

LOCAL HUMAN DEVELOPMENT REPORT 2019 | PROVINCE NO. 3, NEPAL



Government of Province
Province Policy and Planning Commission
Province No. 3, Hetauda, Nepal
2019

LOCAL HUMAN DEVELOPMENT REPORT 2019 | PROVINCE NO. 3, NEPAL



Government of Province
Province Policy and Planning Commission
Province No. 3, Hetauda, Nepal
2019

Publisher : Government of Province
Province Policy and Planning Commission
Province No. 3, Hetauda, Nepal
Phone: 057-525131, 523689
Email: pppc@p3.gov.np, pppc2025@gmail.com
Website: <http://pppc.p3.gov.np>

Publication Date : May 2019

Published Copies : 1000

© Province Policy and Planning Commission, Province No. 3



**Province No. 3
Hetauda, Makawanpur, Nepal**

Chief Minister

Message from the Chief Minister

As Nepal embarks upon a new era of political stability, it is widely recognized that socio-economic development is the main priority of the whole country, as reflected in the long-term vision – “Prosperous Nepal; Happy Nepali” – of the present government. As an important linchpin of the new federal system, all provinces are equally responsible and uniquely placed towards achieving this national vision. In line with this onus, Province No. 3 has also set its long-term vision towards the development of “Healthy, Well-Cultured and Happy People: Socialism Oriented Prosperous Province”.

Since the formation, the Government of Province has taken important strides towards publishing fact-based database documents of the Province. Among others, preparation of provincial profile, as well as an integrated database of all local governments, have been significant, mainly towards guiding evidence - and need-based policy and planning at the level of the province and local government. However, due to lack of data related to the Human Development Index (HDI) at the local level, development priorities and fiscal transfers to local governments have been difficult to manage.

To respond to this absence of information, Province Policy and Planning Commission has prepared “Local Human Development Report 2019, Province No. 3, Nepal” which explores the status and relative strength of human development at all local governments of the province.

I would like to express my sincere thanks to vice-chairperson Dr. Khim Lal Devkota and entire team of Province Policy and Planning Commission for their effort in preparing this report. I hope this publication will be useful for planners and policymakers at all three spheres of the federal governance system in Nepal to execute need-based programs, policies and scientific allocation of funds and budget to local governments of Province No.3.

Dor Mani Paudel
Chief Minister
28 May 2019



**Province No. 3
Hetauda, Makawanpur, Nepal**

Ministry of Economic Affairs and Planning

Message from the Minister

Government of Province No. 3 is dedicated towards achieving the goals set by the provincial vision: "Healthy, well-cultured and happy people: socialism oriented prosperous province". Mean while, Province government is also guided by the long-term national vision: "Prosperous Nepal; Happy Nepali" along with Sustainable Development Goals. The government believes that fact-based approach is essential for achieving the vision and goals. In this connection, Province Policy and Planning Commission (PPPC) is preparing a series of documents that serves as the database for the government of the province. Publication of 'Local Human Development Report 2019, Province No. 3, Nepal' is one of those documents by PPPC that will categorically assist the government in planning process. It will not only be useful for the provincial government but also useful for all stakeholders who are directly or indirectly engaged in the provincial and local development process.

I believe that the publication has come up with a globally recognized tool, 'human development' index', that has reflected the human development status of all local governments of the province. I hope this report will thematically and objectively supports us to compare the local development situations and devise better policies, plans and budgets. It also provides the benchmark for measuring and assessing our future progress and (re)design our targets. Therefore, I believe that the report will be one of the flagship publications of the Province Policy and Planning Commission.

I would like to express my sincere thanks to entire team of Province Policy and Planning Commission, employees and experts for conducting such a valuable study and publishing the report, which is first of its kinds in Nepal. I hope, it will be one of those documents that counts the most while formulating policies, plans, budget and conducting progress assessments.

Kailash Prasad Dhungel
Minister
28 May 2019



**Government of Province
Province Policy and Planning Commission
Province No.3**

Message from the Vice-Chairperson

This is another publication in a series designed to produce relevant data and information to support policy and planning process in Province No. 3. In the first report, a comprehensive profile of all 119 local governments has been prepared and published. This report focusses on calculating composite Human Development Index, Indices and Sub-indices of all the local governments in the province.

One of the pivotal functions of a province now is the provision of fiscal resources to local government based on the development priorities. But, given the dearth of HDI-related data of local governments, it has been difficult for the Province No. 3 to perform just and equivalent distribution of fiscal resources that is a prerequisite for effective implementation of the federal system, mainly with respect to the local governments that are lagging behind in socio-economic indicators. In this context, to fulfill the gap in data, Province Policy and Planning Commission (PPPC) commenced this study to calculate HDI of all local governments in the Province No. 3. This report, I hope, will be crucial towards managing development planning in the province and local levels, apart from serving as a baseline for both level of governments to monitor progress towards achieving the goal set by first periodic plan. Likewise, I expect this to be a piece of evidence for the federal government in working-out on fiscal transfer to provinces.

I am grateful to Honorable Chief Minister Mr. Dor Mani Paudel for inspiring us to carry out this study. I would like to thank members of the commission and the staffs at the PPPC for their valuable inputs towards the completion of the report. Likewise, taking this opportunity, I want to thank Prof. Dr. Ram Prasad Gyanwaly (Leader of the Study Team), along with the members: Er. Saroj Basnet, Mr. Pushkal Shrestha, Mr. Pawan Kanel and Mr. Basanta Bhattarai, for preparing this report.

Khim Lal Devkota, PhD.
Vice Chairperson
28 May 2019

PROVINCE POLICY AND PLANNING COMMISSION

Hon. Chief Minister Mr. Dormani Paudel	Chairperson
Hon. Minister for Economic Affairs and Planning	Invitee Member
Hon. Dr. Khim Lal Devkota	Vice-Chairperson
Hon. Mr. Shyam Kumar Basnet	Member
Hon. Prof. Dr. Ram Chandra Dhakal	Member
Hon. Dr. Yamuna Kandel 'Khanal'	Member
Mr. Ananda Raj Dhakal, Chief Secretary	Member
Mr. Balkrishna Ghimire, Finance Secretary	Member
Mr. Anjan Neupane, Administrative Chief	Member Secretary

CONTENTS

Abbreviations	iii
Overview	v

Chapter 1: Introduction	1
Chapter 2: Estimation of Income Index	9
Chapter 3: Education Index	15
Chapter 4: Life Expectancy at Birth Index	23
Chapter 5: Estimation of Human Development Index	29
Chapter 6: Findings, Conclusion and Policy Implications	39

References	45
-------------------------	----

Appendices

Appendix I: A Note on Income Index.....	48
Appendix II: Income Index.....	61
Appendix III: Alternative Scenario of Human Development Index.....	66
Appendix IV: Education Index.....	68
Appendix V: Life Expectancy Index.....	77
Appendix VI: Estimated Human Development Index.....	84
Appendix VII: Human Development Index in Descending Order by <i>Palikas</i>	91

List of Tables

Table 1.1: Goalposts/Benchmarks	6
Table 5.1 Comparison of Estimated HDI values with HDI Values of 2014	33
Table 5.2 Gap in HDI Values among Local Levels	38

List of Figures

Figure 2.1 Estimated Income Index at Local Levels	11
Figure 2.2 Top Ten Income Index <i>Palikas</i>	12
Figure 2.3 Bottom Ten Income Index <i>Palikas</i>	13
Figure 2.4 Map of Income Index	14
Figure 3.1 Top Ten <i>Palikas</i> in Mean Years of Schooling	16
Figure 3.2 Bottom Ten <i>Palikas</i> in Mean Years of Schooling.....	17
Figure 3.3 Top Ten <i>Palikas</i> in Adult Literacy Rate	18
Figure 3.4 Bottom Ten <i>Palikas</i> in Adult Literacy Rate	18
Figure 3.5 Trend of Education Index	19
Figure 3.6 Top Ten <i>Palikas</i> in Education Index	20
Figure 3.7 Bottom Ten <i>Palikas</i> in Education Index	20
Figure 3.8 Map of Spatial Distribution of Education Index	21
Figure 4.1 Top Ten <i>Palikas</i> in Life Expectancy at Birth	24
Figure 4.2 Bottom Ten <i>Palikas</i> in Life Expectancy at Birth	25
Figure 4.3 Life Expectancy at Birth Index.....	26
Figure 4.4 Map of Life Expectancy at Birth Index.....	27
Figure 5.1 HDI at Local Levels	30
Figure 5.2 Top Ten <i>Palikas</i> in HDI Values	31
Figure 5.3 Bottom Ten <i>Palikas</i> in HDI Values	32
Figure 5.4 Map of Human Development Index	34
Figure 5.5 Top Ten <i>Gaunpalikas</i> in HDI Values	35
Figure 5.6 Bottom Ten <i>Gaunpalikas</i> in HDI Values	36
Figure 5.7 Top Ten Municipalities in HDI values	36
Figure 5.8 Bottom Ten Municipalities in HDI values	37
Figure 5.9 HDI Values in Metropolitan/Sub-Metropolitan Cities.....	38

ABBREVIATIONS

BS	Bikram Sambat
CBS	Central Bureau of Statistics
GDP	Gross Domestic Product
GNP	Gross National Product
HDI	Human Development Index
LGs	Local Governments
MYS	Mean Years of Schooling
NHDR	Nepal Human Development Report
NPC	National Planning Commission
NPHC	National Population and Housing Census
PPPC	Province Policy and Planning Commission
UNDP	United Nation Development Program
UNESCO	United Nation Education Scientific and Cultural Organization
VDC	Village Development Committee

OVERVIEW

Human development index (HDI) is a composite index of three major dimensions of life, namely; decent standard of living, level of knowledge and good health that could be measured through the indices of per-capita income, education and life expectancy of the people respectively. This study has developed the HDI at local level of Province No. 3.

The report is coming at a time when Nepal is taking small but positive strides towards socio-economic transformation after settling an extended period of political instability. Likewise, the period also coincides with the efforts to manage the unfolding of federalism in Nepal. In particular, the formation of provinces and its institutionalization is one of the crucial issues of the present time that is associated with the successful implementation of federalism in the country. This report will be useful in devising provincial plans, policies, programmes and also for budget allocation under the federal structure of governance.

This study has six chapters. Chapter I (Introduction) presents the background, objectives, research methodology and limitation of the study. In the methodology section, the chapter explains how the income index has been estimated for this study in the absence of GDP data at local level. Likewise, it also elaborates the computation of HDI using the geometric mean of income, education and life expectancy indices. Chapter II (Estimation of Income Index) reiterates the lack of GDP data at local level and explains how employment level (percent), the proportion of *Pakki* houses, and per-capital establishments are used as proxy indicators to estimate income index values of the 119 *Palikas*. This index is further adjusted to range and districts value of income index developed in Nepal Human Development Report 2014 (NHDR 2014). Then, the subsequent section presents the spatial distribution of income, top-ten and bottom-ten *Palikas* in the income index.

Chapter III (Education Index) elaborates the computation of education index based on two different sub-indices namely the Mean Years of Schooling (MYS) and adult literacy rate. This chapter explains that the report measures average years of schooling for the population aged 5 years or above to calculate MYS to make it comparable to NHDR 2014. Then, the subsequent section presents the pattern

and spatial distribution of education index, top-ten and bottom-ten *Palikas* in Province No. 3 in term of education index.

Chapter IV (Life Expectancy Index) constructs and discusses life expectancy index at the local level. Explaining the operational definition of life expectancy at birth, in subsequent section it presents the pattern and spatial distribution of life expectancy index. It also presents the top-ten and bottom-ten *Palikas* in terms of life expectancy at birth index.

Chapter V (Estimation of Human Development Index) develops the HDI index based on indices of income, education and life expectancy at birth in chapter II, III and IV respectively. Then it explains the pattern and spatial distribution of HDI, before presenting top-ten and bottom-ten *Palikas* based on HDI. After that, intra-comparison is done between *Gaunpalikas* and Municipalities to present top-ten and bottom-ten local governments in each category.

Chapter VI (Findings, Conclusion and Policy Implications) presents the findings, conclusion and policy implications of this study. It concludes that development process is challenging in Province No. 3 because of larger gap in HDI between local governments in Kathmandu valley and other LGs. It calls for developing special packages to local governments that are lagging far behind in the income and education sector .

Finally, in the Appendices section, there are elaborate presentations on (i) a note on income index, (ii) income index including the overall ranking of the *Palikas*, (iii) alternative scenario of human development index, (iv) ranking of all *Palikas* as per the education index (v) life expectancy index and ranking of *Palikas*, and (vi) estimated human development index, and (vii) detail ranking of *Palikas* on human development index.

CHAPTER

1

INTRODUCTION

INTRODUCTION

1. GENERAL BACKGROUND

The Constitution of Nepal (2015) has transformed Nepal from unitary to federal system of governance. Article 56 of the constitution states that main structure of Federal Democratic Republic of Nepal shall be of three levels, namely - Federal, Province and Local levels. In line with the constitutional mandate, there are one federal, 7 provincial and 753 local governments in Nepal at present.

The directive principle of the constitution, particularly the article 50 (3) states that economic objective of the state is to achieve sustainable economic development with rapid economic growth by means of maximum mobilization of available means and resources. In addition, in the same clause, it is specified that the objective of the state is to develop socialism oriented, independent, self-reliant and progressive national economy by abolishing economic inequality through equitable distribution of achieved gains.

It is in this connection that, to achieve this vital economic objective, there is the provision of planning commission at both federal and provincial levels. The planning commission of the federal government is known as the National Planning Commission (NPC) and that of the provincial government is Province Policy and Planning Commission (PPPC). The prime minister heads the former while the chief minister leads the later.

Planning Commissions formulate the plans to achieve the objectives set by the constitution. NPC has set its long-term vision as “Prosperous Nepal; Happy Nepali “. In the vision paper, Nepal is sought as well-developed, self-reliant and socialism-oriented economy and the home of healthy, educated, self-respected people with decent standard of living. The long-term targets of prosperity are – development and full utilization of human capital, high and sustainable production and productivity, accessible modern infrastructure and high and equitable national income. Similarly, targets of happiness are accordingly set. The long-term quantitative targets are GDP growth rate of 10.5 percent, the per-capita national income of US \$12,100, human development index of 0.760, literacy rate of 100 percent, etc. by the year 2100 BS (National Planning Commission, 2076 BS).

Similarly, PPC of Province No. 3 in its approach paper to its first periodic plan has set its long-term vision as “Healthy, Well-Cultured and Happy People: Socialism Oriented Prosperous Province”. It targets to achieve sustainable high economic growth with social justice and improvement in standard of living. Approach paper’s major quantitative targets are GDP growth rate of 11.2 per cent, per-capita national income of NRs 405,000, human development index of 0.650, literacy rate of 95 percent, life expectancy of 75 years, etc. by the year 2080/81 BS (Province Policy and Planning Commission, 2075 BS). All of these indicators have direct link with Human Development Index (HDI).

Human development is the main essence of these federal and provincial plans. Since the publication of first human development report in 1990, it has been a common trend to measure the human progress through human development index in international communities. In case of Nepal too, Nepal Human Development Reports have been published in 1998, 2001, 2004, 2009 and 2014. Thus, human development is becoming a central focus of measuring the human progress, as well as a basis of formulating and executing plans and budget allocation in Nepal.

Likewise, human development is also a central focus of the Sustainable Development Goals that Nepal is a party to. There are altogether seventeen goals espoused to achieve during the period of 2015-30.. Basically goal 3, 4 and 8 respectively relating to “good health and well being”, “quality education”, and “decent work and economic growth” are very closely connected with the notion of human development. Thus, it is imperative to address the issues related to human development, if we want to achieve the sustainable development goals by 2030 AD.

In the Constitution of Nepal 2015, concept of human development is more pronounced in fundamental rights of the peoples. For example, articles 31 and 35 of the constitution define - free access to primary and secondary education and basic health facilities respectively as the fundamental rights of the people. So, human development is in the central focus in political and economic spheres too.

Schedules 5, 6, 7, 8, and 9 of the constitution have stated exclusive and concurrent functions of each sphere of government. Following the successful completion of general election in 2017, all spheres of governance has started to perform their functions. Provincial governments have started to formulate annual and periodic policy, programme and budget. In this connection, the Province Government needs HDI information to formulate better policies and programs, and for budgetary allocation it needs information on the development status of each local levels. Further, both the provincial and federal governments also provide equalization grants, conditional grants and other development assistance to (i) local level, and

(ii) provincial and local level respectively. These grants are to be provided based on specified development indicators rather than ad-hoc political decisions. To accomplish these fundamental tasks, both federal and provincial governments need information on income index, education index, health related index and more particularly the Human Development Index (HDI).

As stated above, there are series of human development reports, but these reports are limited to national and district level only. None of the Nepal Human Development Reports published so far have information regarding local level. It is in this connection that PPPC has attempted to develop human development index at local levels that is comparable to the output of previous national human development reports.

The provincial government currently does not have adequate as well as updated data and information on these areas. The status of human development of local governments in the province is not clear. For equitable and just development, the gap and ranking of *Palikas* on the status of economic, social and health is important to refer to. However, in absence of such information, grants to local governments are mostly determined on the ad-hoc basis. So, PPPC has tried to develop such indices for the first time in Province No. 3 of Nepal.

This pioneer work of PPPC is helpful to the government of Province No. 3 and even for federal government to allocate equalization grants, conditional grants and other development assistance to provincial and local governments. It is equally important to know the status and relative strength of human development of each *Palika* level to design more equitable and socially just society in Nepal as stated in the constitutions and to achieve the goals and targets of national and provincial plans. More clearly, it is helpful to materialize the vision of “Prosperous Nepal; Happy Nepali.” With the idea that without human development there is no prosperity and happiness, this study has set the following objectives.

2. OBJECTIVES OF THE STUDY

The general objective of this study is to explore the relative status of human development in Province No. 3 of Nepal at *Palika* level. Its specific objectives are:

- a. To (i) estimate the income index, (ii) develop education index, and (iii) develop life expectancy index of all *Palikas*
- b. To estimate the human development index at all *Palika* level

3. LIMITATION OF THE STUDY

This study has the following limitations.

- Data on local level particularly related to literacy rate, mean years of schooling, life expectancy, employment rate, etc are not available for the current period. So, this study relies totally on the *National Population and Housing Census 2011*.
- Data on per-capita income at the local level are lacking in Nepal. So, this study is conducted estimating the income index of local levels. It does not tell about the absolute value of the income at the local level but it explores the index value of the income.

4. RESEARCH METHODOLOGY

This research compiles and analyzes the secondary data using the statistical and mathematical techniques.

DEFINITION OF INDICATORS

Life Expectancy at Birth: Number of years a newborn infant could expect to live if prevailing patterns of age-specific death rates (ASDRs) at the time of birth stay the same throughout the infant's life¹.

Adult Literacy: Percentage of population aged 15 years or over who can "read and write"².

Mean Years of Schooling: Average years of schooling for the population aged 5 years and over who have ever attended school.

Sources of Data: To estimate the human development index, secondary data for the necessary variables have been compiled from the following sources:

National Population and Housing Census 2011 (NPHC 2011): Based on this report which has disaggregated data according to previous forms of local governments i.e. VDCs and municipalities, new data related to life expectancy at birth, adult literacy, mean years of schooling, employment rate, proportion of Pakki³ houses,

1 UNDP Nepal (United Nations Development Programme Nepal). 2014. Nepal Human Development Report 2014, Kathmandu, Nepal.

2 Central Bureau of Statistics (CBS). 2012. *National Population and Housing Census 2011 (National Report)*. Kathmandu, Nepal.

3 The cement bonded bricks or stones houses and RCC with pillars houses are defines as *Pakki* houses. The ratio of *Pakki* houses to total houses is known as proportion of *Pakki* houses.

economically active population, and ten plus years of population were calculated as per the new local structures i.e *Gaunpalika* and Municipality.

Economic Census 2018: Data related to number of economic establishments, and employment in economic establishments.

Nepal Human Development Report 2014 (NHDR 2014): Income index and HDI of districts of Province No. 3.

DEVELOPING THE SUB-INDICES

Life Expectancy at Birth Index: It is computed from direct method as in the *Nepal Human Development Report 2014*. The rationality of following the direct method is that the value derived from this study is comparable to *NHDR 2014*. Second reason is that this method is already established and accepted in Nepal. Once the life expectancy is computed, it is converted into index using the goal posts (Table 1.1) and formula shown in the paragraph below.

Adult Literacy (AL): It is computed as the percentage of population aged 15 years or over who can 'read and write' - using data from NPHC 2011.

Mean Years of Schooling (MYS): It is computed by calculating the average years of schooling for the population aged 5 years or over who have ever attended school. *NHDR 2014* has also used this definition.

However, in the recent years, MYS is calculated using the average years of schooling for the population aged 25 years or over who have ever attended school. To facilitate international comparison, this report also calculates MYS using this (i.e. using average years of schooling for the population aged 25 years or over) method, but the output is reported only in *Appendix VI*. It is important to note here that MYS derived from alternative scenario is not comparable to *NHDR 2014*.

Once the value of indicators is calculated, respective indices are computed using the goalposts/benchmarks provided as Table 1.1.

Table 1.1: Goalposts/Benchmarks

Variables	Maximum	Minimum
Life Expectancy	85	25
Adult Literacy	100	0
Mean Years of Schooling	15	0

Source: *Nepal Human Development Report 2014*

Having defined the goalposts/benchmarks, the sub-indices are calculated as follows:

$$\text{Dimension Index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

The combined education index is computed as the geometric mean of the adult literacy rate and mean years of schooling indices.

$$\text{Education index} = \sqrt{\text{Adult literacy index} \times \text{Mean years of schooling index}}$$

Life Expectancy Index = [actual value - minimum value]/[maximum value - minimum value]

COMPUTING THE INCOME INDEX

A serious limitation of computing the Gross Domestic Product (GDP)/Gross National Product (GNP) in Nepal is that Central Bureau of Statistics (CBS) has not computed GDP/GNP at local level till date. Its methodology is heavily concentrated to national level. Occasionally, it computes GDP at districts level. Last time, GDP of district level were computed in 2014 for the NHDR 2014; since then GDP data of districts are not available. In this background, this study has estimated the values (ranks) of income indices at all 119 local levels based on the information of following three indicators, in addition to the range of income index of 2014 and districts values of income index of 2014. A simple income index is developed using:

- Employment Rate
- Proportion of *Pakki* Houses
- Per-capita Economic Establishment

Computation of Employment Rate

Employment rate is defined as per the ILO definition. Firstly, ten plus population is divided in to economically active and economically not-active population. In second step, economically active population is further divided into usually active and not-usually active population. In third step, this usually active population is further

divided into employed and unemployed population. Finally, the employment rate is calculated as:

$$\text{Employment rate} = \left[\frac{\text{Emp}}{\text{Tpop}} \right] * 100$$

Where,

Emp = Employed Population

Tpop = Total Population of Ten Years or Above

The description of computing the employment rate in Nepalese context is given in Suwal and Dahal (2014).

