



Human Development Index: A Comparative Study between Nepal and Other SAARC Member Countries

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

This study aims at assessing the trends, patterns and compositions of indices of Human Development Index (HDI) of Nepal, with the bid of comparing these with those of the SAARC member countries. Using primary and secondary sources of data, the study embarks on a consecutive analysis of the years ranging from 2015 to 2019, while employing a descriptive research design. Simple descriptive tools; content analysis, trend line, and bar diagram are used for data presentation and analysis. United Nations Development Programme (UNDP) has been preparing the global Human Development Index report since 1990. The study argues that misplaced priorities and not necessarily a shortage of resources often prevent countries from reaching acceptable levels of human development indexes, and thus failing to assuring their citizens the necessary universal access to basic essential amenities such as health, education, security and overall human emancipation. It concludes that, this type of comparison is pertinent because it would attract public attention, in terms of policy advocacy, which could lead to extensive positive policy initiatives for more detailed discussions and application of development strategies amongst the SAARC members' countries.

Keywords: Human development index; SAARC; capability; comparison.

ABBREVIATION

- \$: US dollar
- BIMSTEC : Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
- GDP : Gross Domestic Product
- GNI : Gross National Income
- HD : Human Development
- HDI : Human Development Index
- NGOs : Non-governmental Organizations
- PPP : Purchasing Power Parity
- SAARC : South Asian Association for Regional Cooperation
- UNDP : United Nations Development Programme
- UNESCO : United Nations Educational, Scientific and Cultural Organization
- UNPD : United Nations Population Division,
- US : United States
- WB : World Bank

productivity, and income for decent living, and self-realization.

As Sen [2] explained, "...development is a capability expansion which provides the conceptual basis for human development." Further, he asserts that, "...(1985) human well-being can be evaluated only in terms of the capability to function. It is about the substantial freedom from poverty, hunger, malnutrition, deprivation of ordinary people. It includes how people decide for what to do and how to live." Mahbub ul Haq, a renowned Pakistani economist gave wide momentum to accelerate the human development. Thus, the intellectual contributions [2] and Haq [3] aided in the publication of the first Human Development Report in 1990, which was initiated by the United Nations Development Programme (UNDP).

1. INTRODUCTION

Human development is an alternative approach against the conventional, a single focus on economic growth. As an alternative development, human development as a critique of mainstream development, started in 1990 [1]. The decade of 1990 was popularly known as a development decade; especially the turning point of post-development discourse. This discourse pits a close nexus between social progress and human development. The development discourse shifted from economic-centric to human-centric when UNDP published human development report in 1990 for the first time. Thereafter, notion of development gives more emphasis to human capabilities and well-being. Human development, therefore, is to enhance human rights, dissenting voice, choice, freedom, dignity, entitlement, skill, knowledge, wisdom, art, experiences, ideas, self-esteem, confidence, creativity, longevity,

The human development approach focuses not only on deprivation, but on achievements, which include, enhancing people's capabilities through enlarging their choices [4] This definition is, of course, very broad, and includes non-material aspects such as the many dimensions of freedoms such as long, healthy and creative lives; and be engaged actively in productive life [5] "People are both the beneficiaries and drivers of human development, as individuals and in groups" [6] The two issues connected with enlarging human choices are capabilities and functioning as first part and access to opportunities as second citation required is [7] Therefore, human development reflects the equilibrium between human capabilities and opportunities [4] Development is the process of maximizing the happiness of people that aims to attain long, healthy and creative life [8] The linkage between human capabilities and opportunities is shown in figure one below:

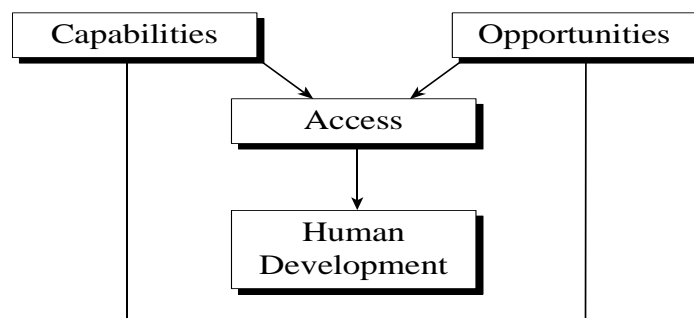


Fig. 1. Equation of Capabilities and Opportunities to Human Development

The Fig. (1) shows the relation between capabilities, opportunities, access and human development. This relation can mathematically expressed as: $HD = f(CAO)$(i) comparing with $Y = f(X)$(ii) where, $Y =$ Human development, $f =$ function of X and $X =$ Capability, Access and Opportunity. To increase the value of Y , the X (each variable equally) should be increased [4]

