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Financial Inclusion and Development as Catalysts for Human Development: Insights from Selected Asian Economies

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ABSTRACT

The current study reveals that financial inclusion and financial development are important determinants of human development in a few selected Asian nations. The authors have contributed panel data for 8 economies for the years starting from 2005 to 2018. The human development index is considered a dependent variable. It also checks for the impact of the number of commercial bank branches and the number of ATMs separately, taking the latter as a proxy for financial inclusion. Further, in this research, an attempt is also made to analyse the impact of financial inclusion on the human development index. It is found, by using fixed and random effect method, that the financial inclusion with all the other explanatory factors has significantly boosted up the human development of the Asian economies. Our results suggested the maximum monetary approach and services to promote human development in an economy. Much focus shall be made on better provision for education to brighten up the standard of living. It also suggests from the study a stable environment for more production, growth, and development.

1 Introduction

1.1 Background of the Study

Financial inclusion fosters human development by providing people access to and usage of appropriate financial services. It helps involve the poor in economic activity, thus leading to inclusive growth that will improve the general well-being and quality of life. Financial inclusion aims to represent the "unbanked" community under the official monetary ambit. Over the last two decades, this sector has immensely grown in terms of sophistication and size and has continued to develop in a manner to promote financial inclusiveness. An improvement in living standards is ignited with such a result; hence, it leads to the economic growth of the country at large.

The present study focuses on the impacts of financial inclusion on human development outcomes proxied by the HDI, and also considers other influences such as financial development, availability of credit to the private sector domestically, growth in the urban population, and increasing ecological footprint on human development in the selected Asian countries.

Financial development is investigated for its potential to enhance access to capital, stimulate investment, and provide more general economic opportunities which could have the longer-term payoff of improving human development outcomes. The availability of domestic credit to the private sector is considered because it may foster entrepreneurship and sustain small businesses. These are believed to spur diversification within the economy conducive to higher levels of human development. Urban population growth is examined because of its twofold effect: the increase in urbanization concentrates services and opportunities, but simultaneously creates problems of infrastructure and ecological sustainability, hence affecting human development in a very complex manner. Finally, ecological footprint or resource use is added as a relevant explanatory variable to examine if higher resource use goes hand-in-hand with improved human development in the chosen Asian economies. This is one measure that considers the environmental costs involved in economic growth and serves as a lens through which the interaction of ecological sustainability and human development can be assessed.

1.2 Research Question

I. How does the number of commercial bank branches influence the human development of the countries in question?

II. What is the influence of the number of ATMs on human and economic development?

III. How has financial inclusion promoted the HD of developing Asian countries over the years?

IV. What is the impact of an increasing urban population on human development?

V. Does a greater ecological footprint (resource consumption) improve human development?

1.3 Problem Statement.

Despite substantial progress in promoting financial inclusion and development, many Asian economies still face challenges in achieving comprehensive human development. Limited access to formal financial services, uneven urbanization, and unsustainable resource consumption hinder equitable growth and development outcomes. While financial inclusion has been recognized as a driver of economic participation and poverty alleviation, its direct impact on human development indices, particularly in the context of environmental sustainability and urbanization, remains underexplored.

This study addresses the gap by investigating how financial inclusion, financial development, urban population growth, and ecological sustainability collectively influence human development in eight selected Asian economies. Specifically, it seeks to understand whether increased access to financial services—measured through the number of bank branches and ATMs—directly contributes to improvements in education, health, and living standards, as reflected in the Human Development Index (HDI). By incorporating resource consumption as a proxy for environmental impact, this research also examines whether higher ecological footprints undermine or support human development in rapidly urbanizing regions.

Through this problem statement, the study highlights the need for integrated strategies that balance financial, social, and environmental dimensions to ensure sustainable human development in Asia.

1.4 Significance of the Study

Previous studies have assessed financial development, unemployment, and CO2 emissions, among other variables, as influencing growth and development in emerging economies. This present research, however, underscores financial inclusion as the major factor in high human development of the selected Asian states. The study supplements and expands other important drivers: urban population growth, increased ecological footprint; in fact, all the key aspects so vital to comprehend the development problem in rapidly urbanizing and environmentally challenged areas. Taken together, these factors further detail the drivers of human development in the region.

These findings are important to policymakers and development practitioners in providing evidence of how increased access to finance can ease inequality, spur entrepreneurship, and generate sustainable growth. Furthermore, the study investigates the case of Asia - a region with particular economic and social challenges - thereby giving an idea of how financial inclusion can fuel longer-term human development, while it informs future directions in development strategies.

The sequence of this research work is as follows: Section II presents the review of literature, Section III outlines the data and methodology, Section IV presents the results, Section V discusses the results, Section VI provides the conclusion, and finally, Section VII gives recommendations.