Per-capita economic establishment is computed using the ten plus population. Based on these three indicators, a simple income index is computed using Max-Min formula for 119 local levels. Arithmetic mean is applied to compute composite simple income index. This index is then adjusted to the national range of income index of 2014. Then, this index is further adjusted to districts values of income index. Thus, this method estimates the income index for 119 local levels but not absolute values of income. However, because income index is enough to compute the HDI, it is not essential to have absolute values of income.

COMPUTING THE HUMAN DEVELOPMENT INDEX:

After calculating education index, life expectancy index, and estimated income index, HDI is computed using geometric mean of three indices.

CHAPTER

2

ESTIMATION OF INCOME INDEX

ESTIMATION OF INCOME INDEX

Income is the one of the major dimensions of human development that is related to standard of living of the people. Generally, it is perceived that higher the level of income, higher will be the standard of living of the people. It is a common international practice to use the per-capita income as one of basic indicators of economic well-being of the people. Thus, the value of per-capita income is used as a basic indicator to develop income index.

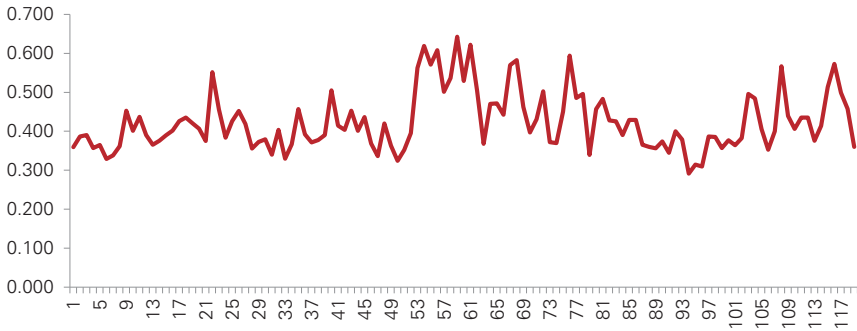
This is the index that ranks the different *Palikas*, but it does not tell about their absolute values of income. To estimate the HDI, income index is necessary. Therefore, income index is estimated for all 119 local governments. While developing the index, following three indicators are used.

1. Employment level (percent) of *Palikas*: Generally, production is the function of capital and labour employment. Production generates income. Contribution of labour may be captured from employment rate. Thus, using the information of NPHC 2011, the employment rate for all local levels in Province No. 3 has been estimated.
2. Proportion of *Pakki* houses: There is no explicit data on capital, so proportion of *Pakki* houses (as reported in NPHC 2011) has been used as a proxy variable for measuring wealth position of *Palikas*. Generally higher the wealth position, higher will be the income. Further, house may be considered as indicators of decent standard of living.
3. Per-capita economic establishments: CBS have very recently conducted Economic Census 2018. This census captures GDP of all sectors. So, this study takes percapita economic establishment as a major indicator of income position of local levels. Per-capita establishment is calculated considering the case of 10+ populations.

Using these three indicators, income index of 119 local levels has been developed. This index is further adjusted to given ranges of income index developed in 2014 and value of income index at district level. The calculated income index is consistent with the income index developed in NHDR 2014. So, this local level income index can be considered unbiased estimator of true income index. Detail of income index construction is given in Appendix I.

The estimated final income index is given in figure 2.1. The pattern of income distribution at local levels in province No. 3 is not uniform. This income index varies from 0.291 to 0.643. Highest level of income is clustering around the Kathmandu valley. The difference between highest and lowest income is 0.352.

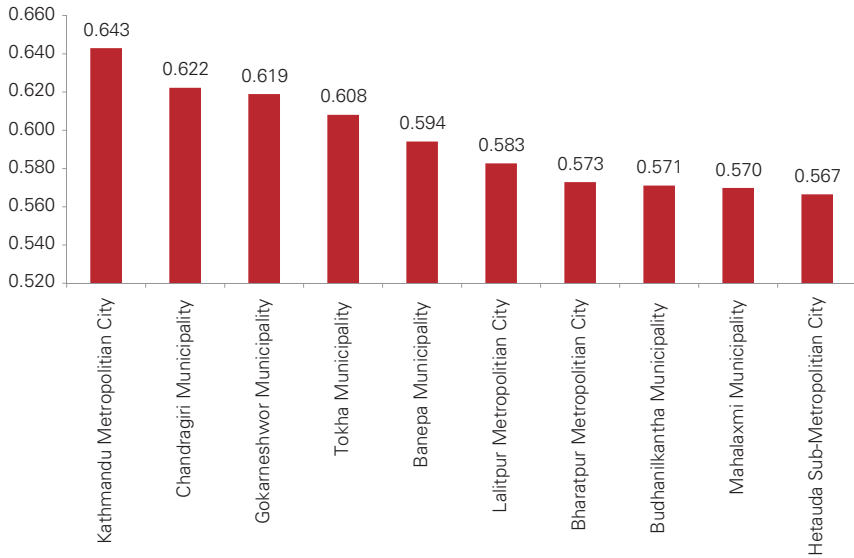
Figure 2.1 Estimated Incomes Index at Local Levels



Source: Constructed Based on Appendix II.

Figure 2.1 shows the distribution pattern of income index at local level. The scenarios of top ten and bottom ten local governments are shown in figure 2.2 and figure 2.3 respectively. The figure 2.2 shows that Kathmandu Metropolitan city occupies the highest position in income status. Chandragiri Municipality is in the second position while Gokarneshwor Municipality is in the third position. A very clear message of this figure is that most of the top ten *Palikas* in income are concentrating in Kathmandu valley. But two *Palikas* are from inner Terai belt namely Bharatpur Metropolitan city of Chitwan and Hetauda Sub-metropolitan city of Makawanpur. Thus, Bharatpur and Hetauda are the two emerging municipalities that are catching-up with municipalities located in surrounding areas of Kathmandu valley.

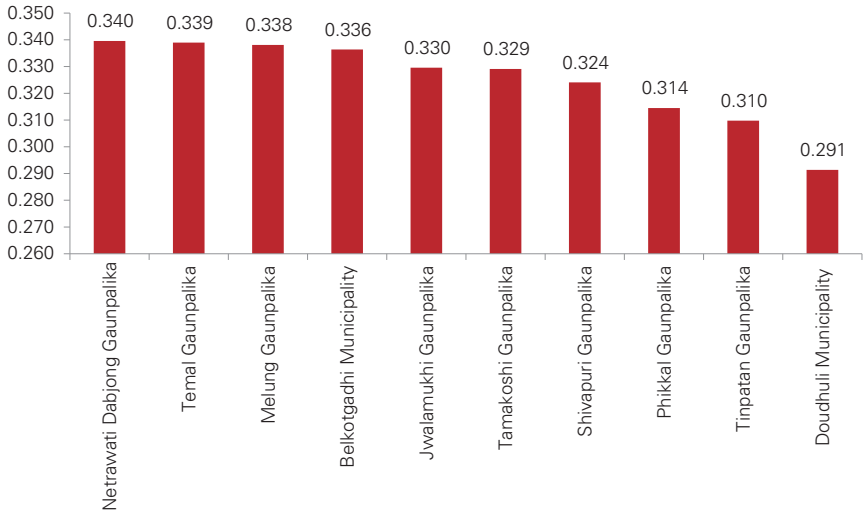
Figure 2.2 Top Ten Income Index *Palikas*



Source: Constructed Based on Appendix II.

Like top ten, bottom ten *Palikas* in term of income index are shown in figure 2.3. According to income index, Doudhuli Municipality is in the lowest position and Tinpatan *Gaunpalika* is in the second lowest position. In the same way, Phikkal *Gaunpalika* is in the third lowest position followed by Shivapuri *Gaunpalika* in the fourth position and so on. The Doudhuli municipality, Tinpatan and Phikkal *Gaunpalikas* are from Sindhuli District while the Shivahari *Gaunpaliks* is from Nuwakot. Other *Palikas* in bottom ten are Tamakoshi *Gaunpalika* of Dolakha, Jwalamukhi *Gaunpalika* of Dhading, Belkotgadhi Municipality of Nuwakot, Melung *Gaunpalika* of Dolakha, Temal *Gaunpalika* of Kavreplanchock and Netrawati Dabjong *Gaunpalika* of Dhading. All the bottom-ten *Palikas* are from out of Kathmandu valley. Detail of the income index is in Appendix II.

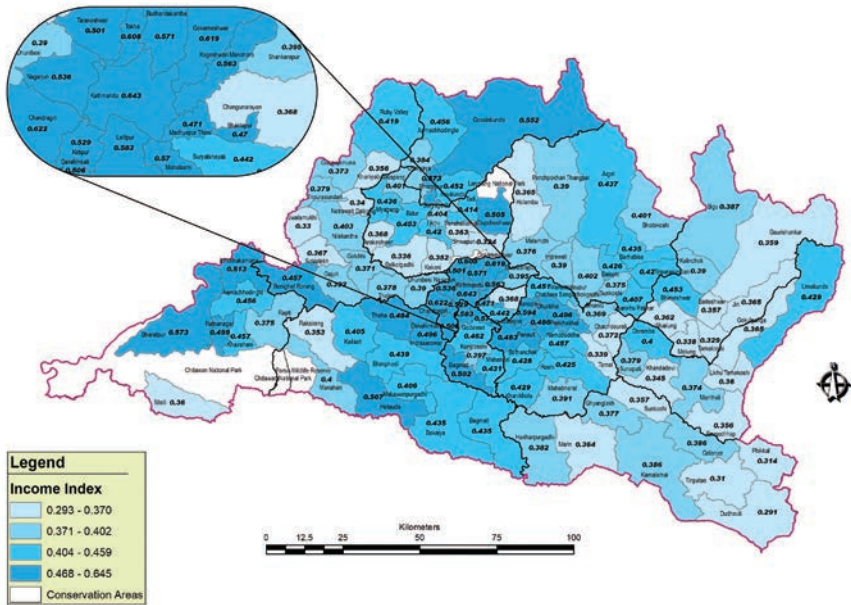
Figure 2.3 Bottom Ten Income Index *Palikas*



Source: Construction Based on Appendix II

Unlike in the other indices, Rubi valley is not among bottom ten *Palikas*. Employment rate of Rubi valley is in comfortable position and per-capita economic establishment is in 52th position though the proportion of *Pakki* houses is in second last position.

Figure No. 2.4 Map of Income Index



Source: Spatial Data - Department of Survey; Attribute Data-National Population and Housing Census 2011/CBS and Economic Survey 2018/CBS.

This shows that economic development process in Province No. 3 is more Kathmandu and urban centric. The remote and rural areas are vulnerable to low level of income and thus the low level of standard of living. The gap between the highest and lowest income *Palikas* is 0.352. This unbalanced and unequal income distribution is a challenge to Province No. 3.

CHAPTER

3

EDUCATION
INDEX

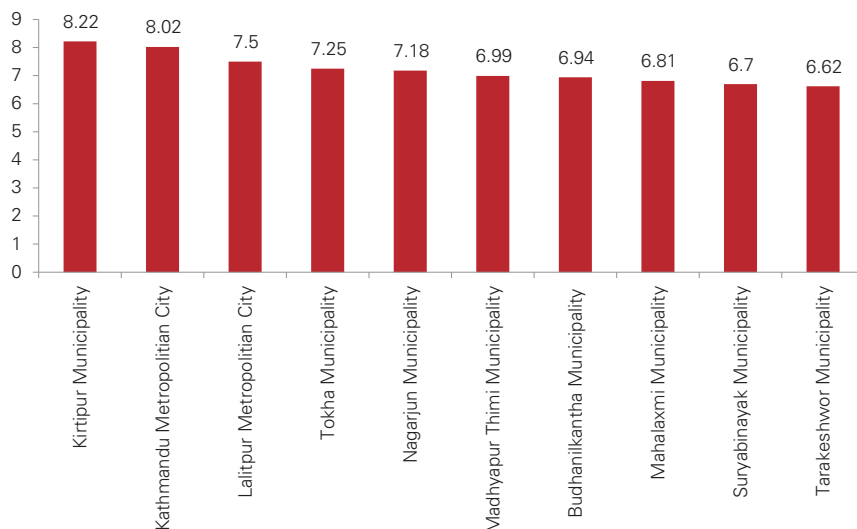
EDUCATION INDEX

Education index is the combined index of “mean years of schooling” and “adult literacy rate”. As mentioned earlier, adult literacy is defined as the percentage of population aged 15 years or over who can “read and write”. Likewise, mean year of schooling is defined as the average years of schooling for the population aged 5 years and over who have ever attended school. It examines the knowledge level of the population.

3.1 MEAN YEARS OF SCHOOLING

The top ten *Palikas* in mean years of schooling are shown in figure 3.1. Kirtipur Municipality has the first highest position, Kathmandu Metropolitan city has the second highest position and Lalitpur Metropolitan city has the third highest position in mean years of schooling. Other top ten *Palikas* are shown in figure 3.1.

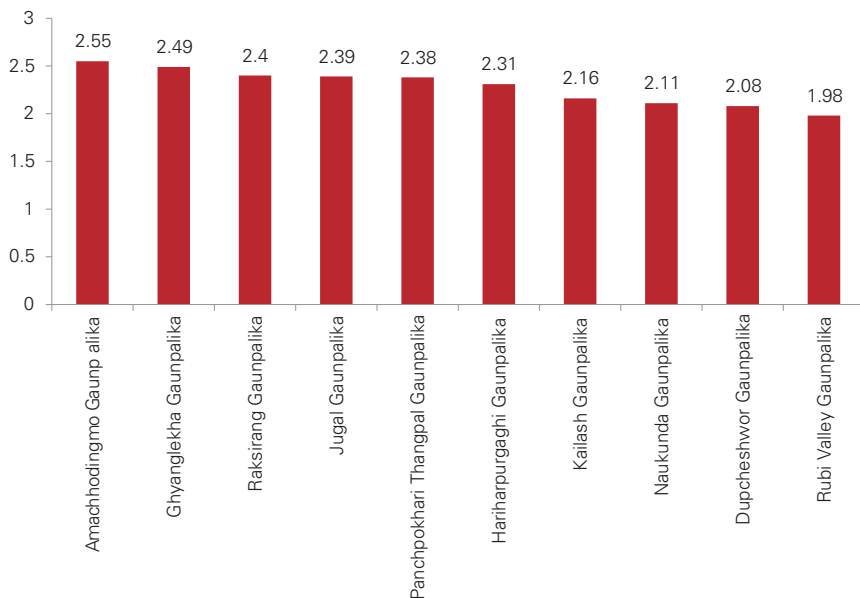
Figure 3.1 Top Ten *Palikas* in Mean Years of Schooling



Source: Constructed Based on Appendix IV

Similarly, bottom ten *Palikas* with the lowest value of mean years of schooling are shown in figure 3.2. The figure shows that Rubi valley *Gaunpalika* of Dhadhing is in the lowest position. Dupcheshwor *Gaunpalika* of Nuwakot and Naukunda *Gaunpalika* of Rasuwa are in the second and third lowest positions respectively in terms of mean years of schools. Other lowest ten *Palikas* are Kailash (Makawanpur), Hariharpurgadhi (Sindhuli), Panchpokhari Thangpal (Sindhupalchock), Jugal (Sindhupalchock), Raksirang (Makawanpur), Ghyanglekha (Sindhuli) and Amachhodingmo (Rasuwa).

Figure 3.2 Bottom Ten *Palikas* in Mean Years of Schooling

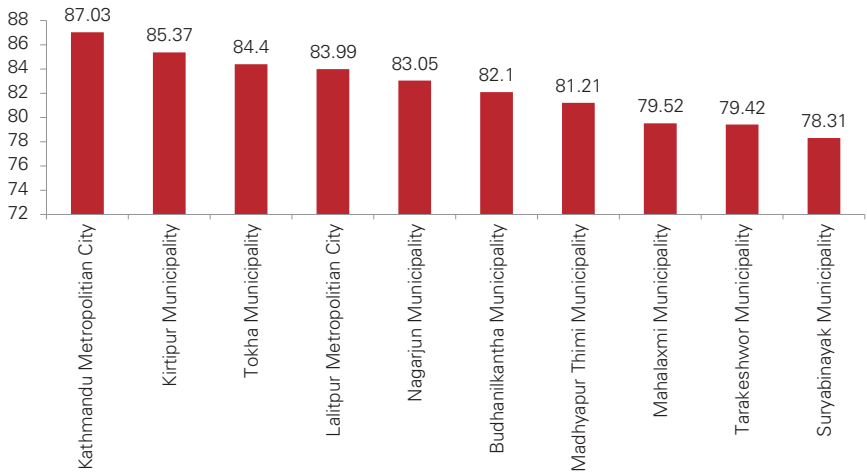


Source: Constructed Based on Appendix IV

3.2 ADULT LITERACY RATE

The top ten *Palikas* of Province No. 3 with highest adult literacy rate are as shown in figure 3.3. Kathmandu Metropolitan city has the highest literacy rate of 87.03% followed by Kirtipur (85.37%) and Tokha Municipality (84.4%) in the second and third positions respectively.

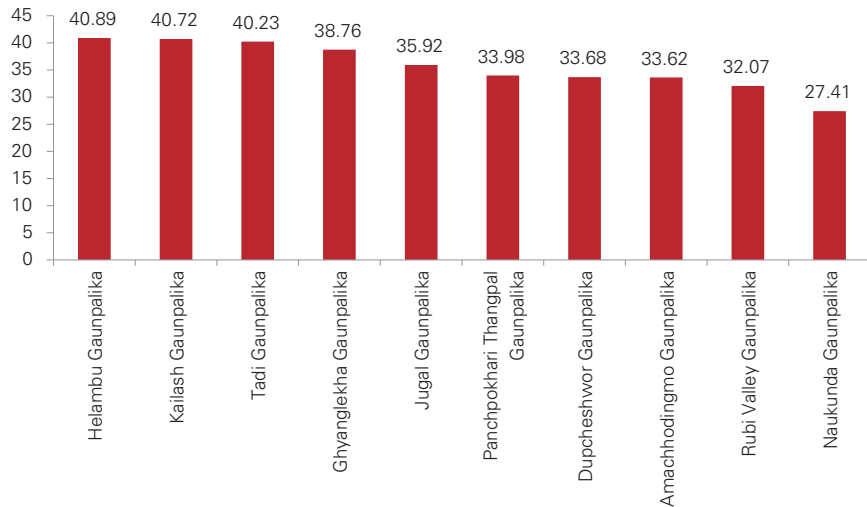
Figure 3.3 TopTen *Palikas* in Adult Literacy Rate



Source: Constructed Based on Appendix IV

Other *Palikas* in top ten are: Lalitpur Metropolitan city, Nagarjun Municipality, Budhanilkantha Municipality, Madhyapur Thimi Municipality, Mahalaxmi Municipality, Tarakeshwor Municipality and Suryabinayak Municipality.

Figure 3.4 Bottom Ten *Palikas* in Adult Literacy Rate



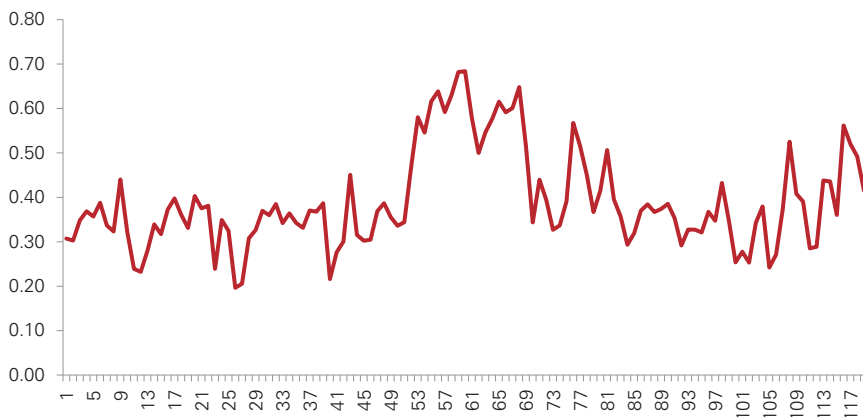
Source: Constructed Based on Appendix IV

Palikas having lowest literacy rate are shown in figure 3.4. Naukunda *Gaunpalika* (Rasuwa) has lowest rate followed by Rubi valley *Gaunpalika* (Dhading), and Amachhodingmo *Gaunpalika* with second and third lowest adult literacy rates. Other *Palikas* in the bottom ten are: Dupcheswor *Gaunpalika*, Panchpokhari Thangpal *Gaunpalika*, Jugal *Gaunpalika*, Gyanglekha *Gaunpalika*, Tadi *Gaunpalika*, Kailash *Gaunpalika* and Helambu *Gaunpalika*.

3.3 EDUCATION INDEX

As stated earlier, education index is developed combining the adult literacy rate index and mean years of schooling index. The index is reported in figure 3.5. The index is varying in between 0.20 and 0.68 having the mean value of 0.39.

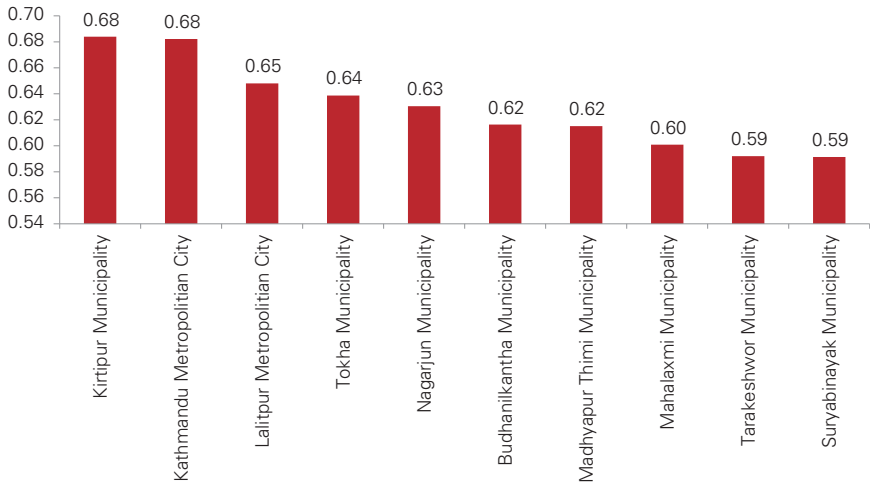
Figure 3.5 Trend of Education Index



Source: Constructed Based on Appendix IV

Palikas with top-ten education index are shown in figure 3.6. Kirtipur Municipality has the highest Education Index followed by Kathmandu Metropolitan city and Lalitpur Metropolitan city respectively. Other municipalities in top ten are: Tokha, Nagarjun, Bhudhanlakantha, Madhyapur Thimi, Mahalaxmi, Tarakeshwar and Suryabinayak Municipalities. The *Palikas with* top ten education index are from Kathmandu and the surrounding areas.