Long and healthy life, access to knowledge, and decent standard of living are three major dimensions of human development that are used to calculate the HDI [6] The data for calculation of HDI for cross country comparisons for life expectancy data, mean years of schooling and expected years of schooling data, and gross national income (GNI) per capita data were taken for different years from the sources of United Nations Population Division, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and Institute for Statistics, and the World Bank with respectively [9] Different philosophers emphasized the HDI for different usages. Kelly [10] explained HDI as a policy manipulation and revealing impact, while Akder [11] explained it as, conceptualizing the intuitive sources and causes. Similarly, Khatib [12] describes it as, measuring rod to assess the governments work performance year after year. Narayanan [13] analyzed the issues in measuring educational achievement, and compiling various educational goals and targets, regarding the human development in India. He concludes that the results derived from India are equally applicable for other developing countries

to measure educational indicators and human development. Poudel [14] stands that the HDI is pivotal method used to measure overall achievement of nations. He is in support of addressing human development keeping the economic progress of nation with equitable and sustainable way. He found the differences in the index on education and adult literacy rate are the main causes of HDI different in SAARC countries. Reddy [15] states that calculation of HDI is used to evaluate the value of human resources available in any region annually. Therefore, higher the HDI value reflects the betterment in the state of development of a country. This study was comparative analysis of BIMSTEC, SAARC and India focusing to HDI ranks with reference to global context. The study concluded that Government, NGOs and other development stakeholders should take initiation to avoid the existing challenges in order to enhance the HDI in India. The fundamental structure of HDI is presented below in figure two:

1.1 The SAARC Countries

The South Asian Association for Regional Cooperation (SAARC), a regional and geo-political organization was formed in Dhaka Declaration on 8, December 1985 in order to enhance regional solidarity, economic prosperity and political stability among the member states of South Asia. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka are the member states of SAARC. The headquarter of the SAARC is located in Kathmandu, Nepal [16,17,18]

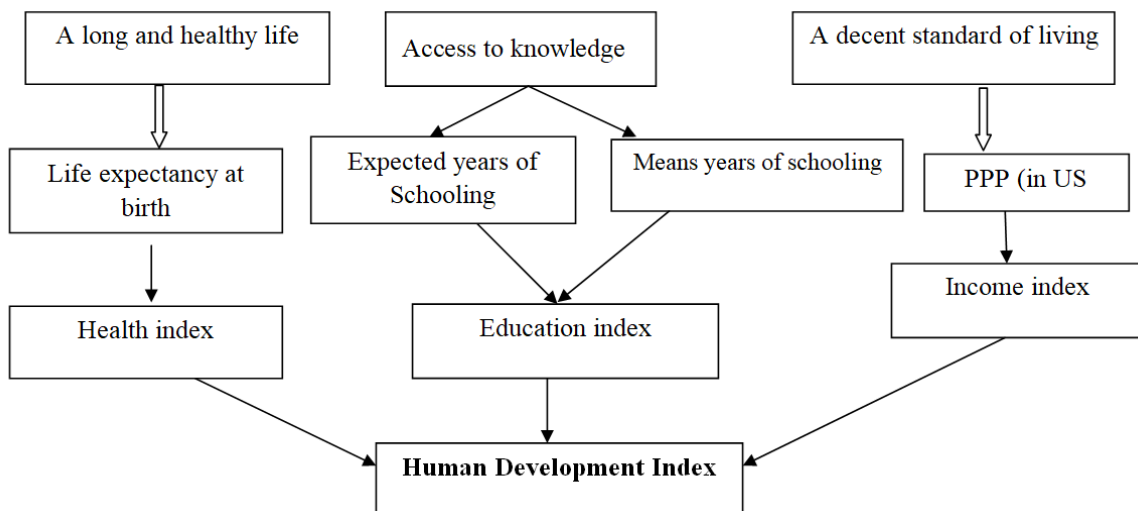


Fig. 2. The Fundamental Structure of Human Development Index

Source: UNDP, [19,20]

1.2 Objectives

- To analyze the trend and pattern of composite indices of human development in the region, Nepal, inclusive;
- To compare the HDI value and rank of countries in the region, including Nepal.

