

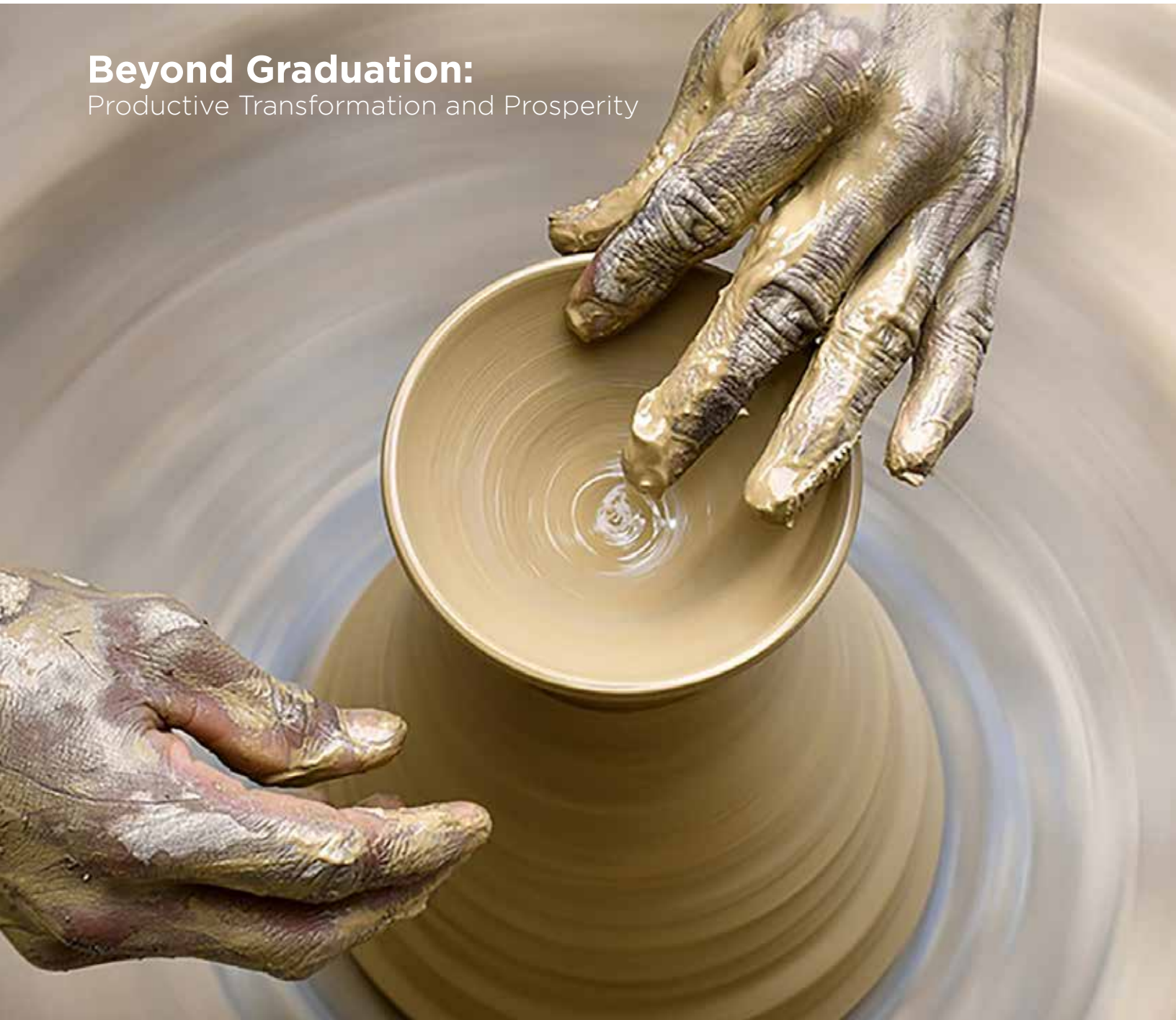


Government of Nepal  
National Planning Commission



# NEPAL HUMAN DEVELOPMENT REPORT 2020

**Beyond Graduation:**  
Productive Transformation and Prosperity







NEPAL

# HUMAN DEVELOPMENT REPORT 2020

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Government of Nepal  
National Planning Commission



