Methodological Article

Development measurement in Nepal using population census 2021 data

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Abstract

The development measurement in Nepal using Population Census data 2021 yield Human Development Index (HDI) value 0.7094, Gender related Development Index (GDI) 0.7087 and Gender Empowerment Measures (GEM) 0.5581. The HDI, GDI and GEM value of Nepal lies medium level countries range. The HDI value is Nepal has increased 0.463 to 0.7094 from 1999 to 2021 about 24 years period with change in number 0.246. Similarly the GDI value has increased from 0.441 to 0.7087 with change in number 0.267. Similarly the GEM number has increased around 0.358.

Keywords: human development index, gender related development index, gender empowerment measures, crude measurement, medium level country.

1. Introduction

Development is measures using three indicators Human Development Index (HDI), Gender related Development Index (GDI) and Gender Empowerment Measure (GEM). Per capita income was major dominant indicator (tools) to measure development and progress before 1990 in economics and development field. The evolution of Human Development (HD) discipline after 1990 structured other indicators to measure development and progress in societies and countries. Development is process to meet the need of people in present socio political arena. People cannot survive without fulfilment of needs in current huge population size (8 Arba). Needs fulfillment process provides happiness to human beings whether from basic needs or from derived needs. The simple society satisfies from basic needs but complex society fulfill their demands through derive needs. The supply of derive needs are measures by development indicators. Development is process to fulfill their needs through complex process. This article tries to measure situation development in Nepal using those three indicators. William Petty (1623-87) argued to achieve each man's particular happiness is objective of human life (ends) and development is process (means) to achieve happiness (Sharma, 2006:2). In the decade of 1950s notion of development shifted from economic measurement (like GDP) to broader social scale. Sir William Arthur Lewis (1955) argued development is process to widening the range of human choice (Sharma, 2006:3). In 1988 Amarty Sen argued development is process to expansion of capabilities of people (Sharma, 2006:12)). In 1990s perceptions, practices and measurement of development shifted widely from income based to social progress oriented (Chhetry, 2006:37). In 1990 United Nations Development Programme (UNDP) constructed Human Development model and widely circulated among the member countries of United Nations. The Human Development Index (HDI) constructed in 1990 which focuses education, health and income are essential requirement for people. These three variables education, health and income combined in a single scale to measures human capability and

functioning uses decimal number between 0 and 1. The minimum limit lies on 0 and maximum limit lies on 1. All countries, population groups belongs between 0 and 1. The income is measured in per capita Gross Domestic Product (GDP) scale. To make it globally comparable Purchasing Power Parity (PPP) in US dollar ($) is chosen (Chhetry, 2006:40). People do not need infinite income to achieve decent standard of living (UNDP, 1995; Chhetry. 2006:40). The additional income applied as the law of diminishing returns indicates that as income increases the impact on human progress (by additional dollar) acts as shrinks marginal utility (Chhetry, 2006:40). In the other words the income used as investment to achieve health and education acts as law of diminishing returns and 'log' is taken to calculate income index (Chhetry, 2006:40,46).

In 1995 Gender related Development Index (GDI) and Gender Empowerment Measures (GEM) constructed (UNDP, 1998:108-109). These two scales also measure level of progress between 0 and 1 like HDI. The HDI, GDI and GEM are quantitative indicators measurable to achievement of human progress (Chhetry, 2006:37-38). These indicators measures the level of health, education, income, political participation, economic participation and decision making process in quantitative terms (Chhetry, 2006:37-38). The life expectancy at birth and education (literacy and combined enrolment ratio) are intrinsic capability and income is acts as instrumental value (Ananda, 1994, Chhetry, 2006:38). Women and men live together with different rewards and deprivations (Ananda, 1993; Sen, 2003:Chhetry, 2006:42) and it is concern of GDI and GEM (Chhetry, 2006:42). The parameter € denotes inequality and express as penalty of discrimination. If €= 0, society practices gender equality, if €= ∞it indicates high gender equality preference. If €=1 single penalty and if €=2 double penalty impose while calculating disparities (Chhetry, 2006:42.43). While calculating GEM income is considered as the source of economic power that frees the income earners to choose possible options and not need to adjusted as law of diminishing returns and 'log' is not taken (Chhetry, 2006:46). This articles tries to illustrate situation of development in Nepal using development measurement methods developed by UNDP using National Population and Housing Census (NPHC) 2021 data. Since 1990 the measurement methods of development has been criticized and analyzed and reformed from various angles. This articles tries to calculate and analyze measurement method of Human Development widely used by UNDP in Nepal: the HDI, GDI and GEM.