2 Literature Review

The relationship between financial inclusion and human development has garnered increasing attention in recent research, particularly in the context of developing economies. While traditional factors such as inflation, foreign aid, trade openness, and investment have long been studied as determinants of growth and development, more recent work emphasizes the critical role of financial inclusion alongside other variables like financial development, urban population dynamics, and ecological footprint consumption. Financial inclusion, defined as the accessibility and utilization of formal financial services, is recognized as a powerful tool for promoting economic participation, reducing poverty, and enhancing overall well-being.

The importance of financial inclusion in advancing human development is evident in the work of Sarma and Pais (2008), who demonstrated a positive link between financial inclusion and human development outcomes in various countries.

Chibba (2009) has also emphasized the important role of financial inclusion in increasing development in some Asian countries. It was found that financial inclusion offers incremental and balanced explanations for handling poverty, promoting inclusive development, and addressing the Millennium Development Goals. Poverty must be decreased to enhance human development. To support this link, Didier et al. (2015) observed a worldwide decline in poverty over the past one and a half decades. And, as the World Bank (2016) reported, in the year 2000, 37% of the growing population worldwide lived in poverty in 1990; but, as of December 2015, it had decreased to only 9.6%. This can be attributed in part to the increased financial access.

Valeriani and Peluso (2011) examined how institutional quality affected economic growth over 60 years in countries at diverse developmental stages. The regression results found a positive link of institutional quality, human development, and economic growth. Asongu and Nwachukwu (2016) assessed the interaction between governance and mobile phone penetration for inclusive human development in Sub-Saharan Africa from 2000 to 2012. Fixed effects, Generalized Method of Moments, and Tobit regressions were used in this study. The results showed a positive association between mobile phones and inclusive development. Moreover, economic governance was stronger relative to institutional governance.

Using data from twenty-eight European Union member states and Turkey, Siyakiya (2017) focused on how institutional quality affected economic performance from 1995 to 2014. The findings indicated an association between economic performance and institutional quality. Moreover, the influence of institutional quality on economic performance was more noticeable in middle-income countries compared to high-income countries.

Tu et al. (2019) empirically investigated how remittance inflows, financial inclusion, and economic development were related, and whether inward remittances helped construct inclusive financial systems. The GMM results showed that remittances and financial inclusion were engines of growth in nations with diverse income groups.

Khan et al. (2019) focused on the association between ICT, economic growth, and the human development index using data from 1990 to 2014. The study results revealed that information and communication technology and economic growth increased the human development index.

Hornset and Soysa (2021) focused on how political empowerment of women increased human development. Fixed regression results showed that the powerful role of women's empowerment increased human development. Moreover, institutional quality also increased development in Middle East and African region.

By using data from 2004 to 2005, Banerjee et al. (2021) highlighted that aggregate financial inclusion enhanced all development outcomes, and this influence was stronger in nations with lower political risk. The study also emphasized financial inclusion and its influence on three noteworthy features of human life in the South Asian region by using data from 2004 to 2016. GMM results found that the penetration of bank branches and automated teller machines (ATMs) increased financial inclusion.

Chen et al. (2021) found that in many countries, economic development has often been associated with an increase in ecological footprint, meaning greater resource consumption and environmental impact. However, improvements in human capital—such as better education, skills, and workforce productivity—can mitigate some of these negative environmental effects. The study also suggests that while human capital initially leads to higher ecological footprint due to industrialization, over time, it contributes to more sustainable practices that reduce the footprint. Moreover, urbanization plays a key role in moderating this relationship, as cities tend to offer the infrastructure and technological advancements that help balance economic growth with environmental sustainability.

Ali et al. (2022) examined the moderation effect of institutional quality on the association between financial inclusion and financial development in forty-five OIC nations from 2000 to 2016. The authors used a two-stage least squares method. The findings showed an increasing trend of financial inclusion, institutional quality, and financial development. It also focused on the influence of foreign capital on human development in sixty-five developing nations during 1984 to 2014. The GMM results showed that foreign direct investment and FPI led to a decrease in per capita income and secondary school enrolment, while remittances increased human development.

Khan et al (2024) explored the impact of financial inclusion on economic growth in Bangladesh, Malaysia, and Pakistan from 2004 to 2019 using panel data analysis. It highlights that financial inclusion positively influences economic growth, alongside factors like inflation, trade openness, and population growth. Drawing from the Finance and Growth theory, the study emphasizes the role of financial inclusion in boosting investment, production, and consumption. The findings underscore the importance of digital financial inclusion, particularly in countries like Bangladesh with rapid digital adoption. The study fills a research gap by focusing on Muslim-majority countries and developing economies, offering policy insights to enhance financial inclusion and drive sustainable economic growth

Helmy (2024) investigates the mutual relationship between human development and financial inclusion and their combined impact on economic development, using Egypt and BRICS countries as case studies from 2000 to 2018. It identifies human development indices, such as education and health, as key drivers of financial inclusion, which in turn promotes savings, financial literacy, and access to financial services. While BRICS countries show a positive interdependence between these factors aiding economic development, inequity in education and income disrupts this synergy. In Egypt, such inequities lead to opposing effects between human development and financial inclusion, hampering economic progress. The study emphasizes that financial inclusion, supported by institutional frameworks, complements human development but cannot rely solely on income levels, as evidenced by China's unique trajectory within BRICS. The findings highlight the critical need for equitable education and income distribution to enhance economic outcomes globally.

