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THE ROLE OF EDUCATION IN THE ECONOMIC DEVELOPMENT OF PAKISTAN

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ABSTRACT

There is a substantial correlation between education, learning environments, and income/productivity levels, according to empirical examination of economies around the world. The human development index (HDI) is frequently cited as one of the most important indices of economic growth and development in a country's national income. Human capital theory views humans as economic companies that contribute to the Total Factor Productivity of the economy through education and learning environments (TFP). Education is the connecting dot between an economy's physical and human resources, and this is critical to its long-term viability. As a result of its beneficial effect on national GDP, education increases the marginal productivity of its workforce. For the services, agricultural, and industrial sectors, Pakistan's education system is vastly divided into three unique learning settings.

Keywords: Education, Environment, Development, Human Capital, Productivity, TFP, FDI, Learning.

INTRODUCTION

For decades, economists and sociologists all over the world have debated the significance of education in a country's economic success. The assumption that education is a good predictor of future economic growth and development is based on the premise that a more educated workforce is more productive. This quotation from British economist Alfred Marshall illustrates the importance of education: "While nature shows a propensity to decreasing return, man shows an inclination to enhance return. In order to conquer nature and satisfy our desires, knowledge is our most powerful engine of production (Ramirez, Luo, Schofer, & Meyer, 2006). As a result, there is a positive association between education and economic growth in a nation. Recognition of the significance of knowledge has grown, and governments are once again being urged to incorporate it into their development plans (Olssen* & Peters, 2005). It doesn't matter what makes up a

country's GDP; the underlying concept is that workers with higher levels of competence create more product in the same number of hours than workers with lower levels of skill. The national revenue of a country is boosted when workers' marginal productivity is raised through education (Breton, 2012). This highlights the importance of a country's human capital in terms of primary, secondary, and higher education levels. Pakistan, a developing country, invests 2.2% of its GDP in education, according to the World Bank. It has a literacy rate of 58 percent for those over the age of ten. Urban areas have a literacy rate of 74%, while rural areas have a literacy rate of 49% (Ali & Malik, 2017).

Mismanagement of resources and a poor GDP-Tax ratio, as well as rampant corruption, overburdening the economy with loans and rapidly depleting foreign reserves have all contributed to Pakistan's fragile economy in the past. In addition, the threat of terrorism that has descended upon the country has made matters worse. Direct foreign investment in Pakistan was negatively impacted because of the country's reputation as an epicenter of terrorism. Pakistan's economy grew at the greatest rate in a decade in 2016-17, despite the country's political and social turmoil. In 2017, Price Waterhouse Coopers released a report predicting that Pakistan will become the world's 20th-largest economy by 2030, and the 16th-largest by 2050 (Ali & Malik, 2017).

To put it another way, since the human capital theory states that productive hours are more essential than the total number of working hours, then it is clear that the average production of a business will improve manifold when its workforce is well-versed in modern knowledge. Considering Pakistan's current severe economic situation, it may be concluded that the country's educational system has not been able to provide students with the necessary skills to compete in today's rapidly changing labor market. As a developing country, Pakistan's education sector is dealing with a number of complicated issues, which is why education is so important. By establishing a bridge between education and economic development, this article will examine the obstacles that prevent Pakistan's human capital from becoming productive members of the country's economy. According to the Human capital hypothesis, a country's working class can become more globally competitive by acquiring the information, skills, assets, and experiences gained via high-quality education, which in turn spurs economic growth and remittances. As a result, the participatory state model of governance will be utilized to demonstrate how the country's education system has been hindered by bad governance and a lack of participation by stakeholders. These theories will help establish and identify how better-educated workers boost overall productivity and production because no country's economy can take off until the government invests in its education.

A look at Pakistan's education system

Pakistan's education system has been ranked as one of the lowest in the world by Quacquarelli Symonds (QS), a British ranking firm. Low primary enrollment rates, unskilled teachers, obsolete curriculum, and poor planning and manipulation of resources are some of the system's many flaws (Farrukh, Lee, & Shahzad, 2019).

