

Human Development Indices and Governance Interrelationship: Evidence from Nepal

¹Suman Kharel and ²Prajwal Man Pradhan (Corresponding Author)

¹ Associate professor, Central Department of Rural Development, Tribhuvan University, Nepal
[(Email: suman.kharel@cdrd.tu.edu.np), ORCID: <https://orcid.org/0000-0002-4675-9157>]

² Assistant professor, Central Department of Rural Development, Tribhuvan University, Nepal
[(Email: prajwal.pradhan@cdrd.tu.edu.np), ORCID: <https://orcid.org/0009-0006-9442-0330>]

Received 13 Sep. 2023; Reviewed 26 Oct. 2023; Revised 20 Nov. 2023; Accepted 24 Dec. 2023.

Copyright: Kharel & Pradhan (2024)



This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.

Abstract

The objective of this study is to investigate the correlation between human development indices (life expectancy, education and GNI) and six dimensions of governance (e.g., voice and accountability, political stability and no violence, government effectiveness, regulatory quality, rule of law, and control of corruption), while utilizing remittances as a control variable in the analysis. The analysis conducted using the ordinary least squares (OLS) method has revealed that personal remittances have a substantial influence on human development indices. A population that has received a high level of education tends to possess a greater understanding of their rights and is able to actively engage in the process of governance. The establishment of good governance has the potential to facilitate the development and successful execution of effective educational policies. A positive correlation has been identified between human development indices and two aspects of governance, including government efficiency and political stability. Life expectancy index has also associated with regulatory quality of government.

Keywords: HDI, governance, linkage, KMO index, Life expectancy, Descriptive analysis

Introduction

Welfare, which is also known as social welfare, is a governmental initiative aimed at ensuring that members of a given community have the means to provide for their most basic necessities, including shelter and food. A government programs intended to assist unemployed or impoverished individuals by providing financial assistance for necessities such as housing, food, and medical expenses, according to the Britannica. The assessment of welfare is conventionally conducted using indicators of human development, including but not limited to life expectancy, education, and GNI (UNDP, 2023).

These indices offer an all-encompassing assessment of the general welfare of a given population. Conversely, public confidence in democratic systems is strengthened by governance. It contributes to increased social cohesion. It functions as the bedrock for both economic prosperity and stability. Good

governance is a comprehensive concept that includes six distinct dimensions. The six dimensions of governance are: voice and accountability, absence of violence, government effectiveness, quality of regulation, adherence to the rule of law, and control of corruption (WB, 2023b). By providing social welfare, effective governance can be maintained and implemented. In the light of the discussion the interrelationship between governance and human development index is associated with social welfare as over the last 30 years, governance has grown in importance and is now a crucial factor in both human and economic development. Effective governance improvements are required if nations hope to see faster economic growth and human development. Governance indicators have an impact on human development that is the primary goal of this paper. The six dimensions developed by Kaufmann et al. (2023) to measure governance, for example, political stability and no violence, voice and accountability, regulatory quality, government effectiveness, rule of law, and control of corruption, are linked to the Human Development Index of Nepal as the dependent variable.

Literature Review

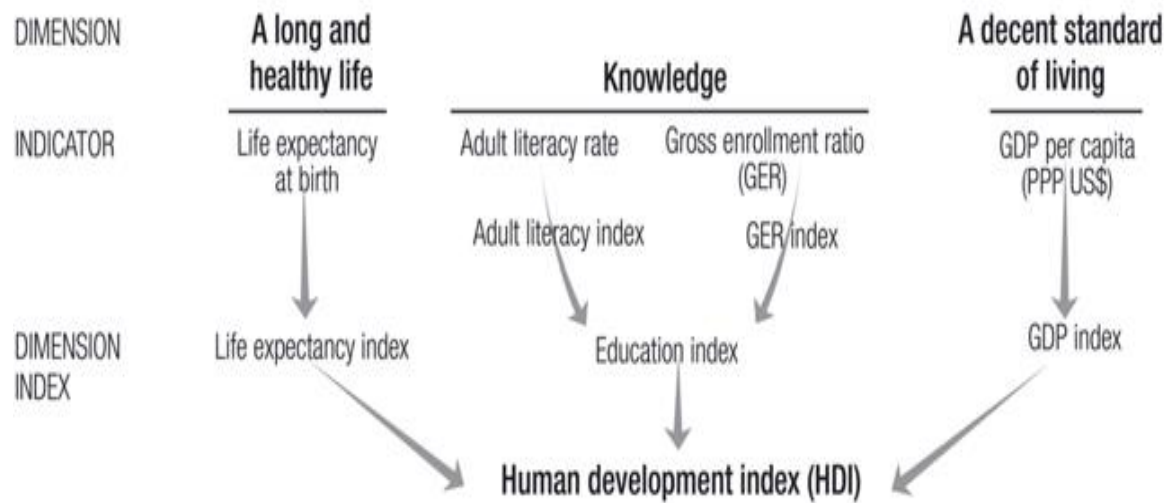
As posited by Sen (1976), the utilization of a multi-indicator framework is of utmost importance in the assessment of happiness and wellbeing. While recognizing the constraints of the index, this study adheres to the approach taken in prior investigations by employing the Human Development Index (HDI) of the United Nations as an all-encompassing indicator of welfare. In addition to the instrumental importance of wealth posited (Anand & Sen, 1994). The HDI takes into account various other determinants that impact an individual's quality of life. Life expectancy at birth, the gross domestic product per capita in US dollars, and a composite metric comprising the adult literacy rate and gross enrollment ratios both of which assess the general level of knowledge are among these factors. Understanding the differences and changes in people's lives and means of subsistence throughout the world is made possible via measuring human development.