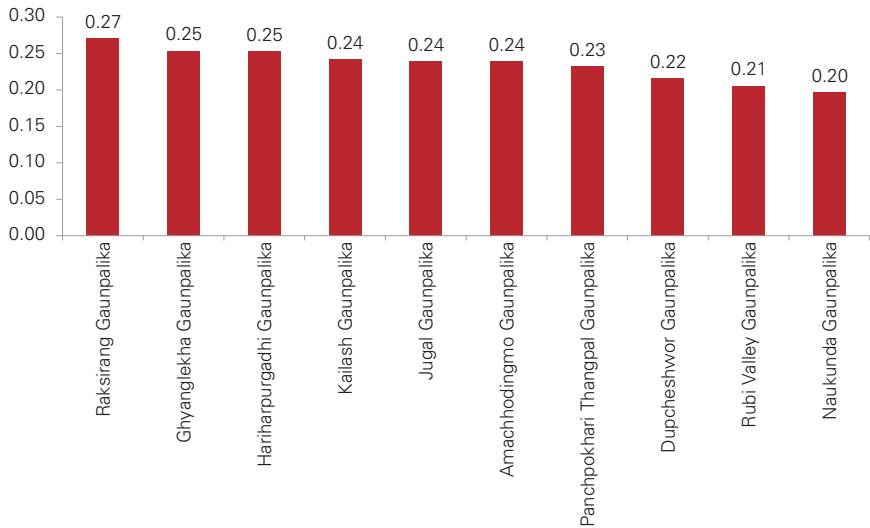
Figure 3.6 Top Ten *Palikas* in Education Index



Source: Constructed Based on Appendix IV

Similarly, ten *Palikas* having lowest Education Index are shown in figure 3.7. Naukunda *Gaunpalika* (Rasuwa) has the lowest rate followed by Rubi valley *Gaunpalika* (Dhading) and Dupcheshwor *Gaunpalika* (Nuwakot) respectively.

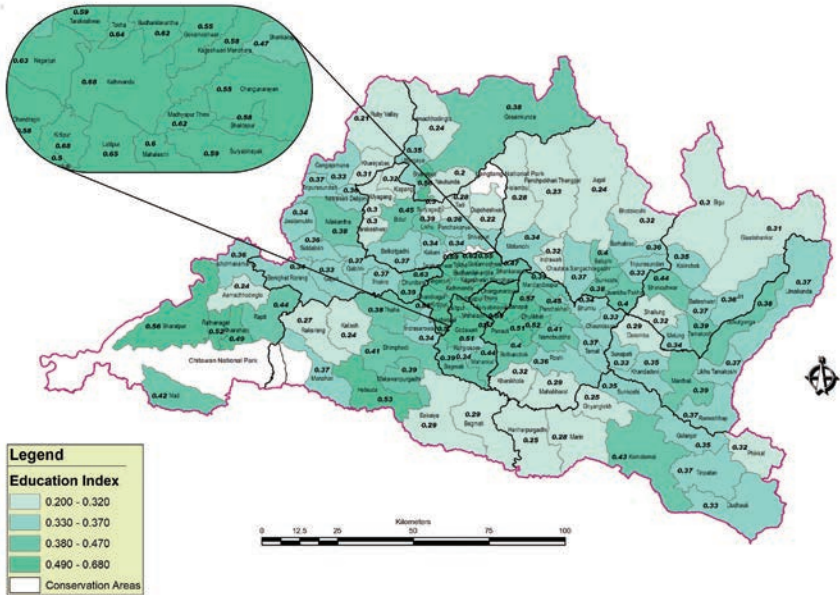
Figure 3.7 Bottom Ten *Palikas* Education Index



Source: Constructed Based on Appendix IV

Other *Palikas* in the bottom ten are: Panchpokhari Thangpal *Gaunpalika*, Amachhodingmo *Gaunpalika*, Jugal *Gaunpalika*, Kailash *Gaunpalika*, Hariharpurgadhi *Gaunpalika*, Gyanglekha *Gaunpalika*, and Raksirang *Gaunpalika*. The spatial distribution of education index is shown in figure 3.8. The dark areas in the map depict the higher values of education index whereas the dim areas indicate the lower values of education index.

Figure 3.8 Map of Spatial Distribution of Education Index



Source: Spatial Data - Department of Survey; Attribute Data-National Population and Housing Census 2011/CBS

Also indicated by the the GIS map, education development is more concentrating in Kathmandu valley areas, in the central part of the map. In mountain area, Gosaikund (North part of map) seems relatively normal and in West and South belt Bharatpur seems comfortable. The Eastern and Northwest part seems more vulnerable to education development measured by literacy and mean years of schooling.

CHAPTER

4

LIFE EXPECTANCY AT BIRTH INDEX

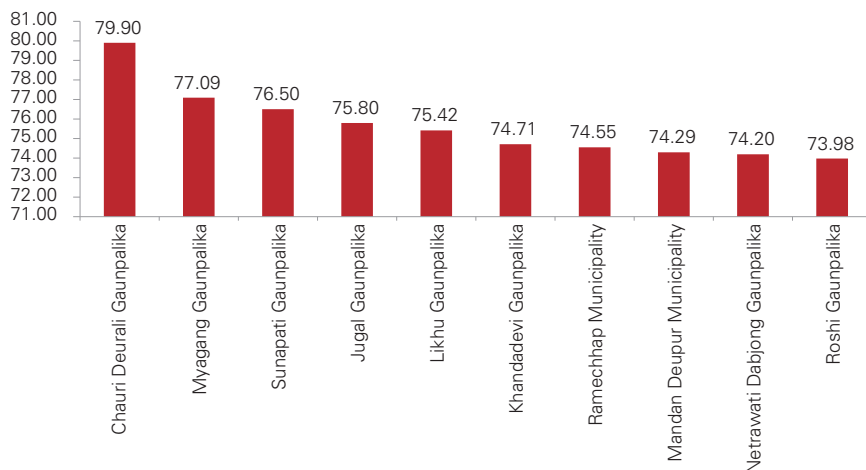
LIFE EXPECTANCY AT BIRTH INDEX

Life expectancy at birth is average number of years that a newborn is expected to live if current mortality rates continue to apply. More clearly, it is average number of years that a newborn is expected to live if he or she were to pass through life subject to the age-specific death rates of a given period. Thus, it reflects the overall mortality level of population. Life expectancy gives the summary information of mortality pattern that prevail in all age groups of population. This chapter deals with the pattern of life expectancy at birth across the 119 local governments of Province No. 3.

4.1 LIFE EXPECTANCY AT BIRTH

The figure 4.1 shows the list of *Palikas* with top ten life expectancy rates. Chauri Deurali *Gaunpalika* has the highest life expectancy of 79.9 years followed by Myagang *Gaunpalika* and Sunapati *Gaunpalika* in second and third positions respectively.

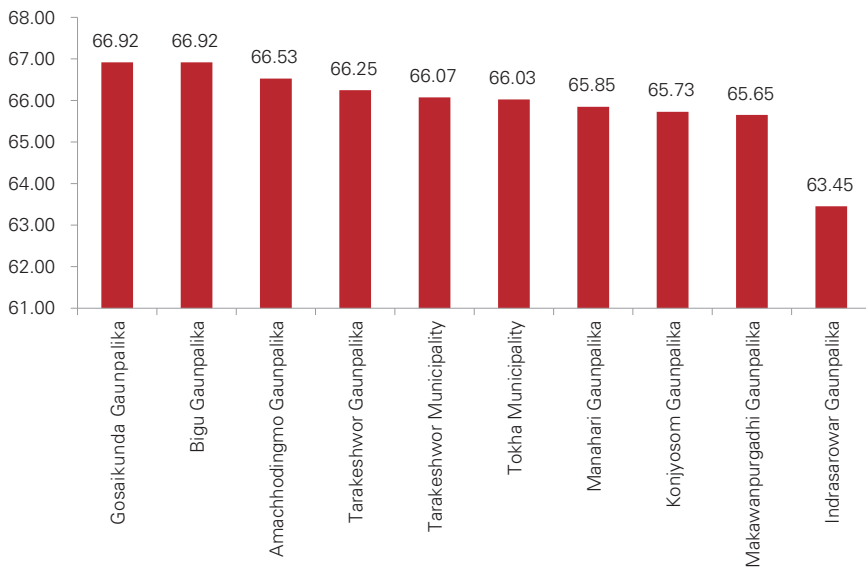
Figure 4.1 Top Ten *Palikas* in Life Expectancy at Birth



Source: Constructed Based on Appendix V

Other *Palikas* in top ten are Jugal *Gaunpalika*, Likhu *Gaunpalika*, Khandadevi *Gaunpalika*, Ramechap Municipality, Madan Deupur Municipality, Netrawati Dabjong *Gaunpalika* and Roshi *Gaunpalika*.

Figure 4.2 Bottom Ten *Palikas* in Life Expectancy at Birth



Source: Constructed Based on Appendix V

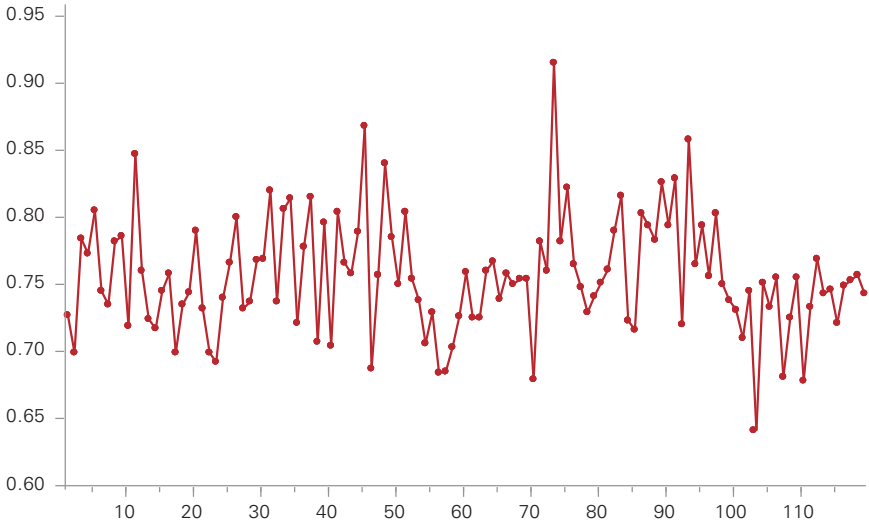
The *Palikas* with the lowest life expectancy at birth is shown in figure 4.2 above. Indrasarwar *Gaunpalika* has the lowest life expectancy of 63.45, followed by Makawanpurgadhi *Gaunpalika* and Konjyosom *Gaunpalika*. Other *Palikas* in bottom ten are: Manahari *Gaunpalika*, Tokha Municipality, Tarakeshwar Municipality, Tarakeshwar *Gaunpalika*, Amachhodingmo *Gaunpalika*, Bigu *Gaunpalika* and Gosaikunda *Gaunpalika*.

Life expectancy in the *Palikas* is fluctuating within the range of 63.45 to 79.90. This means that people of Province No. 3 survive on the average from 63.45 to 79.90 years depending up on the location of *Gaunpalika* and Municipalities. However, it is important to note that mean and median values of life expectancy in the province are 70.34 and 70.19 years respectively.

4.2 LIFE EXPECTANCY AT BIRTH INDEX

Life expectancy at birth is shown in figure 4.3.

Figure 4.3 Life Expectancy at Birth Index

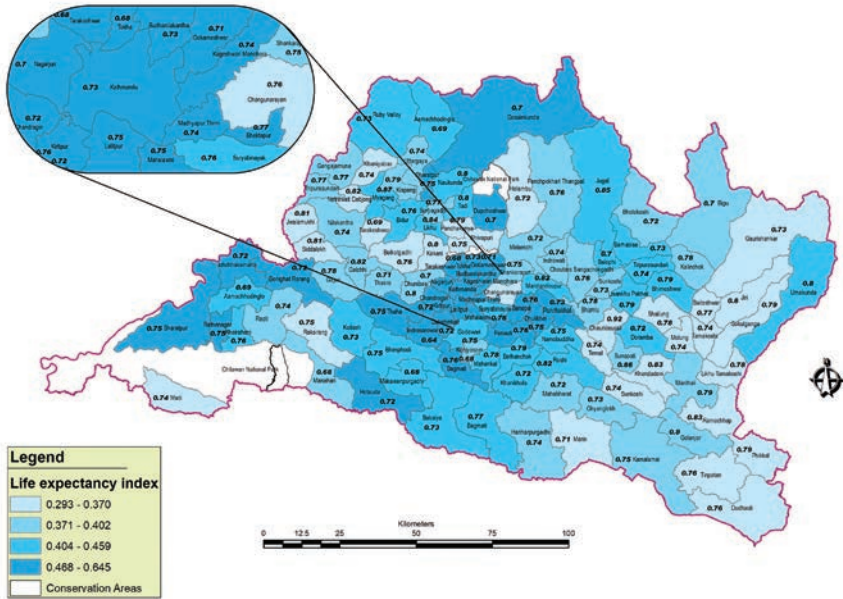


Source: Constructed Based on Appendix V

The index is varying within the range of 0.64 and 0.91. Variability in actual value of life expectancy at birth is in between 63.45 to 79.9. The implication of the index is that maximum attainable value is 1 and minimum value is 0 but province is varying within the range of 0.64 and 0.91.

Spatial distribution of life expectancy index is shown in figure 4.4 with the help of GIS map. The dark areas of the map show the higher values of life expectancy and dim areas show the low value of life expectancy. Unlike the other indices, life expectancy index is highest in *Palikas* that are out of the Kathmandu valley. Statistical implication is that people from Chauri Deurali *Gaunpalika*, Myagang *Gaunpalika*, and Sunapati *Gaunpalika*, etc. survive more than the people from Kathmandu valley. The detail values of life expectancy and its index are shown in Appendix V.

Figure 4.4 Map of Life Expectancy at Birth Index



Source: Spatial Data - Department of Survey; Attribute Data-National Population and Housing Census 2011/CBS

The life expectancy at birth index is varying from 0.64 to 0.91. The highest value of index is 1.42 times larger than the lowest value. The actual value of life expectancy is varying in between 63.45 and 79.90. Thus the variation is smaller in life expectancy index than in education index. Though the variation is smaller, *Palikas* with least life expectancy at birth are Indrasarowar *Gaunpalika*, Makwanpurgadhi *Gaunpalika*, Konjyosom *Gaunpalika*, Manahari *Gaunpalika*, Tokha Municipality, Tarakeshwor Municipality, Tarakeshwor *Gaunpalika*, Amachhodingmo *Gaunpalika*, Bigu *Gaunpalika* and Gosaikunda *Gaunpalika*. So, these *Palikas* have to be focused to improve the health status of the people. But, overall improvement in life expectancy is equally important to meet the national target of life expectancy.

CHAPTER

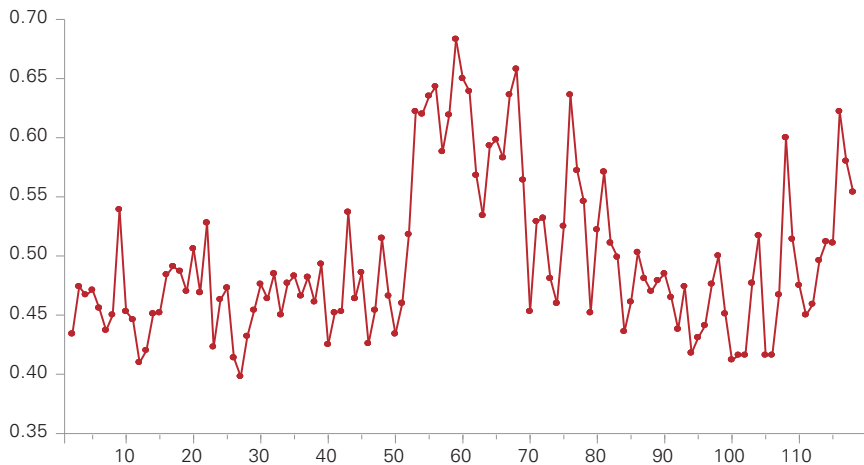
5

ESTIMATION
OF HUMAN
DEVELOPMENT
INDEX

ESTIMATION OF HUMAN DEVELOPMENT INDEX

Human Development Index has three dimensions - standard of living, education and health status. The standard of living is measured by per-capita income, more precisely by index of per-capita income index. Education is another aspect of human development that is measured using two indicators - mean years of schooling and adult literacy rate. Finally, status of health condition is measured by life expectancy at birth index - the average numbers of year people can survive. Based on the income index, education index and life expectancy index developed in preceding sections, HDI of all *Palikas* and that of whole Province No. 3 has been estimated and shown in following graphs and figures.

Figure 5.1 HDI at Local Levels



Source: Constructed Based on Appendix VI

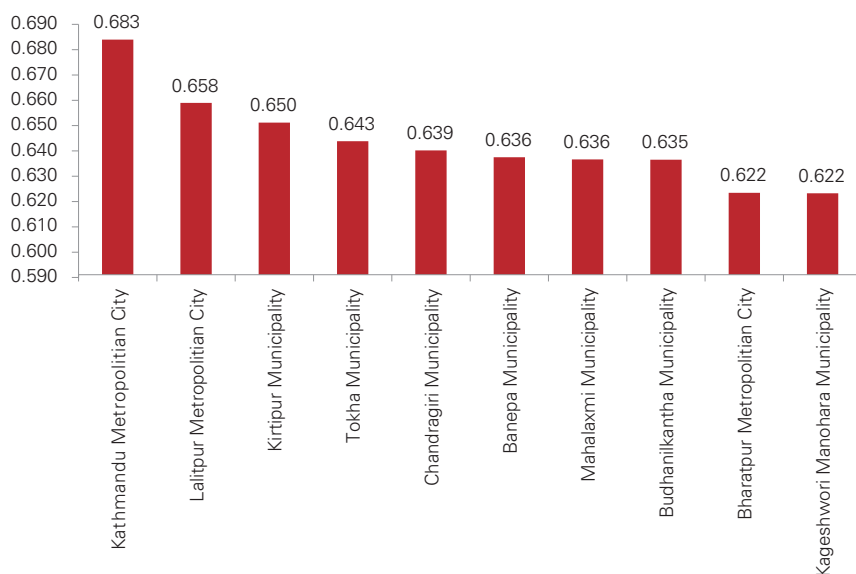
Distribution pattern of HDI values across all the local levels in Province No. 3 is not uniform. The distribution pattern of values of human development is shown figure

5.1. The average value of HDI of all 119 local levels is 0.496 and its maximum and minimum values are 0.683 and 0.398 respectively. Standard deviation of HDI is 0.065. There is variation in individual values of local *Palikas*. The average value of HDI in thirteen districts of Province No. 3 as measured by HDR 2014 is 0.506 while average value of 119 palika is 0.496. Thus, *Palikas'* average value is approaching to average value of thirteen districts.

OVERALL SCENARIO

Palikas with highest values of HDI are shown figure 5.2. Kathmandu Metropolitan city is in first position with HDI value of 0.683. Main reasons of attaining the highest HDI value is due to the highest value in income index and second highest position in education index with negligible difference. Lalitpur Metropolitan city is in the second highest position because it attains the third highest position in education index and the good incidence of average values of three indices. Kirtipur municipality is in third position because it attains the highest position in education index. Other leading municipalities are Tokha, Chandragiri, Banepa, Mahalaxmi, Budhanilkantha, Bharatpur and Kageshwori respectively.

Figure 5.2 Top Ten *Palikas* in HDI Values

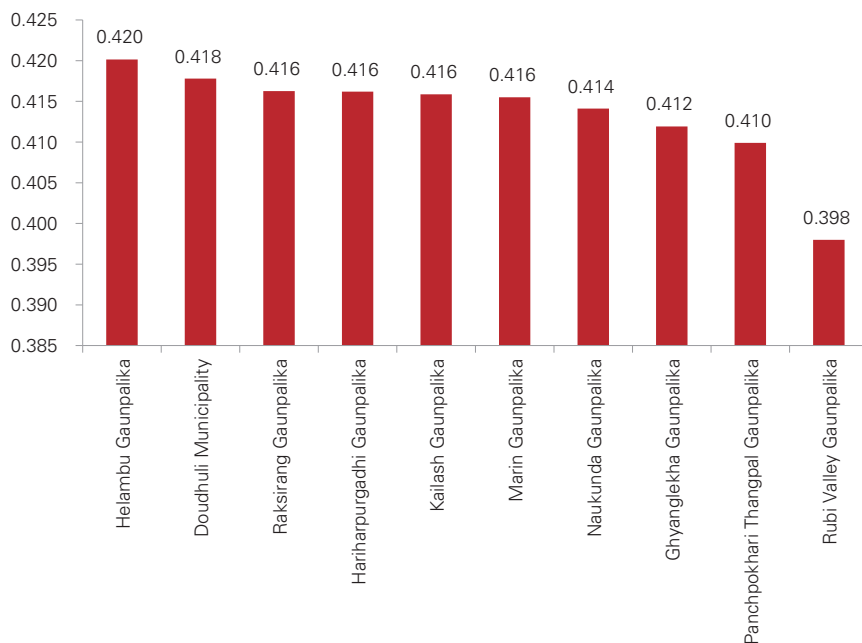


Source: Constructed Based on Appendix VI

The HDI value shows Banepa as a growing economy because of its good position in income index, particularly in per-capita economic establishments and the incidence of average values.

Palikas with lowest HDI values are shown in figure 5.3. Minimum value of HDI (0.398) has been observed in Rubi valley *Gaunpalika* of Dhading District. It is logical for Rubi valley to be in lowest position in HDI in Province No. 3 because of its second-lowest position in education index although its income index is not among the lowest ten *Palikas*. Panchpokhari Thangpal *Gaunpalika* of Sindhuli district has the second minimum HDI value. Ghyanglekha *Gaunpalika* is in the third lowest position because it is in bottom ten positions in both mean years of schooling and adult literacy rate. Naukunda *Gaunpalika* of Rasuwa is in the fourth position and Marin *Gaunpalika* of Sindhuli is in the fifth position. Other *Gaunpalika* with bottom ten HDI are Kailash of Makawanpur, Hariharpurghadi of Sindhuli, Raksirang of Makawanpur, Marin and Dudhali of Sindhuli. These *Palikas* are vulnerable with respect to the situation of human development.