**Nepal Human Development Report 2020**

**Beyond Graduation:** Productive Transformation and Prosperity

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**Government of Nepal**

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**DESIGNED AND PRINTED BY:**

**TheSquare** Design Communication Pvt. Ltd.  
Kupondole, Lalitpur, Nepal  
Tel: +977-1-5260963 / 5531063  
Email: [business@thesquare.com.np](mailto:business@thesquare.com.np)  
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Cover photo: Sushil Shrestha

Printed in Nepal.



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# Message

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Enhancing human capital lies at the heart of the development process. Human resources are the major drivers of development, and therefore, human capital formation is deemed key for the socioeconomic transformation of the country. The *Nepal Human Development Report 2020: Beyond Graduation: Productive Transformation and Prosperity* comes in the context of the upcoming graduation of Nepal from the least developed country category. Nepal has been committed to attaining a smooth, sustainable, meaningful and irreversible graduation, recognizing that for more inclusive development, it is important to look beyond the economic yardsticks and towards more ingrained social and environmental factors of development.

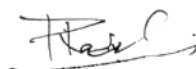
The 15th Five-Year Plan along with the Long-Term Vision has prioritized development and the full utilization of human capital potentials as one of four national goals for attaining the national aspiration of a *Prosperous Nepal and Happy Nepalis*. Human capital development has been prioritized in national policies and programmes as well as in the Medium-Term Expenditure Framework, which builds an interlinkage between the periodic plan and annual budget of the country. On a broader scale, an emphasis on human development has been key in the 2030 Agenda for Sustainable Development through its cross-cutting goals.

Out of the three criteria required for LDC graduation, Nepal has fulfilled two, the Economic Vulnerability Index and Human Assets Index, both in the 2015 and 2018 triennial review, such that Nepal fulfilled the criteria for graduation despite a low level of gross national income per capita. Due to economic and structural gaps, and vulnerabilities stemming from natural disasters, Nepal's graduation was deferred by the Committee for Development Policy in 2018. A sustainable graduation strategy in the wake of a possible graduation is thus imperative. This report delves into the ways forward for the country to utilize existing mechanisms and smoothly embark on a new developmental journey.

This report focuses on assessing the present status of human development at both the national and provincial levels, exploring a transitional strategy to graduation after assessing the likely implications of LDC graduation on international trade and development finance, and evolving pathways and strategies of sustainable human development beyond graduation. The report has explored strategic issues and alternatives for driving the economic sectors that contribute to the productive transformation of the economy. Ways to revamp economic policies for their tangible contributions to pathways to productive transformation have also been highlighted. Understanding full well the necessity for a more gender-inclusive development process, the report has examined human development from gender perspectives too.

The report's findings and strategies for ways forward are all the more important in the current context brought by the COVID-19 pandemic. The pandemic has adversely affected vulnerable segments of society, leading to higher income inequality, exposing our preexisting vulnerabilities in the health sector and increasing the resource gap. In addition, it has severely affected the education sector, undermining learning potential in the short run and foreshadowing major human capital losses in the long run. Building a resilient future is crucial to emphasize in the immediate as well as post-graduation phase. Improved support measures for graduating countries such as Nepal are important, and the report sheds light on these.

Finally, I would like to express gratitude to the members, member-secretary, joint secretaries and key officials of the National Planning Commission, who have played an instrumental role in preparing this flagship document. I would also like to thank the study team and UNDP for their involvement in crafting this report.



**Prof. Dr. Puspa Raj Kadel**  
Vice-Chair





# Forewords

Nepal has been publishing the *Nepal Human Development Report* since 1998, with the focus shifting considering the needs of the country. The last *Nepal Human Development Report* in 2014 focused mainly on the human capability approach to development. Since then, profound changes have occurred in the political, economic, social and governance spheres. With the promulgation of the new Constitution in 2015 and its successive enforcement, the country has moved to a federated political system with three levels of government. With this major change, Nepali society, which was under the strain of a deep-rooted feudal history and culture, has been changing. The Constitution guaranteed the fundamental rights of the people. The adoption of three levels of democratic government now has rippled through different spheres of development and human life. Therefore, the *Nepal Human Development Report 2020: Beyond LDC Graduation: Productive Transformation and Prosperity* has focused on how Nepal could meaningfully advance towards sustainable human development at a faster pace.