The educational system as a whole and the educational environment

While counseling sessions and family history are equally important to student learning, they aren't the only factors that should be taken into account while evaluating an

educational institution. 4 out of every 10 people in Pakistan are living in poverty, and the country's school system reflects this polarization (Group, 2016).

When it comes to academic success, "classroom climate" is one of the most crucial aspects, according to the National Center for Education Statistics. According to experts, the ideal learning environment consists of a setup that efficiently accomplishes the intended learning goals.. But in Pakistan, policymakers, administrators, and faculty members tend to disregard or undervalue the importance of the learning environment. There should be an emphasis on teaching and learning facilities in a suitable learning environment (Jawaid & Aly, 2014). Temperature, wall decoration, lighting, ventilation, and acoustics all play a significant effect in how well kids learn in a classroom setting. The learning environment of 751 children in 34 classrooms across seven UK schools was evaluated in 2013 by Barrett, Zhang, Moffat and Kobbacy to see if environmental circumstances affect learning or not. Students' performance was found to be affected by 25 percent (either positively or negatively) by variables such as light sound, temperature, ventilation and the quality of the furnishings (Granito & Santana, 2016).

Thus, a high-quality education includes a variety of components, including a motivated learner, a well-equipped learning environment, relevant and student-centered curriculum, textbooks, qualified teachers and student-centered teaching methods, and measurable outcomes. Knowledge, skills, and attitudes that promote positive engagement in society are included. Thus, in order to have a good educational system in Pakistan, the following elements must be present:

- Refreshed Coursework
- Textbooks of the highest quality and current educational resources
- Teachers who are properly trained and certified
- Individuals' cognitive abilities were the focus of the assessment.
- a setting that promotes learning

Curriculum plays a critical role in determining and implementing certain teaching methods and content standards in each educational institution. At each level, there are no indications that students are acquiring new abilities, and many times the answers to basic queries like "How," "What," and "Why" remain enigmatic. Unfortunately, the curriculum in Pakistan isn't updated on a regular basis, and the lack of visual stimulation is a major hindrance to learning. Textbooks, which serve as the primary source of information for students, are often out-of-date and unreliable. A lack of connection between the teacher and students is evident in the classroom, where rote learning is the primary method of instruction. The current testing methods fail to improve the cognitive abilities of persons at all levels.

Various Elements of a Growing Economy

According to some, GDP is not an accurate measure of a country's progress. The national income of a country is the most reliable indication of economic growth and progress; hence the human development index is crucial. The following elements make up the index:

- Expected life span

- Welfare and education
- Wealth

In contrast, Pakistan's education system is in shambles and the economy is shaky, despite its enormous potential. This means that national economic growth is a result of both increased physical capital and an increase in the quantity and quality of human capital. Products improved in both quality and quantity as a result of both capital sources working together. Economic growth can be broken down into three basic categories:

- Investment in infrastructure and development
- Advances in technology
- Effort per unit of time

The quality of education and learning environment is directly related to the relationship between each component. Increasing educational quality leads to increased productivity, technological advancement, and infrastructure growth. Thus, a globalized world's knowledge-based structure demands that countries focus on creating educational structures that are favorable to learning. Pakistan, a developing country, is struggling to keep up with the demands of the digital age because of rising financial and knowledge divides. (ALIYU, YAKUBU, Idris, & Nigeria, 2018) points out that Pakistan is a country with a wide range of cultural and religious traditions. Islamabad is the capital and largest city of Pakistan and the second-largest city in South Asia. Results of the 6th population and housing census-2017, (provisional summary results)

Central Asia is China's gateway to the Middle East and Europe, and its strategic location means that China has a direct access to these countries through the region's central Asian states. The country has been classified as a transit economy because of its strategic importance and its position as a conduit to global economies.

In the 2015-2016 fiscal years, the agricultural sector provided 19.8% of the country's GDP while the industrial sector contributed 21.02%. An estimated 50 percent of Pakistan's workforce is involved in agriculture, and the sector generates most of the country's export revenue. Pakistan's education system is feeling the effects of the country's economic diversification (Basheer et al.,2015; Khilji, 2015).