Figure 5.3 Bottom Ten *Palikas* in HDI Values



Source: Constructed Based on Appendix VI

As shown in the table below, the derived HDI values of district are consistent with the findings of NHDR 2014:

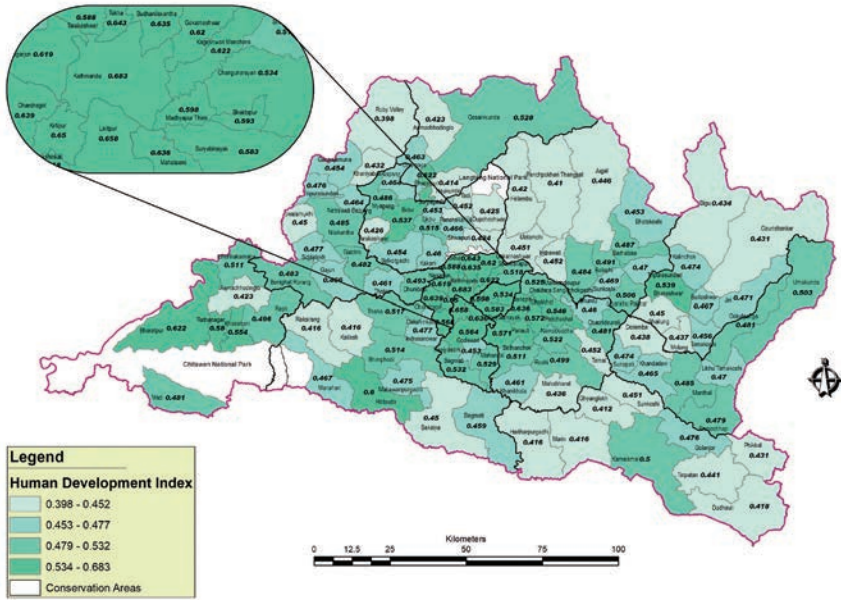
Table 5.1 Comparison of Estimated HDI Values with HDI Values of NHDR 2014

Districts	Average Values of HDI in <i>Palikas</i>	HDI in 2014	Difference
Dolakha	0.462	0.455	0.007
Sindhupalchock	0.461	0.455	0.006
Rasuwa	0.460	0.461	- 0.001
Dhading	0.463	0.461	0.002
Nuwakot	0.464	0.466	- 0.002
Kathmandu	0.617	0.632	- 0.015
Bhaktapur	0.577	0.573	0.004
Lalitpur	0.562	0.601	- 0.039
Kavrepalanchok	0.513	0.520	- 0.007
Ramechhap	0.474	0.468	0.006
Sindhuli	0.440	0.440	0.000
Makwanpur	0.479	0.497	- 0.018
Chitwan	0.537	0.551	- 0.014

Source: Calculated Based on Appendix VI and NHDR 2014

Table 5.1 reveals that the average values of all *Palikas* of each district are almost equal to Districts HDI values reported in NHDR 2014. Thus, findings of this study are consistent with NHDR 2014. The minor differences are due to differences in weight while calculating the means.

Figure 5.4 Map of Human Development Index



Source: Spatial Data - Department of Survey

In conclusion, the estimated HDI reveals that the *Palikas* with top ten HDI value are concentrated in Kathmandu and surrounding areas – except Bharatpur Metropolitan city that lies in inner terai. However, all *Palikas* with the lowest HDI values are from outside of the Kathmandu valley. They are: Rubi valley *Gaunpalika* of Dhading, Panchpokhari Thangpal *Gaunpalika* of Sindhupalchok, Ghyanglekha *Gaunpalika* of Sindhuli, Naukunda *Gaunpalika* of Rasuwa, and Marin *Gaunpalika* of Sindhuli. Other *Gaunpalikas* in bottom ten are Kailash of Makwanpur, Hariharpurghadi of Sindhuli, Raksirang of Makawanpur, Marin and Dudhali of Sindhuli. This indicates that our development effort is more Kathmandu and urban centric. The remote and rural areas are vulnerable to low level of human development and thus the low level of standard of living, education and health condition. The gap between the highest and the lowest income *Palikas* is 0.25 again indicating unbalanced and unequal status of human development in Province No. 3. The detail of HDI values are presented in Appendix VI.

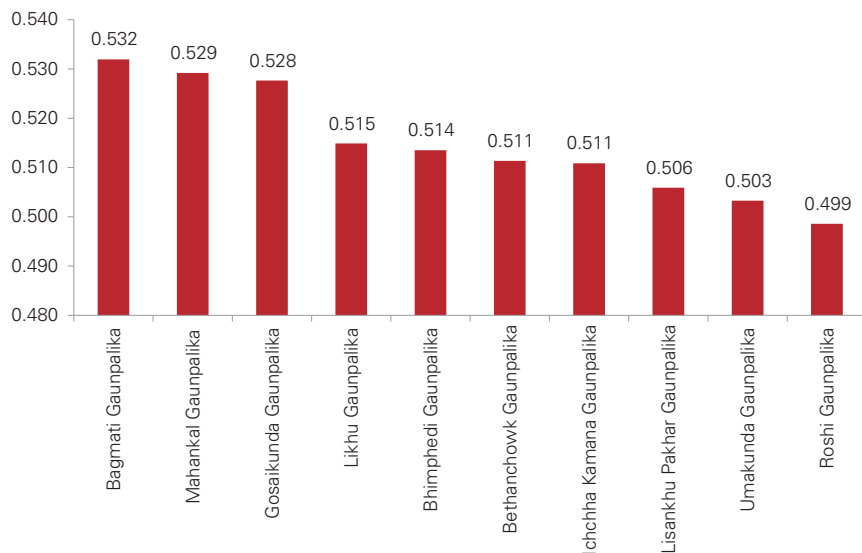
HDI COMPARISON IN GAUNPALIKAS AND MUNICIPALITIES

The comparison of HDI values between local governments by their types e.g. *Gaunpalikas*, Municipalities and Metropolitan/Sub-Metropolitan Cities are presented below.

HDI IN GAUNPALIKAS

If we look the case of *Gaunpalikas* only, the top ten and bottom ten *Gaunpalikas* are as shown in figure 5.5.

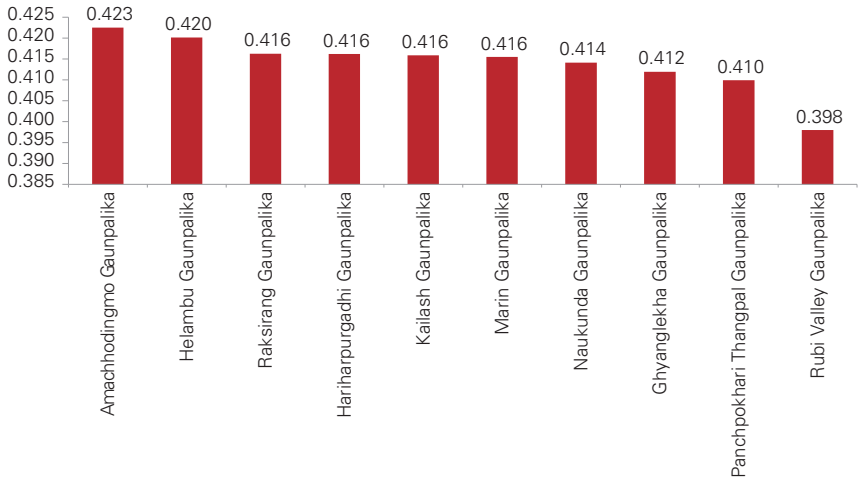
Figure 5.5 Top Ten *Gaunpalikas* in HDI Values



Source: Constructed Based on Appendix VI

The figure shows that Bagmati *Gaunpalika* (Lalitpur) has the highest HDI value followed by Mahankal and Gosaikunda *Gaunpalikas* in the second and third positions. Rest of the top ten *Gaunpalikas* are shown in the figure. Rubi valley *Gaunpalika* is in the lowest position followed by Panchpokhari Thangpal and Ghyanglekha *Gaunpalikas* in the lowest second and third positions. Rest of the *Gaunpalikas* in the lowest ten are presented in figure 5.6.

Figure 5.6 Bottom Ten *Gaunpalikas* in HDI Values

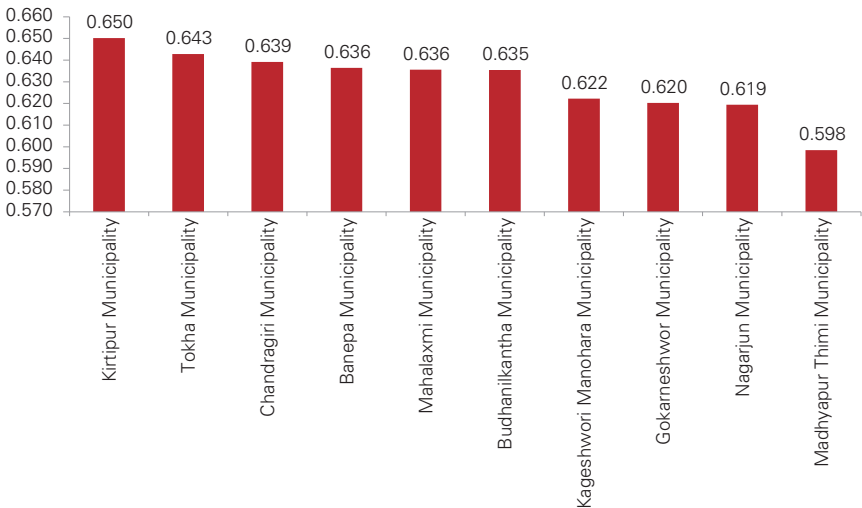


Source: Constructed Based on Appendix VI

HDI IN MUNICIPALITIES

On the average, position of municipalities is better than the position of *Gaunpalikas*. The top ten Municipalities as per the value of HDI are shown in figure 5.7.

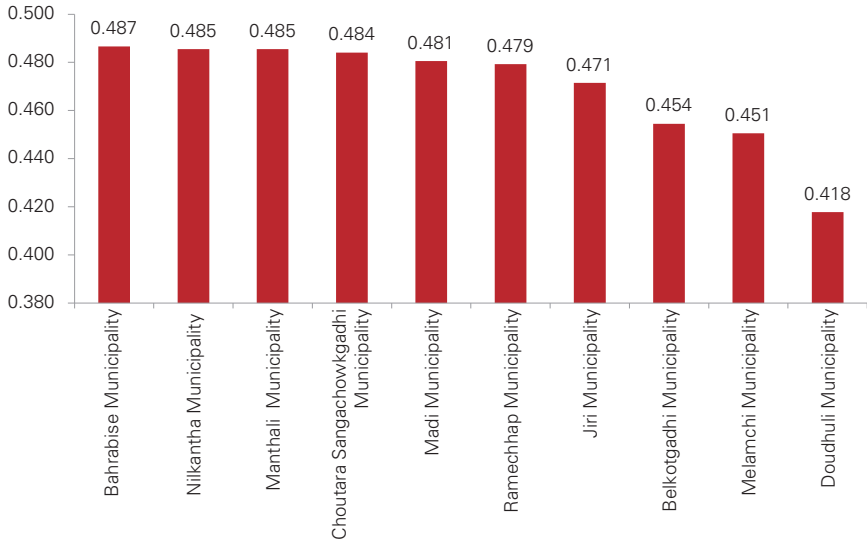
Figure 5.7 Top Ten Municipalities in HDI Values



Source: Constructed Based on Appendix VI

Within municipalities, as the figure shows, Kirtipur has the highest HDI value (0.650). Similarly, with HDI value of 0.643 and 0.639, Tokha and Chandragiri Municipalities are in the second and third position respectively. Other municipalities in the top ten list are listed in figure 5.7.

Figure 5.8 Bottom Ten Municipalities in HDI Values



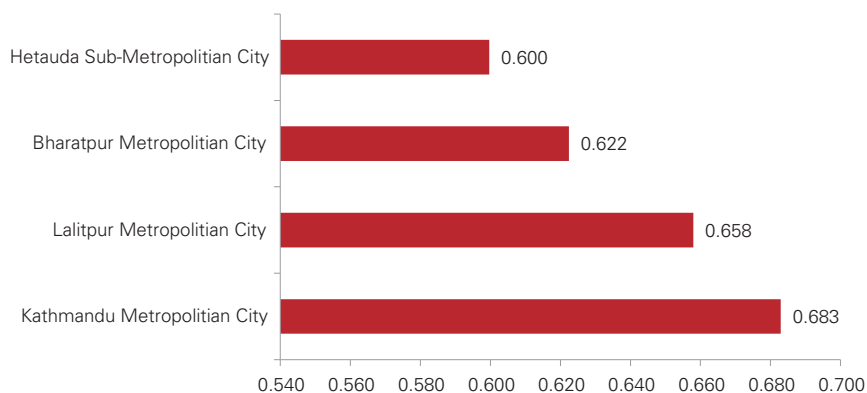
Source: Constructed Based on Appendix VI

The lowest ten municipalities in HDI values are shown in figure 5.8. Dudhuli is in the lowest position followed by Melanchi and Belkotgadhi municipalities in second and third positions respectively. Rest of the lowest ten municipalities are presented in the same figure.

HDI IN METROPOLITAN/ SUB-METROPOLITAN CITIES

The position of HDI in Metropolitan cities are shown figure 5.9. Among metropolitan cities, Kathmandu has the first position in HDI (0.687). Kathmandu Metropolitan city also has the highest position among all local governments of Province No. 3. Lalitpur Metropolitan city has the second position with 0.658 HDI. Among all local governments, Lalitpur has the second highest position. Bharatpur Metropolitan city and Hetauda sub-metropolitan city are in the third and fourth positions with HDI values of 0.622 and 0.600 respectively.

Figure 5.9 HDI Values in Metro/Sub-Metropolitan Cities



Source: Constructed Based on Appendix VI

THE GAP IN HDI VALUES

Table 5.2 Gap in HDI Values among Local Levels

HDI	Gaunpalikas	Municipalities	Metropolitan City	Province No. 3
HDI Max	0.532	0.65	0.683	0.683
HDI Min	0.398	0.418	0.6	0.398
HDI Gap	0.134	0.232	0.083	0.285

Source: Calculated Based on Appendix VI

For equal and just society, minimum gap in HDI is preferable. The gap in 74 *Gaunpalika* is 0.134, 41 municipalities is 0.232, 4 metropolitan cities is 0.083, and total gap in province no. 3 is 0.285. High level of gap is seen in the province between *Gaunpalika* and Metropolitan city as a whole.

However, if comparison is limited to the same nature of local governments, highest HDI gap is in municipalities, followed by *Gaunpalika* and metropolitan cities. The considerable gap in HDI between municipalities is mainly due to haphazard declaration of municipalities without taking into account the level of infrastructure and human development in such areas. A major finding here is that gap in human development is maximum among municipalities as compared to other local levels.

CHAPTER

6

**FINDINGS,
CONCLUSION
AND POLICY
IMPLICATIONS**

FINDINGS, CONCLUSION AND POLICY IMPLICATIONS

This study has estimated the income index, developed the education and life expectancy indices. Based on these three indices, the human development index is developed. Major findings of this study are as follows.

6.1 FINDINGS

Income Index

- Income index of 119 *Palikas* is varying within the lower bound of 0.291 to upper bound of 0.645. Thus, the range of income index is 0.354. The maximum value is 2.21 times larger than the minimum value. There is gap of 0.354 between high and low income *Palikas*.
- Kathmandu Metropolitan city is in the highest position in income status followed by Chandragiri and Gokarneshwor Municipalities in the second and third positions respectively. Other top ten municipalities are Tokha, Banepa, Lalitpur, Bharatapur, Budanilakantha, Mahalaxmi and Hetauda.
- Doudhuli Municipality is in the lowest position in income index followed by Tinpatan and Phikkal *Gaunpalikas*. Other *Palikas* in bottom ten are Shivapuri *Gaunpalika*, Tamakoshi *Gaunpalika*, Jwalamukhi *Gaunpalika*, Belkotgadhi Municipality, Melung *Gaunpalika*, Temal *Gaunpalika* and Netrawati Dabjong *Gaunpalika* respectively.

Education Index

- Education index of 119 *Palikas* is varying within the lower bound of 0.20 to upper bound of 0.68. Thus, the range of education index is 0.48. The maximum value is 2.42 times larger than the minimum value. There is gap of 0.48 in education index.

- Kirtipur Municipality has the highest value in education index. Kathmandu and Lalitpur Metropolitan cities are in second and third positions respectively. Other municipalities in the top ten are: Tokha, Nagarjun, Budhanilkantha, Madhyapur Thimi, Mahalaxmi, Tarakeshwar and Suryabinayak respectively.
- Naukunda *Gaunpalika* has the lowest education index followed by Rubi valley and Dupcheshwor *Gaunpalikas* in the second and third lowest positions respectively. Other *Palikas* in bottom ten in education index are: Panchpokhari Thangpal, Amachhodingmo, Jugal, Kailash, Ghyanglekha, Raksirang and Hariharpurgadhi *Gaunpalikas*.

Life Expectancy Index

- Life expectancy index of 119 *Palikas* is varying within the lower bound of 0.64 to upper bound of 0.91. Thus, the range of life expectancy index is 0.27. The maximum value is 1.42 times larger than the minimum value. There is gap of 0.27 in life expectancy index.
- Chauri Deurali *Gaunpalika* has the highest life expectancy followed by Myagang *Gaunpalika* and Sunapati *Gaunpalika* in the second and third positions respectively. Other *Palikas* in top ten are Jugal *Gaunpalika*, Likhu *Gaunpalika*, Khandadevi *Gaunpalika*, Ramechhap Municipality, Madan Deupur Municipality, Netrawati Dabjong *Gaunpalika* and Roshi *Gaunpalika*.
- Indrasarowar *Gaunpalika* has the least life expectancy followed by Makwanpurgadhi *Gaunpalika* and Konjyosom *Gaunpalika* respectively. Other *Palikas* in bottom ten list are: Manahari *Gaunpalika*, Tokha Municipality, Tarakeshwar Municipality, Tarakeshwar *Gaunpalika*, Amachhodingmo *Gaunpalika*, Bigu *Gaunpalika* and Gosaikunda *Gaunpalika*.

Human Development Index (HDI)

- Human development index of 119 *Palikas* is varying within the lower bound of 0.398 to upper bound of 0.683. Thus, the range of HDI is 0.285. The maximum value is 1.71 times larger than the minimum value. There is gap of 0.285 in HDI.
- In HDI value, Kathmandu Metropolitan city is in the first position while Lalitpur Metropolitan city and Kirtipur municipality are in the second and third positions respectively. Other leading municipalities are Tokha, Chandragiri, Banepa, Mahalaxmi, Bhudanilakantha, Bharatpur and Kageshwori Manohara respectively, in descending order.

- Rubi valley *Gaunpalika* of Dhading has the lowest HDI value followed by Panchpokhari Thangpal and Ghyanglekha *Gaunpalikas* respectively. Other bottom ten *Palikas* are Naukunda, Marin, Kailash, Hariharpurghadi, Raksirang *Gaunpalikas*, Dudhauri Municipality and Helambu *Gaunpalikas*.
- Average HDI of *Palikas* of each district is very close to districts values of HDI as reported in NHDR 2014. Thus, the estimation of HDI at local level is unbiased.
- Forty-six *Palikas* have higher value than the national average HDI as stated in NHDR 2014 while the others are in lower positions.
- In case of *Gaunpalikas*, Bagmati *Gaunpalika* (Lalitpur) has the highest HDI value (0.532) while the Rubi valley has the lowest value (0.398). Thus the range of *Gaunpalika* is 0.134.
- In case of *Municipalities*, Kirtipur Municipality has the highest HDI value (0.650) while the Dudhauri Municipality has the lowest value (0.418). Thus the range of *Municipalities* is 0.232, showing larger disparity between *Municipalities*.
- In case of *Metro/Sub-Metropolitan cities*, Kathmandu Metropolitan city has the highest HDI value (0.683) while the Hetauda Sub-Metropolitan city has the lowest value (0.600). Thus, the range of Metropolitan city is 0.083, showing least gap in case of Metro/Sub-Metropolitan cities.

6.2 CONCLUSION

Development process of Province No. 3 is concentrated in Kathmandu valley and its surrounding areas. Most of the top ten *Palikas* in income, education and human development are from Kathmandu and its surrounding areas except Hetauda and Bharatpur. However, the bottom-ten *Palikas* are from out of Kathmandu valley and its surrounding areas. This shows that the development process in Province No. 3 is challenging because of unequal and imbalanced development process.

Life expectancy index is not so Kathmandu biased but this index has minimum gap as compared to other indices. This means that average survival years is higher outside of Kathmandu valley. Between the sub-indices of HDI, the highest gap is in education index, and minimum gap is in life expectancy index. Thus, education sector is facing larger gaps.

6.3 POLICY IMPLICATIONS

- Special package should be developed to uplift the status of Rubi valley, Panchpokhari Thangpal, Ghyanglekha, Naukunda, Marin, Kailash, Hariharpurghadi and Raksirang *Gaunpalikas*, and Dudhuli Municipality that are in bottom ten in HDI. These *Palikas* are also in the lowest ranks in other sub-indices, such as education indices. So, the package may include income generating and educational activities for the regions they are relatively weak.
- Within three sub-indices, the gap in education index is highest in Province No. 3. To achieve more equitable and socially just society, this disparity in education should be minimized. *Palikas* in lower ranks should be uplifted. Overall improvement in education is equally important.
- Based on HDI values, 46 *Palikas* of the province are above the national average while the remaining 73 *Palikas* are below the national average. Hence, policies should be designed to improve the HDI status of the *Palikas* that are below the national average.
- Life expectancy at birth is higher outside of Kathmandu valley. This does not mean that infrastructure of health sector is better in remote areas than in Kathmandu valley and its surroundings. Good environment (natural gift), organic food and physical work (exercise) may have contributed to better life expectancy in remote areas. So, these *Palikas* (out of the valley) should be kept in priority while developing health sector infrastructures.
- In income side, Kathmandu valley and surrounding areas are in relatively better position than *Palikas* outside of the valley. This means, out of the valley areas are lagging behind in income-generating activities. Very weak condition of income generation is observed in Doudhuli Municipality and Tinpatan, Phikkal, Shivapuri, Tamakoshi, Jwalamukhi, Belkotgadhi, Melung, Temal and Netrawati Dabjong *Gaunpalikas*. So, special package directly relating to income generation could be implemented in these areas. Some of the package could be credit facilities for establishing the economic establishments, increasing the rate of employment opportunity, improving the access to work, micro credit program for income generation and other agricultural related activities. A further survey is necessary to identify the specific activities to specific *Palikas*.
- Looking the gaps in HDI in three different types of *Palikas*, largest gap is in Municipalities followed by second largest gap in *Gaunpalikas*, and minimum gap is in case of Metro/Sub-Metropolitan cities. So, in order to reduce the disparity between similar local governments, Municipalities should be given first priority. Then comes, *Gaunpalika* and Metro/Sub-Metropolitan city.