The Government of Nepal has set a Long-Term Vision of a *Prosperous Nepal and Happy Nepali*. The current 15th Five-Year Plan has internalized the Sustainable Development Goals (SDGs) in its policies and programmes, and commits to transforming Nepal into a developing country category from a least developed country (LDC). This report comes at a time when the country is making efforts to graduate from the LDC category, achieve the SDGs by 2030 and enhance the creative power of its people.

Since Nepal is a small landlocked country, there is a deep realization that it has to constantly keep in mind the development taking place in the two big neighbouring countries of China and India, and the rest of South Asia. The report offers comparisons in terms of achievements on the Human Development Index. It assesses human development from a gender perspective, taking political, economic and social dimensions into account. Nepal's overall status on the LDC graduation criteria is appraised based on the most recent data available from the provinces; and variations and gaps across provinces are assessed for the first time.

While the report was in progress, the global COVID-19 pandemic erupted, and the report had to be delayed to reflect information and impacts related to the pandemic within the country. Therefore, the report also highlights the impacts of COVID-19 and its likely consequences in the short, medium and long term, and makes suggestions for strategies to cope with the health, humanitarian and economic crises, which are very adversely affecting critical dimensions of human development and LDC graduation criteria.

The key messages of the report are: Despite overall notable progress in human development, disparities in human development achievements are persistent. The tough work for the country now is building effective institutions in a newly federated system; enhancing an independent judiciary; achieving efficient public services in education, health and transport; and upholding accountability. With LDC graduation, Nepal faces potentially high risks with regard to overall export loss and attrition in the level of concessional aid, and therefore needs to make structural adjustments and improve its development strategies to achieve human development in a more equitable and sustainable way. This includes tackling issues such as consumption demand, increasing the purchasing power of a larger segment of the population, employment generation, wages and distributional effects, and overall investment in the development process.

I had the opportunity to go through the report and provide inputs. While the publication was delayed due to the pandemic, I thank all of those involved in its preparation and finalization.



**Dr. Krishna Prasad Oli**  
Member

# Forewords

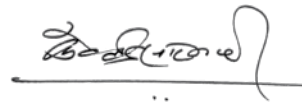
The development of a country largely depends on the productive abilities of its citizens. The enhancement of human capacities and their optimum utilization are therefore vital for achieving national prosperity. *The Nepal Human Development Report 2020: Beyond Graduation: Productive Transformation and Prosperity* navigates pathways for Nepal to graduate from the least developed country status to a developing one. This will contribute to Nepal's aspiration for a *Prosperous Nepal and Happy Nepali* set by the 15th Five-Year Plan along with the Long-Term Vision. Among others, building productive capacity, enhancing entrepreneurial and technological competence, strengthening production and market linkages, and proficient development governance have been identified as key drivers and strategies. These will also be instrumental in achieving the all-encompassing and overarching goals of sustainable development.

The report presents a rigorous analysis of the socio-economic spectrum of the country, using available data across the country and across time, including a province-wise analysis. The findings have shown that some provinces are further behind than others in human and overall development. The analysis could be useful for policymakers, practitioners and other development stakeholders to formulate policies and programmes with an efficient allocation of available resources, and fulfil the aspirations of the 2030 Agenda for Sustainable Development in 'leaving no one behind' and 'reaching the furthest behind first'.

The report uncovers inequalities across Nepal, particularly within some provinces, denoting a wide variation in productive capabilities and opportunities. The report also suggests narrowing these gaps with a more radical strategic shift in both the supply and demand side of the economy, specifically focusing on complementary investment in empowering people through voice and choice, as well as the accountability of all levels of decision-making towards an empowerment agenda.

