



The Management of Human Capital in the Indian Power Generation Industry is illustrated via the case study of TSGENCO.

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Abstract

In the worldwide setting, the rival controls the businesses regardless of industry. The market's intense competition has given corporations a distinct competitive advantage. The company's unique competitive edge is its human capital. To improve an organization's performance, human capital is crucial. The time is now for businesses to enhance their human capital by offering training and development programs to improve their staff members' abilities, knowledge, and skills. Additionally, it delivers excellent results in workforce planning and assesses employee attitude. A company's most significant asset is its workforce, which provides the concrete foundation needed to ensure continuous success and long-term prosperity. As a result, the study demonstrates the value of investing in human capital for the Indian power generation business.

Keywords: Human Capital, Investment in Human Capital, Power Generation Sector

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I. INTRODUCTION

"Employees are the heart and soul of any business."

Like other economic concepts, human capital has an economic history. It is therefore not well defined. According to Becker's premise from 1962, it is difficult to estimate human capital. We outline the human capital definition based on the literature review. The definition of human capital that is considered to be the most accurate reads, "Human capital consists of knowledge, skills, attitude, experience, and other traits that contribute to the production and productivity of the organization." (Goode, 1959).

Human capital is a collection of intangible assets amassed by employees of the firm, according to the book Roos & Roos (1997). Intangible assets come in three different categories: competencies, attitudes, intellectual prowess, and knowledge.

According to Laroche et al. (1999), eight different parts make up human capital. They pay particular emphasis to those parts that have been studied and determined to consist of an innate and an acquired component that cannot be sold but may be acquired through formal and informal channels. Both the qualitative and quantitative aspects of human capital might be particular or universal. Humans do not consistently apply their gained information and skills. Human capital, however, may be impacted by outside factors.

Chen et al. (2004) defined human capital as a person's talents, attitudes, and inventiveness. Talent and individual knowledge and skills are regarded as contributing factors to the worth of the organization. Human capital, defined by Litschka et al. (2006), is a group of components that comprises a person's abilities to work, knowledge, and skills, as well as psychological and physical traits. These assets are used by the company but do not belong to it; they help it expand and perform better.

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II. SIGNIFICANCE OF HUMAN CAPITAL

An important factor in the industrial revolution's development was physical capital. What effects will the information era have on the way wealth is produced in knowledge-based industries? Using human capital will enable this. The World Bank conducted a study in 1995 to ascertain the levels of wealth in 192 nations and concluded that there is 16 percent of physical capital, 20 percent of natural capital, and 64 percent of human and social capital in countries with high levels of wealth. Nafukho et al. (2004) contend that investing in education and training, which develops human capital, is a means of advancing the individual, the organization, and the country.

Human capital management is the new paradigm for the information era, according to Weathely (2003). To do the required tasks, a person must decide quickly. Johnson (2002) highlights the value of human capital and claims that all breakthroughs are the result of human ingenuity. The people uphold the business system and economy. Without people, there would be no structural or intellectual capital, according to this view. Human capital has a significant impact on how quickly a nation expands, according to Lucas' research from 1988.

III. FINANCIAL INVESTMENT IN HUMAN CAPITAL

The investment in human capital is given a clear examination by Mincer, Schultz, and Becker. According to Schultz (1971), human capital investments fall into five categories. Invest in health and economic information, migration, and the improvement of skills and knowledge (via on-the-job training). The author believed that people might make whatever investments in their development they desired.

The best strategy to enhance social and societal well-being is through this. Organizational development is possible, according to Becker's (1962) prediction, if specific abilities, expertise, and a willingness to invest in human capital, which will boost productivity, are present. The cost of general skills must be carried by employees who are paid less when an organization wants to acquire wide abilities but runs into problems owing to staff turnover.

IV. HUMAN CAPITAL INVESTMENT'S IMPORTANCE

Industrialized nations like the United States have drastically increased their investment in human capital. In his article, Schultz (1962) found that investing in human capital significantly alters the factors that determine disparity in a person's income distribution. Human capital investment was emphasized as a growth factor by Becker et al. (1990). The country will reach an equilibrium, the author claims, if investments in human capital are increased. According to Lee et al. (1994), Taiwan's output growth and the narrowing of income disparities are significantly impacted by the progressive development of human capital.

The empirical work provided support for the development of phenomena in industrial economies like Taiwan and Korea and the process of continuous learning, which give rise to investments in human capital and the accumulation of human capital. Schultz, Blinder, and Liu tested their hypothesis that investing in human capital increases employee productivity, social mobility, and educational attainment. The theories are presented in a World Bank document, and they are backed up by a Taiwanese study.