The publication of the first six by the United Nations Development Programme (UNDP) is documented (UNDP, 2023). The final one, AHDI, has been developed by Leandro Prados de la Escosura (2021), a renowned economic historian. By incorporating additional significant indicators that assess individuals' quality of life, these measurements collectively strive to broaden the scope of development beyond mere economic advancement. This paper focuses exclusively on the dimensions of the Human Development Index (HDI).

The publication of the Human Development Index (HDI) falls under the purview of the United Nations Development Programme (UNDP). The index in question is widely recognized as the primary measure for assessing human development. This concept is grounded in the notion that human development encompasses the realization of prolonged and robust lifespans, the acquisition of knowledge, and the attainment of a specific degree of material well-being for individuals.

- i. A long and healthy life can be assessed by measuring life expectancy.
- ii. Knowledge is assessed through the evaluation of expected years of schooling for children of school-age and average years of schooling for adults aged 25 and above.
- iii. A satisfactory level of living: assessed by Gross National Income (GNI). The index is subsequently computed by normalizing and aggregating these three indicators.

Figure 1: Dimensions of Human Development Index (HDI)



Source: Human Development Reports (https://hdr.undp.org/sites/default/files/2021-22_HDR/hdr2021-22_technical_notes.pdf)

Initially, all of the indications are subjected to a scale ranging from 0 to 1. This is achieved by assigning a score of 1 to a nation that meets or exceeds the maximum value, and a score of 0 to a country that falls at or below the minimum value for each indicator. The minimum and maximum values are determined for each indication. Following that, the indicators have been integrated. The calculation of the geometric mean across the three dimensions involves computing the arithmetic mean of the knowledge indicators.

Every nation is assigned a score on the Human Development Index (HDI), which is measured on a scale from 0 to 1. It encompasses a comprehensive range of nations dating back to 1990. In addition to its primary function as an index, it is also utilized to categorize nations into distinct groups.

Governance

A broader definition of governance is the formulation and implementation of collective action that includes the formal institutions of government and their hierarchies, as well as the informal norms, networks, community organizations, and neighborhood associations. Governance also includes the establishment of the framework for interactions between citizens and between citizens and states, collective decision-making, and the provision of public services. A number of global studies (Kim, 2023; LI, 2023; WB, 2023b; among others) on governance has been documented throughout the literature. Previous empirical studies have revealed a positive relationship between governance and human development (Lehnert et al., 2013; Ross, 2019). The Worldwide Governance Indicators (WGI) collects data from over thirty think tanks, international organizations, nonprofit groups, and private businesses worldwide according to three primary criteria. The comparability of these statistics across nations is attributed to their production by reputable organizations and their consistent updating.

Concerning governance, the data incorporates the viewpoints of numerous stakeholders worldwide, including tens of thousands of survey respondents and experts. A composite index comprising of numerous elements—including political instability and violence, voice and accountability, government

effectiveness, regulatory burden, rule of law, and corruption control was applied to evaluate governance (Kaufmann & Kraay, 2023).