To sum it up, the literature review emphasizes how important it is for financial inclusion, institutional quality, ICT, and other macroeconomic elements to contribute to human development in different parts of the world, especially in Asia, Africa, and Europe. Particularly in low- and middle-income nations, financial inclusion is shown as a major factor in eradicating poverty, accelerating economic growth, and supporting inclusive development. Furthermore, ecological factors point to the necessity of sustainable growth models, citing the effects of urbanization and human capital on the ecological footprint. In general, the interaction of institutional elements, technical developments, and financial inclusion leads to more equitable and inclusive human development in a variety of economic environments.

3 Data and Methodology

In this research, we utilized data from 2005 to 2018 from eight selected developing Asian economies. The focus has been to highlight how financial development, financial inclusion, urban population, and the consumption of natural resources have enhanced human development in Asian nations such as *Bangladesh, India, Indonesia, Malaysia, Pakistan, Iran, Jordan and the Philippines*. The data was drawn from the World Development Indicators.

Here, Human Development Index (HDI) is taken as the dependent variable, while the independent variables include the financial inclusion index (number of commercial bank branches per 100,000 adults and the number of ATMs), financial development (measured by domestic credit to the private sector as a percentage of GDP), urban population (% of the total population), and resource consumption per capita, which is used as a proxy for environmental degradation. We applied fixed and random effects techniques in this analysis.

3.1 Supporting Empirical Literature

- **Financial Development and Human Development**: Researchers such as Levine (2005) and King & Levine (1993) have documented how well-functioning financial systems contribute to growth, income distribution, and ultimately human welfare.
- **Financial Inclusion and HDI**: Studies like Honohan (2008) and Demirgüç-Kunt et al. (2018) have shown that greater access to financial services enhances savings, reduces poverty, and improves social indicators like education and healthcare.
- **Urbanization and Human Development**: Urbanization's positive influence on HDI through better infrastructure and social services is widely supported in the literature (Glaeser, 2011).
- **Ecological Footprint and HDI**: Findings from the Global Footprint Network and research by Dietz et al. (2009) highlight the trade-offs between resource consumption and sustainability.

The econometric models utilized are stated as follows:

The equations are:

$HDIN = \beta_0 + \beta_1 DCPSit + \beta_2\ NOCBBit + \beta_3\ UPOPit \beta\ _4 LEFPit + uit$

$HDIN = \beta_0 + \beta_1\ DCPSit + \beta_2\ NATMit + \beta_3\ UPOPit\ \beta\ _4\ LEFPit + uit$

$HDIN = \beta_0 + \beta_1\ DCPSit + \beta_2\ FDINDXit + \beta_3\ UPOPit\ \beta\ _4 LEFPit + uit$

HDIN= Human Development Index

DCPS= Domestic credit to private sector as % of GDP

NOCBB= Number of Commercial Bank Branches per 100,000 adults

NATMs= Number of ATMs

FINDX= Financial inclusion index

UPOP= Urban population (% of GDP)

LEFP= Log ecological footprint

$_{it}$ = (time trend)

ui_t= (error term)

4 Results and Empirical Analysis

Table 1 reveals that, on average, the commercial bank branches are 13.151 in the selected Asian nations. The data shows that domestic credit to the private sector averages 52.3337 percent. The financial inclusion index for these nations ranges from 0.120 percent to 157.9448 percent. On average, the urbanized population of countries in Asia is 53.1271 percent. Additionally, the average Human Development Index (HDI) for these nations is 0.6628

Table 1

Summary Statistics

Variables	Observations	Mean	Standard deviation	Minimum	Maximum
HDIN	112	0.664	0.092	0.4860	0.805
DCPS	112	52.334	28.635	15.386	125.0618
NCBB	112	13.151	6.996	5.273	32.30717
NATM	112	23.2704	19.8921	0.2016	88.6476
FDINDX	112	36.4196	24.4731	0.120	157.9448
UPOP	112	53.1271	19.9630	26.809	90.979
LEFP	96	0.1860	0.2541	-0.2228	0.6510

4.1 Empirical Estimations

Table 2 presents the main results using the fixed effects process. The Chi-square value is 9.98, with a probability value of 0.0616, which supports the validity of the fixed effects results.