2. Methods and Materials

This article has adopted measurement methods constructed by Human Development Report 1998 and Human Development report 1999. To measure Human Development Index (HDI) following indicators are used.

1.Educational Index = [2(Literacy Index) + 1(General enrolment Index)] / 3

2. Index = (Actual Value - Minimum Value) / (Maximum Value - Minimum Value)

3.Equally Distributed Educational Attainment Index (EDEAI) =

$\{(\text{Female population share})(\text{Female education index})^{1}\} + \{(\text{Male population share})(\text{male education index})^{-1}\}^{-1}$

4. The female share of wage bill is calculated as follows:

$$\text{Female share of wage bill} = \frac{\{(wf/wm) \times eaf}{\{(wf/wm) \times eaf\} + eam}$$

Where,

Sm= Male share of earned income

Sf = Female share of earned income

wf = female wage

wm = male wage

eaf = Percentage share of female economically active population

eam = Percentage share of male economically active population

Wf/wm = Ratio of female non-agricultural wage to male non-agricultural wage

= 0.75.

Assuming that female share of earned income is exactly equal to the female share of wage bill (sf)

$$\text{Female share of wage bill} = \frac{\{(wf/wm) \times eaf}{\{(wf/wm) \times eaf\} + ea}$$

3. Sources of Data

This article drawn data from different sources as follows:

1.The life expectancy at birth, adult literacy and combined enrolment ratio data are taken from Population Census 2021 provided by National Statistical Office (NSO). 2.GDP (PPP) Per capita data are taken from World Bank (WB). 3.The percentage share of economic active population data are taken from Population Census 2021 data provided by National Statistical Office (NSO). 4. Total population size data , size of male and female are taken from Population Census 2021 data provided by National Statistical Office (NSO). 5. Male and female percentage share of parliament representation data are taken by Parliament Secretariat. 6. Male and female share of administrative and managerial position and the data for professional and technical position are taken from Ministry of Women, Children and Senior Citizen (MWCCC) and civil service book record (Nizamati Kitab Khana). Most of the data are taken from population census 2021 records provided by National Statistical Office (NSO). Age is important variables in this study. United Nations (UN) defined age as the estimated or calculated interval of time between date of birth and ate of enumeration. Age is expressed in the completed solar year (Shryock and Siegel (1975:113). While operating census process failure to record age, misreporting of age, age heping, counting twice and digit preference like on 0 and 5 have corrected and carefully checked by National Statistical Office (NSO). This is merit to chose secondary data in academic study.

4. Measurement

Following measurement is done in this article:

Measurement 1 : The Human Development Index (HDI)

Data Given:

(i) Life expectancy at birth = 73.3 years,

(ii) Adult literacy rate = 71.58%.

(iii) Combined Gross Enrolment Ratio = 76.36%.

(iv) Income per capita (Real) = 1,69,038 Rs = 1410 US $

(v) Income per capita = 4670.74 US$ (PPP).

The methodology to calculate index (UNDP, 1998: 179) is given as below:

$$\text{Index} = \frac{\text{(Actual Value - Minimum Value)}}{\text{(Maximum Value - Minimum Value)}}$$

(A).To calculate Life Expectancy Index (LEI)
= (71.3 - 25) / (85 - 25)
= 46.3 / 60
= 0.771

(B).To Calculate Educational Index
First, to calculate Gross Enrolment Index (GEI)
We know,
Index = (Actual Value - Minimum Value) / (Maximum Value - Minimum Value)
= (76.36 - 0) / (100 - 0)
= 76.36 / 100
So, GEI = 0.7636

(C).To Calculate Literacy Index (LI)
Index = (Actual Value - Minimum Value) / (Maximum Value - Minimum Value)
LI = (71.58 - 0) / (100 - 0)
= 71.58 / 100
= 0.7158

Now, to calculate Educational Index (EI)
We know that (UNDP, 1998: 179),
EI = [2(LI) + 1(GEI)] / 3
= [2(0.7158) + 1(0.7636)] / 3
= [1.4316 + 0.7636] / 3
= 2.1952 / 3
= 0.7317

