



# BABA FARID COLLEGE OF ENGG. & TECHNOLOGY

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Advances in Wireless  
Communication and Mathematics

*EDITORS*  
Ram Krishan | Lekh Raj

# Advances in Wireless Communication and Mathematics

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Ram Krishan  
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## Chapter-14

### ENERGY CONSIDERATIONS IN TRANSMISSION OF INFORMATION

B.S. Brar<sup>1</sup>

*There is a view that by applying information communication technology more and more in all spheres, all the problems of our nation may be solved. In our country, the agriculture is the basis-factor; heavy industry is the leading-factor; and the small-scale industry is the bridging-factor between the agriculture and the heavy industry. The use of science and technology in all the production-processes, and use of information-communication systems and computer technology is resulting in energy-consumption, especially of electric power, leading to more and more use of national natural resources and increasing carbon-content in environment. More electricity is needed for the faithful transmission of information. Problems of energy-crisis are going to become more serious. Energy is being produced from non-renewable sources in a big way. Production of energy from renewable sources must become the main stay. The purpose of technology must be to make the lives of all the people easy, happy, and prosperous. There is need to develop such technologies which consume less energy and the natural energy. The facilities based upon developed technologies are not to be used in a ruthless manner leading to health problems, and diversion from direct dialogue and inter-action resulting in social-isolation among human-beings. More and more electricity should be produced by using renewable resources and gradually but systematically reducing dependence upon the generation of electricity from non-renewable resources.*

**Keywords:** *Information-communication systems, computer technology, faithful-transmission, information, energy-consumption, national natural resources, carbon-content, non-renewable sources, renewable sources, health problems, diversion, social-isolation, dependence.*

#### INTRODUCTION

Agrarian sector is the basis of industrial development [1]. The agriculture provides the raw materials to the industry. The agriculture utilises the products of agro-industry. The agriculture population consumes the products of the small scale industry to meet their daily needs. The agriculture provides the grains to feed the entire working class and other middle and rich strata settled in the industrial centres. Thus if the agrarian sector develops, then small scale industry (and agro-industry) will develop further, and on the other hand, development of small scale industry (and agro-industry) will promote the development of agriculture. So there is very close relation between the development of agrarian sector and small scale industry (and agro-industry).

The development of small-scale industry generates the capital necessary for the development

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