Table 2

Fixed Effect Results

Variables	Coefficients, Standard Errors and Z-values
DCPS	0.0010*
	0.002
	(4,12)
NCBB	0.0026*
	0.0007
	(3.79)
UPOP	0.0036*
	0.0006
	(6.44)
LEFP	0.0711***
	0.0438
	(1.62)
Con	0.3718
	0.3095
	(12.01)
R2 Within	0.70
R2 Between	0.83

R2 Overall	0.84

t-values are in parentheses

** p<0.05, * p<0.1 and*** p< 0.01

Table 3 presents the results using the random effects method. The Chi-square value is 6.10, with a probability value of 0.1918, which supports the validity of the random effects results.

Table 3

Random Effect Results

Variables	Coefficients, Standard Errors and Z-values
DCPS	0.0006**
	0.0003
	(2.08)
NATM	0.0006 *
	0.0002
	(4.14)
UPOP	0.0026*
	0.0006
	(4.28)
LEFP	0.1490*
	0.4309
	(3.46)
Con	0.4486
	0.0343
	(13.06)
Wald chi2	215.23
Prob.	0.0000
R2 Within	0.69
R2 Between	0.88
R2 Overall	0.87

Table 4 presents the results using the fixed effects method. The Chi-square value is 10.91, with a probability value of 0.012, supporting the validity of the fixed effects results. The findings indicate that financial inclusion, along with major control variables, significantly increases human development.

Table 4

Fixed Effect Results

Variables	Coefficients, Standard Errors and Z-values
DCPS	0.0007*
	0.0003
	(2.53)
FINDX	0.0005*
	0.0002
	(2.97)
UPOP	0.0037*
	0.0008
	(4.80)
LEFP	0.3885*

	0.0397
	(3.42)
Con	0.3839
	0.0395
	(9.73)
R2 Within	0.76
R2 Between	0.88
R2 Overall	0.87

- The above-mentioned results highlight a one percent increase in commercial bank branches leads to a 0.0007% increase in human development, as shown in Table 2. Moreover, an increase in the number of ATMs results in a 0.0026% rise in human development, as shown in Table 3
- In Table 4, the results show that a one percent increased financial development results in a 0.0005% increase in human development
- The results indicate that a one percent increase in domestic credit to the private sector increases human development by 0.0010%, 0.0006%, and 0.0070% in Tables 2, 3, and 4, respectively
- It was found that a one percent increased urban population leads to increases in human development by 0.0036 percent, 0.0026%, and 0.0038% in Tables 2, 3, and 4, respectively
- The findings show that a one percent increase in the ecological footprint (resource consumption per capita) may result in increases in human development by 0.0711%, 0.1489%, and 0.1575% in Tables 2, 3, and 4, respectively .

By integrating these empirical insights, the study's methodological framework is well-grounded, offering a robust basis for the analysis of human development in developing Asian economies.

5 Discussion

The findings of the present study indicate that commercial bank branches, financial development, domestic credit to the private sector, and ecological footprint are very important determinants of HDI components which include life expectancy, education, and standard of living. Each of these factors has its contribution to HDI in their various ways e.g. having access to financial services due to commercial bank branches, chances are the economy improves; people will also have more access to health facilities to improve life expectancy (Demirgüç-Kunt & Klapper, 2012). Moreover, more bank branches can facilitate investment in education by helping the literacy rate and the enrolment ratio will improve as families can afford schooling. Economically, increased access to banking services supports entrepreneurship and job creation, with resultant higher incomes and better standards of living reflected in a higher GDP per capita (Levine, 2005).

The analysis shows that for every one percent increase in commercial bank branches, human development increases by 0.0007%. That means increased financial inclusion - as represented by the number of commercial bank branches - plays a positive role in enhancing human development, though quite negligible. Access to credit, savings, and other financial services through bank branches may support economic empowerment and, in turn, lead to an improvement in the living standards, health, and education that are vital components of human development. Financial inclusion through bank branches enables better investment in education, as access to credit and savings for families and individuals becomes more feasible for financing schooling, hence increasing literacy rates and boosting enrolment at different levels of education. The expansion in access to branches of commercial banks should, therefore, improve health outcomes as it enhances the ability of individuals to afford better healthcare and nutrition services that raise life expectancy. With a relatively small effect size, however, this would again hint at the fact that an increase in bank branches is beneficial but possibly not sufficient in itself to bring about a significant increase in HDI in the absence of accompanying improvements in other spheres like education, health, and infrastructure.