Sunardi et al. (2022) found that local government financial statement audit opinions improved from 2015 to 2020. However, corruption and legal transgressions have increased, proving good government governance ineffective. Indonesian local governments and the good governance goals are affected by human development. Organizational variables were examined using associative quantitative research. City and regency governments make up 514 Indonesian local governments. All citizens receive services from these governments. Local government performance variables were scored using points, unlike GGG variables, which were indexed. Partial Least Squares (PLS) is used for primary analysis and panel regression for supplementary analysis. The study found that GGG increased local government productivity and efficacy. Novel components in human development may increase the GGG variable, which could affect local government effectiveness. That research has theoretical, policy, managerial, and practical implications. Local governments should increase labour budgets to boost human development and competitiveness.

Croes et al. (2022) examined how governance and human agency affect destination competitiveness and human development. This study evaluated human agency using the capability approach, focusing on feminist empowerment. Case study research emphasized context greatly. Findings suggest a link between human development and destination competitiveness. The findings support empowering individuals with decision-making power and autonomy in public fund allocation, promoting tourism as a human development strategy, and putting individual autonomy over government interference in employment. The findings revealed unanticipated governance flaws in human development-destination competitiveness. Further research is needed to examine the rural-urban gap and the societal norms and pressures that enforce gender-based expectations. Decomposing employment indices into their components revealed the forces that drive these relationships.

Good governance includes creating a sustainable human development-friendly workplace, according to Laha (2016). However, poor governance can impede systems that help people, especially the most vulnerable, meet their basic needs. That study examined South Asian human development and governance empirically. South Asian human development and governance indices have risen steadily. Lack of empirical evidence suggests a positive correlation between human development and governance quality. Good governance increases national human development.

Kombeto et al. (2021) compared authoritarian modern societies to democratic traditional societies. The government holds absolute power in modern societies, leaving citizens powerless. The recipients were strongly encouraged to abstain from the negative principle to establish a democratic system that supports individual liberty, protects human rights, and promotes professional growth, advancing a democratic and self-governing nation.

Yang et al. (2022) suggested that the UN's 2030 Agenda for Sustainable Development Goals (SDGs) may promote positive interconnections and conflict resolution, accelerating transformation. Scholarly research on the Sustainable Development Goals (SDGs) has focused on their interactions and potential synergies or barriers. The fundamental factors that drive these interconnections have received little scholarly attention. An innovative methodology has been developed to understand how human activities affect the complex interdependencies and mutual benefits of the Sustainable Development

Goals. The study examined how livestock care, local non-agricultural employment, and labour migration affect these goals.

Sibinga et al. (2022) remarked that education is insufficient to reduce knowledge production. Lack of education was expected to create a knowledge-based economy with limited access and availability. This assessment highlights a critical domain that requires focused efforts to overcome the current understanding gap. In these countries' educational systems, technical skill training is prioritized over theoretical understanding, human resource management principles, practical implementation, and governance. The environment for primary, secondary, and tertiary education must be ideal. That creates an information-driven, quality-improving economy.

Nations need national systems, institutional frameworks, and capable leaders and managers to create a favourable environment. Regardless of proficiency, the final result depends on a cohort of well-informed and ambitious thinkers, competent and accountable administrators and decision-makers, and an all-encompassing and inspiring academic setting. This paper analyses the knowledge economy's fundamental components and their magnitude and quality. That study also examined how knowledge economies affect domestic healthcare systems and patient safety across human development groups.

Research Methodology

Measure of Sampling Adequacy

The Kaiser-Meyer-Olkin (KMO) test is applicable for assessing the adequacy of sampling in factor analytic data matrices. Kaiser (1970) initially introduced this assessment as a metric for evaluating the sufficiency of sampling (MSA). Kaiser and Rice made additional revisions to it in 1974. This function exclusively compares the squared elements of the 'image' matrix to the squares of the initial correlations. The comprehensive MSA can be found, providing detailed estimates for each item. The index mentioned above is referred to as the KMO index. Kaiser presented the subsequent values for the purpose of comprehending the outcomes:

Table 1: KMO Index

Ranking	Range
Unacceptance	0.00 to 0.49
Miserable	0.50 to 0.59
Mediocre	0.60 to 0.69
Middling	0.70 to 0.79
Meritorious	0.80 to 0.89
Marvelous	0.90 to 1.00

Owing to the significant degree of collinearity exhibited by the dimensions of HDI, governance and remittances, the study conducted factor analyses (Kaiser, 1970, Kaiser& Rice, 1974) with the aim of identifying the underlying factor or factors among the indicators and representing governance performance using fewer uncorrelated variables. If KMO value is less than 0.50, variables are eliminated for the statistical analysis.