- Looking at the overall status of human development, *Gaunpalikas* may be in first consideration while designing policies and plans because of their minimum HDI values as compared to other *Palikas*. Second and third priority may be given to municipalities and Metro/Sub-Metropolitan cities respectively. It is because Metropolitan Cities have larger HDI values and smaller gap in them.
- There is no upper limit of development. So, overall growth in HDI is fundamentally important. NPC has set its target to increase HDI to 0.760 (national HDI) by 2100 BS and PPC of Province No. 3 targets to increase HDI to 0.650 (Provincial HDI) by 2081 BS. So, overall growth in HDI is very important.
- Finally, the province government may consider human development status of local governments as one of the key bases for formulating policies, plans and budgets that help create more equitable and just society.

REFERENCES

REFERENCES

- Barro, R. J.& Lee, J.W. (2010). A new data set of educational attainment in the world, 1950–2010. *NBER Working Paper No. 15902*
- Central Bureau of Statistics (CBS) (2012). *National population and housing census 2011 (National Report)*. Kathmandu, Nepal: CBS
- Central Bureau of Statistics (CBS) (2019): Preliminary result of economic census 2018.
- Government of Nepal (2015). *Constitution of Nepal 2015*. Kathmandu: Government of Nepal
- Suwal, R. & Dahal, M.P. (2014). Economically active population: Dimension and dynamics. *Population Monograph of Nepal, Vol. III*: 1-40. Kathmandu: Central Bureau of Statistics
- UNDP (1998). *Nepal human development report*. Kathmandu: Nepal South Asia Centre
- UNDP (2001). *Nepal human development report: Poverty reduction and governance*. Kathmandu: UNDP
- UNDP (2004). *Nepal human development report: Empowerment and poverty reduction*. Kathmandu: UNDP
- UNDP (2009). *Nepal human development report: State Transformation and human development*. Kathmandu: UNDP
- UNDP (2014). *Nepal human development report 2014: Beyond geography, unlocking human potential*. Kathmandu: UNDP
- UNESCO & UNESCO Institute for Statistics (2013). *UIS methodology for estimation of mean years of schooling*. Retrieved from: http://uis.unesco.org/sites/default/files/documents/uis-methodology-for-estimation-of-mean-years-of-schooling-2013-en_0.pdf
- प्रदेश नीति तथा योजना आयोग, प्रदेश ३ (२०७६) । पहिलो आबधिक योजना (२०७६/७७– २०८०/८१), आधार पत्र । हेटौडा : प्रदेश नीति तथा योजना आयोग ।
- राष्ट्रिय योजना आयोग (२०७६) । पन्ध्रौ योजना(२०७६/७७– २०८०/८१), आधार पत्र । काठमाण्डौ : राष्ट्रिय योजना आयोग ।

APPENDICES

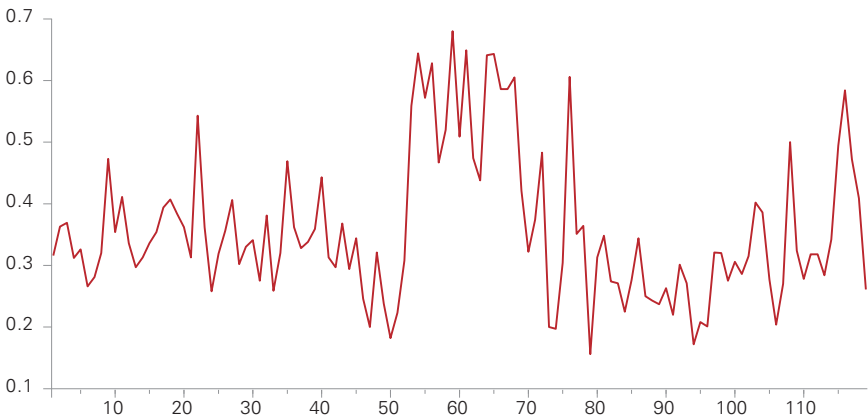
APPENDIX I: A NOTE ON INCOME INDEX

After a number of alternative derivations (about a dozen), the study team reached the conclusion that, in absence of local level GDP data, following indicators may be used as proxy indicators for estimation of income index. This index ranks the different *Palikas* but it does not tell about absolute values of income of different *Palikas*. Hence, following three indicators are used to estimate the income index.

1. Employment level (percent) of *Palikas* based on data of population census 2011.
2. Proportion of *Pakki* Houses based on data of population census 2011.
3. Per-capita economic establishments based on the data of economic census 2018. Per-capita establishment is calculated considering the case of 10+ population.

Based on these indicators, following simple income index is derived. This index also reflects the scenario of economic census of 2018. However, it is useful to determine rank of income status of 119 *Palikas*. The simple index is as follows.

Figure A.1.1 Simple Income Index

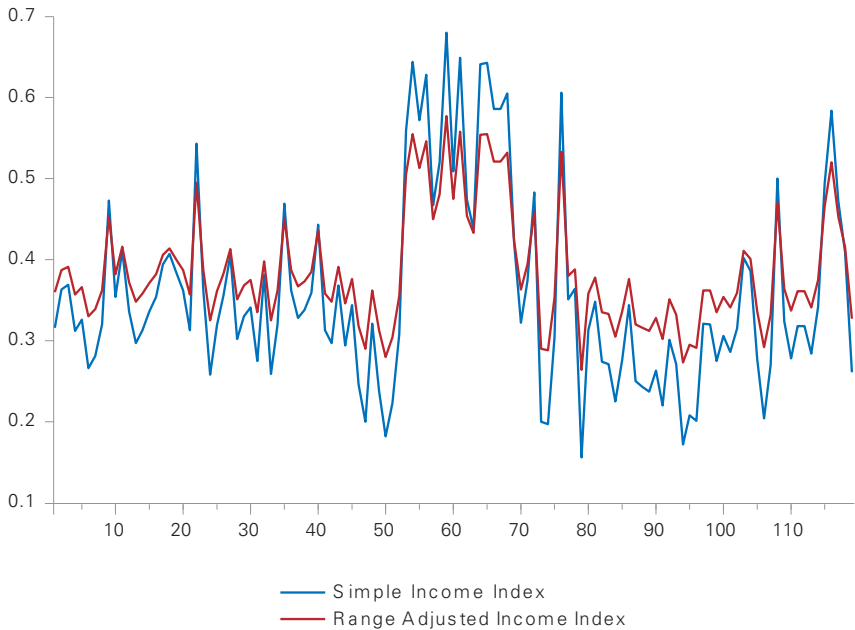


Source: Constructed Based on Appendix I

This index varies within 0.156 to 0.680.

The range of variation of income index used in HDI index in 2014 is range of 0.26 to 0.57. Assuming that income index of Province No. 3 also operates within this range, following adjusted income index is derived. The rationality of this assumption is that Province No. 3 varies from high land Himalaya to low land Terai and highly developed *Palikas* to less developed *Palikas*, as in Nepal. The benefit of this index is that, it does not change the Ranks of *Palikas* but transform the value of index within this range. The adjusted index is given below. Both the indices are plotted in the following graph.

Figure A.1.2 Range Adjusted Income Index and Simple Income Index

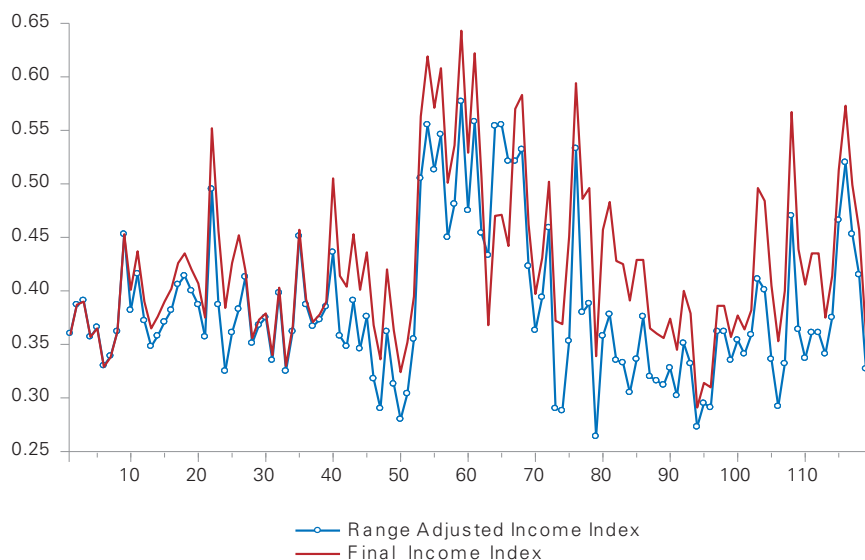


The blue color index is the simple index derived from the basic three variables. The red color index is adjusted index based national range of income index used to derive HDI in 2014. The adjusted index has lower variability than the unadjusted simple income index. This adjusted index pushup the lower values and pull down the upper extreme values.

The value of adjusted income index is downward biased as compared to districts level income index used to derive HDI in 2014. This is because the average value of *Palikas* is still less than the district values. Keeping in mind the district values of

income index in 2014, we derived the second round adjusted income index which is named as double adjusted income index. The benefit of this double adjusted income index is that the average values of *Palikas* of each districts is close to to district value of income index used in HDI 2014 report. So, there is very little space to suspect the individual values of income index of each *Palika* because these values are consistent with district values. Statistically, these estimators are unbiased estimators. However, it is important to note here that districts values are known from NHDR 2014. This double adjusted income index is given below which here after is known as “Final Income Index”.

Figure A.1.3 Comparison of Final and Range Adjusted Income Index

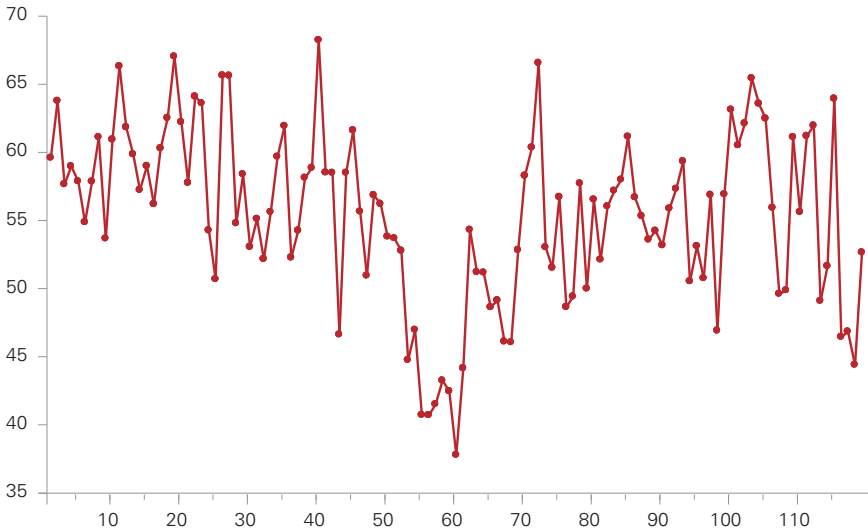


A BRIEF DESCRIPTION ABOUT THE INDICATORS OF INCOME

Employment Rate

The employment rate is not uniform at *Palika*. It varies across the *Palika* level. The variation pattern is shown in the following figure. The employment rate as shown in figure A.1.4 is not Kathmandu based. This means that employment rate is generally higher out of Kathmandu valley.

Figure A.1.4 Employment Rate

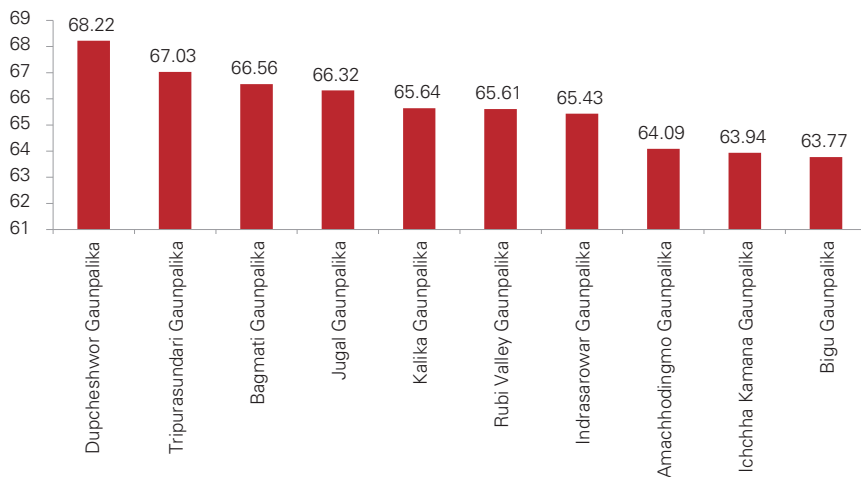


Source: Further Derivation Based on NHPC 2011

As the figure A.1.5 shows, the highest rate of employment rate is in Dupcheshwor *Gaunpalika*. Second and third highest rate of employment is in Tripurasundari *Gaunpalika* (Sindhupalchok) and Bagamati *Gaunpalika* (Lalitpur) respectively. Rubi valley *Gaunpalika* is at bottom ten level in other indicators as discussed in the text but in employment rate it secures the fourth highest position in top ten *Palikas*.

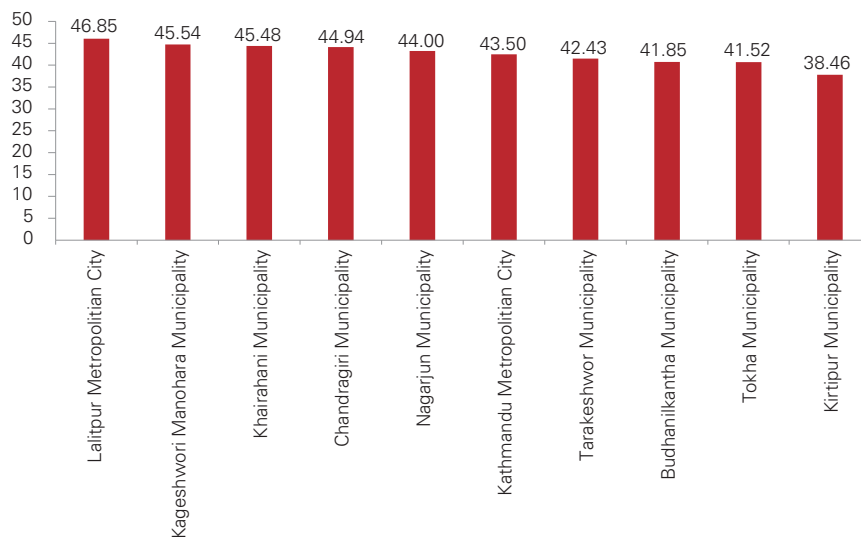
The lowest rate of employment is in Kathmandu and its surrounding areas. Kirtipur has the lowest rate followed by Tokha and Budhanilakantha Municipalities in second and third positions respectively. This is mainly because of the concentration of students in these areas who are technically considered as unemployed. Other bottom ten *Palikas* are presented in figure A.1.6.

A.1.5 Top Ten Employment Rate at Palika Level



Source: Derived Based on Appendix I, Table A.1.1

A.1.6 Bottom Ten Palikas in Employment Rate

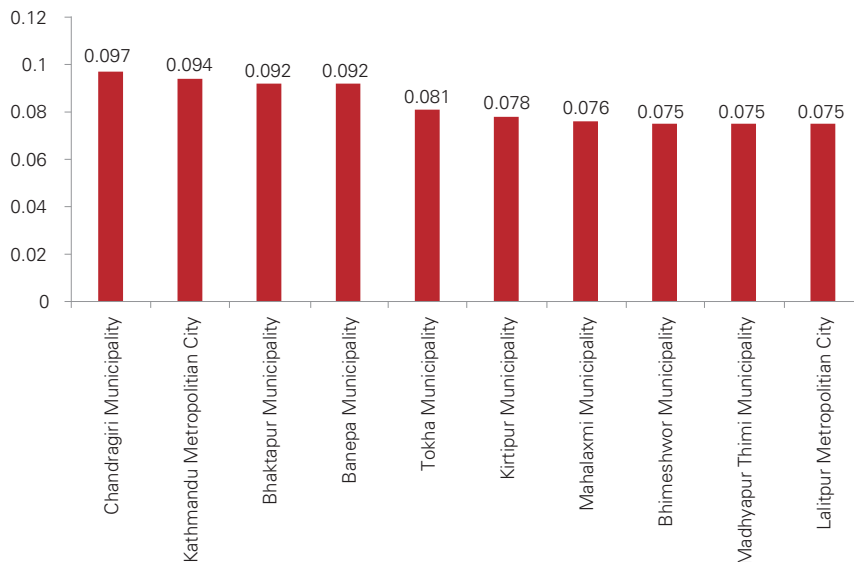


Source: Derived Based on Appendix I, Table A.1.1

PER-CAPITA ECONOMIC ESTABLISHMENT

Top ten position of per-capita economic establishment is shown the figure in A.1.7.

Figure A.1.7 Top Ten *Palikas* in Per-capita Establishment

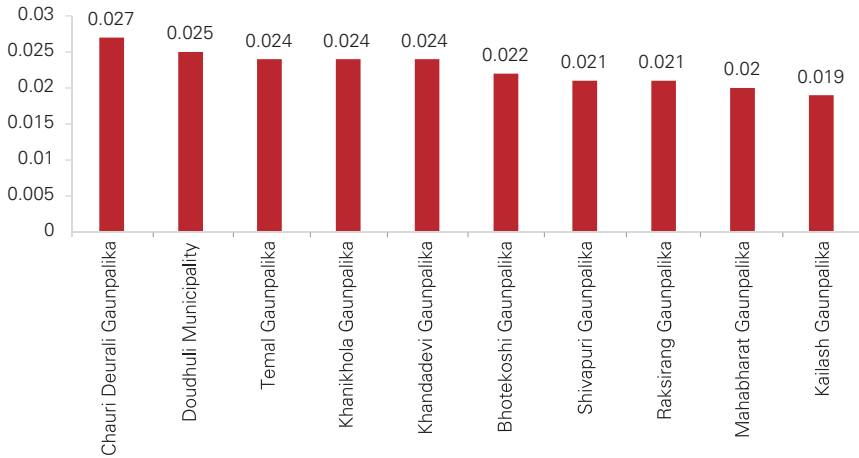


Source: Derived Based on Appendix I, Table A.1.1

The figure A.1.7 shows that per-capita economic establishment is highest in Chandragiri Municipality followed by Kathmandu metropolitan city and Banepa Municipality. Very recently Banepa is also emerging as a rapidly growing *Palika*. Other top ten *Palikas* can easily be read from the figure A.1.7.

Bottom ten *Palikas* in per-capita economic establishment are shown in figure A.1.8. The graph shows that Kailash *Gaunpalika* is in the lowest position followed by Mahabharat and Shivapuri *Gaunpalikas* in the second and third positions respectively.

Figure A.1.8. Bottom Ten *Palikas* in Per-capita Economic Establishment

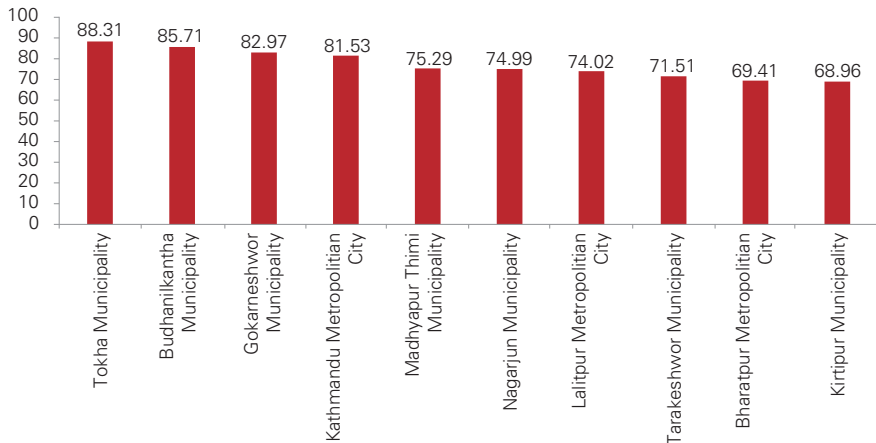


Source: Derived based on Appendix I, Table A.1.1

PROPORTION OF *PAKKI* HOUSES

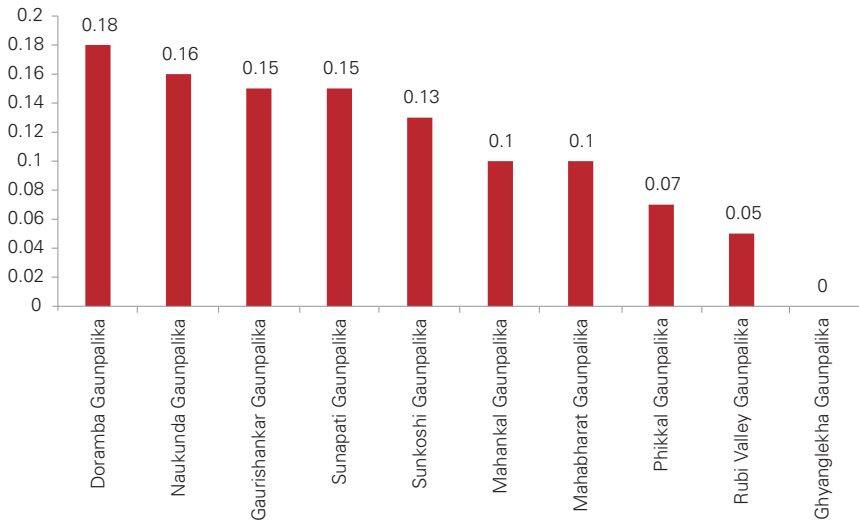
Data on capital at local levels is not available. So, wealth variable- *Pakki* houses - has been taken as proxy variable for income (decent living) on the assumption that higher wealth position is associated with higher income. Based on proportion of *Pakki* houses, top ten and bottom ten *Palikas* are presented in figures A.1.9 and A.1.10.