An estimated 25 percent of Pakistani youth are illiterate, while 8.2 percent are unemployed due to a lack of vocational or technical skills, according to the UNESCO Institute for Statistics in 2016. The primary school completion rate in Pakistan is among the lowest in the world. The majority of Pakistan's population has limited access to education. It has been suggested by several observers that the current state of education in the country stems from a lack of clearly defined national educational standards (Ali & Malik, 2017).

Country	Scientific and Technical Journal Articles (2009, World Bank Data) (World Bank's World Development Indicators, 2018)	GDP Ranking (based on 2011, World Bank Data)	Human Development Index (HDI, based on 2012 UNDP Data) (United Nations Development Program (UNDP) HDI, 2019)
United States	208,601	1	Very High
China	74,019	2	Medium
Japan	49,627	3	Very High
United Kingdom	45,649	7	Very High
Germany	45,003	4	Very High
France	31,748	5	Very High
Canada	29,017	10	Very High
Italy	26,755	7	Very High
South Korea	22,271	14	Very High
Spain	21,543	11	Very High
India	19,917	8	Very High
Australia	18,923	12	Very High
Netherlands	14,866	16	Very High
Russia	14,016	9	Very High
Brazil	12,306	6	High
Sweden	9,478	20	Very High
Switzerland	9,469	18	Very High
Turkey	8,301	17	High
Poland	7,355	21	Very High
Belgium	7,218	22	Very High
Pakistan	1,043	45	Low

Table-1. Country Wise Comparison

Human development indices show that Pakistan lagged behind China and India in 2011, and this was reflected in the country's GDP ranking, as shown in the table below in a comparison of regional economies of China, India, and Pakistan.

The Economic Effects of Education in Pakistan

In today's knowledge-based economies, Pakistan is no exception. Foreign Direct Investment (FDI), Domestic Investment (DI), and Trade Openness (TO) are all important factors in Pakistan's economic success (Hamid, 2008). Simply said, the government must educate its citizens in order to transform natural resources into valuable commodities in order to tap into their full potential. Pakistan's education system is weak, and the quality of education does not fulfil the needs of knowledge-based economies, as was previously noted. Poor education in Pakistan has failed to close the knowledge gap between Pakistan and established industrial nations, resulting in a worsening wealth inequality between the two countries. Education is linked to the economy's service, industrial, and agricultural sectors in the following ways:

The service industry

Almost 70% of worldwide output, 35% of global employment, and nearly 20% of global trade are all accounted for by the services sector, which is expanding at a rapid pace. There has been a 41.7 percent increase in the value of services in world exports between 1975 and 2005, whereas the value of products has risen by just 35.5%. As (Ahmed & Ahsan, 2014) points out, industrialized countries' agricultural and industrial foundations have been replaced by the service sector. Investing in education and technology can help countries with limited resources advance economically. There are several reasons for this, but one is that it affects all aspect of an economy, especially human capital advancements, which have resulted in a dramatic shift in the economic trajectory of many developing economies.

Services in Pakistan's economy include banking and insurance, transportation and storage, retail trade, and government and defense. Globally, the service sector has displaced agriculture and industry as the primary source of employment. In Pakistan, we are seeing a similar movement in employment from agriculture to the service sector. It currently makes up 53.8% of Pakistan's GDP. Services account for a significant portion of Pakistan's gross fixed capital formation (Tariff on Services in Pakistan, 2018). (GFCF). Almost 26% of the country's earnings come from taxes, compared to just 1% from the agriculture sector, making the service sector a substantial source of money for the country. Human development has a direct bearing on this sector of the economy, as a nation that is better educated and technologically aware will be better able to meet global employment demands.

Sectors of the Economy

Consumer goods and industrial goods are both part of Pakistan's industrial sector. The country's second-largest source of GDP comes from the manufacturing industry. However, it has decreased significantly from a 25% growth rate in 20% increase from 2000 to 2016. Export markets for cotton yarn and cloth are dependent on its well-being, and that is why its well-being is critical to the country's economic prosperity.