Furthermore, financial inclusion through the increase in the number of ATMs leads to a rise of 0.0026% in human development, hence reflecting the importance attached to accessible and efficient financial services. ATMs enhance access to banking in terms of withdrawing money and carrying out transactions with ease. Such facilities are of great significance in countries which have less developed traditional infrastructure concerning banking. They can also reduce transaction costs, make savings more viable, and even help provide a safety net for the financially underserved. By providing a means for the consumer to withdraw cash to pay bills and conduct other transactions more conveniently, an automated teller machine can make the system more accessible and user-friendly. In turn, this ease of access to cash improves economic security, which is vital in enabling people to invest in health and education, both contributors to improved health and higher levels of education. The increase in ATMs, secondly, boosts growth in the economy as it facilitates day-to-day transactions, hence encouraging business activities, employment, and better wages that elevate living standards and in return contribute to higher GDP per capita (Beck et al., 2007). But as with the commercial bank branches, the modest magnitude of the effect suggests that ATMs, while useful, must be part of a broader strategy for increasing human development.

A one percent increase in financial development increases human development by 0.0005 percent. Financial development is typified by the growth and sophistication of the financial markets, institutions, and instruments; It allows access to more credit, widens investment opportunities, and consolidate economic stability. Not only this, but financial development also generates employment and income opportunities which upgrades the living standard level. As the financial sector develops, it contributes to the prosperity of the economy, where businesses can get resources to expand, hence creating employment, thus increasing wages that raise GDP per capita. To explain this further, since we took 'domestic credit to the private sector' as a proxy for financial development, a one percent rise in credit is causing rises in human development by 0.0010, 0.0006, and 0.0070%, respectively, across the different tables. The nations with better availability of domestic credit to the private sector offer more financial services and opportunities. These findings are backed by those of Banarjee (2020) and Ali et al. (2022). Domestic credit to the private sector influences HDI positively, since it provides the capital required for the expansion of the business world. This enables the SMEs to grow, thus creating more jobs and encouraging investment in research and development, translating to higher income levels and a rise in the general standard of living. Access to credit, therefore, also enables investment in education by individuals, leading to improved literacy rates and enrolment, and allows better healthcare availability and such other essential services, leading to improved health outcomes and longer life expectancy.

Furthermore, having an urban population is essential for the well-being of Asian economies. A more expert and well-informed urban population provides greater avenues for employment and earning, which in turn increases the level of income and living standards. A one percent increased urban population leads to human development increases of 0.0036, 0.0026%, and 0.0038% in Tables 2, 3, and 4, respectively. It can significantly enhance the components of HDI. This is common with the expansion of cities, providing more access to healthcare, which improves health outcomes and enhances the life expectancy. Often, urban areas contain more hospitals, medical facilities, and specialized healthcare providers, making quality healthcare easier for its residents to access. Cities are also typically centres for education, offering more schools, universities, and places for vocational training, which raise literacy rates and attainment of education. The concentration of educational resources in urban centres increases enrolment ratios from primary to tertiary level. Increased job opportunities, wages, and accessibility to businesses and services are all associated with higher levels of economic activity accompanying urbanization. With more agglomeration of industries, financial institutions, and markets in the cities, economic activities spur growth and raise per capita GDP with a general improvement in the standard of living. City dwellers can also enjoy better conditions regarding infrastructure: transport, utilities, or housing. All these contribute to a better quality of life. Overall, it is the growth of population in the urban centres that enables the enhancement of essential socio-economic factors which relate to human development. However, while it is true that urbanization generally leads to a set of opportunities that make services, infrastructure, and economic prospects more accessible, urbanization can also pose some challenges that have hindered human development. All these rapid urban population growth factors contribute to overcrowding of cities, strain on public services, shortage in housing, and increase in pollution-all negatively affecting quality of life. In addition, the relationship between urban population growth and HDI is complex and contextual. While in some countries, the processes of urbanization can result in higher human development because of better access to education and health care, in other countries they might further exacerbate inequality and environmental degradation (UN-Habitat, 2012).

Lastly, and probably most pronounced in the results, is the complicated relationship that exists between resource consumption and human development. This is further asserted by Chen et al. (2021); a one percent increase in ecological footprint, meaning resource consumption per capita, results in an increase in human development by 0.0711, 0.1489, and 0.1575 percent as shown by the various tables. This would appear to suggest at face value that the higher the resource consumption, the higher the human development. This is because when economies industrialize and urbanize, they become more resource-intensive in driving economic growth by raising production, creating employment, opening avenues of investment, and increasing the standard of living. However, this positive relation does introduce some critical questions of sustainability. While it may be true that higher short-term economic growth often occurs with increased resource consumption, this does not account for the negative effects emanating from the unsustainable use of resources within a long-term perspective. The ecological footprint measure for resource use covers all resource use, whether sustainable or not, and therefore, the relationship between resource consumption and HDI might be misleading, since it doesn't take into consideration the environmental cost resulting from gradual resource depletion. The results may therefore present too optimistic a view about the trade-off between economic growth and environmental sustainability. Also, the research did not take into account the type of resource used e.g. renewable resources versus non-renewable, which could've led to an oversimplification of ecological footprint growth impacting long-term development. Thus, while economic growth based on increased resource consumption may bring about improved human development in the near term, close attention to environmental sustainability is crucial for the potential benefits of such improvements to last well into the future.