Descriptions of Variables

Dependent Variable

As mentioned above, human development indices, which include life expectancy, mean years of schooling, predicted years of schooling, and GNI, can be viewed as indicators of a nation's social wellbeing. Nonetheless, GNI offers less variance and explanatory functions than integrative measures and eliminates the indirect factors influencing wellbeing (Lehnert et al., 2013). Table 2 represents sources and methodology of dependent variables.

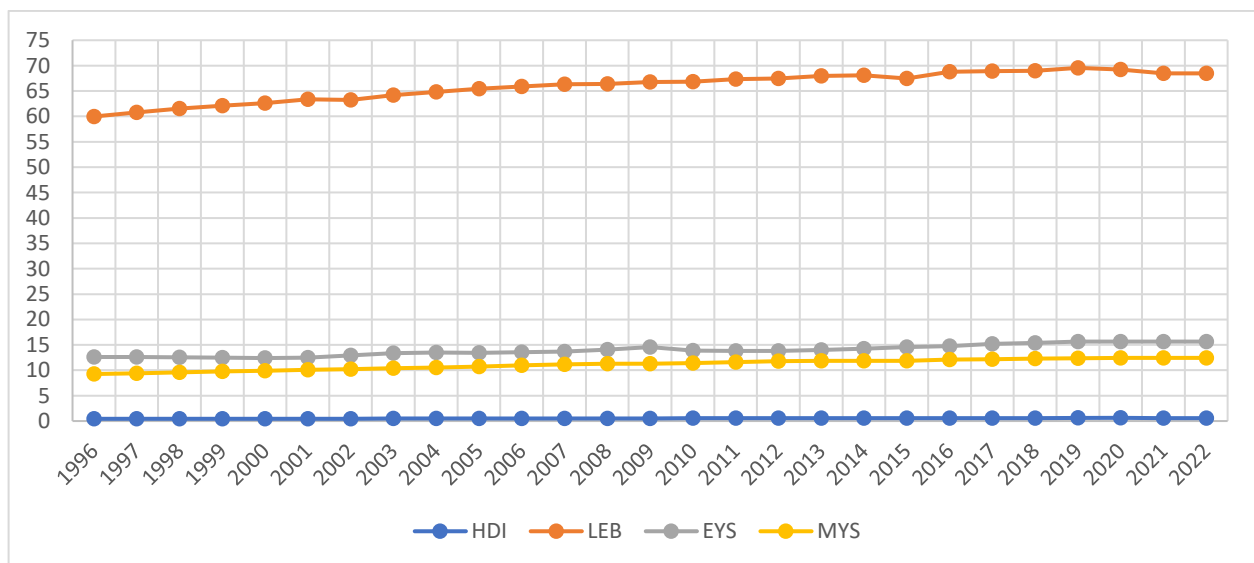
Table 2: Variables, Definitions and Sources of Data and Its Methodology

Variables	Definitions	KMO	Source of data and its methodology
HDI (Dependent Variable)	HDI index: the composite measure of human development	0.56	https://hdr.undp.org/data-center/human-development-index#/indicies/HDI
	• Life Expectancy Index as measured by the life expectancy at birth.	0.54	
	• Education Index as measured by the adult literacy rate (EYS)	0.47	
	• Gross school enrollment ratio (MYS).	0.48	
	• GNI (in purchasing power parity terms in US dollars)	0.42	
REG (Control Variable)	Personal remittances as the percentage of GDP	0.64	https://data.worldbank.org/indicator/BX.TRF.PWK.R.CD.DT
Worldwide Governance Indicators (WGIs): Explanatory Variables			
Voice and accountability (VAA)	Encapsulates views about the degree to which people in a nation may choose their own government in addition to freedom of expression, freedom of association, and freedom of the press.	0.70	
Political stability and no violence (PAN)	Collects opinions on the possibility of political unrest and/or violence driven by political reasons, such as terrorism.	0.63	https://www.worldbank.org/en/publication/worldwide-governance-indicators
Government effectiveness (GOE)	Evaluates the quality of public services, the level of autonomy demonstrated by the civil service in relation to political pressures, the effectiveness of policy development and execution, and the government's adherence to these policies.	0.56	
Regulatory quality (ROQ)	Gathers opinions on how competently the government can create and carry out laws and rules that allow and promote the growth of the private sector.	0.60	
Rule of law	Records opinions on how much agents trust and	0.46	

(ROL)	follow social norms, namely about the standard of contract enforcement, property rights, law enforcement, and the courts, as well as the probability of crime and violence.	
Control of corruption (COC)	Captures opinions on the degree to which public authority is used for private benefit, encompassing both small-scale and large-scale corruption, as well as the idea that elites and private interests have "captured" the state.	0.56