Figure A.1.9. Top Ten *Palikas* in Percentage of *Pakki* Houses



Source: Derived Based on Appendix I, Table A.1.1

Figure A.1.10. Bottom Ten *Palikas* in Percentage of *Pakki* Houses



Source: Derived Based on Appendix I, Table A.1.1

Palikas with highest level of proportion of *Pakki* houses is shown in figure A.1.9. Tokha is in highest position followed by Budhanilakantha and Gokarneshwor Municipalities. Kathmandu is in the fourth position. The value of the data in bar diagram shows the percentage of household having *Pakki* houses.

Bottom ten *Palikas* having lowest proportion of *Pakki* houses are shown in figure A.1.10. Ghyanglekha *Gaunpalika* is in lowest position followed by Rubi valley and Phikkal *Gaunpalikas* in the second and third positions respectively. The value of the data in bar diagram shows the percentage of household having the *Pakki* houses.

Table A.1.1 Basic Indicators of Income

S.N	District	Palika Name	Empolymnt Rate	Per Capita Establishment	Percentage of Pakki Houses
1	Dolakha	Gaurishankar <i>Gaunpalika</i>	59.60	0.037	0.15
2	Dolakha	Bigu <i>Gaunpalika</i>	63.77	0.037	0.27
3	Dolakha	Kalinchowk <i>Gaunpalika</i>	57.65	0.054	0.44
4	Dolakha	Baiteshwar <i>Gaunpalika</i>	58.98	0.036	2.01
5	Dolakha	Jiri Municipality	57.86	0.043	1.17
6	Dolakha	Tamakoshi <i>Gaunpalika</i>	54.86	0.035	2.78
7	Dolakha	Melung <i>Gaunpalika</i>	57.85	0.033	0.52
8	Dolakha	Shailung <i>Gaunpalika</i>	61.10	0.034	0.42
9	Dolakha	Bhimeshwor Municipality	53.66	0.075	16.76
10	Sindhupalchok	Bhotekoshi <i>Gaunpalika</i>	60.94	0.022	23.05
11	Sindhupalchok	Jugal <i>Gaunpalika</i>	66.32	0.041	1.17
12	Sindhupalchok	Panchpokhari Thangpal <i>Gaunpalika</i>	61.83	0.036	0.78
13	Sindhupalchok	Helambu <i>Gaunpalika</i>	59.85	0.031	1.67
14	Sindhupalchok	Melanchi Municipality	57.24	0.040	3.16
15	Sindhupalchok	Indrawoti <i>Gaunpalika</i>	58.99	0.043	1.01
16	Sindhupalchok	Choutara Sangachowkgadhi Municipality	56.20	0.047	8.92
17	Sindhupalchok	Balephi <i>Gaunpalika</i>	60.29	0.044	11.47
18	Sindhupalchok	Bahrabise Municipality	62.51	0.041	11.87
19	Sindhupalchok	Tripurasundari <i>Gaunpalika</i>	67.03	0.034	0.91
20	Sindhupalchok	Lisankhu Pakhar <i>Gaunpalika</i>	62.21	0.039	3.32
21	Sindhupalchok	Sunkoshi <i>Gaunpalika</i>	57.75	0.038	3.58
22	Rasuwa	Gosaikunda <i>Gaunpalika</i>	50.68	0.060	22.76
23	Rasuwa	Amachhodingmo <i>Gaunpalika</i>	64.09	0.027	0.84
24	Rasuwa	Uttargaya <i>Gaunpalika</i>	54.27	0.035	3.09
25	Rasuwa	Kalika <i>Gaunpalika</i>	65.64	0.035	9.48
26	Rasuwa	Naukunda <i>Gaunpalika</i>	63.59	0.049	0.16
27	Dhading	Rubi Valley <i>Gaunpalika</i>	65.61	0.043	0.05

S.N	District	Palika Name	Empolymnt Rate	Per Capita Establishment	Percentage of Pakki Houses
28	Dhading	Khaniyabas <i>Gaunpalika</i>	54.79	0.046	0.38
29	Dhading	Ganga Jamuna <i>Gaunpalika</i>	58.38	0.043	1.34
30	Dhading	Tripurasundari <i>Gaunpalika</i>	53.06	0.055	5.96
31	Dhading	Netrawati Dabjong <i>Gaunpalika</i>	55.11	0.039	0.51
32	Dhading	Nilkantha Municipality	52.17	0.051	23
33	Dhading	Jwalamukhi <i>Gaunpalika</i>	55.61	0.034	0.56
34	Dhading	Siddhalek <i>Gaunpalika</i>	59.67	0.036	2.32
35	Dhading	Benighat Rorang <i>Gaunpalika</i>	61.92	0.053	16.4
36	Dhading	Gajuri <i>Gaunpalika</i>	52.27	0.053	15.88
37	Dhading	Galchhi <i>Gaunpalika</i>	54.26	0.045	9.74
38	Dhading	Thakre <i>Gaunpalika</i>	58.12	0.039	8.66
39	Dhading	Dhunibenshi Municipality	58.85	0.042	8.4
40	Nuwakot	Dupcheshwor <i>Gaunpalika</i>	68.22	0.045	0.18
41	Nuwakot	Tadi <i>Gaunpalika</i>	58.50	0.039	1.12
42	Nuwakot	Suryagadhi <i>Gaunpalika</i>	58.49	0.035	1.48
43	Nuwakot	Bidur Municipality	46.61	0.066	19.54
44	Nuwakot	Kispang <i>Gaunpalika</i>	58.49	0.034	1.2
45	Nuwakot	Myagang <i>Gaunpalika</i>	61.61	0.037	2.36
46	Nuwakot	Tarakeshwor <i>Gaunpalika</i>	55.64	0.031	0.51
47	Nuwakot	Belkotgadhi Municipality	50.94	0.031	1.89
48	Nuwakot	Likhu <i>Gaunpalika</i>	56.85	0.042	3.69
49	Nuwakot	Panchakanya <i>Gaunpalika</i>	56.21	0.027	0.99
50	Nuwakot	Shivapuri <i>Gaunpalika</i>	53.81	0.021	0.6
51	Nuwakot	Kakani <i>Gaunpalika</i>	53.68	0.028	3.51
52	Kathmandu	Shankharapur Municipality	52.77	0.040	15.06
53	Kathmandu	Kageshwori Manohara Municipality	44.75	0.072	68.54
54	Kathmandu	Gokarneshwor Municipality	46.97	0.073	82.97

S.N	District	Palika Name	Empolymnt Rate	Per Capita Establishment	Percentage of Pakki Houses
55	Kathmandu	Budhanilkantha Municipality	40.72	0.070	85.71
56	Kathmandu	Tokha Municipality	40.70	0.081	88.31
57	Kathmandu	Tarakeshwor Municipality	41.49	0.056	71.51
58	Kathmandu	Nagarjun Municipality	43.25	0.061	74.99
59	Kathmandu	Kathmandu Metropolitan City	42.47	0.094	81.53
60	Kathmandu	Kirtipur Municipality	37.79	0.078	68.96
61	Kathmandu	Chandragiri Municipality	44.15	0.097	65.13
62	Kathmandu	Dakshinkali Municipality	54.31	0.070	20.41
63	Bhaktapur	Changunarayan Municipality	51.20	0.062	28.95
64	Bhaktapur	Bhaktapur Municipality	51.16	0.092	49.14
65	Bhaktapur	Madhyapur Thimi Municipality	48.63	0.075	75.29
66	Bhaktapur	Suryabinayak Municipality	49.13	0.073	61.18
67	Lalitpur	Mahalaxmi Municipality	46.12	0.076	66.6
68	Lalitpur	Lalitpur Metropolitan City	46.04	0.075	74.02
69	Lalitpur	Godawari Municipality	52.83	0.049	34.4
70	Lalitpur	Konjyosom <i>Gaunpalika</i>	58.27	0.041	0.85
71	Lalitpur	Mahankal <i>Gaunpalika</i>	60.34	0.049	0.1
72	Lalitpur	Bagmati <i>Gaunpalika</i>	66.56	0.058	0.19
73	Kavrepalanchok	Chauri Deurali <i>Gaunpalika</i>	53.02	0.027	0.3
74	Kavrepalanchok	Bhumlu <i>Gaunpalika</i>	51.52	0.028	2.02
75	Kavrepalanchok	Mandan Deupur Municipality	56.71	0.038	5.14
76	Kavrepalanchok	Banepa Municipality	48.65	0.092	46.7
77	Kavrepalanchok	Dhulikhel Municipality	49.41	0.053	21.34
78	Kavrepalanchok	Panchkhal Municipality	57.70	0.046	8.57
79	Kavrepalanchok	Temal <i>Gaunpalika</i>	49.98	0.024	0.27
80	Kavrepalanchok	Namobuddha Municipality	56.52	0.042	3.31
81	Kavrepalanchok	Panauti Municipality	52.12	0.048	17.73

S.N	District	Palika Name	Empolymt Rate	Per Capita Establishment	Percentage of Pakki Houses
82	Kavrepalanchok	Bethanchowk <i>Gaunpalika</i>	56.03	0.037	0.33
83	Kavrepalanchok	Roshi <i>Gaunpalika</i>	57.16	0.033	0.66
84	Kavrepalanchok	Mahabharat <i>Gaunpalika</i>	57.98	0.020	0.1
85	Kavrepalanchok	Khanikhola <i>Gaunpalika</i>	61.14	0.024	0.38
86	Ramechhap	Umakunda <i>Gaunpalika</i>	56.69	0.051	0.44
87	Ramechhap	Gokulganga <i>Gaunpalika</i>	55.33	0.033	0.49
88	Ramechhap	Likhu Tamakoshi <i>Gaunpalika</i>	53.60	0.035	0.63
89	Ramechhap	Ramechhap Municipality	54.24	0.032	1.08
90	Ramechhap	Manthali Municipality	53.18	0.037	5.51
91	Ramechhap	Khandadevi <i>Gaunpalika</i>	55.87	0.024	0.26
92	Ramechhap	Doramba <i>Gaunpalika</i>	57.30	0.040	0.18
93	Ramechhap	Sunapati <i>Gaunpalika</i>	59.33	0.027	0.15
94	Sindhuli	Dudhouli Municipality	50.53	0.025	1.72
95	Sindhuli	Phikkal <i>Gaunpalika</i>	53.11	0.029	0.07
96	Sindhuli	Tinpatan <i>Gaunpalika</i>	50.74	0.033	0.74
97	Sindhuli	Golanjor <i>Gaunpalika</i>	56.87	0.045	0.57
98	Sindhuli	Kalamamai Municipality	46.91	0.055	18.62
99	Sindhuli	Sunkoshi <i>Gaunpalika</i>	56.91	0.035	0.13
100	Sindhuli	Ghyanglekha <i>Gaunpalika</i>	63.12	0.027	0
101	Sindhuli	Marin <i>Gaunpalika</i>	60.50	0.027	0.92
102	Sindhuli	Hariharpurgadhi <i>Gaunpalika</i>	62.12	0.031	0.2
103	Makwanpur	Indrasarowar <i>Gaunpalika</i>	65.43	0.041	1.8
104	Makwanpur	Thaha Municipality	63.57	0.041	3.76
105	Makwanpur	Kailash <i>Gaunpalika</i>	62.48	0.019	0.68
106	Makwanpur	Raksirang <i>Gaunpalika</i>	55.91	0.021	0.66
107	Makwanpur	Manahari <i>Gaunpalika</i>	49.61	0.044	10.78
108	Makwanpur	Hetauda Sub-Metropolitan City	49.86	0.073	37.68
109	Makwanpur	Bhimphedi <i>Gaunpalika</i>	61.10	0.033	3.1
110	Makwanpur	Makawanpurgadhi <i>Gaunpalika</i>	55.61	0.037	2.46

S.N	District	Palika Name	Empolymnt Rate	Per Capita Establishment	Percentage of Pakki Houses
111	Makwanpur	Bakaiya <i>Gaunpalika</i>	61.20	0.032	2.6
112	Makwanpur	Bagmati <i>Gaunpalika</i>	61.96	0.031	1.22
113	Chitwan	Rapti Municipality	49.09	0.038	21.6
114	Chitwan	Kalika Municipality	51.65	0.045	20.66
115	Chitwan	Ichchha Kamana <i>Gaunpalika</i>	63.94	0.052	18.23
116	Chitwan	Bharatpur Metropolitan City	46.44	0.073	69.41
117	Chitwan	Ratnanagar Municipality	46.85	0.070	41.34
118	Chitwan	Khairahani Municipality	44.40	0.058	45.59
119	Chitwan	Madi Municipality	52.66	0.034	10.55

Source: Derived from NPHC 2011

APPENDIX II: INCOME INDEX

S.N.	District	Palika Name	Income Index	Rank
1	Dolakha	Gaurishankar <i>Gaunpalika</i>	0.359	102
2	Dolakha	Bigu <i>Gaunpalika</i>	0.387	74
3	Dolakha	Kalinchowk <i>Gaunpalika</i>	0.39	70
4	Dolakha	Baiteshwar <i>Gaunpalika</i>	0.357	103
5	Dolakha	Jiri Municipality	0.365	94
6	Dolakha	Tamakoshi <i>Gaunpalika</i>	0.329	115
7	Dolakha	Melung <i>Gaunpalika</i>	0.338	112
8	Dolakha	Shailung <i>Gaunpalika</i>	0.362	99
9	Dolakha	Bhimeshwar Municipality	0.453	33
10	Sindhupalchok	Bhotekoshi <i>Gaunpalika</i>	0.401	62
11	Sindhupalchok	Jugal <i>Gaunpalika</i>	0.437	39
12	Sindhupalchok	Panchpokhari Thangpal <i>Gaunpalika</i>	0.39	71
13	Sindhupalchok	Helambu <i>Gaunpalika</i>	0.365	95
14	Sindhupalchok	Melanchi Municipality	0.376	83
15	Sindhupalchok	Indrawoti <i>Gaunpalika</i>	0.39	72
16	Sindhupalchok	Choutara Sangachowkgadhi Municipality	0.402	61
17	Sindhupalchok	Balephi <i>Gaunpalika</i>	0.426	48
18	Sindhupalchok	Bahrabise Municipality	0.435	41
19	Sindhupalchok	Tripurasundari <i>Gaunpalika</i>	0.42	51
20	Sindhupalchok	Lisankhu Pakhar <i>Gaunpalika</i>	0.407	56
21	Sindhupalchok	Sunkoshi <i>Gaunpalika</i>	0.375	84
22	Rasuwa	Gosaikunda <i>Gaunpalika</i>	0.552	12

S.N.	District	Palika Name	Income Index	Rank
23	Rasuwa	Amachhodingmo <i>Gaunpalika</i>	0.456	32
24	Rasuwa	Uttargaya <i>Gaunpalika</i>	0.384	77
25	Rasuwa	Kalika <i>Gaunpalika</i>	0.426	49
26	Rasuwa	Naukunda <i>Gaunpalika</i>	0.452	35
27	Dhading	Rubi Valley <i>Gaunpalika</i>	0.419	53
28	Dhading	Khaniyabas <i>Gaunpalika</i>	0.356	105
29	Dhading	Ganga Jamuna <i>Gaunpalika</i>	0.373	87
30	Dhading	Tripurasundari <i>Gaunpalika</i>	0.379	79
31	Dhading	Netrawati Dabjong <i>Gaunpalika</i>	0.34	110
32	Dhading	Nilkantha Municipality	0.403	60
33	Dhading	Jwalamukhi <i>Gaunpalika</i>	0.33	114
34	Dhading	Siddhalek <i>Gaunpalika</i>	0.367	93
35	Dhading	Benighat Rorang <i>Gaunpalika</i>	0.457	29
36	Dhading	Gajuri <i>Gaunpalika</i>	0.392	68
37	Dhading	Galchhi <i>Gaunpalika</i>	0.371	89
38	Dhading	Thakre <i>Gaunpalika</i>	0.378	81
39	Dhading	Dhunibenshi Municipality	0.39	73
40	Nuwakot	Dupcheshwor <i>Gaunpalika</i>	0.505	17
41	Nuwakot	Tadi <i>Gaunpalika</i>	0.414	54
42	Nuwakot	Suryagadhi <i>Gaunpalika</i>	0.404	59
43	Nuwakot	Bidur Municipality	0.453	34
44	Nuwakot	Kispang <i>Gaunpalika</i>	0.401	63
45	Nuwakot	Myagang <i>Gaunpalika</i>	0.436	40
46	Nuwakot	Tarakeshwor <i>Gaunpalika</i>	0.368	91
47	Nuwakot	Belkotgadhi Municipality	0.336	113
48	Nuwakot	Likhu <i>Gaunpalika</i>	0.42	52
49	Nuwakot	Panchakanya <i>Gaunpalika</i>	0.363	98
50	Nuwakot	Shivapuri <i>Gaunpalika</i>	0.324	116

S.N.	District	Palika Name	Income Index	Rank
51	Nuwakot	Kakani <i>Gaunpalika</i>	0.352	108
52	Kathmandu	Shankharapur Municipality	0.395	67
53	Kathmandu	Kageshwori Manohara Municipality	0.563	11
54	Kathmandu	Gokarneshwor Municipality	0.619	3
55	Kathmandu	Budhanilkantha Municipality	0.571	8
56	Kathmandu	Tokha Municipality	0.608	4
57	Kathmandu	Tarakeshwor Municipality	0.501	19
58	Kathmandu	Nagarjun Municipality	0.536	13
59	Kathmandu	Kathmandu Metropolitan City	0.643	1
60	Kathmandu	Kirtipur Municipality	0.529	14
61	Kathmandu	Chandragiri Municipality	0.622	2
62	Kathmandu	Dakshinkali Municipality	0.506	16
63	Bhaktapur	Changunarayan Municipality	0.368	92
64	Bhaktapur	Bhaktapur Municipality	0.47	27
65	Bhaktapur	Madhyapur Thimi Municipality	0.471	26
66	Bhaktapur	Suryabinayak Municipality	0.442	37
67	Lalitpur	Mahalaxmi Municipality	0.57	9
68	Lalitpur	Lalitpur Metropolitan City	0.583	6
69	Lalitpur	Godawari Municipality	0.462	28
70	Lalitpur	Konjyosom <i>Gaunpalika</i>	0.397	66
71	Lalitpur	Mahankal <i>Gaunpalika</i>	0.431	44
72	Lalitpur	Bagmati <i>Gaunpalika</i>	0.502	18
73	Kavrepalanchok	Chauri Deurali <i>Gaunpalika</i>	0.372	88
74	Kavrepalanchok	Bhumlu <i>Gaunpalika</i>	0.369	90

S.N.	District	Palika Name	Income Index	Rank
75	Kavrepalanchok	Mandan Deupur Municipality	0.451	36
76	Kavrepalanchok	Banepa Municipality	0.594	5
77	Kavrepalanchok	Dhulikhel Municipality	0.486	23
78	Kavrepalanchok	Panchkhal Municipality	0.496	21
79	Kavrepalanchok	Temal <i>Gaunpalika</i>	0.339	111
80	Kavrepalanchok	Namobuddha Municipality	0.457	30
81	Kavrepalanchok	Panauti Municipality	0.483	25
82	Kavrepalanchok	Bethanchowk <i>Gaunpalika</i>	0.428	47
83	Kavrepalanchok	Roshi <i>Gaunpalika</i>	0.425	50
84	Kavrepalanchok	Mahabharat <i>Gaunpalika</i>	0.391	69
85	Kavrepalanchok	Khanikhola <i>Gaunpalika</i>	0.429	45
86	Ramechhap	Umakunda <i>Gaunpalika</i>	0.429	46
87	Ramechhap	Gokulganga <i>Gaunpalika</i>	0.365	96
88	Ramechhap	Likhu Tamakoshi <i>Gaunpalika</i>	0.36	100
89	Ramechhap	Ramechhap Municipality	0.356	106
90	Ramechhap	Manthali Municipality	0.374	86
91	Ramechhap	Khandadevi <i>Gaunpalika</i>	0.345	109
92	Ramechhap	Doramba <i>Gaunpalika</i>	0.4	64
93	Ramechhap	Sunapati <i>Gaunpalika</i>	0.379	80
94	Sindhuli	Dudhouli Municipality	0.291	119
95	Sindhuli	Phikkal <i>Gaunpalika</i>	0.314	117
96	Sindhuli	Tinpatan <i>Gaunpalika</i>	0.31	118
97	Sindhuli	Golanjor <i>Gaunpalika</i>	0.386	75
98	Sindhuli	Kamalamai Municipality	0.386	76
99	Sindhuli	Sunkoshi <i>Gaunpalika</i>	0.357	104
100	Sindhuli	Ghyanglekha <i>Gaunpalika</i>	0.377	82
101	Sindhuli	Marin <i>Gaunpalika</i>	0.364	97
102	Sindhuli	Hariharpurgaghi <i>Gaunpalika</i>	0.382	78

S.N.	District	Palika Name	Income Index	Rank
103	Makwanpur	Indrasarowar <i>Gaunpalika</i>	0.496	22
104	Makwanpur	Thaha Municipality	0.484	24
105	Makwanpur	Kailash <i>Gaunpalika</i>	0.405	58
106	Makwanpur	Raksirang <i>Gaunpalika</i>	0.353	107
107	Makwanpur	Manahari <i>Gaunpalika</i>	0.4	65
108	Makwanpur	Hetauda Sub-Metropolitan City	0.567	10
109	Makwanpur	Bhimphedi <i>Gaunpalika</i>	0.439	38
110	Makwanpur	Makawanpurgadhi <i>Gaunpalika</i>	0.406	57
111	Makwanpur	Bakaiya <i>Gaunpalika</i>	0.435	42
112	Makwanpur	Bagmati <i>Gaunpalika</i>	0.435	43
113	Chitwan	Rapti Municipality	0.375	85
114	Chitwan	Kalika Municipality	0.414	55
115	Chitwan	Ichchha Kamana <i>Gaunpalika</i>	0.513	15
116	Chitwan	Bharatpur Metropolitan City	0.573	7
117	Chitwan	Ratnanagar Municipality	0.499	20
118	Chitwan	Khairahani Municipality	0.457	31
119	Chitwan	Madi Municipality	0.36	101

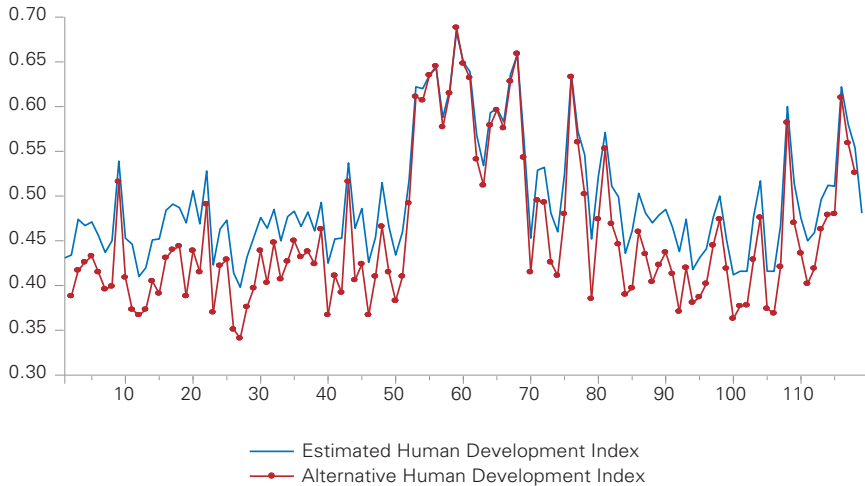
Source: Derived from NPHC 2011; Range and Districts Value of Income Index from NHDR (2014).