2. MATERIALS AND METHODS

Methodologically, this paper has used the content analysis as a secondary data technique. The usefulness of this method is that, it enables the researcher to draw comparative view from secondary data produced by various writers concerning their insights covering the Human Development Report within a five year interval from 1990 to 2010 with a consecutive recourse from 2015 to 2019 as published by the UNDP. Other research techniques used are: Descriptive cum comparative research design, content analysis, trend line, and bar diagram used for data presentation and analysis with the paper's scope limited to SAARC countries.

3. RESULTS

Development is a creation of the human mind and effort through collective or individual learning. It is a discourse, a process of articulating power and knowledge that shapes the tenets, concepts, constructs, propositions, theories, and human happiness as a whole. The notion of human development puts mankind at the center of the list of the development process. It is an alternative approach to a single focus on

economic growth, and focused on social justice, as a way of understanding progress.

The Human Development Report (2020) includes 189 countries in the world while calculating the HDI values and their ranks lead by the UNDP. Nepal's HDI value gradually increased from 0.387 in 1990 to 0.602 in 2019. Accordingly, the rank of Nepal is 142 out of 189 countries having 0.602 HDI value with medium human development level in 2019 [9] The position of Nepal in human development is low in comparison to developed countries due to low human assets, economic vulnerability, natural disasters and low GNI per capita. Therefore, the 2020 Human Development Report suggests that easing planetary pressure facilitates the dismantlement of inequality in power, opportunity and progress driven by carbon-intensive growth which helps people in every country to flourish equally [21]. The trend of HDI of Nepal based on consistent time series data and new goalposts have been presented below:

The country's socio-economic status is directed by the level of human development and its key indices. Life expectancy, literacy and GDP per capita are the substantial measuring rods of progress. As an alternative discourse of development, HDI reflects the level of human well-beings and makes a possible base for comparative study with other countries [22]. Since 1990 to 2019, life expectancy at birth, mean years of schooling and expected years of schooling of Nepal are increased by 16.4 years, 3.0 years, 5.3 years respectively. Similarly, the GNI per capita of Nepal accelerated by about 151.9 percent between 1990 and 2019 (Table 1).

Table 1. Nepal's HDI Components and their trends based on Consistent Time Series Data and New Goal Posts

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP\$)
1990	54.4	7.5	2.0	1372
1995	58.6	8.1	2.2	1553
2000	62.3	9.0	2.4	1793
2005	65.3	9.5	2.8	1993
2010	67.6	11.9	3.3	2372
2015	69.5	12.7	4.7	2957
2016	69.8	12.6	4.9	2946
2017	70.2	12.6	4.7	3135
2018	70.5	12.8	4.9	3276
2019	70.8	12.8	5.0	3457