A comprehensive metric, the HDI index evaluates relative development through the allocation of weights to a multitude of indices. The dependent variables utilized in this study are the HDI index and its components. This approach enables the researchers to compare results across various dimensions of human development, as illustrated in Figure 1. From 1996 to 2022, the HDI indices for Nepal were derived from the United Nations Human Development Reports. The selection of countries was predicated upon the data furnished by the United Nations Human Development Report. Undoubtedly, the substantial technological advancements emerged predominantly as a result of the extraordinary strides achieved during the 20th century to alleviate poverty and promote human development (UNDP, 2001:2). KMO values of dependent variables are as follows: HDI (0.56). LEB (0.54), EYS (0.47), MYS (0.48), and GNI (0.42).

Figure 2 :Trends of HDI, Life Expectancy and Education (1996-2022)



As shown in Figure 2, HDI and its composite indices have been increasing gradually since it 1996. A similar trend of GNI is observed during 1996-2010 and declined slowly until 2014. Second drop was noticed during Covid period.

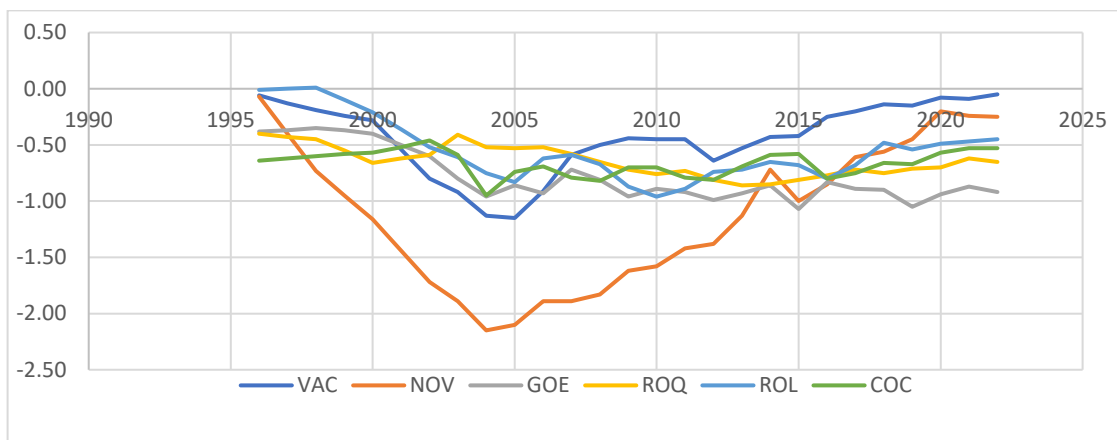
Explanatory Variable

Even the most generously funded development initiatives would be rendered impracticable by inadequate governance, corruption, and a disregard for the law. According to the World Bank (WB, 2000: xi), weak public sector institutions and inadequate governance pose significant obstacles to both equitable and economic development in many developing nations. Half of the variation in KMO value

among the indicators was found to be caused by a single factor. Measures of "voice and accountability" (0.70), "political stability and absence of violence" (0.63), "government effectiveness" (0.56), "regulatory quality" (0.60), "rule of law" (0.46), and "control of corruption" (0.56) are all significantly higher in the extracted component.

Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance). As shown in Figure 2, values of six dimensions fall below 0, suggesting Nepal's governance performance seems weak. Political instability/violence is found worst during the 2003-2005 period. A plausible reason behind this was Maoist insurgency. Government effectiveness is comparatively weak in 2022 as compared to other five dimensions.

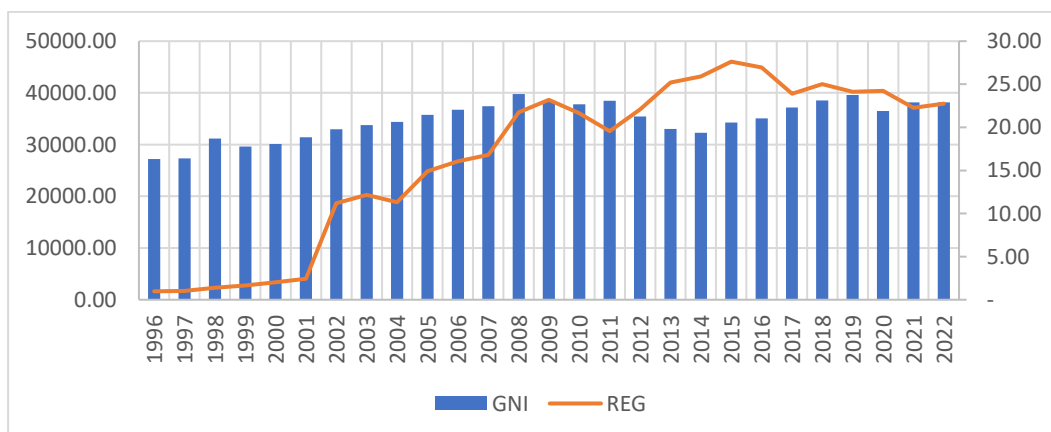
Figure 2: Trends of Six Dimensions of Governance (1996-2022)



