WORKING PRINCIPLE

Washing machine basically works on the principle of "centrifugation" The centrifuge works using the sedimentation principle, where the centripetal acceleration causes denser substances and particles to move outward in the radial direction. At the same time, objects that are less dense are displaced and move to the center.



Page | 1790 www.ijsart.com

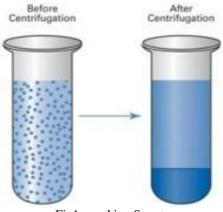


Fig1- working Structure
Fig2- Working Principle "Centrifugation"

### III. PROBLEM STATEMENT

To design an economically-viable, human-powered washing machine that can be used by the average Peruvian woman entrepreneur. The machine must clean as well as or better than, and in less time than hand-washing, and be compact yet stable enough to be transported easily in an urban setting

# IV. CONSTRUCTION

The simple multi-function washing machine its consist of 2-Rotating drum one is external [inside] and another is internal[outside] and another component are cycle for moving purpose of washing machine and dynamo for the purpose of store the energy generate by the dynamo and fan for the purpose of air dry function.

## V. WORKING

The multi-function washing machine works when we give to rotational movement to the cycle pedal. when we rotate the cycle pedal the cycle chain is transfer the energy from cycle to washing machine drum then the system is run. Outside drum is fix this only for the water only run in the system and go outside from the drum and when we put our cloths in the inside drum with 3 part of water and 1 part of detergent and mix together with cloths and rotate the inside drum for [5min-8 min] maximum and then for the dry function remove the water from the system and ON switch of fan for the dry function. This rotational movement also transfers the dynamo and battery is store that energy in the form of electricity



#### VI. CONCLUSIONS

Mothers and daughters typically spend 8 hours to wash the cloths so, Developing the urban area with small effort of man power and provide the best that we have now using the various Function of Technologies to help with middle class level as well as lower class level and to maintain the human health

#### REFERENCES

- [1] http://en.wikipedia.org/wiki/washing machine
- [2] http://www.idenfinder.com/history/inventions/washmachi ne.htm
- [3] http://en.wkipedia.org/washing mc/pedal-powered-washing-machine.htm
- [4] http://home.howstuffworks.com/washer1.htm
- [5] Bicilavadora The Pedal-Powered Washing Machine IDEAS 2005 Proposal[1]

Page | 1791 www.ijsart.com