In the years 2006-2011, 1579 businesses were forced to close because of a shortage of people and material resources. The underutilization of human resources in the industry is exacerbated by a lack of access to high-quality education and a conducive learning environment.

There is a shortage of skilled workers in the country's industrial sector because of a lack of technical knowledge in the educational curriculum. Investment in R&D (Research and Development) is critical to the transformation of technology, which ultimately improves both yield quantity and quality. In order to keep up with the rapid pace of technological change and replacement, businesses must keep up with the latest developments in the area. Since Pakistan's educational landscape is not research-centric and there is no collaboration between the industry and educational institutions, the country loses in the realm of industry.

An important part of the economy is Agriculture.

Agriculture is the primary source of income and employment in Pakistan, as it is in all developing countries like it is in the United States. The country has both arable and pastoral farming systems, which are both prevalent. Planting crops and raising cattle are two different types of farming. Cotton, rice, horticulture, and cattle dominate Pakistan's agricultural exports, with sporadic shipments of sugar and wheat also arriving. Cotton, rice, wheat, and sugarcane are the country's most important crops, although they aren't very competitive on the world market, thus they are primarily produced for the home market (Gulati et al., 2007).

Additionally, the country's agriculture industry generates a significant portion of Pakistan's foreign exchange revenues (forex). Subsistence farming is no longer the sole way to feed one's family and provide for one's basic needs in today's world. To meet the world's growing want for food, it has evolved into a sector requiring cutting-edge technology. It is only by educating farmers on the fundamentals of farming that they will be able to take use of newer technologies and better farming methods in order to increase their yields. Because of a lack of qualified teachers and a hostile learning environment, the agricultural industry has been particularly hard hit. As a result, farmers are ill-equipped to respond to shifting market trends and shifts in resources in reaction to the shifting supply and demand chain. A lack of high-quality education and a poor learning environment has hindered farmers from transforming their agricultural outputs from low-value staple foods to higher-value commodities (Gulati et al., 2007).

Having a great education and a suitable learning environment would help people better comprehend the environment because agriculture employs a large amount of the country's workforce. When vast and intense farming practices are used, yields will rise. Farmers that have a firm grasp of the environment's interrelationship with the economy will be more equipped to employ environmentally friendly farming methods. Soil degradation and other soil cropping characteristics such as soil salinity, alkalinity, erosion, and fertility will be better understood by the workforce through sustainable practices. Crop yields will rise as a result of improved knowledge of water use efficiency, irrigation system management, geography, climate, and crop demands. As a result of the country's dismal educational situation, not only has agricultural research in the country been

hampered, but information to farmers has also been restricted, preventing them from learning about methods such as:

- Pure Seeds of the Highest Quality Selected
- Soil Fertility Management and Integrated Maintenance
- The preservation of water
- Drought-resistant plants
- Weed Control in a Whole-System Approach
- Integrated Soil Fertility Management through Crop Rotation
- Integrated Insect Pest Control (IPNMS)
- System for managing plant nutrition (IPNMS)
- Crop production with the use of organic materials
- Waste Disposal Methods
- Farming with Compost
- Technology of Mulch
- Applied Microorganism Science
- Use of the Latest Technology
- Plants that Have Been Genetically Modified (Gm Crops)
- Animal Care and Control
- Intercropping/Mixed Crops
- Farming Fish

A research in Sindh found that farmers were unaware of sustainable agricultural practices such genetically modified crops, fish farming, mulch technology, electromagnetic technology, and IPNMS (Kumbhar, Sheikh, Soomro, Khooharo, & Sciences, 2012; Yan et al.,2020).The agricultural industry will suffer in the long term if people are unaware of sustainable farming practices, which will lead to environmental deterioration and the loss of arable land, which will have a negative effect on the economy.

Conclusion

In order for nations to be judged on the quality of their human resources, educational achievement is essential. By and large, education gives people and society as a whole the fundamental information, wisdom, and abilities necessary to guide a country's growth in the direction of prosperity and success. There can be no doubt that higher output levels are closely linked to the quality of education and learning environment as well as the acquisition of technical skills. Long-term economic success depends on a well-educated and well-trained workforce. With the increasing use of unskilled or semiskilled labor in Pakistan's metropolitan centers and rural areas, there is an increasing disparity in educational quality. As a result, the country's balance of payments is suffering, as exports are below optimal levels.

