



## CORRELATION BETWEEN HUMAN AND ECONOMIC DEVELOPMENT

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### Abstract

This paper evaluates correlation between human and economic development. The results of the study argue that health and education are two important pillars of human development which may help to achieve inclusive growth target of underdeveloped countries. The study suggests that economic development should bridge the gap between rich and poor which is otherwise responsible for unrest, conflicts and aggression all over the world.

**Key Words:** Economic Development, Human Capital, Health and Education

**JEL Classification:** O1, J24, I1

### INTRODUCTION

Human development requires economic growth, for without it, no sustained improvement in human well being is possible. High growth rates do not automatically translate into higher levels of human development. And firm policy action is required to forge a closer link between economic growth and human development. Just as economic growth is necessary for human development, human development is critical to economic growth. The two way link must be at heart of any enlightened policy action (UNDP, 1991).

Laroche, Merette and Ruggeri (1999) identified five aspects of human capital as under:

- (a) Human-beings generate human capital which can not be traded. However the services rendered by human capital are marketable.
- (b) Human capital has the potential to render services not only at individual level but social level also.
- (c) Human capital can be used in general or in a specific form as per the needs of entity employing it.
- (d) Individuals can acquire human capital as fast as possible but they can not translate into the services at the same speed.
- (e) Quality and quantity of human capital depends upon the educational insights.

According to Harbison (1973) human resources are the ultimate basis of the wealth of nations. According to the study the developing countries come across with two major problems: firstly underutilization of the capacities of human beings as indicated by rising unemployment and underemployment in both rural and urban areas, due to high rates of population growth; and secondly the under development of the capacities of human agents for productive use of their energies. Further, study found that there is no serious conflict between maximizing employment opportunities and maximizing national income.

Tilak (1997) observed that India has during the post-independence period made substantial progress towards building up of a large educational edifice and network of scientific and technical institution in the country. Still half of the population in the country is illiterate. The goal of universalisation of



elementary education still eludes and vocational and technical education at secondary level did not progress much so as to employ graduates. The study confirmed that investment in human capital in India has to be significantly increased in three essential purposes (a) to meet the challenge of poverty and to meet the aspiration of the people for better levels of living in the modern world, (b) to eliminate or at least reduce technological dependence on other countries and thus to free the country from colonial and neo colonial dominance and (c) to enter the international market in industry and trade on a competitive basis to reap the benefits of economic liberalization and globalization.

Datt (2002) examined the improvement in human development index in India vis-a-vis other countries of the world. The study found that the population growth rate has begun to decline and it is estimated that it would be 1.3 percent per annum during 1999-2015. This will release quite a significant proportion of the resources being currently used to support a higher growth rate of population for other areas of development. The public expenditure on education was found to be stagnant at 3.2 percent of the GDP during the last 25 years. The youth literacy at 72 percent is much lower than the achievement of a majority of medium human development countries, which is around 90 percent and above.

Dholakia (2003) examined the trends in regional disparity in the economic and human development in India over the last two decades. While per capita income does not show any significant trend in regional disparity over the last two decades, seven out of nine human development indicators display a declining trend. Similarly, 12 of the other 16 related social and human development indicators show a marked decline in regional disparity during 1981-91. Further the study examined the question of the direction of causality between economic development and human development. The study found that the Indian regional data suggest a two-way causality between human and economic development. The structure of the relationship varies overtime when human development index (HDI) are the cause and PCI is the effect, but in the reverse causality case, the structure of the equations is stable over time.

The development of human resources can be made in number of ways, and to begin with we can make use of the tool of formal education at primary level which is the first level of education. Then comes the level of secondary education at school level and lastly at higher education level which includes colleges, universities and higher technical institutes. After theoretical education comes the most effective tool of human resource development which is 'on the job' training which transforms the educational skills to working skills. Training can be systematic or informal. The training programmes are conducted in working institutes through adult education programmes and through various social, political, religious and cultural groups. The third effective tool of resource development is skill development of the self at individual level. Individuals also seek greater knowledge and skills by their personal efforts through preparation when they take formal education or correspondence courses from others. Their thirst for knowledge and sense of achievement make them perfect managers in their own way. This sense of achievement further motivates them to polish their skills for better incentives and high social values and thus a continuous process of learning of new skills is developed (Harbison and Meyers, 1964). More investment on education of people is universally recognized as essential for achieving higher rate of economic development in any country. Education is able to develop and mould people in such a way that they are eager and ever ready to accept any changes around them that can lead to enrichment of skills and abilities in them which could be helpful in adopting technical changes around the world for the over all social and economic development. Thus the increase in education level serve as a platform for the policy maker. The acquisition of knowledge and skills is an investment in the sense that people forego consumption in order to increase future income. Investment in human beings does not result in same output across all workers because it is the differences in skill formation which makes the difference in output. Education increases future labour productivity and future income and can thus be seen as an investment in human capital, which then is embodied in the human being (Wobmann, 2003).