Khan (2005) claimed that sustaining a healthy environment and a skilled labor force, which will boost productivity through the investment of human capital, can sustain a nation's development. The discussion that came before it emphasizes how important investments in human capital are to a country's economic growth. The creation of national value and the expansion of the global economy both depend on intellectual capital, according to Bontis (2004).

V. INDIA'S MANAGEMENT OF HUMAN CAPITAL

Long recognized the role that human capital plays in India's economic development. The seventh five-year plan states that through offering education and training to the vast majority of the population, human capital development is essential to the formulation of strategies. It accelerates economic growth and changes the situation as intended. It is quite challenging to establish a causal link between the expansion of human capital and economic growth. The expansion of each industry has an impact on the expansion of other sectors.

A. Understanding India's human capital

India placed 115th out of 157 nations in 2019. India is ranked 116th in 2020 out of 174 nations. India's score, on the other hand, went up from 0.44 in 2018 to 0.49 in 2020. The World Economic Forum reports on the development and use of human capital in 130 countries in its human capital index report for 2016. The Indian falls five positions from the previous year, 2015, to 105th place with a score of 57.73. India does better than Nepal and Pakistan in the South Asian area, but it trails well behind Sri Lanka and Bhutan and is roughly on pace with Bangladesh. Bhutan is in 91st place with a score of 61.83, Bangladesh is in 100th place with a score of 61.83, and Sri Lanka is in 50th place with a score of 71.69. 90% of the population is literate, and educational

attainment has increased for all age categories. Despite this, it came in 103rd place among emerging markets internationally.

In terms of its incapacity to increase labor force participation and employment creation, India came in at number 121 out of 130 countries. Due to their low enrollment rate and poor quality, India's primary schools are lagging. On the other hand, just 89% of children and teenagers are literate. Higher education in India performs better than it does for university graduates. This demonstrates how academic specialism is constrained and significantly contributes to gender inequality in the workplace. It has a hard time finding qualified employees. A rating of 45 and a score of 55.71 are normal for skilled employees in India. Pakistan and Bangladesh, two of our neighbors, are ranked 93 and 97, respectively, with scores of 44.05 and 43.44. India came in at 53.24.

The majority of tertiary degree holders worldwide are in India, which has roughly 78 million of them. Distribution of those with a university degree. India comes in second behind China in terms of the number of STEM graduates with 2.5 million. Approximately 65% of the talented individuals in the world maximize their schooling, lifetime employment, and skill development.

India dropped 10 spots from its current position to number 76 in the 2014 global innovation index research. Cornell University and the international body for intellectual property jointly released this.

Soumitra Dutta contends that STEM research and investments in human capital should be given top priority in India. India has not put many innovation-related activities into action over the last five years. India must concentrate on several factors for the nation to prosper. India's economic advantage has been eroded in other sectors as a result of scandals, corruption, and retroactive taxation. Investment in our country will not be encouraged by these acts. India's ability to attract foreign investment is becoming less effective in this environment.

Industries in India gave expenditure on research and development a lower priority than was required. They must improve their infrastructure, environment, and education to draw in more foreign investment and stay free of corruption and scandals. In terms of investments in human resources and research, India lags behind China by three times, according to the most recent five-year analysis of the global situation. In India, numerous IIMs and IITs are being founded without the necessary infrastructure or faculty.

University funding has been incredibly sparse. It is now time to tackle challenges to improve the institution's quality because only the branding of the institution has been developed and there are not enough infrastructures.

The research and development division has not received enough funding from the Indian organization. There isn't much of a link between Indian businesses and academic institutions. Innovation is what drives the corporate sector's thinking and changing conditions.

To stay competitive, all corporate entities must implement innovative strategies. The general public should make investments in human capital, such as health, education, and skill development, to capitalize on India's demographic advantage. Investments in maternal health, nutrition, and economic growth are related, according to the economic analysis. If India wishes to invest in human capital, it must take initiatives to attract more young people and boost the number of young people already living there.

B. Pumping Investment to better India's human capital

According to the economic survey, to promote private investment in social sectors, the quality of education in both the public and private sectors (private and public) must be defined and determined. India has spent more than 4% of its GDP on education, which is less than its long-term target of 6%. With more than 1.4 million schools, 45,000 colleges, and more than 700 institutions, India has the largest education sector in the world. Our biggest failing is the caliber of our education system. More than 300 million students now have the opportunity to contribute to the country thanks to advantages related to human capital. India lacks social infrastructure in the areas of housing, health, and education. India's specific growth is dependent on the quality of its education system and the state of its people's health.

Between 2015 and 2050, India's workforce will grow to 249 million, while China's will shrink to 166 million. India has the human capital to advance economically and overtake China by 2030. When policymakers take into account human capital, this is feasible. The population segment that joins the employment force will have the most opportunities between 2030 and 2050.

