**DESIGN AND FABRICATION OF PEDAL OPERATED WATER PUMP CUM POWER GENERATOR**

**Ajay Nehare1, Md. Zubair Ansari2, Sagar Melekar3**

**Dr. C. C. Handa4**

**1, 2 & 3 Student, 4 Guide & Head of Department**

**Department Of Mechanical Engineering, KDK College of Engineering, Nagpur**

**Abstract**

Energy is the most vital aspect in the development of modern technological civilization. The conventional energy sources are being scarce, so alternative energy sources are found which must be cheap, easily available and must satisfy the technical requirements.Bicycle is the main mode of transportation for many Indian villagers. Most of these villages are un-electrified. Power generated by pedalling can be converted from mechanical to electrical energy by using either dynamo or alternator and it can also be used to lift water by using a suitable pump. In the present work, a human powered multipurpose machine is developed which lifts water to a height 10 meter and generates 14 Volt, 4 ampere of electricity in most effective way. Power required for pedalling is well below the capacity of an average healthy human being.