Health is another aspect of human resource development which is equally important. The improvement of medical and public health of the working population leads to more labour productivity. Only a physically and medically fit individual or group or society at large can make better use of their skills to further develop human resources (Harbison and Myers, 1964). Health improvement leads to better human development and better health itself leads to economic growth. While economic growth may not be always necessary for health but health plays vital role for the economic growth.

A healthy person can work more effectively and efficiently and by doing so he can devote more time to gainful activities. Strawn and Thomas (1998) have clarified that health attributes the variation in wages as well as education. Bloom and Canning (2003) have found that aggregate output is greatly influenced by health capital indicators. They have revealed that almost 25 percent of the growth rate is due to the health capital and improvement in health condition which is comparable to increase in the life expectancy up to one more years and also increase up to 4 percent points of higher GDP growth per year. It is well known that good health is essential part of human well being and people like to spend on health. Improved health increases production which is otherwise badly affected by workers ill health. Even natural resources can not be fully explored when people have to fight diseases on a large scale. Good health ensures more enrollments of children in schools. This increases their learning process which leads to economic growth. Economic gains earned through good health greatly affect poor people as the resources meant for their development are wasted due to their ill health. Nutrition is associated with general health that ensures better physique and mental health required for human development. One can not think of good health without nutritious and good food. The quantity and the quality of available food determine the physical and mental health and well being of a society.

However, due to poverty and hunger of large mass of people malnutrition is a global development challenge in recent times. It has affected health of the adults in general and children in particular which is more pronounced in under developed countries. Developing countries have one billion adults who are under weight and another 1.6 billion people who are anemic. They can not resist infection, have less capacities to work and have low economic productivity. Malnutrition is the major cause of child deaths, ill health and under development (Schroeder 2001). Thus nutrition is critical input for human health which ultimately leads to human capital formation.

### **CORRELATION BETWEEN HUMAN AND ECONOMIC DEVELOPMENT**

A desirable link can be created between economic growth and human development in many ways. Firstly emphasis of investment on education, health, skills of people can enable them to participate in growth and to share its benefits principally through remunerative employment. Investment in education promotes economic growth. It helps in creating more productive force and endowing it with increased knowledge and skills. It helps in providing widespread employment and income earning opportunities. It helps in creating a class of educated leaders to fill the vacancies.

Secondly investment in human capital in the form of on the job training is mostly undertaken by the firms themselves and they are the direct beneficiaries of increased production that thus materializes. However, since industrial production as a whole also tends to increase, the nation also benefits.

Thirdly improvement in the health of masses increases their productive capacity and leads to qualitative improvement in human capital. Therefore expenditures on health are important in building and maintaining a productive labour force as well as in improving the lives of people and quality of society (UNDP, 1995).

The progress in human development can be observed from the levels of living. The availability of goods and services in a given time for the needs and satisfaction of the people denotes the standard of living. Level of living of country is determined by the level of education, level of health and medical



facilities and services like level of banking system, level of transport, communication, road length and level of leisure and environment (Ganguly and Gupta, 1976).

The concept of modern economic growth implies suitable human capital development and accumulation not only for developed and developing countries but also for underdeveloped countries. Economic growth is not possible without emerging technology which calls for acquisition and mastery of new knowledge for the updation of skills and for improvement in efficiency of deploying those skills. The emerging technology has replaced old age practice of trade for cost advantages with new trade patterns concerning quality, information and intensity of production. Thus human capital formation and economic development are very much closely related. Without the quality of skilled workers economic development is not thinkable because better human capital can exploit the infrastructure and other physical resources to the optimum level so that the best of the results can be obtained thereby making development a universal phenomenon. There is growing realization of rapid rate of human capital formation necessary for economic development has induced the spirit to conduct more research on it. The studies conducted earlier have spelled out various causes of under utilization of human resources and also suggested measures to over come this problem so as to achieve the objective of economic development but there is dire need to explore different possibilities so that both can augument each other.