6 Conclusion

In the present study, we have tried to explain major causes of human development in some economies through the application of fixed and random effect techniques. Results highlight the fact that financial access via branches and ATMs, financial development, availability of domestic credit, and ecological footprint growth contribute towards influencing human development across selected Asian economies. Whereas these factors are positively related to HDI, the overall magnitudes of the impacts, which in particular are rather modest concerning financial development and credit availability, suggest that these individual factors can hardly lead to considerable human development improvements themselves but are part of a more general development strategy entailing investment in education, healthcare, and environmental sustainability. Future research should also provide long-term influences of ecological footprint growth and urbanization on human development when these change along with evolving economic and environmental conditions.

Whereas urbanization is associated with increased access to health, education, and economic opportunities, it also reflects the challenges faced while managing the rapid increase within the confines of infrastructure and environmental limitations. As the ecological footprint indicates, resource consumption and human development have a positive correlation; this means that increased levels of industrialization and urbanization are immediately beneficial, but they also bring up some concerns regarding the long-term sustainability of these improvements in human development. What is important in growing economies is to ensure that such development does not come at the expense of environmental degradation, which could eventually undo the very gains being recorded. Though financial services growth, urbanization, and resource consumption can create better human development, a balanced approach to economic growth with environmental responsibility becomes of essence for sustainable and inclusive growth. Further research is, therefore, needed to elaborate on these dynamics, with respect to long-term growth effects and how sustainability forms the core of human development policies.

In conclusion, it is commercial bank branches, ATMs, financial development, domestic credit, and the growth in ecological footprint that have driven human development, and these drivers do not act fairly, being in themselves the result of a range of contextual variables such as income inequality, sustainability, and regional disparities.

7 Recommendations

Bangladesh, India, Indonesia, Malaysia, Pakistan, Iran, Jordan, and the Philippines have special problems in human development due to their unique economic, political, and social natures. Policies need to be designed with care so that economic progress is supported, more people are brought into the fold of the financial system, and sustainable development is ensured.

The below-mentioned recommendations can only be effectively implemented in the selected countries if the respective governments make a pledge for localized policy development. A government should take up and redevelop the following recommendations to fit its cultural, social, and economic realities. Such an approach ensures that policies are of local relevance, and hence, more practical in implementation for their populations;

Financial accessibility can have immense potential improvement, with much of the population, in particular, rural and underserved areas of countries, remaining unbanked. Financial services remain out of reach for many. This is one big problem, especially in villages and remote areas. Most people in Bangladesh, Pakistan, and Indonesia do not have bank accounts. These countries must establish branch offices and more ATMs with cooperation from both governments and financial institutions to serve those without access. Mobile banking and digital wallets are very promising for greater financial inclusion. In addition, in countries like India and Indonesia, with relatively high levels of mobile phone penetration, digital financial services can also reach people without physical banking infrastructure and thus offer a convenient low-cost way to access the financial system. Partnerships with telecom providers to facilitate digital payment and other financial services in rural communities will aid even further to increase financial inclusion across the region.

The next critical area that calls for attention is domestic credit availability. SMEs are inarguably vital engines of economic growth; however, even in economies like India or Indonesia, they often face serious obstacles in accessing affordable credit. One pivotal role that governments could play in this respect would be by creating policies that favour lending to such business enterprises, particularly in the informal sectors, which essentially dominate the economies of countries like Pakistan and Bangladesh. Developing microfinance products targeting these sectors and streamlining the processes involved in loan applications will ensure that small enterprises receive what they require to become successful, generate job opportunities, and stimulate economic diversification.

Urbanization is outpacing adequate infrastructure in many fast-expanding cities in countries such as India, Indonesia, and the Philippines. To address this, the focus of governments should be on sustainable urban planning that emphasizes low-income housing, health facilities, and efficient public transportation in rapidly growing cities like Dhaka, Jakarta, and Manila. Through this, the stresses due to a growing population will be reduced since the living standard would be improved.

Additionally, there should be green infrastructure developments, such as energy-saving buildings and renewable sources of energy supply, which also help minimize the footprint of urban growth. Integrating technology into urban planning e.g. smart city projects for managing traffic and waste reduction can also enhance urban sustainability.

Ecological preservation and economic development must work simultaneously for sustainable growth. In regions like Iran and Pakistan, where the situation on water shortages is getting grimmer with every passing day, there exists the greater need to incentivize green technologies e.g. solar energy and green farming practices. Jordan, with major solar panel investments, presents a case to be emulated by other countries with the same challenges. Furthermore, upgrading the use of renewable energy and developing modern climate-smart agricultural techniques will reduce any environmental degradation that can occur with economic growth and ensure the sustainability of long-term growth.