Politicians are essential in convincing young people to pursue politics or to complete their education. India has demographic advantages that affect policymakers' choices, as well as the catchphrases "Make in India" and "Think in India." If this idea is implemented, India's reputation can be retained and a knowledge-based economy with a plentiful supply of human capital may be built. India has a highly skilled labor force, but our policymakers are preoccupied with other issues. In a knowledge-based economy, there should be a strong correlation between investment in firms and investment in human capital. However, in India, these connections are weak.

According to the economic assessment report, insufficient investments have been made in human capital and business, compared to the needs of the nation. Nevertheless, thriving industries in the service and manufacturing sectors have fueled the brisk economic expansion.

VI. SECTOR OF INDIA'S POWER GENERATION

One of the most crucial components of infrastructure is power because it is necessary for a country's economic growth and general well-being. For India's economy to thrive sustainably, there needs to be and be expanded competent energy infrastructure. The goal of India's electricity sector has been to guarantee inexpensive, sustainable power for all people. Over the past few years, the Ministry of Power has made significant efforts to transform a nation with a power deficit into one with a surplus. By establishing a unified national grid, enhancing the distribution system, and guaranteeing that every residence has access to power, they have achieved this.

India has one of the most varied power industries in the world. Coal, lignite, natural gas, oil, hydropower, and nuclear power are examples of traditional sources; possible non-conventional sources include wind, solar, agriculture, and municipal garbage. In the upcoming years, it is predicted that the nation's demand for power would increase even more. The current production capacity needs to be greatly boosted to keep up with the nation's expanding demand for electricity.

It is necessary to greatly boost capacity. As of July 31, 2022, India was the third-largest producer and consumer of power worldwide. Its installed electricity capacity is 404.13 GW. India's installed renewable energy capacity (including hydro) stood at 161.29 GW as of July 31, 2022, or 39.91% of the nation's total installed power capacity. The predicted contribution of solar energy is 57.97 GW, with wind power coming in second at 40.89 GW, biomass coming in third at 10.68 GW, small hydropower coming in at 4.89 GW, and hydropower coming in at 46.85 GW.

4.2 GW of non-hydro renewable energy capacity was added during the first quarter of FY23 as opposed to 2.66 GW during the same period in FY22.

In the first quarter of FY23, India's electricity production (including renewable sources) increased by 16.79% year over year to 430.97 BU. India's power consumption increased 3.8% year over year to 128.38 BU in July 2022, per data from the Ministry of Power.

Human Capital at TSGENCO

Telangana State Power Generation Corporation Limited includes the Telangana State Electricity Board. It is in charge of producing electricity for Telangana. After the Telangana state was established, the electricity trade was stopped, and management of the power-producing system remained in its hands.

Telangana State Power Generation Corporation Limited was established on May 19, 2014, by the 2013 Companies Act, and it started operating on June 2, 2014. Electricity generation, transmission, and distribution were the purview of the erstwhile Andhra Pradesh State Energy Board, which was founded in 1959. The Andhra Pradesh Electricity Reforms Act was passed by the state's government in 1998 in conjunction with the Electricity Sector Reforms agenda. The former APSEB was reformed as part of the reform process.

When the state was partitioned on June 2, 2014, APGENCO distributed all assets and liabilities, and Telangana Power Generation Corporation (TSGENCO) was established for the newly created Telangana state, while APGENCO remained for Andhra Pradesh. Both states now have access to power plants. Telangana GENCO was provided with the Telangana region's thermal, hydroelectric, and solar power plants are provided "as is, where is."

VII. CONCLUSION

Ila Patnaik predicts that India will have the youngest labor force in the world. In the ensuing years, she underlined the value of a healthy workforce. Around 70% of the workforce is now literate, thanks to a significant rise in literacy rates. India's economic growth is reportedly second only to China. Additionally, we hear that bank credit, investment, and employment growth are all on the decline. It's unclear how the two tales can coexist. The first is about the potential long-term growth of India, and the second is about the actual growth we are experiencing.

The nation enjoys three main economic benefits: increased capital stocks, rising human capital, and a variety of microeconomic productivity factors. The National Survey of India has reported that the literacy rate in India will be 77.7% in 2022. 73% of people were literate in 2011. The quantity and caliber of labor will increase due to the rapid rise in literacy. Everyone entering the workforce in 10 years will be literate, and 20% of them will have a college degree.

Additionally, it is anticipated that India will have a 100% female literacy rate. India has a competitive advantage in the international market for scientific and technical workers. The decline in industrial production is incompatible with India's anticipated rapid expansion.

India has a competitive advantage in the international market for scientific and technical workers. The decline in industrial production is incompatible with India's anticipated rapid expansion. Companies' net revenues are still declining. In addition, bank loans to the commercial sector are declining, and projects are stagnant. This illustrates how little money has been invested in the nation.

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