Source: UNDP, Human Development Report, 1990,1995, 2000,2005, 2010 and 2015-2020

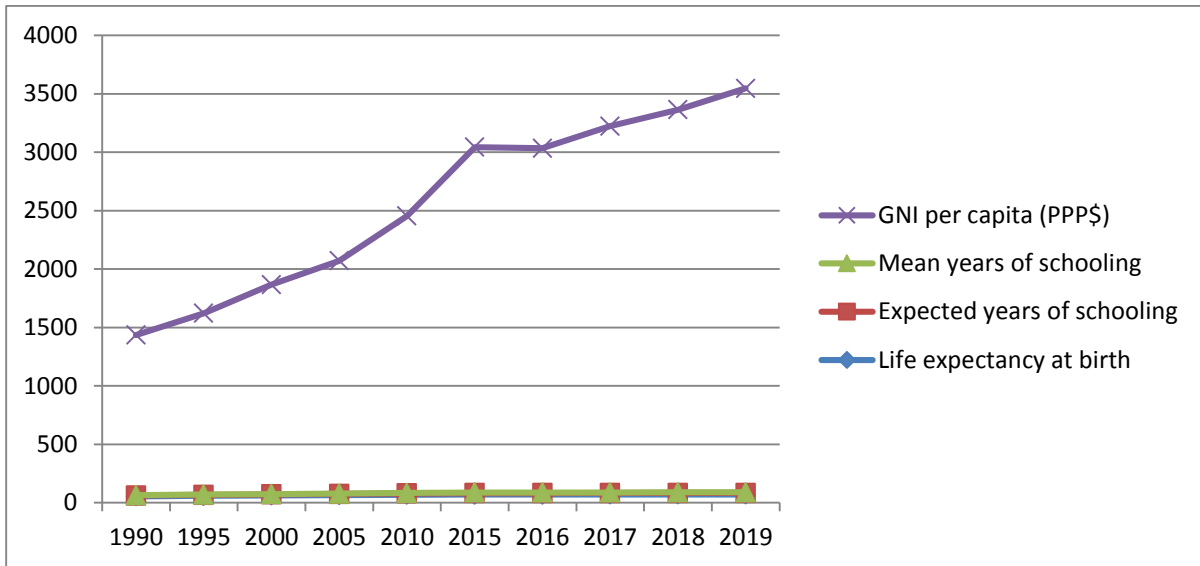


Fig. 3. Substantial progress of human development from 1990 to 2019
 Source: UNDP, Human Development Report, 2020

Table 2. Nepal’s HDI and Component Indicators for 2019 relative to other SAARC member Countries

Country	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP \$)	HDI Value
Sri Lanka	77.0	14.1	10.6	12707	0.782
Maldives	78.9	12.2	7.0	17,417	0.740
India	69.7	12.2	6.5	6,681	0.645
Bhutan	71.8	13.0	4.1	10,746	0.654
Bangladesh	72.6	11.6	6.2	4,976	0.632
Nepal	70.8	12.8	5.0	3,457	0.602
Pakistan	67.3	8.3	5.2	5,005	0.557
Afghanistan	64.8	10.2	3.9	2,229	0.511

Source: UNDP, Human Development Report, 2020

Between 1990-2019, all regions and human development groups have made substantial progress. The world HDI value was 0.598 in 1990 and 0.737 in 2019 [4,9] which gives an increase of 23.2 percent after 29 years. Nepal has not exceeded HDI value in comparative terms in to the world either in 1990 or in 2019. Whatsoever, there is direct relation between HDI value and people's living standard including long and healthy life, good education and income for decent living. The three-dimensional indices are averaged to compute HDI value. However, geometric mean is used to compute HDI value as it gives closer reflection to reality.

Table 2 reveals the life expectancy, expected years of schooling, mean years of schooling and GNI per capita of SAARC countries. It is very significant to note that the life expectancy at birth

was highest of Maldives 78.9 years followed by Srilanka 77 years, Bangladesh 72.6 years, Bhutan 71.8 years and Nepal is comfortable with Pakistan and Afghanistan with 70.8 years life expectancy at birth and 67.3 and 64.8 years life expectancy at birth of Pakistan and Afghanistan respectively. Similarly, Sri Lanka secured the highest rank in expected years of schooling (14.1) followed by Bhutan (13.0), Nepal (12.8), Maldives (12.2), India (12.2), Bangladesh (11.6), Afghanistan (8.3) and Pakistan (8.3) the least. In the same vein, in terms of mean years of schooling Sri Lanka (10.6) ranked at highest followed by Maldives (7.0), India (6.5) and Nepal (5.0) are more comfortable than other SAARC member countries such as Bhutan, and Afghanistan. Moreover, GNI per capita was highest in the Maldives standing at 17, 417 PPP \$ and comparatively very low in Nepal (PPP \$

3457) and the least in Afghanistan (the US \$ 2,229). The table indicates policy debate that a country does not need to become rich first before it can assure people a decent level of human development. Sri Lanka for instance, continues to have a relatively low level of income than Maldives and still reports a relatively high HDI value than Maldives. Likewise, Pakistan to have a higher level of income per person than Nepal, but life expectancy at birth, expected years of schooling and the HDI Value of Nepal is higher than Pakistan. It is the case of Nepal in comparison to Pakistan and nearly equal human development of Nepal with other countries Bhutan, Bangladesh and India (Table 2).