Human development heavily relies on investment in education and health. Bangladesh and Pakistan have bad resources and a lack of quality educational facilities in rural areas, and Malaysia and Indonesia need improvement in access to health services. The governments should invest in and upgrade the educational facilities in these deprived regions with sufficient funds so that equal opportunities for education are provided to all. In addition to this, infrastructure development and scaling up of services in the areas of poor access will be further developed by the health public-private partnerships. Telemedicine and mobile health solutions will also bridge gaps in health access and permit necessary care for communities that are hard to reach.

Financial literacy remains a very significant issue in most Asian countries, particularly because a large proportion of the population lacks basic knowledge concerning finance. What is required in countries like India where financial inclusion is on a fast expansion track, are national campaigns on financial literacy and management, the usage of digital platforms, and access to financial services. Initiative as such should first be incorporated into school curricula and then be further expanded over digital channels. Financial inclusion would allow the emerging middle class to make more calculated decisions with regards to their finances for their individual economic benefit.

Targeted interventions are usually more effective in addressing regional disparities, especially within rural or less-developed areas. For instance, countries like Bangladesh and Pakistan suffer from enormous inequalities between metropolis and rural areas; hence, this calls for policies that place especial emphasis on the development of financial inclusions, healthcare, and infrastructure in rural areas. This postulates that the government should create programs which will offer incentives to businesses in the operation in rural areas to create jobs and spur on local economies. Addressing these disparities is of essence to realizing balanced economic growth. Digital solutions should be introduced within education, governance, and healthcare services in these areas; mobile-based solutions should be developed to extend such services to the villages of each country for more efficiency and accessibility.

The other area of concern is gender inclusivity, in which countries like India and Pakistan have had no access to financial services or economic participation by women. Governments should ensure that policies are put in place to help them access microfinance initiatives, training in business, among other ways aimed at improving access to financial services. These will, in turn, add to the economic empowerment of women, leading to certain social and economic development impacts in the community. Economic independence among women is an assurance that broader human development goals, such as gender equity and inclusive economic growth are being met.

Moreover, quicker actualization of such plans requires the involvement of public-private partnership. For example, Malaysia and the Philippines require private sector involvement in key development projects. It can be realized with the support of an integrated effort through the collaboration of government bodies, financial bodies, as well as international organizations.

Finally, community participation is key to the success of such projects. Local leaders, NGOs, and opinion makers in the communities must be involved as per orders of the respective governments to ensure that there is acceptance at the grassroots level. Awareness campaigns, if done in the local dialects, could explain and enable communities to own the proposals. Another major step will be the capacity-building process. Indeed, investing in the requisite skills for implementing and maintaining the recommendations by the local authorities, the public servants, and members of the community is of essence. Such a training process must be in line with the country's specific needs to promote self-sufficiency and long-term success. Decision-making should also be informed by data for this to reflect actual needs in each country's population. Systems of collecting and analysing localized data should be developed by governments themselves to monitor progress and adjust the strategies on real-time feedback. Regular assessments will ensure that the recommendations remain effective and relevant. Lastly, governments, through observation of successful practices in other countries, can benefit from inter country learning. It brings about bilateral or multilateral dialogues between neighbouring countries with similar challenges which can ultimately help with applying solutions within their own contexts. Pilot projects within their borders can act as a model in refining and scaling up for wider application.

Therefore, to achieve more meaningful human development in the selected Asian countries, the recommendations indicated above should be implemented in a context-specific manner. Driven by financial inclusion, sustainable development, education, health care, and gender equity, these countries can address their challenges while working to improve the well-being of their citizens. This approach makes the recommended strategies more effective for the needs of each country, leading to long-term and inclusive growth.

References

Ali, S., Jehan, Z., & Sherbaz, S. (2022). Foreign capital flows and human development in developing countries: Does institutional quality matter? *Zagreb International Review of Economics & Business*, *25*(1), 1-19.

Ali, M., Nazir, M. I., Hashmi, S. H., & Ullah, W. (2022). Financial inclusion, institutional quality and financial development: Empirical evidence from OIC countries. *The Singapore Economic Review*, *67*(01), 161-188.

Banerjee, R., Donato, R., & Maruta, A. A. (2021). The effects of financial inclusion on development outcomes: New insights from ASEAN and East Asian countries. In *Financial inclusion in Asia and Beyond* (pp. 54-97). Routledge.

Banerjee, S. (2020). Effect of financial inclusion and stability on equality, poverty, and human development: An empirical analysis in the context of South Asia. *DLSU Business & Economics Review*, *30*(1), 130-142.