Education and learning environments are currently in a catastrophic state, which has resulted in a lack of worldwide competitiveness. Education and learning environments have a direct impact on the country's economy, as the balance of payments is directly related to this. While the CPEC project is still in the planning stages, Pakistan's geographic location makes it well-positioned to take advantage of any new prospects.

The demand for a better education system in the country is greater than ever before. Agricultural and industrial production will benefit from education that emphasizes the development of cognitive and analytical skills. It is imperative that educational institutions and businesses work together more frequently in order to generate more revenue. A policy of STEM (Science, Technology, Engineering, and Math) education is consequently required in order to assure long-term economic prosperity. Many studies have shown a direct correlation between primary education and increased economic growth. In order to achieve this, education in the country should be free for all, dropout school rates reduced, the curriculum updated, textbooks improved, and the teachers well-trained and qualified In order for Pakistan to make better use of its labor force and boost its growth rates, the evaluation methods used in schools should emphasize the development of students' talents.

References:

Ahmed, A., & Ahsan, H. J. R. J. S. S. (2014). Contribution of services sector in the economy of Pakistan. *3*(1).

Ali, M., & Malik, I. R. J. P. i. (2017). Impact of foreign direct investment on economic growth of Pakistan. *3*(2).

ALIYU, M., YAKUBU, U. I., Idris, A. M. J. J. o. A. o. V., & Nigeria, T. E. o. (2018). EFFECTS OF e-CONTENT ON STUDENTS'ACHIEVEMENT AND RETENTION IN AUTOMOBILE LIGHTING SYSTEM IN TECHNICAL COLLEGES IN NIGER STATE. *23*(2).

Basheer, M. F., Hussain, T., Hussan, S. G., & Javed, M. (2015). Impact of customer awareness, competition and interest rate on growth of Islamic banking in Pakistan. *International Journal of Scientific & Technology Research*, *4*(8), 33-40.

Breton, T. R. (2012). The role of education in economic development: theory, history, and current returns.

Farrukh, M., Lee, J. W. C., & Shahzad, I. A. J. J. o. A. R. i. H. E. (2019). Intrapreneurial behavior in higher education institutes of Pakistan: The role of leadership styles and psychological empowerment.

Granito, V. J., & Santana, M. E. J. J. o. L. S. (2016). Psychology of learning spaces: Impact on teaching and learning. *5*(1).

Group, W. B. (2016). *World development report 2016: Digital dividends*: World Bank Publications.

Gulati, A., Minot, N., Delgado, C., Bora, S. J. G. s. c., standards, systems, t. p. H. t. g. o. f., development, s. a. r., & poverty. (2007). Growth in high-value agriculture in Asia and the emergence of vertical links with farmers. 91-108.

Hamid, N. (2008). Rethinking Pakistan's Development Strategy.

Jawaid, M., & Aly, S. M. J. J. o. P. M. I. (2014). Learning environment in undergraduate institutes in Pakistan: determining factors and suggestions. *28*(3).

Khilji, S. (2015). Annual Report 2015 From Knowledge to Action.

Kumbhar, M. I., Sheikh, S. A., Soomro, A. H., Khooharo, A. A. J. J. o. B., & Sciences, A. (2012). Sustainable agricultural practices as perceived by farmers in Sindh province of Pakistan. *8*(2).

Olssen*, M., & Peters, M. A. J. J. o. e. p. (2005). Neoliberalism, higher education and the knowledge economy: From the free market to knowledge capitalism. *20*(3), 313-345.

Ramirez, F. O., Luo, X., Schofer, E., & Meyer, J. W. J. A. J. o. E. (2006). Student achievement and national economic growth. *113*(1), 1-29.

Yan, R., Basheer, M. F., Irfan, M., & Rana, T. N. (2020). Role of psychological factors in employee well-being and employee performance: an empirical evidence from Pakistan. *Revista Argentina de Clínica Psicológica*, *29*(5), 638.