APPENDIX III: ALTERNATIVE SCENARIO OF HUMAN DEVELOPMENT INDEX

The current HDI used in the main text is based on the methodology used in Nepal Human Development Report 2014 where Mean Years of Schooling (MYS) is defined as average years of schooling for the population aged 5 years and over who have ever attended school. It is important to maintain this consistency in definitions and methods to examine the relative status of Province No. 3 and its *Palikas* with national level.

However, as an alternative to current HDI used in the text, an alternative human development index is also estimated employing the second definition of MYS i.e. average numbers of years attaining the school by 25 years and above population. MYS in this alternative scenario is computed using the method of UNESCO (2013) which is in line with Barro and Lee (2010). Very recently, in international practices, MYS is calculated from the average schooling years of 25 years and above population. This definition, definitely, pull down the value of MYS and hence the education indices and HDI. Thus it is not comparable to NHDR 2014.

Figure A.3.1 Comparison of HDI Values



Source: Constructed Based on Appendix VI

However, for international comparison, second definition of MYS would be preferable. So, alternative HDI has also been estimated following the second definition of MYS. HDI computed from second definition of MYS is termed as "Alternative Human Development Index". The trend and nature of both HDI values are presented in figure A.3.1.

Both indices shown in above graph have similar pattern. Turning points are almost matching, although alternative HDI has smaller values. The average value of human development index is 0.496 while alternative human development index is 0.456. The correlation coefficient between them is 0.9915 and its corresponding t statistics is 82.63. Thus, the estimated correlation coefficient is statistically significant at less than one percent level. As per national comparison, we choose estimated HDI rather than alternative HDI. For policy analysis comparable HDI is essential. This is the first reason why main text uses the first definition of MYS. Second reason is that without any fundamental change in the economy, value of HDI will be decreased if we follow alternative HDI, which in-turn may create the question from experts and academicians. However, as per international comparison alternative HDI may be used.

APPENDIX IV: EDUCATION INDEX

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
1	Dolakha	Gaurishankar Gaunpalika	2.89	49	0.19	0.49	0.307	98
2	Dolakha	Bigu Gaunpalika	2.79	49.29	0.19	0.49	0.303	100
3	Dolakha	Kalinchowk Gaunpalika	3.38	53.82	0.23	0.54	0.348	73
4	Dolakha	Baiteshwar Gaunpalika	3.83	53.19	0.26	0.53	0.369	58
5	Dolakha	Jiri Municipality	3.68	51.9	0.25	0.52	0.357	68
6	Dolakha	Tamakoshi Gaunpalika	3.96	56.97	0.26	0.57	0.388	42
7	Dolakha	Melung Gaunpalika	3.46	49.19	0.23	0.49	0.337	81
8	Dolakha	Shailung Gaunpalika	3.24	48.36	0.22	0.48	0.323	91
9	Dolakha	Bhimeshwar Municipality	4.65	62.53	0.31	0.63	0.440	28
10	Sindhupalchok	Bhotekoshi Gaunpalika	3.11	50.24	0.21	0.5	0.323	92
11	Sindhupalchok	Jugal Gaunpalika	2.39	35.92	0.16	0.36	0.239	114
12	Sindhupalchok	Panchpokhari Thangpal Gaunpalika	2.38	33.98	0.16	0.34	0.232	116
13	Sindhupalchok	Helambu Gaunpalika	2.88	40.89	0.19	0.41	0.280	107

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
14	Sindhupalchok	Melanchi Municipality	3.43	50.35	0.23	0.5	0.339	80
15	Sindhupalchok	Indrawoti Gaunpalika	3.18	47.47	0.21	0.47	0.317	95
16	Sindhupalchok	Choutara Sangachowkgadhi Municipality	3.87	53.8	0.26	0.54	0.373	53
17	Sindhupalchok	Balephi Gaunpalika	4.1	57.84	0.27	0.58	0.398	37
18	Sindhupalchok	Bahrabise Municipality	3.59	54.35	0.24	0.54	0.361	64
19	Sindhupalchok	Tripurasundari Gaunpalika	3.26	50.47	0.22	0.5	0.331	85
20	Sindhupalchok	Lisankhu Pakhar Gaunpalika	4.19	58.16	0.28	0.58	0.403	36
21	Sindhupalchok	Sunkoshi Gaunpalika	3.93	53.75	0.26	0.54	0.375	50
22	Rasuwa	Gosaikunda Gaunpalika	4.09	53.28	0.27	0.53	0.381	48
23	Rasuwa	Amachhodingmo Gaunpalika	2.55	33.62	0.17	0.34	0.239	115
24	Rasuwa	Uttargaya Gaunpalika	3.77	48.46	0.25	0.48	0.349	71
25	Rasuwa	Kalika Gaunpalika	3.55	44.61	0.24	0.45	0.325	90
26	Rasuwa	Naukunda Gaunpalika	2.11	27.41	0.14	0.27	0.196	119
27	Dhading	Rubi Valley Gaunpalika	1.98	32.07	0.13	0.32	0.206	118
28	Dhading	Khaniyabas Gaunpalika	3.08	46.23	0.21	0.46	0.308	97

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
29	Dhading	Ganga Jamuna Gaunpalika	3.27	48.88	0.22	0.49	0.326	89
30	Dhading	Tripurasundari Gaunpalika	3.77	54.33	0.25	0.54	0.370	56
31	Dhading	Netrawati Dabjong Gaunpalika	3.74	51.95	0.25	0.52	0.360	66
32	Dhading	Nilkantha Municipality	3.98	55.82	0.27	0.56	0.385	46
33	Dhading	Jwalamukhi Gaunpalika	3.47	50.58	0.23	0.51	0.342	79
34	Dhading	Siddhalek Gaunpalika	3.64	54.58	0.24	0.55	0.364	63
35	Dhading	Benighat Rorang Gaunpalika	3.19	55.14	0.21	0.55	0.342	78
36	Dhading	Gajuri Gaunpalika	3.31	49.73	0.22	0.5	0.331	84
37	Dhading	Galchhi Gaunpalika	3.65	56.41	0.24	0.56	0.370	54
38	Dhading	Thakre Gaunpalika	3.61	56.23	0.24	0.56	0.368	59
39	Dhading	Dhumbenshi Municipality	3.95	56.77	0.26	0.57	0.387	44
40	Nuwakot	Dupcheshwor Gaunpalika	2.08	33.68	0.14	0.34	0.216	117
41	Nuwakot	Tadi Gaunpalika	2.85	40.23	0.19	0.4	0.276	109
42	Nuwakot	Suryagadhi Gaunpalika	3.07	44.11	0.2	0.44	0.300	102

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
43	Nuwakot	Bidur Municipality	4.82	63.23	0.32	0.63	0.451	27
44	Nuwakot	Kispang Gaunpalika	3.3	45.19	0.22	0.45	0.315	96
45	Nuwakot	Myagang Gaunpalika	3.21	42.72	0.21	0.43	0.302	101
46	Nuwakot	Tarakeshwor Gaunpalika	3.14	44.41	0.21	0.44	0.305	99
47	Nuwakot	Belkotgadhi Municipality	3.85	52.98	0.26	0.53	0.369	57
48	Nuwakot	Likhu Gaunpalika	4.04	55.57	0.27	0.56	0.387	43
49	Nuwakot	Panchakanya Gaunpalika	3.67	51.61	0.24	0.52	0.355	69
50	Nuwakot	Shivapuri Gaunpalika	3.42	49.52	0.23	0.5	0.336	83
51	Nuwakot	Kakani Gaunpalika	3.48	51.01	0.23	0.51	0.344	75
52	Kathmandu	Shankharapur Municipality	4.95	66.07	0.33	0.66	0.467	25
53	Kathmandu	Kageshwori Manohara Municipality	6.46	78.21	0.43	0.78	0.580	11
54	Kathmandu	Gokarneshwor Municipality	5.96	75	0.4	0.75	0.546	17
55	Kathmandu	Budhanilkantha Municipality	6.94	82.1	0.46	0.82	0.616	6

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
56	Kathmandu	Tokha Municipality	7.25	84.4	0.48	0.84	0.639	4
57	Kathmandu	Tarakeshwor Municipality	6.62	79.42	0.44	0.79	0.592	9
58	Kathmandu	Nagarjun Municipality	7.18	83.05	0.48	0.83	0.631	5
59	Kathmandu	Kathmandu Metropolitan City	8.02	87.03	0.53	0.87	0.682	2
60	Kathmandu	Kirtipur Municipality	8.22	85.37	0.55	0.85	0.684	1
61	Kathmandu	Chandragiri Municipality	6.43	78.2	0.43	0.78	0.579	12
62	Kathmandu	Dakshinkali Municipality	5.25	71.42	0.35	0.71	0.500	23
63	Bhaktapur	Changunarayan Municipality	6.04	74.17	0.4	0.74	0.546	16
64	Bhaktapur	Bhaktapur Municipality	6.43	77.6	0.43	0.78	0.577	13
65	Bhaktapur	Madhyapur Thimi Municipality	6.99	81.21	0.47	0.81	0.615	7
66	Bhaktapur	Suryabinayak Municipality	6.7	78.31	0.45	0.78	0.591	10
67	Lalitpur	Mahalaxmi Municipality	6.81	79.52	0.45	0.8	0.601	8
68	Lalitpur	Lalitpur Metropolitan City	7.5	83.99	0.5	0.84	0.648	3

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
69	Lalitpur	Godawari Municipality	5.6	70.89	0.37	0.71	0.514	21
70	Lalitpur	Konyosom Gaunpalika	3.49	50.78	0.23	0.51	0.344	76
71	Lalitpur	Mahankal Gaunpalika	4.49	64.55	0.3	0.65	0.440	29
72	Lalitpur	Bagmati Gaunpalika	3.8	61.36	0.25	0.61	0.394	39
73	Kavrepalanchok	Chauri Deurali Gaunpalika	3.51	45.68	0.23	0.46	0.327	88
74	Kavrepalanchok	Bhumlu Gaunpalika	3.54	48.04	0.24	0.48	0.337	82
75	Kavrepalanchok	Mandan Deupur Municipality	4.03	56.94	0.27	0.57	0.391	40
76	Kavrepalanchok	Banepa Municipality	6.21	77.81	0.41	0.78	0.568	14
77	Kavrepalanchok	Dhulikhel Municipality	5.58	71.61	0.37	0.72	0.516	20
78	Kavrepalanchok	Panchkhal Municipality	4.66	65.47	0.31	0.65	0.451	26
79	Kavrepalanchok	Temal Gaunpalika	3.79	53.29	0.25	0.53	0.367	62
80	Kavrepalanchok	Namobuddha Municipality	4.28	60.22	0.29	0.6	0.415	34
81	Kavrepalanchok	Panauti Municipality	5.4	71.24	0.36	0.71	0.506	22
82	Kavrepalanchok	Bethanchowk Gaunpalika	3.93	59.7	0.26	0.6	0.395	38
83	Kavrepalanchok	Roshi Gaunpalika	3.55	53.86	0.24	0.54	0.357	67
84	Kavrepalanchok	Mahabharat Gaunpalika	2.74	47.12	0.18	0.47	0.293	103

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
85	Kavrepalanchok	Khanikhola Gaunpalika	2.96	51.59	0.2	0.52	0.319	94
86	Ramechhap	Umakunda Gaunpalika	3.69	55.7	0.25	0.56	0.370	55
87	Ramechhap	Gokulganga Gaunpalika	3.91	56.64	0.26	0.57	0.384	47
88	Ramechhap	Likhu Tamakoshi Gaunpalika	3.67	55.04	0.24	0.55	0.367	61
89	Ramechhap	Ramechhap Municipality	3.91	53.68	0.26	0.54	0.374	52
90	Ramechhap	Manthali Municipality	4.09	54.45	0.27	0.54	0.385	45
91	Ramechhap	Khandadevi Gaunpalika	3.63	51.47	0.24	0.51	0.353	70
92	Ramechhap	Doramba Gaunpalika	3.11	41.03	0.21	0.41	0.292	104
93	Ramechhap	Sunapati Gaunpalika	3.49	46.13	0.23	0.46	0.328	86
94	Sindhuli	Dudhouli Municipality	3.36	47.79	0.22	0.48	0.327	87
95	Sindhuli	Phikkal Gaunpalika	3.22	48	0.21	0.48	0.321	93
96	Sindhuli	Tinpatan Gaunpalika	3.69	54.87	0.25	0.55	0.367	60
97	Sindhuli	Golanjor Gaunpalika	3.49	51.89	0.23	0.52	0.347	74
98	Sindhuli	Kamalamai Municipality	4.56	61.49	0.3	0.61	0.432	32
99	Sindhuli	Sunkoshi Gaunpalika	3.63	50.21	0.24	0.5	0.349	72
100	Sindhuli	Ghyanglekha Gaunpalika	2.49	38.76	0.17	0.39	0.254	111
101	Sindhuli	Marin Gaunpalika	2.69	42.96	0.18	0.43	0.278	108

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
102	Sindhuli	Hariharpurgaghi Gaunpalika	2.31	41.66	0.15	0.42	0.253	112
103	Makwanpur	Indrasarowar Gaunpalika	3.27	53.8	0.22	0.54	0.342	77
104	Makwanpur	Thaha Municipality	3.65	59.14	0.24	0.59	0.379	49
105	Makwanpur	Kailash Gaunpalika	2.16	40.72	0.14	0.41	0.242	113
106	Makwanpur	Raksirang Gaunpalika	2.4	45.92	0.16	0.46	0.271	110
107	Makwanpur	Manahari Gaunpalika	3.6	58.46	0.24	0.58	0.375	51
108	Makwanpur	Hetauda Sub-Metropolitan City	5.55	74.56	0.37	0.75	0.525	18
109	Makwanpur	Bhimphedi Gaunpalika	3.98	62.82	0.27	0.63	0.408	35
110	Makwanpur	Makawanpurgadhi Gaunpalika	3.75	61.05	0.25	0.61	0.391	41
111	Makwanpur	Bakaiya Gaunpalika	2.66	45.89	0.18	0.46	0.285	106
112	Makwanpur	Bagmati Gaunpalika	2.7	46.31	0.18	0.46	0.289	105
113	Chitwan	Rapti Municipality	4.39	65.56	0.29	0.66	0.438	30
114	Chitwan	Kalika Municipality	4.38	65.07	0.29	0.65	0.436	31
115	Chitwan	Ichchha Kamana Gaunpalika	3.37	57.81	0.22	0.58	0.360	65

S.N.	Districts	Palika Name	Mean Years of Schooling	Adult Literacy Rate	Index of Mean Years of Schooling	Index of Adult Literacy Rate	Education Index	Rank
116	Chitwan	Bharatpur Metropolitan City	6.09	77.74	0.41	0.78	0.562	15
117	Chitwan	Ratnanagar Municipality	5.63	72	0.38	0.72	0.520	19
118	Chitwan	Khairahani Municipality	5.3	68.55	0.35	0.69	0.492	24
119	Chitwan	Madi Municipality	4.15	62.25	0.28	0.62	0.415	33

Source: Derived from NPHC 2011

APPENDIX V: LIFE EXPECTANCY INDEX

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
1	Dolakha	Gaurishankar Gaunpalika	68.603	0.727	91
2	Dolakha	Bigu Gaunpalika	66.92	0.699	109
3	Dolakha	Kalinchowk Gaunpalika	72.059	0.784	29
4	Dolakha	Baiteshwar Gaunpalika	71.376	0.773	35
5	Dolakha	Jiri Municipality	73.285	0.805	14
6	Dolakha	Tamakoshi Gaunpalika	69.673	0.745	69
7	Dolakha	Melung Gaunpalika	69.107	0.735	82
8	Dolakha	Shailung Gaunpalika	71.899	0.782	31
9	Dolakha	Bhimeshwar Municipality	72.142	0.786	27
10	Sindhupalchok	Bhotekoshi Gaunpalika	68.117	0.719	101
11	Sindhupalchok	Jugal Gaunpalika	75.8	0.847	4
12	Sindhupalchok	Panchpokhari Thangpal Gaunpalika	70.607	0.76	45
13	Sindhupalchok	Helambu Gaunpalika	68.458	0.724	96
14	Sindhupalchok	Melanchi Municipality	68.029	0.717	102
15	Sindhupalchok	Indrawoti Gaunpalika	69.699	0.745	70
16	Sindhupalchok	Choutara Sangachowkgadhi Municipality	70.487	0.758	49

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
17	Sindhupalchok	Balephi <i>Gaunpalika</i>	66.962	0.699	110
18	Sindhupalchok	Bahrabise Municipality	69.072	0.735	83
19	Sindhupalchok	Tripurasundari <i>Gaunpalika</i>	69.639	0.744	72
20	Sindhupalchok	Lisankhu Pakhar <i>Gaunpalika</i>	72.411	0.79	24
21	Sindhupalchok	Sunkoshi <i>Gaunpalika</i>	68.896	0.732	86
22	Rasuwa	Gosaikunda <i>Gaunpalika</i>	66.92	0.699	111
23	Rasuwa	Amachhodingmo <i>Gaunpalika</i>	66.53	0.692	112
24	Rasuwa	Uttargaya <i>Gaunpalika</i>	69.416	0.74	76
25	Rasuwa	Kalika <i>Gaunpalika</i>	70.966	0.766	40
26	Rasuwa	Naukunda <i>Gaunpalika</i>	73.013	0.8	19
27	Dhading	Rubi Valley <i>Gaunpalika</i>	68.919	0.732	87
28	Dhading	Khaniyabas <i>Gaunpalika</i>	69.232	0.737	80
29	Dhading	Ganga Jamuna <i>Gaunpalika</i>	71.065	0.768	38
30	Dhading	Tripurasundari <i>Gaunpalika</i>	71.168	0.769	36
31	Dhading	Netrawati Dabjong <i>Gaunpalika</i>	74.2	0.82	9
32	Dhading	Nilkantha Municipality	69.228	0.737	81
33	Dhading	Jwalamukhi <i>Gaunpalika</i>	73.343	0.806	13
34	Dhading	Siddhalek <i>Gaunpalika</i>	73.829	0.814	12
35	Dhading	Benighat Rorang <i>Gaunpalika</i>	68.251	0.721	98
36	Dhading	Gajuri <i>Gaunpalika</i>	71.7	0.778	34

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
37	Dhading	Galchi <i>Gaunpalika</i>	73.9	0.815	11
38	Dhading	Thakre <i>Gaunpalika</i>	67.412	0.707	105
39	Dhading	Dhumbenshi Municipality	72.774	0.796	20
40	Nuwakot	Dupcheshwor <i>Gaunpalika</i>	67.216	0.704	107
41	Nuwakot	Tadi <i>Gaunpalika</i>	73.233	0.804	15
42	Nuwakot	Suryagadhi <i>Gaunpalika</i>	70.985	0.766	41
43	Nuwakot	Bidur Municipality	70.481	0.758	50
44	Nuwakot	Kispang <i>Gaunpalika</i>	72.352	0.789	26
45	Nuwakot	Myagang <i>Gaunpalika</i>	77.09	0.868	2
46	Nuwakot	Tarakeshwor <i>Gaunpalika</i>	66.25	0.687	113
47	Nuwakot	Belkotgadhi Municipality	70.399	0.757	52
48	Nuwakot	Likhu <i>Gaunpalika</i>	75.42	0.84	5
49	Nuwakot	Panchakanya <i>Gaunpalika</i>	72.124	0.785	28
50	Nuwakot	Shivapuri <i>Gaunpalika</i>	69.994	0.75	63
51	Nuwakot	Kakani <i>Gaunpalika</i>	73.243	0.804	16
52	Kathmandu	Shankharapur Municipality	70.257	0.754	57
53	Kathmandu	Kageshwori Manohara Municipality	69.262	0.738	78
54	Kathmandu	Gokarneshwor Municipality	67.377	0.706	106
55	Kathmandu	Budhanilkantha Municipality	68.743	0.729	89

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
56	Kathmandu	Tokha Municipality	66.03	0.684	115
57	Kathmandu	Tarakeshwor Municipality	66.07	0.685	114
58	Kathmandu	Nagarjun Municipality	67.164	0.703	108
59	Kathmandu	Kathmandu Metropolitan City	68.573	0.726	92
60	Kathmandu	Kirtipur Municipality	70.553	0.759	48
61	Kathmandu	Chandragiri Municipality	68.483	0.725	93
62	Kathmandu	Dakshinkali Municipality	68.482	0.725	94
63	Bhaktapur	Changunarayan Municipality	70.587	0.76	46
64	Bhaktapur	Bhaktapur Municipality	71.025	0.767	39
65	Bhaktapur	Madhyapur Thimi Municipality	69.364	0.739	77
66	Bhaktapur	Suryabinayak Municipality	70.461	0.758	51
67	Lalitpur	Mahalaxmi Municipality	69.989	0.75	64
68	Lalitpur	Lalitpur Metropolitan City	70.252	0.754	58
69	Lalitpur	Godawari Municipality	70.239	0.754	59
70	Lalitpur	Konyosom Gaunpalika	65.73	0.679	117
71	Lalitpur	Mahankal Gaunpalika	71.921	0.782	32
72	Lalitpur	Bagmati Gaunpalika	70.601	0.76	47
73	Kavrepalanchok	Chauri Deurali Gaunpalika	79.9	0.915	1
74	Kavrepalanchok	Bhumlu Gaunpalika	71.902	0.782	33