(D).To Calculate Income Index II)
We know that:

$$\text{Index} = \frac{\text{(Actual Value - Minimum Value)}}{\text{(Maximum Value - Minimum Value)}}$$

Taking ‘log’ for all variables

$$\text{Index} = \frac{\log(\text{Actual Value}) - \log(\text{Minimum Value})}{\log(\text{(Maximum Value)}) - \log(\text{Minimum Value})}$$

$$\text{Index} = \frac{\log(4670.74) - \log(100)}{\log(40000) - \log(100)}$$

$= 3.6693 - 2 / 4.6020 - 2$
$= 1.6693 / 2.6020$
$= 0.6415$

HDI is average of all three indexes (LEI, EI and II)

$$\text{HDI} = \frac{0.771 + 0.7158 + 0.6415}{3}$$

HDI = 2.1283 / 3
HDI = 0.7094

Measurement 2. The Gender-related Development Index (GDI)

The GDI measures disparity in achievement between men and women (UNDP, 1999: 160). In this measurement, we are using weighting formula. Here it is setting weighting parameter €=2. This is harmonic mean value of male and female (UNDP, 1999: 160). The parameter € denotes inequality and express as penalty of discrimination (Chhetry, 2006: 42).

Data given

(i) Life expectancy at birth
Male maximum = 82.5 years
Male minimum = 22.5 years
Female maximum = 87.5 years
Female minimum = 27.5 years

(ii) Percentage Share of population
Male = 48.87% = 0.4887
Female = 51.13% = 0.5113

(iii) Life expectancy at birth
Male = 68.20 years
Female = 73.80 years

(iv) Adult literacy rate (15 years and above)
Male = 80.57% = 0.8057
Female = 63.41% = 0.6341

(v).Combined first, second and third level of Gross Enrolment Ratio (5 years and above)
Male = 83.66
Female = 69.48

(vi) Total population = 29.16 Million
Male = 14.25 million
Female = 14.91 million

(vii).Percentage share of economically active population:
Females (eaf) = 71.15% = 0.7115
Males (eam) = 60.23% = 0.6023

(viii)Wf/wm = 0.7500 (Given)

(ix).GDP per capita = 4670.74 US$ (PPP)

Calculation

(A) Calculating Life Expectancy Index (LEI), we know that

Index = (Actual Value - Minimum Value) / (Maximum Value - Minimum Value)

For female

= (73.80 - 27.5) / (87.5 - 27.5)
= 46.3 / 60
= 0.771

For Male

= (68.20 - 22.5) / (82.5 - 22.5)
= 45.7 / 60
= 0.76

Step 1: Equally Distributed Life Expectancy Index (EDLEI)) =
{(Female population share)(Female life exp. index) $^{-1}$} + {(Male population share)(male life exp. index) $^{-1}$} $^{-1}$

(UNDP, 1998:179-180).

$$\text{Or, EDLF} = \text{Inverse of } \left\{ \frac{0.5113}{0.7710} + \frac{0.4887}{0.7600} \right\}$$

$$= (0.6631 + 0.6430)^{-1}$$
$$= 1 / 1.3061$$
$$= 0.7656$$

(B): Calculating Educational Attainment Index (EAI)
To calculate educational attainment index, we know that
= {2(Adult literacy) + 1(Combined enrolment)} / 3

For Female, = 2[(0.6341) + 1(0.6948)] / 3
= [(1.2682 + 0.6948)] / 3
= 1.963 / 3
= 0.65433

For Male, = {2(0.8057) + 1(0.8366)} / 3
= (1.6114 + 0.8366) / 3
= 2.448 / 3
= 0.816

Step II : To calculate, Equally Distributed Educational Attainment Index (EDEAI) = {(Female population share)(Female education index)^{1}} + {(Male population share)(male education index) $^{-1}$} $^{-1}$

$$\text{Or, EDEAI} = \text{Inverse of } \left\{ \frac{0.5113}{0.6543} + \frac{0.4887}{0.8160} \right\}$$

Or, EDAI =(0.7814 + 0.59880) $^{-1}$
Or, EDAI =1/1.3802
Or, EDAI = 0.72.