Control Variable

Personal remittances encompass both personal payments and employee compensation. Personal transfers refer to the exchange of cash or non-monetary gifts between resident families and nonresident households. Consequently, all ongoing transactions involving individuals and non-residents are classified as private transfers. The phrase toward the compensation of employees signified the earnings of temporary, seasonal, and border workers as well as residents working for nonresident companies in an economy where they do not dwell.

Figure 3: Gross National Income and Remittances (% of GDP) (1996-2022)



Data, as defined in the sixth edition of the Balance of Payments Manual by the International Monetary Fund (IMF), comprises two constituent elements: personal transfers and employee compensation. Current U.S. dollars are used for data. World Bank estimates personal remittances based on IMF balance of payments data (WB, 2023a). The accumulated total of personal remittances in a given country in a given year as a proportion of GDP collected from World Bank's online database. Remittance (% of GDP) is considered as a control variable in addition to as an explanatory and its KMO value is 0.64.

Stark and Levhari (1982) were the first to consider the possible knock-on effects of migration and remittances on other sources of income in the family of migrants. Theories derived from the New Economics of Labor Migration (NELM) underpin their conclusions. Massey et al. (1993) state that NELM considers migration to be a dependable approach for managing risks in both domestic and international markets. By raising household income, investments, and production decisions, the theory suggests that remittances may have a significant impact on poverty.

Further research concentrated on the remittances' indirect impact on growth in a number of areas. For instance, through the banking sector (Giuliano & Ruiz-Arranz, 2009), the real exchange rate (Acosta et al., 2007), and investments (Rao & Hassan, 2012), remittances indirectly influence growth. Despite being thought to have beneficial effects on growth, the human capital channel has received little attention. The body of research on the connection between remittances and the development of human capital was mostly conducted through household surveys in individual nations. Bansak et al. (2015), who looked at how household spending on human capital investment in Nepal is impacted by remittances.

Latest Update

Millions of people in developing countries depend on the remittances that migrant workers send home. An increasing number of individuals are migrating for seeking economic opportunity that resulted changes in the planet's structure, population pressures, and the widening wealth disparity between richer and poorer countries.

Global remittances hit a record \$647 billion in 2022, according to official statistics—three times official development aid (ODA). Remittances are actually worth more than that as a lot of individuals transfer money through unofficial routes that aren't included in government figures. Remittance income surpasses revenue from the Suez Canal in Egypt, surpasses tea exports in Sri Lanka, and exceeds tourism profits in Morocco (Ratha, 2023).

Remittances offer a crucial source of income during difficult times. When a natural catastrophe strikes, for example, migrant workers typically send more money home to help affected family with housing costs or food purchases. Even in times of crisis in the nation of origin, remittances tend to remain steady. In 2020, for example, during the early phases of COVID, remittances decreased by only 1.1 percent, during a year in which the global income declined by 3 percent.

During the Covid-19 pandemic, migrant laborers were essential to the economy as front-line delivery workers and highly qualified medical professionals. Remittance services were interrupted by money transfer companies closing during lockdowns, but many continued to send money home via digital means. Remittances made a significant comeback and increased by about 20 percent in Nepal during 2021–2022 (see Figure 3).

Model

The time frame spanning from 1996 to 2022 is chosen for the paper due to the availability of dependable data on the variables under consideration (WB, 2023). Variables EYS, MYS, GNI, and ROL were omitted from the analysis due to their Kaiser-Meyer-Olkin (KMO) values falling below 0.50. The study utilizes the econometric framework introduced by Vinod and Rao (2019) to assess the empirical relationship between personal remittances and governance and welfare (HDI).

$$HDI_t = \beta_0 + \beta_1 * REG_t + \beta_2 * VAA_t + \beta_3 * PAN_t + \beta_4 * GOE_t + \beta_5 * ROQ_t + \beta_6 * COC_t + e_t$$

$$LEB_t = \beta_0 + \beta_1 * REG_t + \beta_2 * VAA_t + \beta_3 * PAN_t + \beta_4 * GOE_t + \beta_5 * ROQ_t + \beta_6 * COC_t + e_t$$

where t denotes time.