The report appears at an unprecedented time, when not only Nepal but the entire world is struggling with the COVID-19 pandemic, which has slowed development momentum globally, with a high risk of fallback from a high growth trajectory. The present generation needs to battle to overthrow this by using all of its capacity and endeavouring to transform our future.

I would like to extend my appreciation to the Steering Committee members, and peer reviewers of this report. I would also like to thank National Planning Commission colleagues, the study team, UNDP and all others who contributed to the preparation of the report, directly and indirectly.



**Kewal Prasad Bhandari**  
Secretary



# Forewords

Nepal's commitment to graduate from the status of Least Development Country (LDC) by 2022 shows country's aspiration for development and prosperity. As Nepal is approaching the LDC graduation deadline, the 2020 Human development Report of Nepal with the theme on LDC graduation is very timely and I believe is very useful to help the country prepare a plan for a smooth and irreversible transition.

The LDC graduation is not just a technical exercise, rather it is a process of taking the country to the next level of development discourse with expanded opportunities and choices for the citizens - the core of the human development framework. Hence the progress on human development is fundamental for the sustainable graduation. Nepal's status of graduation is quite unique. Nepal is the first country that became eligible with two non-income criteria. This is a matter of a concern from the sustainability perspective. The transition plan should consider this putting human development at the center.

It gives me immense satisfaction that Nepal has largely integrated human development concept in its development pathways since the first National Human Development Report was published in 1998. The five-year development plans and development strategies of Nepal have consistently emphasized the need for enhancing human capabilities with significant investments in education and health. This is precisely the reason that despite low levels of economic growth, Nepal achieved many targets of Millennium Development Goals (MDGs). Nepal also has included the value and the status of the Human development Index (HDI) as one of the criteria for the inter-governmental fiscal transfer - grant from Federal government to the provincial and local governments. These actions bear testimony to strong commitment of Nepal to human development. It is pertinent to mention the Sustainable Development Agenda 2030 and the Sustainable Development Goals (SDGs), to which Nepal has made a strong commitment. The human development achievements of Nepal has not only help the country achieve LDC graduation, but has also provided a solid foundation for the achievement of SDGs by 2030.

This 2020 Human Development Report of Nepal highlights that while Nepal has made notable progress on overall human development, significant disparities still exist in the form of gender, social groups and location. As denotated by several stakeholders during the provincial consultations, possessing robust evidence and disaggregated data is not only a sine qua non to capture disparities and to inform policies, laws, programmes and budgets of federal, provincial and local governments for a smooth transition from the LDC status, but above all, in achieving the 2030 Agenda targets, thus guaranteeing Nepal's full commitment to the principle of "Leave no one behind".

The report also alerts that in the post-graduation era, Nepal faces potential export losses and erosion in concessional aid, although reductions may not be very high in the short to medium term. Other risks may stem from less favourable bilateral aid terms and the phasing out of some United Nations mechanisms and other supports. A very robust transitional strategy for graduation is required to help minimize risks and maximize gains. The COVID-19 pandemic does pose a big challenge to overall human development in Nepal. For the first time in 30 years, the progress on HDI is likely to be negative.

It is therefore important for Nepal to consider all the challenges while developing transition plan for graduation. UNDP stands ready to partner with the Government of Nepal to promote human development for the sustainable and irreversible LDC graduation as well as for the achievement of SDGs by 2030. I am sure that with collaboration of all development actors of Nepal, the country will be able to pursue a human development trajectory, which would in the ultimate analysis would leave no one behind.



**Ayshanie Medagangoda-Labé**  
 Resident Representative - UNDP Nepal

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# Acknowledgements

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*The Nepal Human Development Report 2020* is the fifth in a series, starting with the first such report in 1998. The current report is a joint effort of the National Planning Commission and UNDP, building on broad consultations. The analysis and major findings and policy recommendations are those of the authors, however.

Preparation of the report started in early 2019 after the formation of a report Steering Committee chaired by the Hon'ble Vice Chairman of the National Planning Commission. It drew on wider consultation to define the major theme of the report.