(C).Calculating Equally Distributed Income Index (EDII)
Given,

(i)Percentage share of economically active population
Female (eaf) = 71.15% = 0.7115
Male (eam) = 60.23% = 0.6023

(ii)Wf/Wm = 0.750 (Given)

(iii)GDP per Capita = 4670.74 US$ (PPP)

(iv)Population = 29.16 Million (Total)
Male = 14.25 million (48.87%)
Female = 14.91 million (52.13%)

Solution
Total GDP = 29.16 million X 4670.7405 $
= 136198.77 million
Female share of earned income (Sf) = ?

$$Sf = \frac{(wf/wm) \times eaf}{\{(wf/wm) \times eaf\} + eam}$$ (UNDP, 1998:179-180).

$$Sf = \frac{(0.75) \times 0.7115}{\{(0.75) \times 0.7115\} + 0.6023}$$

$$Sf = \frac{0.533625}{0.533625 + 0.6023}$$

$$Sf = \frac{0.533625}{1.135925}$$

$$Sf = 0.4697$$

Therefore, Female total GDP (PPP)
= Sf X Total GDP
= 0.4697 X 136198.77 million
= 63,982.27 million (US $)

Male Total GDP (PPP) = Total GDP - Female GDP
= 13,61,98.77 - 63,982.27
= 72,216.50 Million

Now, per capita female GDP = Total female GDP / Female population
=63,982.27 million / 14.91 Million
= 4291.23 US$ PPP

Again, per capita male GDP = Total male GDP / Male population
=72,216.50 Million / 14.25 million
= 5067.82 US$ PPP

Now, to calculate adjusted income index for male (W(y,m)) and female (W(y,f)) is

$$W(ym) = \frac{\{\log(y\_max) - \log(y\_min)\}}{\{\log(y\_max) - \log(y\_min)\}}$$

$$\text{Or, } W(ym) = \frac{\log(5067.82) - \log(100)}{\log(40000) - \log(100)}$$

$$\text{Or, } W(ym) = \frac{3.7048 - 2}{4.6020 - 2}$$

$$\text{Or, } W(ym) = \frac{1.7048}{2.6020}$$

$$\text{Or, } W(ym) = 0.6551$$

Similarly, to calculate adjusted income index for male (W(y,m)) and female (W(y,f)) is

$$W(yf) = \frac{\{\log(y\_max) - \log(y\_min)\}}{\{\log(y\_max) - \log(y\_min)\}}$$

$$\text{Or, } W(yf) = \frac{\log(4291.23) - \log(100)}{\log(40000) - \log(100)}$$

$$\text{Or, } W(yf) = \frac{3.6325 - 2}{4.6020 - 2}$$

$$\text{Or, } W(yf) = \frac{1.6325}{2.6020}$$

$$\text{Or, } W(yf) = 0.6274$$

Step III : To calculate Equally Distributed Income Index (EDII) is

$$\text{Or, EDII} = \text{Inverse of } \left\{ \frac{\text{Female pop share}}{\text{Female adj income}} + \frac{\text{Male pop share}}{\text{male adj income}} \right\}$$

$$\text{Or, EDII} = \text{Inverse of } \left\{ \frac{0.5113}{0.6274} + \frac{0.4887}{0.6551} \right\}$$

$$\text{Or, EDII} = \text{Inverse of } \{ 0.8149 + 0.7459 \}$$

$$\text{Or, EDII} = \text{Inverse of } \{ 1.5608 \}$$

$$\text{Or, EDII} = \frac{1}{1.5608}$$

$$\text{Or, EDII} = 0.6406$$

Step IV: Computing GDI

$= [0.7656 + 0.72 + 0.6406] / 3$

$= 2.1262 / 3 = 0.7087$

Measurement 3. The Gender Empowerment Measure (GEM)

GEM is empowerment of political and economic spheres of activities between men and women. The theme of GEM in this measurement is to calculate disparities in participation between men and women in government job rather than domestic and agricultural work in rural farm.