Chen, Y., Lee, C.-C., & Chen, M. (2022). Ecological footprint, human capital, and urbanization. *Energy & Environment*, *33*(3), 487-510. https://doi.org/10.1177/0958305X211008610

Chibba, M. (2009). Financial inclusion, poverty reduction and the millennium development goals. *The European Journal of Development Research*, *21*, 213-230.

Coelho TR, Segatto AP, Frega JR (2015) Analysing ICT and development from the perspective of the capabilities approach: A study in South Brazil. Electron. *J Inf Syst Dev Ctries*, *67*, 1–14.

Didier, T., AyhanKose, M. Ohnsorge F. &Ye , L.S.(2015). Slowdown in emerging markets: Rough patch or prolonged weakness? (World Bank Group Policy Research Note No.101741). Development Economics. World Bank Group.

Demirgüç-Kunt A, Klapper L (2013) Measuring financial inclusion: explaining variation in use of financial services across and within countries. Brook Pap Econ Activ *44*(1), 279–34

Greenwood, J., & Jovanovic, B. (1990). Financial development, growth, and the distribution of income. *Journal of political Economy*, *98*(5, Part 1), 1076-1107.

Helmy, A. (2024). The Mutual Interdependence between Financial Inclusion and Human Development and Their Effects on Economic Development: Comparative Study between Egypt and The BRICS Countries. Arab Journal of Administration, *44*(2), 319-336.

Hornset, N., & de Soysa, I. (2022). Does Empowering Women in Politics Boost Human Development? An Empirical Analysis, 1960–2018. *Journal of Human Development and Capabilities*, *23*(2), 291-318.

Khan, N. H., Ju, Y., & Hassan, S. T. (2019). Investigating the determinants of human development index in Pakistan: an empirical analysis. *Environmental Science and Pollution Research*, *26*, 19294-19304.

Khan, N., Hassan, M. S., Yusof, M. F., Islam, M. A., & Rahim, M. M. (2024). Financial inclusion as a catalyst for economic growth: evidence from selected developing countries. *Cogent Social Sciences*, *10*(1), 1-12..

Summak MS, Bağlibel M, Samancioğlu M (2010) Technology readiness of primary school teachers: a case study in Turkey. *Procedia-Social Behav Sci*. Retrieved from: https://doi.org/10.1016/j.sbspro.2010.03.393

Sarma M (2012) Index of financial inclusion—a measure of financial sector inclusiveness (Berlin Working Papers No. 07-2012). University of Applied Sciences, Berlin, Germany.

Sahay R, Cihak M, N'Diaye PM, Barajas A, Mitra S, Kyobe A, Mooi YN, Yousefi SR (2015) Financial inclusion: can it meet multiple macroeconomic goals? (IMF Staff Discussion Notes 15/17). International Monetary Fund.

Siyakiya, P. (2017). The impact of institutional quality on economic performance: An empirical study of European union 28 and prospective member countries. *world Journal of applied economics*, *3*(2), 3-24.

Tu, C. A., Phi, N. T. M., Yoshino, N., Sarker, T., & Taghizadeh-Hesary, F. (2019). Remittance inflows, financial inclusion, and economic development: An empirical analysis of the world sample (Discussion Paper No. 1000). ADBI Working Paper Series.

Tyworth M (2014) Organizational identity and information systems: how organizational ICT reflect who an organization is. *Eur J Inf* Syst, 23, 69–83. https://doi.org/10.1057/ejis.2013.32

Sarma, M., & Pais, J. (2008). Financial inclusion and development: A cross country analysis. Retrieved from: https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-financialinclusion-and-development-a-cross-countryanalysis-sep-2008.pdf

World Bank. (2015). Development goals in an era of demographic change (Global Monitoring Report 2015/2016). Washington, DC: World Bank

Valeriani, E., & Peluso, S. (2011). The impact of institutional quality on economic growth and development: An empirical study. *Journal of Knowledge Management, Economics and Information Technology*, *1*(6), 1-25.

Verma, A., Giri, A. K., & Debata, B. (2023). The role of ICT diffusion in sustainable human development: an empirical analysis from SAARC economies. *Environmental Science and Pollution Research*, *30*(6), 14518-14532.

Demirgüç-Kunt, A., & Klapper, L. (2012). Financial inclusion in Africa: The role of financial services in enabling access (World Bank Policy Research Working Paper, No. 6025). World Bank.

Levine, R. (2005). Finance and growth: Theory and evidence. *Handbook of Economic Growth*, 1, 865–934.

Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality, and poverty: Cross-country evidence. *Journal of Economic Growth*, *12*(1), 27–49.

UN-Habitat. (2012). State of the world's cities 2012/2013: Prosperity of cities. *UN-Habitat*. Retrieved from: https://unhabitat.org/state-of-the-worlds-cities-20122013-prosperity-of-cities