Health indicators revealed a continuous improvement in life expectancy, infant mortality rate and maternal mortality rate though they do not commensurate with the levels attained in several of the medium developed countries. Gender related development indicators reveal the gap between male and female population in adult literacy, gross enrolment ratio and earned income as being too wide and indicate the existence of a strong gender bias. The public expenditure on the health has been pitiable low at less than 1 percent of the Gross Domestic Product (GDP). Military expenditure as a percentage of Gross Domestic Product (GDP) indicated a declining trend during the 1990s. The growth rate of the Indian economy has remained at 6 percent during the last two decades and can be considered as satisfactory. The study concluded that though the human development index of India has improved from 0.406 in 1975 to 0.571 to 1999 but still she has miles to go before she can enter the group of high human development countries.

Moreover human development index (HDI) positively influence per capita income with a lag of about eight years, whereas per capita income affect the human development index (HDI) within two years. The study concludes that the central institutions need not be unduly concerned about reduction in regional disparity either in per capita income or in human development index (HDI). The states are best placed to choose their development strategy as per their felt need. This is the best time when the central institutions can and should purpose the natural priority of achieving high economic growth. The other concerns are more likely to be addressed hereby.

The issue of causality is basic to any study that examines an economic relationship. There is a need to know how variations in one variable affects the other in understanding economic behaviour and in the generation of economic policies. The country's potential to grow is not only dependent on physical resources but also on human resources. The human capital formation has taken the pivotal role in the process of development. Human capital formation is both qualitative and quantitative in the sense that it involves attainment of the skills, education and experience as well as enhancing the number of individuals who possess these and is essential for economic development. Economic development in turn also influences individuals, their education, health and living conditions. Thus the human capital formation and economic development are closely related,

Education plays a great and significant role in the economy of a nation. It forms the basis of human capital which is urgently required for increasing output and earnings of individuals. Education helps in enhancing skills of manpower, make them more productive, increases the employment avenues



of the workers thus contributing to economic development. It not only imparts knowledge and skills to individuals but also make them better human beings. Therefore in order to improve the education, following education policies should be adopted:

In order to impart education to all, governments, especially of less developed countries, should have schemes for adopting the children of the poor so that schooling become compulsory for them. Along with formal education, these children must be taught some skill to enable them to earn the livelihood after completing their schooling. Poor parents be compensated for the loss of their child's earning. Special attention must be given to the poor girl children who are a neglected lot in most of the underdeveloped countries. For the education to be relevant and purposeful, teacher pupil ratio should be realistically brought down in order to pay individual attention to each and every learner at the school level. Education policy should be supplemented with manpower planning keeping in mind the requirements of the economy. Health is another major contributor of human capital formation which leads to economic development. Each individual should have access to primary health care because healthy population only can build up a developed society. Improved life expectancy at birth and reduced infant and maternal mortality, crude birth rate and crude death rate are important ingredients of healthy society. Similarly increase in percentage of births attended by health staff, number of physicians and number of hospital beds combined with access to safe drinking water and sanitation helps fight the diseases at the early stages. To achieve all this following health policy may be adopted especially in the less developed countries. Improved medical and health care be given to infant/child ensuring better chances of survival. For keeping the whole family healthy, women should be given paramount importance by introducing schemes for improvement of women health and by imparting them necessary knowledge about healthy way of life. For keeping the wheel of production moving effectively, special attention should be paid to the health of the labour force by diverting sufficient and larger funds towards health facilities. Nutrition is a key determinant of better health and rapid economic development. The major threats in this area are malnutrition and under nutrition which lead to low birth weight babies and underweight children. To meet this challenge following nutrition policy may be adopted. The people should be made aware of the importance of balanced and nutritious diet necessary for keeping good health. States should declare their national policy of food for all so that there is no starvation of people. Supplies of food should be made in such a way so that it is equally and evenly distributed in all regions and for all times throughout the year. Policies should be made for improving the quality of life which will in turn improve human development levels. As a matter of fact the basic purpose and reason of economic development is to enable all mankind to live comfortably, peacefully and to make sure that coming generations do not face miseries and adversaries.