The report looks at graduation from Nepal's current status as an LDC, drawing a link to human development as highly pertinent in the changed political landscape. The first federal Government formed after the new Constitution has set *Prosperous Nepal and Happy Nepali* as its long-term agenda. It has committed to Nepal graduating from the LDC category by 2024 and accomplishing the SDGs before 2030.

In the early 1970s, countries such as Nepal were categorized as LDCs on the grounds that, in addition to very low levels of socioeconomic development, they confront multiple structural impediments and vulnerabilities. Rapid transformation through human capability development and productive use of economic resources has been regarded as crucial for overcoming deprivation, inequality, insecurity and poor livelihoods, and breaking out of the low-development trap. A successful and irreversible graduation from the LDC category largely depends on both marked improvement in human development and productive transformation that is fast and equitable, leaving no one behind.

Against this backdrop, this Nepal Human Development Report takes up the theme: ***Beyond Graduation: Productive Transformation and Prosperity***. As Nepal has already met two global criteria to qualify for graduation by 2024, on human assets and economic vulnerability, the report assesses the implications of graduation from the standpoint of an irreversible and sustainable graduation. Equally important, it apart from assessing gender development separately estimates human development indices and graduation criteria by provinces, considering disparities, gaps and imbalances towards identifying the best pathways to attain the national prosperity agenda and the SDGs in a more equitable way.

The draft of the report was ready before the outbreak of the COVID-19 pandemic. Some delays in publication resulted to accommodate initial quick assessments of the pandemic's likely impact on both human development and graduation criteria, and to explore ways to minimize fallout, and reinvigorate the transformation and prosperity agenda.

Before initiating the development and drafting of the report, the concept and proposed outline were presented to the consultative meeting organized by the National Planning Commission and UNDP in August 2019. This was followed by wider consultations in all provinces, coordinated by the provincial planning commissions. The draft report was improved after receiving suggestions from peer reviewers and valuable feedback from the UNDP. Inputs from Selim Jahan, former director of UNDP's global Human Development Report Office, were highly useful as well. The final version of the report was presented to the Steering Committee in August 2020, and finalized after incorporating major

suggestions provided by Steering Committee members. Gretchen Luchsinger performed a commendable job in editing the report.

Throughout the preparation process, the report study team worked in close consultation with the National Planning Commission and UNDP. We would like to acknowledge the many contributions made by both. The guidance and support of the Hon'ble Vice-chairman; coordination and feedback by the Hon'ble Member Dr. Krishna Prasad Oli; and inputs from other members of the National Planning Commission helped bring the report to its final form. We would also like to acknowledge the valuable contributions of Steering Committee members representing Federal Government ministries, provincial planning and policy commissions, the private sector, civil society organizations and academia.

The report would not have been possible without continuous support from the National Planning Commission. We express our gratitude to Secretaries Laxman Aryal and Kewal Prasad Bhandari, Joint Secretaries Khomraj Koirala and Biju Kumar Shrestha, Program Directors Dr. Chakra Pani Acharya, Narayan Khatiwada, Dr. Narayan Raj Poudel and other officials for their valuable contributions.

The support and guidance of UNDP Resident Representative Ayshanie Medagangoda-Labé and Policy Advisor Dharma Swarnakar was equally invaluable. Our thanks also go to Human Development Report Office and UNDP Bangkok Regional Hub for their inputs and suggestions.

Finally, we thank UNDP-funded Accelerating Implementation of SDGs in Nepal (AISN) for all the support throughout the process. We also thank TheSquare Design Communication Pvt. Ltd. for excellent designing and printing services.