Data given:

(i) Percentage share of population

Female = 51.13% = 0.5113

Male = 48.87% = 0.4887

(ii) Total population

Female = 14.91 million

Male = 14.25 million

(iii) Percentage share of parliamentary representation

Female = 33% = 0.33

Male = 67% = 0.67

(iv) Percentage share of administrative and managerial position

Female = 20.28% = 0.2028

Male = 79.71% = 0.7971

(v) Percentage share of professional and technical position

Female = 24.09% = 0.2409

Male = 75.90% = 0.7590

Step 1: To calculate political representation

To calculate Equally Distributed Equivalent Percentage (EDEP) of Parliament representation

$= [(0.5113/33) + (0.4887/67)]^{-1}$

$= (0.015493 + 0.007294)^{-1}$

$= (0.022787)^{-1}$

$= 1/0.22787$

$=43.88$

Step 2 : To calculate Administrative and Professional Representation

Calculating EDEP for administrative and managerial position

$= [(0.5113/20.28) + (0.4887/79.71)]^{-1}$

$= (0.02521203 + 0.00613097)^{-1}$

$= (0.031343)^{-1}$

$= 1/0.031343$

$=31.90$

Calculating EDEP for professional and technical position:

$= [(0.5113/24.89) + (0.4887/75.90)]^{-1}$

$= (0.02122457 + 0.00643874)^{-1}$

$= (0.02766331)^{-1}$

$= 1/0.02766331$

$= 36.14$

Now, to calculate Index of Parliament representation:

$= 43.88/50 = 0.8776$

Again, to calculate Index of administrative and managerial position:

$= 31.90/50 = 0.638$

Similarly, Index of Professional and technical position = 36.14/50

= 0.7228

Combining administrative and managerial and professional and technical position

= (0.638 + 0.7228)/2

= 1.366 /2

= 0.683

Step 3 : Calculating Index Share of Earned Income (ISEI)

Data Given:

(i) Percentage share of economic active population,

Female (eaf) = 71.15% = 0.7115

Male (eam) = 60.23% = 0.6023

(ii) Ratio of female non-agricultural wage to male non-agricultural wage = 0.75

(iii) Unadjusted real GDP per capita in PPP US$ = 4670

Solution

By methodology, ratio of female wage to average wage (w') and male wage to average wage (w) is given as follows:

W = (0.7115)(0.75) + (0.6023)(1)

= 0.533625 + 0.6023

= 1.135925

Now, Female to male ratio to average wage = 0.75 / 1.135925

= 0.66025

and, male wage to average wage is

= 1/1.135925

= 0.88033981

So, Share of earned income for

Female = (0.66025)X(0.7115)

= 0.46976

Male = 0.88033981) (0.6023)

= 0.53022

Female and male proportion of income share is as follows:

Female = 0.46976 / 0.5113

= 0.9187

and,

Male = 0.53022/ 0.4887

= 1.0849

Now to calculate Equally Distributed Equivalent Percentage of income index

[Female population share\ Female income index + Male population share \Male income index] $^{-1}$

= (0.5113/0.9187 + 0.4887/1.0849) $^{-1}$

$= (0.5565 + 0.4504)^{-1}$

$= (1.0069)^{-1}$

$= 1/1.0069$

$= 0.9931$

Income equals = 0.9931 x 4670.74

= 4638.51

Now, to Calculate Income Index

$$\text{Or ,Index} = \frac{\text{(Actual Value - Minimum value)}}{\text{(Maximum value - Minimum value)}}$$

$$\text{Or ,Index} = \frac{(4638.51 - 100)}{(40000 - 100)}$$

$$\text{Or ,Index} = \frac{(4538.51 - 100)}{(39900)}$$

Or, Index = 0.1139.

Step 4 : To calculate Gender Empowerment Measures (GEM)

Now, GEM is average of all three indices

GEM = (0.8776 + 0.683 + 0.1137)/3

= 1.6743 / 3

= 0.5581

5. Sources of errors

There might exist error in the population data collecting, compiling and analyzing process (Shryock and Siegel, 1976:113-115). First the problems of errors has discussed here. While reporting age, the age hipping problems might have solved by age smoothing process on indirect analysis before data publication. The life expectancy data are taken from mortality rate of 100000 population. The problem might occurs while choosing 100000 population from 29.2 million population. The standard 100000 population might not represents the whole 29.2 million population and might exist error in this position. Due to large census size the over reporting and under reporting might cancel each other and this phenomena fixed the point of equilibrium in the same point which reduces chances of error. Due to participation of large number of enumerators and supervisors the census data has high reliability. While measuring development in Nepal in this article the data sources are taken from population census 2021. The date like separate male and female life expectancy at birth, adult literacy rate, percentage share of population, combined enrolment ratio and economically active population are taken from population census 2021 data. While calculating GDI it is considered ratio of female non-agricultural wage to male non-agricultural wage wf\wm is taken as 0.750. This indicator indicates that if 1000 male participates in non-agricultural activities in that case only 75 female participates. In recently situation is not similar in Nepal. In Nepal more females are participating in agricultural work than males. So that considering wf\wm is sources of error