HDI value of Sri Lanka was 0.776 and leads the SAARC nations and secured 70th rank in the globe in 2015 which was followed by Maldives 102nd rank and second in SAARC region, Nepal secured 142nd rank in the globe and sixth rank in SAARC region. Afghanistan was the lowest rank holder in the SAARC region with 167th global rank in 2015 and 169th in 2019. Though HDI values increased in the subsequent years of each SAARC country, as the position in the SAARC region remains the same each year. However, the global ranking witnessed some changes. Maldives ranked 102th global rank in 2015 but it secured 95th global rank in 2019. Other SAARC country's global rank seems to fluctuate between the consecutive years from

2015 to 2019 globally. In 2019 Sri Lanka and Maldives had a high human development index, while India, Bhutan, Bangladesh, Nepal and Pakistan had a medium human development index, while Afghanistan had a low human development index. Nepal's HDI value increased in recent four consecutive years and an indicator of the country's remarkable progress and achievement in uplifting the people from poverty and illiteracy (Table 3).

4. DISCUSSION

Development should not be judged by GDP per capita, but by human capability. Thus, if used creatively the HDI effectively helps to draw attention to low levels of human development and areas of inequality. Though, HDI has set of limitations but it is significant in the sense that it helps to develop the other different indicators which are more sensitive to develop policies and reflect the political freedom, security, and participation in short-run. Molina and Purser [17] have followed a cross-sectional analysis of the non-income elements comparing 1970 and 2000 including 111 countries; as they argued that, "...the rate of HDI progress and achievement in poorest countries is much faster than that of richest countries of the world."

