
SOLAR E BICYCLE FOR ADIVASI STUDENTS

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ABSTRACT

The increasing mobility has directly led to deteriorating traffic conditions, extra fuel consumption, increasing automobile exhaust emissions, air pollution and lowering quality of life. Apart from being clean, cheap and equitable mode of transport for short-distance journeys, cycling can potentially offer solutions to the problem. Many cities have tried promoting cycling particularly through the implementation of bike-sharing. Apparently the fourth-generation bike sharing system has been promoted utilizing electric bicycles which considered as a clean technology implementation. Utilization of solar power is probably the development keys in the fourth generation bike sharing system and will become the standard in bike sharing system in the future but in interior areas like gadchiroli it has already less transports and economy of peoples live in remote places for that very cheaply cycle is available is priority

Keywords: Economy, Remote area, clean energy,E bicycle.

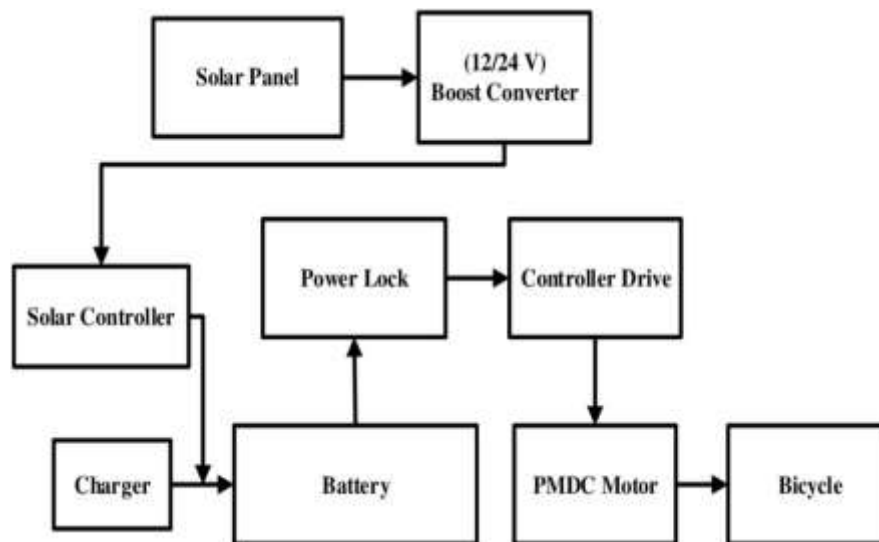
I. INTRODUCTION

Now a days the usage of bicycle for shorter distance has reduced because of the pedaling, time etc. Our project about solar powered electric bicycle which runs with help of both sunlight and the help of pedaling. The solar energy is converted into electrical energy by solar panel, battery, converter and the power is transmitted to the hub motor to run the cycle. We hope that this model bicycle runs with the operation of no emission. Due to this in upcoming years the usage of the bicycle for shorter distance will be increased and it also helps to reduce the pollutions like air & noise. Increasing awareness and government initiatives to promote use of battery operated vehicles is resulting into increasing adoption of eco-friendly vehicles by consumers as government is very sensitive for remote and interior places as scheme for such promotion will help people below poverty line.

II. DESIGN OF SOLAR E-BICYCLE

Solar E-cycle consists of many mechanical parts which works on their specific principles and play a vital role in the formation of the solar bicycle. These individual 54 components are classified as parts of the solar bicycle which are need to be assembled in order to make a full working solar bicycle, This is a very important thing to be considered. As this bicycle is just only a symbol of innovative thinking, it consists of general life components used in different mechanical or electrical machineries but the only difference is that they are used here in different specifications and assembled in a self designed way. These components when used with an innovative idea, then the result comes out as electrical circuits supporting a mechanical machine to work in a different and better ways Component used Bicycle ,2Solar pannel , PMDC motor, Battery charger , Battery ,Boost converter

III. BLOCK DIAGRAM



IV. RESULTS AND DISCUSSION

The results and discussion may include that as government promotes start up and skill India builds Clean and green energy adopted in next future era it should be beneficial for rural areas and economical backwards areas like all components already available in market with minimum cost if production is large that benefited.

V. CONCLUSION

Solar assisted bicycle is modification of existing bicycle and driven by solar energy. It is suitable for both city and country roads, that are made of cement, asphalt, or mud. This bicycle is cheaper, simpler in construction & can be widely used for short distance travelling especially by school children, college students, office goers, villagers, postmen etc. It is very much suitable for young, aged, handicap people and caters the need of economically poor class of society. It can be operated throughout the year free of cost. The most important feature of this bicycle is that it does not consume valuable fossil fuels thereby saving crores of foreign currencies. It is ecofriendly & pollution free, as it does not have any emissions. Moreover it is noiseless and can be recharged with the AC adapter in case of emergency and cloudy weather. The operating cost per kilometer is minimal, around Rs.0.70/km. It can be driven by manual pedalling in case of any problem with the solar system. It has fewer components, can be easily mounted or dismounted, thus needs less maintenance. From a future energy system perspective, it is important to identify new ways of transport and generation of electricity

VI. REFERENCES

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