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# Acronyms

CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CTVET	Council for Technical and Vocational Education and Training
DAC	Development Assistance Committee
DFQG	Duty-free, quota-free
EIF	Enhanced Integrated Framework
EVI	Economic Vulnerability Index
FAO	Food and Agriculture Organization
GATTS	General Agreement on Tariffs and Trade
GDI	Gender Development Index
GDP	Gross domestic product
GII	Gender Inequality Index
GLOF	Glacial lake outburst flood
GNI	Gross national income
GSP	Generalized System of Preference
HAI	Human Assets Index
HDI	Human Development Index
HS	Harmonized System
IFAD	International Fund for Agricultural Development
IHDI	Inequality-adjusted HDI
ILO	International Labour Organization
IMF	International Monetary Fund
ITU	International Telecommunications Union
kWh	Kilowatt hours
LDC	Least developed country
LDCF	Least Developed Countries Fund
MICS	Multiple Indicator Cluster Survey
MPI	Multidimensional Poverty Index
MW	Megawatts
NDHS	Nepal Demographic Health Survey
NEA	Nepal Electricity Authority
NERC	Nepal Electricity Regulatory Commission
NRs.	Nepal rupees
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OPHI	Oxford Poverty and Human Development Initiative
PPP	Purchasing power parity
RISE	Regulatory Indicators for Sustainable Energy
SAARC	South Asian Association for Regional Cooperation
SDG	Sustainable Development Goals

SITC	Standard International Trade Classification
SLC	School-leaving certificate
STDF	Standards and Trade Development Facility
TRIMS	Trade-related investment measures
TRIPS	Trade-related aspects of intellectual property rights
TVET	Technical and vocational education and training
UNCDF	United Nations Capital Development Fund
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
WFP	World Food Programme
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WITS	World Integrated Trade Solution
WTO	World Trade Organization





# Overview

Profound changes have taken place in Nepal since the last Nepal Human Development Report in 2014. The 2015 Constitution and subsequent elections under the new federal system of governance restored stability and led to reforms with far-reaching implications for democracy, the economy, institutions and the people.

The decentralized delegation of authority and resources to the provincial and local levels has deepened democracy and strengthened the federal structure. Women hold at least a third of seats in Parliament, and various ethnic groups, minorities and deprived communities are fairly represented. Guarantees of fundamental economic and social rights have included provisions for minimum employment and food security. A substantial expansion of social protection has encompassed adding private sector workers through a contributory social insurance programme.

The Government's long-term agenda, Prosperous Nepal and Happy Nepali, envisions Nepal becoming a developed country in 25 years. It has been integrated in the 15th Five-Year Plan, which also incorporates the Sustainable Development Goals (SDGs) and commits to Nepal graduating from the least developed country (LDC) category by 2024. Against this background, the 2020 Nepal Human Development Report focuses on how Nepal can achieve a smooth, meaningful and irreversible graduation, and accelerate progress towards sustainable human development.

# 25 y

A long-term vision of a Prosperous Nepal and Happy Nepali centres on human development, and aims to transform Nepal into a developed country in 25 years, as envisioned in the current 15th Five-Year Plan.

The report starts in [Chapter 1](#) by identifying mutually reinforcing key drivers and strategies of sustainable graduation and human development that could enhance attainment of the SDGs by their 2030 endpoint. It elaborates deep-rooted structural and other barriers that trap Nepal in underdevelopment as well as major breakthroughs required to move forward. The latter include identifying and cultivating priority sectors for the productive transformation of the economy, and minimizing shocks and vulnerabilities through developing and using productive resources more efficiently, equitably and sustainably.

In [Chapter 2](#), the report assesses Nepal's progress in human development, as measured by a series of indices, and based on new estimates with recent data. A comparison of performance with other South Asian countries is presented, and for the first time, calculations of human development indices at the provincial level highlight why some provinces are lagging behind others. An assessment of multidimensional poverty between 2011 and 2014 tracks the changing pattern in the intensity of poverty and deprivation at both the national and provincial levels. [Chapter 3](#) considers human development specifically from a gender perspective, taking political, economic and social dimensions into account.

[Chapter 4](#) delves into Nepal's overall status on criteria established for LDC graduation, presenting recent data for verifying eligibility by 2024. For the first time, provincial variations and gaps in the criteria are explored. The chapter traces the underlying reasons that most provinces do not meet all of the criteria. Since one of the implications of graduation would be a likely erosion in international support measures in trade and development finance, [Chapter 5](#) evaluates these based on quantitative and qualitative analysis. It reviews experiences from other countries that have graduated, looking at the transitional and long-term strategies they pursued during and after graduation.