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
75	Kavrepalanchok	Mandan Deupur Municipality	74.29	0.822	8
76	Kavrepalanchok	Banepa Municipality	70.871	0.765	42
77	Kavrepalanchok	Dhulikhel Municipality	69.875	0.748	67
78	Kavrepalanchok	Panchkhal Municipality	68.724	0.729	90
79	Kavrepalanchok	Temal <i>Gaunpalika</i>	69.444	0.741	75
80	Kavrepalanchok	Namobuddha Municipality	70.078	0.751	61
81	Kavrepalanchok	Panauti Municipality	70.663	0.761	44
82	Kavrepalanchok	Bethanchowk <i>Gaunpalika</i>	72.4	0.79	25
83	Kavrepalanchok	Roshi <i>Gaunpalika</i>	73.98	0.816	10
84	Kavrepalanchok	Mahabharat <i>Gaunpalika</i>	68.36	0.723	97
85	Kavrepalanchok	Khanikhola <i>Gaunpalika</i>	67.943	0.716	103
86	Ramechhap	Umakunda <i>Gaunpalika</i>	73.172	0.803	17
87	Ramechhap	Gokulganga <i>Gaunpalika</i>	72.627	0.794	21
88	Ramechhap	Likhu Tamakoshi <i>Gaunpalika</i>	72.007	0.783	30
89	Ramechhap	Ramechhap Municipality	74.55	0.826	7
90	Ramechhap	Manthali Municipality	72.629	0.794	22
91	Ramechhap	Khandadevi <i>Gaunpalika</i>	74.71	0.829	6
92	Ramechhap	Doramba <i>Gaunpalika</i>	68.22	0.72	100
93	Ramechhap	Sunapati <i>Gaunpalika</i>	76.5	0.858	3
94	Sindhuli	Dudhuli Municipality	70.899	0.765	43

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
95	Sindhuli	Phikkal Gaunpalika	72.639	0.794	23
96	Sindhuli	Tinpatan Gaunpalika	70.346	0.756	54
97	Sindhuli	Golanjor Gaunpalika	73.161	0.803	18
98	Sindhuli	Kamalamai Municipality	70.018	0.75	65
99	Sindhuli	Sunkoshi Gaunpalika	69.251	0.738	79
100	Sindhuli	Ghyanglekha Gaunpalika	68.851	0.731	88
101	Sindhuli	Marin Gaunpalika	67.611	0.71	104
102	Sindhuli	Hariharpurgadhi Gaunpalika	69.676	0.745	71
103	Makwanpur	Indrasarowar Gaunpalika	63.45	0.641	119
104	Makwanpur	Thaha Municipality	70.05	0.751	62
105	Makwanpur	Kailash Gaunpalika	68.965	0.733	84
106	Makwanpur	Raksirang Gaunpalika	70.273	0.755	55
107	Makwanpur	Manahari Gaunpalika	65.85	0.681	116
108	Makwanpur	Hetauda Sub-Metropolitan City	68.488	0.725	95
109	Makwanpur	Bhimphedi Gaunpalika	70.296	0.755	56
110	Makwanpur	Makwanpurgadhi Gaunpalika	65.65	0.678	118
111	Makwanpur	Bakaiya Gaunpalika	68.979	0.733	85
112	Makwanpur	Bagmati Gaunpalika	71.15	0.769	37
113	Chitwan	Rapti Municipality	69.599	0.743	73
114	Chitwan	Kailika Municipality	69.737	0.746	68

S.N	District	Palikas	Life Expectancy at Birth	Life Expectancy Index	Rank
115	Chitwan	Ichchha Kamana Gaunpalika	68.232	0.721	99
116	Chitwan	Bharatpur Metropolitan City	69.949	0.749	66
117	Chitwan	Ratnanagar Municipality	70.191	0.753	60
118	Chitwan	Khairahani Municipality	70.424	0.757	53
119	Chitwan	Madi Municipality	69.574	0.743	74

Source: Derived from NPHC 2011

APPENDIX VI: ESTIMATED HUMAN DEVELOPMENT INDEX

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
1	Dolakha	Gaurishankar Gaunpalika	0.431	105	0.387
2	Dolakha	Bigu Gaunpalika	0.434	102	0.388
3	Dolakha	Kalinchowk Gaunpalika	0.474	63	0.417
4	Dolakha	Baiteshwar Gaunpalika	0.467	70	0.426
5	Dolakha	Jiri Municipality	0.471	66	0.433
6	Dolakha	Tamakoshi Gaunpalika	0.456	83	0.415
7	Dolakha	Melung Gaunpalika	0.437	100	0.396
8	Dolakha	Shailung Gaunpalika	0.45	94	0.399
9	Dolakha	Bhimeshwar Municipality	0.539	25	0.516
10	Sindhupalchok	Bhotekoshi Gaunpalika	0.453	86	0.409
11	Sindhupalchok	Jugal Gaunpalika	0.446	97	0.373
12	Sindhupalchok	Panchpokhari Thangpal Gaunpalika	0.41	118	0.367
13	Sindhupalchok	Helambu Gaunpalika	0.42	110	0.373
14	Sindhupalchok	Melanchi Municipality	0.451	92	0.405

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
15	Sindhupalchok	Indrawoti Gaunpalika	0.452	89	0.391
16	Sindhupalchok	Choutara Sangachowkgadhi Municipality	0.484	51	0.431
17	Sindhupalchok	Balephi Gaunpalika	0.491	46	0.440
18	Sindhupalchok	Bahrabise Municipality	0.487	47	0.444
19	Sindhupalchok	Tripurasundari Gaunpalika	0.47	67	0.388
20	Sindhupalchok	Lisankhu Pakhar Gaunpalika	0.506	40	0.439
21	Sindhupalchok	Sunkoshi Gaunpalika	0.469	69	0.415
22	Rasuwa	Gosaikunda Gaunpalika	0.528	30	0.491
23	Rasuwa	Amachhodingmo Gaunpalika	0.423	109	0.370
24	Rasuwa	Uttargaya Gaunpalika	0.463	77	0.422
25	Rasuwa	Kalika Gaunpalika	0.473	65	0.429
26	Rasuwa	Naukunda Gaunpalika	0.414	116	0.351
27	Dhading	Rubi Valley Gaunpalika	0.398	119	0.341
28	Dhading	Khaniyabas Gaunpalika	0.432	104	0.376
29	Dhading	Ganga Jamuna Gaunpalika	0.454	84	0.397
30	Dhading	Tripurasundari Gaunpalika	0.476	60	0.439
31	Dhading	Netrawati Dabjong Gaunpalika	0.464	75	0.403
32	Dhading	Nilkantha Municipality	0.485	49	0.448
33	Dhading	Jwalamukhi Gaunpalika	0.45	95	0.407
34	Dhading	Siddhalek Gaunpalika	0.477	58	0.427

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
35	Dhading	Benighat Rorang Gaunpalika	0.483	52	0.450
36	Dhading	Gajuri Gaunpalika	0.466	72	0.432
37	Dhading	Galchi Gaunpalika	0.482	53	0.438
38	Dhading	Thakre Gaunpalika	0.461	78	0.424
39	Dhading	Dhunibenshi Municipality	0.493	45	0.463
40	Nuwakot	Dupcheshwor Gaunpalika	0.425	108	0.367
41	Nuwakot	Tadi Gaunpalika	0.452	90	0.411
42	Nuwakot	Suryagadhi Gaunpalika	0.453	87	0.392
43	Nuwakot	Bidur Municipality	0.537	26	0.516
44	Nuwakot	Kispang Gaunpalika	0.464	76	0.406
45	Nuwakot	Myagang Gaunpalika	0.486	48	0.424
46	Nuwakot	Tarakeswor Gaunpalika	0.426	107	0.367
47	Nuwakot	Belkotgadhi Municipality	0.454	85	0.410
48	Nuwakot	Likhu Gaunpalika	0.515	35	0.466
49	Nuwakot	Panchakanya Gaunpalika	0.466	73	0.415
50	Nuwakot	Shivapuri Gaunpalika	0.434	103	0.383
51	Nuwakot	Kakani Gaunpalika	0.46	80	0.410
52	Kathmandu	Shankharapur Municipality	0.518	33	0.492
53	Kathmandu	Kageshwori Manohara Municipality	0.622	9	0.611
54	Kathmandu	Gokarneshwor Municipality	0.62	11	0.607

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
55	Kathmandu	Budhanilkantha Municipality	0.635	8	0.635
56	Kathmandu	Tokha Municipality	0.643	4	0.645
57	Kathmandu	Tarakeshwor Municipality	0.588	16	0.577
58	Kathmandu	Nagarjun Municipality	0.619	12	0.615
59	Kathmandu	Kathmandu Metropolitan City	0.683	1	0.688
60	Kathmandu	Kirtipur Municipality	0.65	3	0.648
61	Kathmandu	Chandragiri Municipality	0.639	5	0.632
62	Kathmandu	Dakshinkali Municipality	0.568	21	0.541
63	Bhaktapur	Changunarayan Municipality	0.534	27	0.512
64	Bhaktapur	Bhaktapur Municipality	0.593	15	0.579
65	Bhaktapur	Madhyapur Thimi Municipality	0.598	14	0.596
66	Bhaktapur	Suryabinayak Municipality	0.583	17	0.576
67	Lalitpur	Mahalaxmi Municipality	0.636	6	0.628
68	Lalitpur	Lalitpur Metropolitan City	0.658	2	0.659
69	Lalitpur	Godawari Municipality	0.564	22	0.543
70	Lalitpur	Konjosom <i>Gaunpalika</i>	0.453	88	0.415
71	Lalitpur	Mahankal <i>Gaunpalika</i>	0.529	29	0.495
72	Lalitpur	Bagmati <i>Gaunpalika</i>	0.532	28	0.493
73	Kavrepalanchok	Chauri Deurali <i>Gaunpalika</i>	0.481	54	0.426
74	Kavrepalanchok	Bhumlu <i>Gaunpalika</i>	0.46	81	0.411

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
75	Kavrepalanchok	Mandan Deupur Municipality	0.525	31	0.480
76	Kavrepalanchok	Banepa Municipality	0.636	7	0.633
77	Kavrepalanchok	Dhulikhel Municipality	0.572	19	0.560
78	Kavrepalanchok	Panchkhal Municipality	0.546	24	0.502
79	Kavrepalanchok	Temal <i>Gaunpalika</i>	0.452	91	0.385
80	Kavrepalanchok	Namobuddha Municipality	0.522	32	0.474
81	Kavrepalanchok	Panauti Municipality	0.571	20	0.553
82	Kavrepalanchok	Bethanchowk <i>Gaunpalika</i>	0.511	38	0.469
83	Kavrepalanchok	Roshi <i>Gaunpalika</i>	0.499	43	0.446
84	Kavrepalanchok	Mahabharat <i>Gaunpalika</i>	0.436	101	0.390
85	Kavrepalanchok	Khanikhola <i>Gaunpalika</i>	0.461	79	0.397
86	Ramechhap	Umakunda <i>Gaunpalika</i>	0.503	41	0.460
87	Ramechhap	Gokulganga <i>Gaunpalika</i>	0.481	55	0.435
88	Ramechhap	Likhu Tamakoshi <i>Gaunpalika</i>	0.47	68	0.404
89	Ramechhap	Ramechhap Municipality	0.479	57	0.423
90	Ramechhap	Manthali Municipality	0.485	50	0.437
91	Ramechhap	Khandadevi <i>Gaunpalika</i>	0.465	74	0.413
92	Ramechhap	Doramba <i>Gaunpalika</i>	0.438	99	0.371
93	Ramechhap	Sunapati <i>Gaunpalika</i>	0.474	64	0.420
94	Sindhuli	Dudhouli Municipality	0.418	111	0.381

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
95	Sindhuli	Phikkal Gaunpalika	0.431	106	0.387
96	Sindhuli	Tinpatan Gaunpalika	0.441	98	0.402
97	Sindhuli	Golanjor Gaunpalika	0.476	61	0.445
98	Sindhuli	Kamalamai Municipality	0.5	42	0.474
99	Sindhuli	Sunkoshi Gaunpalika	0.451	93	0.419
100	Sindhuli	Ghyanglekha Gaunpalika	0.412	117	0.363
101	Sindhuli	Marin Gaunpalika	0.416	112	0.377
102	Sindhuli	Hariharpurgaghi Gaunpalika	0.416	113	0.378
103	Makwanpur	Indrasarowar Gaunpalika	0.477	59	0.429
104	Makwanpur	Thaha Municipality	0.517	34	0.476
105	Makwanpur	Kailash Gaunpalika	0.416	114	0.374
106	Makwanpur	Raksirang Gaunpalika	0.416	115	0.369
107	Makwanpur	Manahari Gaunpalika	0.467	71	0.421
108	Makwanpur	Hetauda Sub-Metropolitan City	0.6	13	0.582
109	Makwanpur	Bhimphedi Gaunpalika	0.514	36	0.470
110	Makwanpur	Makawanpurgadhi Gaunpalika	0.475	62	0.436
111	Makwanpur	Bakaiya Gaunpalika	0.45	96	0.402
112	Makwanpur	Bagmati Gaunpalika	0.459	82	0.419
113	Chitwan	Rapti Municipality	0.496	44	0.463
114	Chitwan	Kalika Municipality	0.512	37	0.479

S.N.	Districts	Palika Name	HDI	Rank	AHDI 25+
115	Chitwan	Ichchha Kamana Gaupalika	0.511	39	0.480
116	Chitwan	Bharatpur Metropolitan City	0.622	10	0.610
117	Chitwan	Ratnanagar Municipality	0.58	18	0.559
118	Chitwan	Khairahani Municipality	0.554	23	0.526
119	Chitwan	Madi Municipality	0.481	56	0.453

Source: Derived from NPHC 2011 and Estimated Income Index

APPENDIX VII: HUMAN DEVELOPMENT INDEX IN DESCENDING ORDER BY PALIKAS

7.1 HDI IN GAUNPALIKA

S.N	Quartile	District	Palikas	HDI
1	I	Lalitpur	Bagmati Gaunpalika	0.532
2	I	Lalitpur	Mahankal Gaunpalika	0.529
3	I	Rasuwa	Gosaikunda Gaunpalika	0.528
4	I	Nuwakot	Likhu Gaunpalika	0.515
5	I	Makwanpur	BhimpheDi Gaunpalika	0.514
6	I	Kavrepalanchok	Bethanchowk Gaunpalika	0.511
7	I	Chitwan	Ichchha Kamana Gaunpalika	0.511
8	I	Sindhupalchok	Lisankhu Pakhar Gaunpalika	0.506
9	I	Ramechhap	Umakunda Gaunpalika	0.503
10	I	Kavrepalanchok	Roshi Gaunpalika	0.499
11	I	Sindhupalchok	Balephi Gaunpalika	0.491
12	I	Nuwakot	Myayang Gaunpalika	0.486
13	I	Dhading	Benighat Rorang Gaunpalika	0.483
14	I	Dhading	Gaichhi Gaunpalika	0.482

S.N	Quartile	District	Palikas	HDI
15	I	Kavrepalanchok	Chauri Deurali Gaunpalika	0.481
16	I	Ramechhap	Gokulganga Gaunpalika	0.481
17	I	Makwanpur	Indrasarwar Gaunpalika	0.477
18	I	Dhading	Siddhalek Gaunpalika	0.477
19	I	Dhading	Tripurasundari Gaunpalika	0.476
20	II	Sindhuli	Golanjor Gaunpalika	0.476
21	II	Makwanpur	Makawanpurgadhi Gaunpalika	0.475
22	II	Dolakha	Kalinchowk Gaunpalika	0.474
23	II	Ramechhap	Sunapati Gaunpalika	0.474
24	II	Rasuwa	Kaika Gaunpalika	0.473
25	II	Sindhupalchok	Tripurasundari Gaunpalika	0.470
26	II	Ramechhap	Likhu Tamakoshi Gaunpalika	0.470
27	II	Sindhupalchok	Sunkoshi Gaunpalika	0.469
28	II	Makwanpur	Manahari Gaunpalika	0.467
29	II	Dolakha	Baiteshwar Gaunpalika	0.467
30	II	Nuwakot	Panchakanya Gaunpalika	0.466
31	II	Dhading	Gajuri Gaunpalika	0.466
32	II	Ramechhap	Khandadevi Gaunpalika	0.465
33	II	Dhading	Netrawati Dabjong Gaunpalika	0.464

S.N	Quartile	District	Palikas	HDI
34	II	Nuwakot	Kispang Gaunpalika	0.464
35	II	Rasuwa	Uttargaya Gaunpalika	0.463
36	II	Dhading	Thakre Gaunpalika	0.461
37	II	Kavrepalanchok	Khanikhola Gaunpalika	0.461
38	II	Nuwakot	Kakani Gaunpalika	0.460
39	III	Kavrepalanchok	Bhumlu Gaunpalika	0.460
40	III	Makwanpur	Bagmati Gaunpalika	0.459
41	III	Dolakha	Tamakoshi Gaunpalika	0.456
42	III	Dhading	Ganga Jamuna Gaunpalika	0.454
43	III	Sindhupalchok	Bhotekoshi Gaunpalika	0.453
44	III	Nuwakot	Suryagadhi Gaunpalika	0.453
45	III	Lalitpur	Konjosom Gaunpalika	0.453
46	III	Sindhupalchok	Indrawoti Gaunpalika	0.452
47	III	Kavrepalanchok	Temal Gaunpalika	0.452
48	III	Nuwakot	Tadi Gaunpalika	0.452
49	III	Sindhuli	Sunkoshi Gaunpalika	0.451
50	III	Dolakha	Shailung Gaunpalika	0.450
51	III	Makwanpur	Bakaiya Gaunpalika	0.450
52	III	Dhading	Jwalamukhi Gaunpalika	0.450

S.N	Quartile	District	Patikas	HDI
53	III	Sindhupalchok	Jugal Gaunpalika	0.446
54	III	Sindhuli	Tinpatan Gaunpalika	0.441
55	III	Ramechhap	Doramba Gaunpalika	0.438
56	III	Dolakha	Melung Gaunpalika	0.437
57	III	Kavrepalanchok	Mahabharat Gaunpalika	0.436
58	IV	Dolakha	Bigu Gaunpalika	0.434
59	IV	Nuwakot	Shivapuri Gaunpalika	0.434
60	IV	Dhading	Khaniyabas Gaunpalika	0.432
61	IV	Dolakha	Gaurishankar Gaunpalika	0.431
62	IV	Sindhuli	Phikkal Gaunpalika	0.431
63	IV	Nuwakot	Tarakeshwar Gaunpalika	0.426
64	IV	Nuwakot	Dupheshwor Gaunpalika	0.425
65	IV	Rasuwa	Amachhodingmo Gaunpalika	0.423
66	IV	Sindhupalchok	Helambu Gaunpalika	0.420
67	IV	Makwanpur	Raksirang Gaunpalika	0.416
68	IV	Sindhuli	Hariharpurgaghi Gaunpalika	0.416
69	IV	Makwanpur	Kailash Gaunpalika	0.416
70	IV	Sindhuli	Marin Gaunpalika	0.416
71	IV	Rasuwa	Naukunda Gaunpalika	0.414

S.N	Quartile	District	Palikas	HDI
72	IV	Sindhuli	Ghyanglekha Gaunpalika	0.412
73	IV	Sindhupalchok	Panchpokhari Thangpal Gaunpalika	0.410
74	IV	Dhading	Rubi Valley Gaunpalika	0.398

Source: Constructed Based on Appendix VI

7.2 HDI IN MUNICIPALITIES

S.N	Quartile	District	Palikas	HDI
1	I	Kathmandu	Kirtipur Municipality	0.650
2	I	Kathmandu	Tokha Municipality	0.643
3	I	Kathmandu	Chandragiri Municipality	0.639
4	I	Kavrepalanchok	Banepa Municipality	0.636
5	I	Lalitpur	Mahalaxmi Municipality	0.636
6	I	Kathmandu	Budhanilkantha Municipality	0.635
7	I	Kathmandu	Kageshwori Manohara Municipality	0.622
8	I	Kathmandu	Gokarneshwor Municipality	0.620
9	I	Kathmandu	Nagarjun Municipality	0.619
10	I	Bhaktapur	Madhyapur Thimi Municipality	0.598
11	I	Bhaktapur	Bhaktapur Municipality	0.593

S.N	Quartile	District	Palika	HDI
12	II	Kathmandu	Tarakeshwar Municipality	0.588
13	II	Bhaktapur	Suryabinayak Municipality	0.583
14	II	Chitwan	Ratanagar Municipality	0.580
15	II	Kavrepalanchok	Dhulikhel Municipality	0.572
16	II	Kavrepalanchok	Panauli Municipality	0.571
17	II	Kathmandu	Dakshinkali Municipality	0.568
18	II	Lalitpur	Godawari Municipality	0.564
19	II	Chitwan	Khairahani Municipality	0.554
20	II	Kavrepalanchok	Panchkhal Municipality	0.546
21	II	Dolakha	Bhimeshwar Municipality	0.539
22	II	Nuwakot	Bidur Municipality	0.537
23	III	Bhaktapur	Changunarayan Municipality	0.534
24	III	Kavrepalanchok	Mandan Deupur Municipality	0.525
25	III	Kavrepalanchok	Namobuddha Municipality	0.522
26	III	Kathmandu	Shankharapur Municipality	0.518
27	III	Makwanpur	Thaha Municipality	0.517
28	III	Chitwan	Kailika Municipality	0.512
29	III	Sindhuli	Kamalamai Municipality	0.500

S.N	Quartile	District	Pailkas	HDI
30	III	Chitwan	Rapti Municipality	0.496
31	III	Dhading	Dhunibensi Municipality	0.493
32	III	Sindhupalchok	Bahrabise Municipality	0.487
33	III	Dhading	Nilkantha Municipality	0.485
34	IV	Ramechhap	Manthali Municipality	0.485
35	IV	Sindhupalchok	Choutara Sangachowkgadhi Municipality	0.484
36	IV	Chitwan	Madi Municipality	0.481
37	IV	Ramechhap	Ramechhap Municipality	0.479
38	IV	Dolakha	Jiri Municipality	0.471
39	IV	Nuwakot	Belkotgadhi Municipality	0.454
40	IV	Sindhupalchok	Melanchi Municipality	0.451
41	IV	Sindhuli	Dudhuli Municipality	0.418

Source: Constructed Based on Appendix VI

7.3 HDI IN METRO/SUB-METROPOLITAN CITIES

S. N	District	Palikas	HDI
1	Kathmandu	Kathmandu Metropolitan City	0.683
2	Lalitpur	Lalitpur Metropolitan City	0.658
3	Chitwan	Bharatpur Metropolitan City	0.622
4	Makwanpur	Hetauda Sub-Metropolitan City	0.600

Source: Constructed Based on Appendix VI



Government of Province
Province Policy and Planning Commission
Province No. 3, Hetauda, Nepal
Phone: 057-525131, 523689