REG_t is measured by annual inflows of personal remittances (millions USD at current prices) based on the World Bank database and considered it as control variable. The data are transformed via a normalization to generate a normal distribution. VAA, PAN, GOE, ROQ, and COC are vectors of governance indicators in Nepal.

Results and Discussion

Table 3 represents outputs of ordinary least squares (OLS), which show all independent (WGI) and control variables (Remittances) (p<0.0001) are highly correlated with the HDI and LEI with high values of R². Individually, the statistical findings indicate that remittances (p<0.01 for HDI and p<0.05 for LEI), expressed as a proportion of GDP, have a significant impact on the general welfare of Nepal. After controlling remittances, overall HDI index has also affected by two WGIs such as GOE (p<0.001) and ROQ (p<0.01). A similar trend is observed when examining the interrelationship between life expectancy at birth (p<0.0001) and WGIs, i.e., GOE (p<.0001) and ROQ (p<0.05).

Table3: Ordinary Least Squares (OLS)

Variable	Human Development Index (HDI)		Life Expectancy Index (LEI)	
	Model 1	Model 2	Model 1	Model 2
Remittance (% of GDP)	0.00951**	-	0.0170*	-
Voice and accountability (VAA)	0.61540	0.21124	0.3788	0.12250
Political stability and no violence (PAN)	0.02995*	0.09071	0.9879	0.80530
Government effectiveness (GOE)	0.03074*	3.50e-08 ***	0.0738	2.49e-07 ***
Regulatory quality (ROQ)	0.13483	0.00586**	0.4472	0.03950*
Control of corruption (COC)	0.56980	0.55582	0.9892	0.93640
Constant	0.12910	4.21e-08 ***	0.0273*	3.24e-09***
Multiple R ²	0.9527	0.9333	0.9249	0.8995
F-Statistic	0.000***	0.000***	0.000***	0.000***

Significance Code: 0 “***”, .001 “**”, .01 “*”

Thus, the human development index, which incorporates life expectancy, provides further evidence that two facets of governance—government effectiveness (and regulatory quality—afford a positive impact

on the nation and contribute to increased welfare. The analysis provides support for the proposition that personal remittances contribute supplementary funds to the Nepali government and households, which can be utilised for welfare purposes such as education, healthcare, and overall improvement of living conditions.

As shown in Table 3, ability of government of Nepal is found effective in terms of public service deliver, which is free from political pressure to formulate and implement sound policies and regulations that permit and promote private sector development. In this context, remittance has played vital role in strengthening HDI and LEI (Acosta & Lopez, 2007, Bansak et al., 2015). Other three indicators (VAA, PAN and COC) after controlling remittances are not associated with HDI and LEI but these needs to be further analyzed in the future with standard scientific methodology. More importantly, the Fifteenth Plan (2019/20-2023/24) was launched with the goal of creating a good governance through foundation for prosperity, the economic and social conditions of the country, which were seriously affected by the Covid-19 epidemic. The study recommends that new policies, strategies, plans and programmes are needed to strengthen good governance in Nepal through the long-term vision of the sixteenth development plan.

Conclusion

The research employed the Ordinary Least Squares (OLS) technique to examine the relationship between governance dimensions and human development indices. As a percentage of GDP, personal remittances functioned as a correlated intervening variable with the human development index. Government effectiveness and the calibre of regulations have played a pivotal role in the increase in the human development index. Conducting a prompt household survey is crucial in order to provide evidence for this finding.

References

- Acosta, P., Fajnzylber, P., & Lopez, J. H. H. (2007). The impact of remittances on poverty and human capital: evidence from Latin American household surveys. *World Bank Policy Research Working Paper No. 4247*. World Bank
- Anand, S., & Sen, A. (2000). Human development and economic sustainability. *World Development*, 28(12), 2029-2049.
- Anand, S., & Sen, A. K. (1994). *Human development index: Methodology and measurement*. <https://hdr.undp.org/content/human-development-report-1994>
- Bansak, C., Chezum, B., & Giri, A. (2015). Remittances, school quality, and household education expenditures in Nepal. *IZA Journal of Migration*, 4 (1), 1-19.
- Croes, R., Kubickova, M., & Ridderstaat, J. (2023). Destination competitiveness and human development: The compelling critical force of human agency. *Journal of Hospitality & Tourism Research*, 47(4), NP62-NP75.
- Giuliano, P., & Ruiz-Arranz, M. (2009). Remittances, financial development, and growth. *Journal of Development Economics*, 90 (1), 144-152.