Appropriate strategies to enhance human capabilities, reduce vulnerabilities and build

resilience, all of which augment human development, are presented in [Chapter 6](#). Their role in building the productive capacity of the economy and the identification of the most transformative sectors is then analysed in [Chapter 7](#). It also presents ideas on revamping economic policies and reforming institutions and governance to make tangible contributions to productive transformation of the economy. The discussion emphasizes how to strengthen overall equity and provincial balances in human development.

[Chapter 8](#) presents conclusions and ways forward, including transitional strategies for LDC graduation. An epilogue on the likely ramifications of the COVID-19 pandemic rounds out the report with short- to long-term strategies to cope with a combined health, humanitarian and economic crises that could reverse human development gains and derail prospects for graduation.

## Key Messages

- **Notable progress in human development has taken place in Nepal. However, across gender, region and local groups, large disparities persist.** Gaps are evident across and within provinces, and in all three dimensions of human development—a long and healthy life, knowledge and a decent standard of living. Remarkable gender inequality remains and has heightened a variety of human development disparities. Reoriented human development strategies should strongly focus on achieving gender equality and reducing interprovincial disparities, including through provincial and local governments playing more effective roles.

- **Notable progress has been made on the protection and promotion of women's rights and gender equality. Still, deeply rooted sociocultural norms impede better outcomes.** The depths of gender inequality is much broader than what human development indices capture. Gender transformative policies need to aim at long leaps forward for women in the economy, politics and society at large, shifting norms as well as the structures that perpetrate discrimi-

nation. Expanding women's capabilities, opportunities and agency will accelerate empowerment.

- **Nepal meets the criteria for LDC graduation despite its per capita income remaining below the threshold.** It has satisfied two criteria associated with human assets and economic vulnerability, but its low per capita income remains a major challenge for graduation to be sustainable. Structural impediments to the productive transformation of the economy combine with multiple vulnerabilities, including natural and trade shocks, a landlocked geography, high inequality, climate risks, a largely informal labour market, and weak governance and institutions. Ensuring graduation is irreversible requires revamping development to achieve greater productivity while mitigating multiple risks.
- **In graduating, Nepal faces potential export losses and erosion in concessional aid,** although reductions may not be very high in the short to medium term. In trade, besides the possible reduction in some exports, Nepal may experience constraints on diversifying exports due to high tariffs, loss of flexibility in the implementation of the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement, limited flexibilities to promote infant industries, and loss of LDC-specific decisions under the Doha Round negotiations. These factors may pose additional challenges to industrialization and compound problems related to protecting public health and preserving rich stores of biodiversity. Others risks stem from less favourable bilateral aid terms and the phasing out of some United Nations mechanisms and other supports. There is scope for new opportunities in the postgraduation period, however. These come from larger inflows of foreign direct investment, among others. A very robust transitional strategy for graduation would help minimize risks and maximize gains.
- **Structural shifts and radical changes in development strategies can speed up human development, making it equitable and sustainable.** This is also key for a success-

ful LDC graduation. Such changes would entail transforming the structure of the economy to make the most of productive resources, and reduce poverty and inequality. Important elements include improving entrepreneurial capabilities, and forging production and market links. Streamlining and reforming institutions and improving governance should make them highly responsive, accountable and results-oriented in putting policies into practice. On the other hand, inducing changes in the structure of investment and consumption demand could enhance productive capacity and increase consumption of large segments of the population currently left behind through decent employment, wages and distributional effects.

- **Enhancing the catalytic role of provincial and local tiers of governance would minimize large spatial development gaps, reduce vulnerabilities and ensure sustainable human development.** In line with the principle of federalism, including fiscal federalism, a strategic shift in the roles and capacities of provinces and localities would unleash their vital contributions to more equitable and sustainable human development and prosperity.