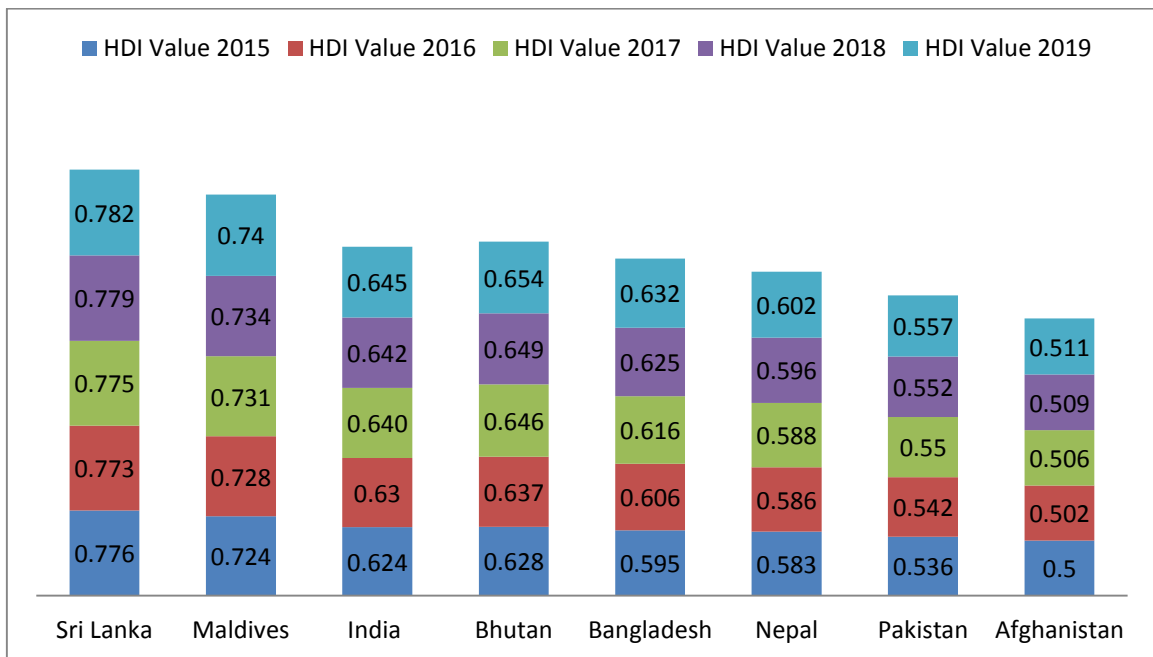


Fig. 4. Comparison of Nepal's HDI value and Rank with SAARC Countries

Source: UNDP, Human Development Report, 2015- 2020

Table 3. Comparison of Nepal's HDI Value and Rank with SAARC Countries

Country	HDI Value					HDI Rank				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sri Lanka	0.776	0.773	0.775	0.779	0.782	1(70)	1 (71)	1 (72)	1(72)	1(72)
Maldives	0.724	0.728	0.731	0.734	0.740	2 (102)	2 (102)	2 (100)	2(98)	2 (95)
India	0.624	0.630	0.640	0.642	0.645	4 (130)	4 (131)	4 (130)	4(130)	4(131)
Bhutan	0.628	0.637	0.646	0.649	0.654	3 (129)	3 (129)	3(129)	3(129)	3(129)
Bangladesh	0.595	0.606	0.616	0.625	0.632	5 (138)	5 (135)	5 (135)	5(134)	5(133)
Nepal	0.583	0.586	0.588	0.596	0.602	6 (142)	6 (143)	6(143)	6(143)	6(142)
Pakistan	0.536	0.542	0.550	0.552	0.557	7 (155)	7 (154)	7(154)	7(154)	7(154)
Afghanistan	0.500	0.502	0.506	0.509	0.511	8 (167)	8 (168)	8(169)	8(169)	8(169)

Source: UNDP, Human Development Report, 2020.

Note: 1,2,...,8 implies rank

In 2019 Sri Lanka and Maldives attained high human development value (0.782 and 0.740) respectively, while India, Bhutan, Bangladesh, Nepal and Pakistan had achieved medium human development value. Likewise, the position of Afghanistan is that, it has a low human development value. It means there has been an asymmetrical position of human development value among the SAARC member countries. A similar result was found by the work of Levine, (2007) entitled "Trends in Human Development and Human Poverty in Namibia [23]. Further, he argued that, "...life expectancy, a fundamental component of HDI is not only stimulated by GNI per capita but is heavily affected by the increased mortality rate; owing to the HIV/AIDS epidemic." Levine (2007) concluded that, "... there is no absolute relation between GNI per capita and HDI." For instance, the life expectancy of India (69.7 years) has comparatively lower than Nepal (70.8 years) but the GNI per capita of India (6681 PPP\$) has relatively higher than that of Nepal (3457 PPP\$).

5. CONCLUSION AND RECOMMENDATIONS

The purpose of this paper is to highlight changes in the human development status of Nepal in comparison to other SAARC member countries during the period between 2015 and 2019. It is noticed almost all SAARC nations have developed HDI values progressively. Nepal has experienced 1.52 times of growth in HDI value within 29 years. Though Nepal has significantly improved in life expectancy at birth and expected years of schooling since 1990 to 2019, still it has to improve in mean years of schooling and GNI (PPP \$) for securing a higher HDI. This implies in the case of an indicator like life expectancy, Nepal documented the highest as 1.30 times their life expectancy has increased and the least with Sri Lanka (1.09 times) [19,24]. Nepal has similar HDI value in comparison to Bangladesh, Bhutan and India but the GNI per capita of Nepal is lower than these three countries in 2019 [9] Thus, countries may have similar level of HDI value but differ in GNI per capita. Therefore, it is not a compulsion for any nation to become economically sound before it can assure people a decent level of human development. Misplaced priorities and not necessarily a shortage of resources often prevent countries from assuring people universal access to basic health and education. These types of comparisons have attracted public attention and carry the potential to initiate a more

detailed discussion on development strategies and priorities.

The findings will encourage government and development stakeholders to develop effective policy measures to allocate resources for future planning and development initiatives on behalf of human development and welfare. This study showed that there is no relation between GNI per capita and expected years of schooling. For example expected years of schooling of Nepal is 12.8 with GNI per capita US\$ 3,457 in 2019 but expected years of schooling of India is 6.5, even if, GNI per capita of India is nearly double than of Nepal. But there HDI value remains approximately same. It may be the new inquiry for further research. It is essential to adopt the policies in an appropriate way for a program of action if any nation desires to increase the higher level of human development. Moreover, any nation should invest in social priority areas such as basic and primary education, literacy; primary and preventive health care, family planning, safe drinking water, women skill development and job-oriented vocational training. Moreover, the indicators are needed to capture the shorter term that impacts on policies and reflect the priorities and principles of human development. The indicators could be the revealing who are the most deprived and how their lives are affected by policies, reflecting the disparities between groups such as by gender, ethnicity, region and urban or rural dwelling to help identify current or historical discrimination and to show whether policies are reducing or exacerbating the gaps, responding to policy measures so that the findings help in assessing government performance.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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