### Project's Contribution to Sustainable Development

Indian economy is highly dependent on "Coal" as fuel to generate energy and for production processes. Thermal power plants are the major consumers of coal in India and yet the basic electricity needs of a large section of population are not being met.

This results in excessive demands for electricity and places immense stress on the environment. Changing coal consumption patterns will require a multi-pronged strategy focusing on demand, reducing wastage of energy and the optimum use of renewable energy (RE) sources.



#### UNFCCC/CCNUCC



CDM – Executive Board

Page :

Government of India has stipulated following indicators for sustainable development in the interim approval guidelines for CDM projects.

## 1. Social well-being

The proposed CDM project activity leads to direct and indirect employment benefits accruing out of ancillary units for manufacturing towers for erecting the WTG and for maintenance during operation of the project activity; It will lead to development of infrastructure around the project area in terms of improved road network etc. and will also improve in availability of electricity to the region.

# 2. Economical well-being

Being a renewable resource, using wind energy to generate electricity contributes to conservation precious natural resources. The project contributes to the economic sustainability through promotion of decentralization of economic power, leading to diversification of the national energy supply, which is dominated by conventional fuel based generating units. Locally, improvement in infrastructure will provide new opportunities for industries and economic activities to be setup in the area. Apart from getting better employment opportunities, the local people will get better prices for their land, thereby resulting in overall economic development.

# 3. Environmental well-being

The project utilizes wind energy for generating electricity which is a clean source of energy. The project activity will not generate any air pollution, water pollution or solid waste to the environment which otherwise would have been generated through fossil fuels. Also it will contribute to reduction GHG emissions. Thus the project causes no negative impact on the surrounding environment contributing to environmental well-being.

## 4. Technological well-being

The project activity leads to the promotion of 1.5 MW WTGs into the region, demonstrating the success of large wind turbines, which feed the generated power into the nearest substation, thus increasing energy availability and improving quality of power under the service area of the substation. Hence, the project leads to technological well-being.