

## Chapter 2

# Coupling of Economic Development and Technology Diffusion for Inclusive Growth to Meet the Challenge of Technology Implementation in Perspective

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### **ABSTRACT**

*The chapter is devoted to clearly analyze economic development in the country that will usher economic growth in all goods and services to benefit all people for inclusive growth. The discussion justifies the concept by logical reasonings that technology acts as catalyst in accelerating economic development. A model has been shown to link technology, infrastructural development, and economic development with a mathematical model that establish a relationship between per capita income, capital investment, labor, and economic growth. For this purpose, economic resources and infrastructure development have been discussed with logical sequence by exemplifying the economic status of different states in respect of energy sector which is the main driving force of the economic development. Finally, strategy for implementation of technology diffusion in the system has been developed to meet the challenge of coupling technology with economic development.*

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## **INTRODUCTION**

The present population in India of 1.21 billion (Census India, 2011) is increasing at 2.3. %,(Average), in 2050, the total population in India will reach around 2billion. It is a challenging task to meet the growing demand of the food and shelter requirement for this growing population, in addition to this, other basic necessity for energy, education, health care, communication and transport across the country need be looked into. Economic development is necessary in order to meet the requirement of the population for better standard of living, economic growth in country implies better standard of living by increasing productivity in economic resources with development of infrastructure Economic resources are industrial and agricultural sector that provide employment and generate income of the population. Economic growth at 7.8% was pegged at Indian economy during 2016 (“NCAER”, 2016). But Income of people across the population is not equal that varies interstate and intrastate across the country that is barrier to reach benefit of economic growth to all in rural and urban area. This difference in income per capita across the country is attributed to non uniformity in infrastructural development and productivity of industrial and agricultural sectors. The non-uniformity of economic development in vertical and horizontal level of the society is manifested by inequality of income, educational level, health benefits and communication services. There is considerable disparity in access to benefit of services because of difference in purchasing power of the population across the country interstate and intrastate. Since 1991, trade liberalization, the impact of economic development in global economy on the economic scenario in India is manifested by application of information and communication technology and massive computerization of different administrative, financial and business activities. It is obvious fact that economic growth becomes stagnant when the infrastructural capacity augmentation is stopped. The quality, production capacity and time of any work can be efficiently improved by application of technology. Therefore, economic development in India need technology application in functioning of economic resources and other social dimensions. Technology diffusion in the process of economic development act as catalyst to increase production, reduce cost of production, increase supply chain activity for employment generation to boost up income inter alia purchasing power of population. The infrastructure growth along with economic growth needs a concurrent effort consistently in order to meet basic services to all across the country. Thus the strategy invigorate the dual activity of maintaining flow of hard and soft technology to support supply of commodity and simultaneously increasing purchasing power capacity by agricultural work and self help programme. Economic resources are agriculture, industrial and service sector that are supported by energy and communication and transport infrastructures. There is linkage between supporting services with development of economic resources which

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