The concept of development can be viewed as a multidimensional process which involves the reorganization and reorientation of the whole economic and social system. It is much more than the increase in income and output. It not only involves the radical changes in institutional, social administrative structure, popular attitudes, but also in customs and beliefs. The country's potential to grow is not only dependent on physical resources but also on human resources. In this context during 1970's the concept of economic development was redefined in terms of reduction of poverty, inequality and unemployment in a growing economy (Todaro, 1977). There are number of factors which contribute to economic growth and development, such as availability of capital, raw materials, power, market, machinery and equipment, entrepreneurial ability and technical and skilled manpower. The three categories under which these could be placed are: human, physical, and financial. However in the final analysis human resource factor appears to be, the most strategic and critical. A country may have plenty of natural and physical resources and the necessary machinery and capital equipment, but if it has not got the efficient, skilled and able manpower which utilize these resources to the optimum level, these resources will be fruitless. This is now universally accepted phenomena that 'human capital formation'



is as important a precondition of economic growth as the rapid rate of 'physical capital formation' (Mehta, 1976). The quality of human resources, the organization of their production system and the institutional arrangements undertaken to accelerate their productivity growth are the main attributes of any success story of development. According to Kuznets (1966), high rates of increase in factor productivity is one of the few characteristic features, manifested in the growth process of almost every developed country. In other words, technological progress including the upgrading of existing physical and human resources accounts for most of the measured historical increase in per capita GNP. The levels of labour productivity are low in developing countries compared with those in the developed countries. Low level of living and low productivity are self reinforcing social and economic phenomenon in poor countries and as such are principal manifestations and contributors to their under development. Lack of complementary factor inputs such as physical capital or experienced managements explains the phenomenon of low levels of labour productivity in many developing countries. The linkage between the low level of income and low level of productivity can be explained through poor physical health. The poor nutrition in childhood, poor dietary habits, inadequate food and low standard of personal hygiene in later years can severely restrict the mental and the physical growth of individuals. Human development and human rights go side by side. If the human rights are not protected by human development it would be a case of lopsided development and could cause a rift in the society which ultimately degenerate the development itself. Human development with human angle help in bringing prosperity, self respect and the care for the respect of others and hence the well-being of society at large. Efficient workers of any country are the back bone of economic development of that country.

Efficiency can be obtained by sharing technological advancement taking place all over the world as also by technological innovation of individuals and group of individuals. Technological advancement of one field in one part of the world effects the other part of the world and advancement taking place in some other fields effects the first part of the world. That is by sharing technical advancement of one part with that of the other part brings to both parts of the world the best of their technology to each other. Human progress can not be thought of without technological innovation which has replaced printing press with computers and electronic printing, use of penicillin with large scale use of vaccination etc. All these innovations have greatly improved health, raised productivity and facilitated learning and given new dimensions to communication. That is why technology has drawn world-wide attention. New break through in digital, genetic and molecular fields have brought improved health, hygienic and affordable nutrition, expansion of knowledge accelerated economic growth and empowered people at all levels so that they have better and larger participation at their own locations (UNDP, 2001).

The concept of modern economic growth implies suitable human capital development and accumulation not only for developed and developing countries but also for underdeveloped countries. Economic growth is not possible without emerging technology which calls for acquisition and mastery of new knowledge for the updation of skills and for improvement in efficiency of deploying those skills. The emerging technology has replaced old age practice of trade for cost advantages with new trade patterns concerning quality, information and intensity of production. Thus human capital formation and economic development are very much closely related. Without the quality of skilled workers economic development is not thinkable because better human capital can exploit the infrastructure and other physical resources to the optimum level so that the best of the results can be obtained thereby making development a universal phenomenon.

### **Concluding Remarks**



Economic development should bridge the gap between rich and poor which is otherwise responsible for unrest, conflicts and aggression all over the world. It is only economic development in true sense - with all human beings enjoying good health and better levels of living - which can make the world a better place to live in.

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