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SUSTAINABLE DEVELOPMENT OF RENEWABLE ENERGY RESOURCE IN KARNATAKA: A GEOGRAPHICAL ANALYSIS

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Abstract:

Apart from conservative fuels already used for heating them, renewable energy sources are probable to play a significant role in the near future. This paper mainly aims at the sustainable development of renewable energy resources in Karnataka state, India. The methodology has been made by primary surveys of major wind power installed units at Gadag and Chitra Durga, and Secondary data has been used which is collected from various agencies, central renewable energy resource department, Bangalore bureau of economics and statistics, etc. ArcGIS software was used to extract the study area map. The interviews method is also adopted for concluding. Finally, the analysis shows that there is a potential of about 13000 MW for the development of wind power plants in the state, 3000 MW for the development of micro hydel plants, 66.5 lakh tones of agricultural waste, 1.4 lakh tone of cattle dung for establishing Biomass, and Biogas plants.

Keywords: *Renewable Energy Resource, Sustainable Development, GIS.*

Introduction:

Renewable energy is divided from natural processes that are replenished Constantly in its various forms, it is divided directly from the sun or heat generated deep within the Earth. Included in the definition is electricity and heat generated from Solar, Wind, Ocean, Hydropower, Biomass, Geothermal, resource and biofuels, and hydrogen divided from a renewable resource.

Energy consumption is one of the greatest significant indicators showing the development stages of countries and the living standards of communities. Population raises, urbanization, industrializing, and technologic growth results directly in increasing energy consumption Sahil (Suryvansheea and Dr. Alok Chaubeb, 2013). (M.A. Ehyaei, A. Mozafari and M.H. Alibiglou 2011) – are presented that the exergy, economic & environmental analysis of Shahid Rajaee gas

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