- Kaufmann, D, & Kraay, A. (2023). *Worldwide governance indicators, 2023 update*. <https://www.worldbank.org/en/publication/worldwide-governance-indicators>
- Kim, A. B. (2023, November). *2023 Index of economic freedom*. <https://www.heritage.org/index/>
- Kombeto, B. N., Dzango, R. B., Modeawi, M. N., Ngiala, G. B., Ridwan, M., & Ngbolua, K. (2021). Indices of bad governance by African political leaders: The case study of Central African Republic, Democratic Republic of the Congo and Uganda. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(1), 1506-1514.
- Laha, A. (2016). Association between Governance and Human Development in South Asia: A cross country analysis. In *Handbook of Research on Global Indicators of Economic and Political Convergence* (pp. 254-273). IGI Global.
- Lehnert, K, Benmamoun, M., & Zhao, H. (2013). FDI Inflow and human development: Analysis of FDI's impact on host countries' social welfare and infrastructure. *Thunderbird International Business Review*, 55 (3), 285-298.
- Massey, D.S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, E. (1993). Theories of international migration: a review and appraisal. *Population and Development Review*, 19 (3), 431-466.
- Prados de la Escosura, L. (2021), Augmented human development in the age of globalisation. *Economic History Review*. https://frdelpino.es/investigacion/en/category/01_social-sciences/02_world-economy/03_human-development-world-economy/
- Rao, B. B., & Hassan, G. (2012). Are the direct and indirect growth effects of remittances significant?" *World Economy*, 35, 351-372.
- Ratha, D. (2023, November). *Remittances remain resilient but risks of slowdown ahead*. <https://blogs.worldbank.org/peoplemove/remittances-remain-resilient-risks-slowdown-aheadReforming.pdf>
- Ross, A.G. (2019). Governance infrastructure and FDI flows in developing countries. *Transnational Corporations Review*, 11 (2), 109-119. <https://doi.org/10.1080/19186444.2019.1640572>
- Sen, A. (1976). Poverty: An ordinal approach to measurement. *Econometrica*, 44(2), 219–231.
- Sibinga, C. T. S., Al-Riyami, A. Z., Oladejo, M. A., & Kajja, I. (2022). Poor economics–knowledge economy and the existing knowledge gaps (higher and academic education) in healthcare; how to overcome?. *Electronic Journal of Knowledge Management*, 20(1), 17-26.
- Stark, O., & Levhari, D. (1982). On migration and risk in LDCs. *Economic Development and Cultural Change*, 31 (1), 191-196.
- Sunardi, S., Djazuli, A., Handayani, R. D., Hidayat, B. A., & Saksono, H. (2022). The role of human development in improving local government performance through good government governance. *Jurnal Bina Praja: Journal of Home Affairs Governance*, 14(3), 571-582.
- United Nations Development Programme (2001). Human development report 2001. <http://hdr.undp.org/>
- United Nations Development Programme (2023). [Human development index \(HDI\)](https://hdr.undp.org/data-center/documentation-and-downloads). <https://hdr.undp.org/data-center/documentation-and-downloads>

Interdisciplinary Journal of Management and Social Sciences (IJMSS)

Vol. 5, No. 1, January 2024. Pages: 158-170

ISSN: 2738-9758 (Print), ISSN: 2738-9766 (Online)

DOI: 10.3126/ijmss.v5i1.62672

- United Nations Development Programme (2023, November). *Human development reports*. <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>
- Vinod, H. D., & Rao, C. R. (Eds.) (2019). *Handbook of statistics*. Volume 41, Elsevier B. V.
- World Bank (WB). (2000). Reforming public institutions and strengthening governance. <http://www1.worldbank.org/publicsector/>
- World Bank (WB). (2023a, November). *Personal remittances, received (current US\$)*. <https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT>
- World Bank (2023b, November). *Worldwide governance indicators*. <https://www.worldbank.org/en/publication/worldwide-governance-indicators>
- Yang, H., Dietz, T., Li, Y., Dou, Y., Wang, Y., Huang, Q., ... & Liu, J. (2022). Unraveling human drivers behind complex interrelationships among sustainable development goals: a demonstration in a flagship protected area. *Ecology and Society*, 27(3), 15-35.