while calculating GDI. To correct it and to find out exact value of wf\wm the separate research is needs to conduct. The real income per capita of Nepal in 2021 was Nepali Rs. 1,69,038 which converted into 1410 US $. While converting it in to Purchasing Power Parity (PPP) it converted into 4670.74 US$ (PPP). This figure is taken from World Bank data. The meaning of Purchasing Power Parity is as follows: To buy some bundle (and same quality) of goods and service in Nepal required Rs. 1,69,038 (US $ 1410) and to buy same bundle (and same quality) of goods and service in US market it required 4670.70 US $. There is no any clear-cut method to convert actual income into PPP income and it should be dependent on the World Bank estimation. There might exist error and might affect outcome. Considering these factors the GDI value is not exact rather crude measurement.

6.0 Results and Discussion

In social science taking 5 per cent level of significance is common. In social science exact measurement does not need like pure science. The crude measurement is also acceptable. In general the outcome obtained in life expectancy, adult literacy and combined Gross Enrolment Ratio have significant reliability and validity. While measuring development in Nepal the GEM indicators is considered as policy level representative tools. The variables chosen to calculate GEM are male and female percentage of population, parliament representation, administrative position, managerial position, technical position and professional position. To make the index more government representative, administrative and managerial data are taken only from civil service and Nepal police force. Similarly the professional and technical data are taken only from the Engineers and Doctors. The theme of GEM in this measurement is to calculate disparities in participation between men and women in government job rather than domestic and agricultural work in rural farm. This is unique definition considered in this study. The UNDP has not consider this definition.

The development measurement in Nepal using Population Census data 2021 yield Human Development Index (HDI) value 0.7094, Gender related Development Index (GDI) 0.7087 and Gender Measurement Index (GEM) 0.5581. Nepal obtained 70.94 per cent marks out of hundred while measuring HDI indicators. Similarly Nepal obtained 70.87 per cent marks out of hundred while measuring GDI indicators and Nepal obtained only 55.81 per cent marks out of hundred while measuring GEM indicators. The GEM marks obtained by Nepal on 2021 is below merit (60%). In1999 the rank 1 country Canada had HDI value 0.932 (UNDP, 1999:134) which is 0.223 index high than Nepal (2021). Similarly the GDI value of Rank 1 country Canada had 0.928 (UNDP, 1999: 138) which is 0.219 index high than Nepal (2021). Similarly the GEM value of Rank 1 country Norway had 0.810 (UNDP, 1999:142) which is 0.251 index high than Nepal. The current situation of Nepal lies very below compared with past 24 years ago with rank 1 countries. Nepal need to work more on HDI, GDI and GEM sectors basically Nepal needs to work more focus on gender sector reform. The achievement Nepal obtained in both GDI and GEM sector also belongs below distinction (80%). On an average in all three sectors (HDI, GDI and GEM) Nepal need to invest more to yield better result. The development measurement of Nepal compared with rank 1 countries shows low progress.

The Human Development Report 1999 classified index above 0.80 as high index (UNDP, 1999:134). The index 0.79 to 0.50 is classified as medium HDI and the index below 0.50 is classified as low HDI index (UNDP, 1999:134-137). Based on this standard value, the HDI value of Nepal 0.7094 lies medium level countries. Similarly based on GDI and GEM indicators Nepal lies on medium level countries. The development indicators calculated for Nepal 2021 has compared with Human Development Report 1999 which is based on 1997 data. This makes us possible to compare the current situation of Nepal to 24 years back. The HDI value is Nepal has

increased 0.463 to 0.7094 from 1999 to 2021 with change in number 0.246. Similarly the GDI value has increased from 0.441 to 0.7087 with change in number 0.267. Similarly the GEM number has increased around 0.358. These achievement are big changes achieved in Nepal compared with past two and half decade period. Nepal has achieved big progress in education, health, income, political participation, professional participation in all sectors including gender sectors compared with our past 24 years back situation. Compared with our past we have achieve big progress but compared with rank 1 countries we progress less and meaning less.

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