“ **Structural shifts and radical changes in development strategies can speed up human development, making it equitable and sustainable. This is also key for a successful LDC graduation.** ”

- **A comprehensive relief package accompanied by a medium- to long-term strategic plan to mitigate the COVID-19 crisis and build resilience is imperative.** Although this report was prepared before the outbreak of COVID-19, a quick assessment of the implications of the pandemic based on the latest information indicated that it has already severely undercut critical dimensions of human development and LDC graduation. Given acute pre-pandemic vulnerabilities, the life and livelihood risks of people in general

and informal sector workers, women and other vulnerable populations in particular have markedly increased. The pandemic has confirmed that enhancing human development in a more equitable way protects lives and boosts resilience. It has opened opportunities to bring about major shifts in development discourse and priorities. A more aggressive health programme to combat the virus and reach the most vulnerable should be combined with a comprehensive relief programme and a robust economic stimulus to revive the economy. A medium to long-term strategic plan should aim to accelerate economic momentum, advance productive transformation and prevent disruption in the development of human capabilities.

- **The pandemic requires a fresh review of the graduation plan.** With sharp deceleration in economic growth, reductions in human assets and intensification of economic vulnerability, Nepal faces a changed situation. This necessitates a closer review of the scheduled graduation plan. Enhancing socioeconomic and environmental resilience by reducing vulnerabilities will likely be a crucial part of the transitional strategy.
- **It could be time for a universal minimum income to cope with magnified vulnerability.** A comprehensive strategy could integrate social protection, social security and employment-related programmes, which are currently operating in isolation, and establish a guaranteed income threshold sufficient to live on. By helping to reduce vulnerabilities, especially among the most disadvantaged people across provinces, such a groundbreaking approach will take Nepal much farther down the road to equitable prosperity and sustainable development, and towards fully realizing its hopes for LDC graduation.













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## Chapter 1

# Introduction

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## Background

The human development approach has inspired a revolution in development thinking and practice, shifting discourse from strictly material progress to a broader notion of human well-being. Above all, human development aims for people to have a happy life built on three dimensions, health, knowledge and a decent standard of living. This depends on enhancing people's capabilities, ensuring they find opportunities to use them, and expanding substantive freedoms to live in ways they value.

Human development has an evaluative aspect and an agency aspect.<sup>1</sup> The evaluative aspect is concerned with appraising improvements in human lives as an explicit development objective, and using human achievements as key indicators of progress. The agency aspect is concerned with what human beings can do to achieve such improvements, particularly through policy, structural and institutional reforms and changes, and amid shifting political, social and economic conditions.

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<sup>1</sup> For details, see Sen 2002.

Enhancing human capabilities, choices and freedoms must evolve with changing circumstances, and in line with people's values, demands and aspirations. In the past, the focus was primarily on basic capabilities such as access to primary education and basic health as well as raising minimum per capita income. Today, with the advancement of information and communication technology, access to the Internet and freedom of general communication have increasingly become important means to enhance capabilities. These link to human rights, including rights to freedom of opinion and expression. Realization of rights is in turn influenced by the political milieu. Changes in climate that influence livelihoods, well-being and human rights have also now come to the forefront, as has understanding that enhancing capabilities in an equitable way will determine the depth and sustainability of human development.<sup>2</sup> It has intergenerational ramifications as well.

Human development stresses brokering simultaneous opportunities for people to realize a decent standard of living. In many cases, this requires breakthroughs in development strategies, policy discourse and priorities, in tandem with minimizing or removing structural and institutional impediments to greater productive capacity and structural transformation. Particularly in least developed countries (LDCs) like Nepal,<sup>3</sup> building productive capacities and advancing structural transformation are critical to accelerating human development in a sustainable manner.<sup>4</sup> Drivers of productive capacity in the LDCs are diverse and wide-ranging, encompassing enhanced human and physical capabilities; the mobilization and more productive use of resources; the strengthening of technological, institutional and entrepreneurial capabilities; and the bolstering of production and market links domestically and externally.<sup>5</sup>

Moving up the ladder of human development is critical to moving out of the LDC category, first defined in 1971 as a group of low-income

countries with structural handicaps making them likely to remain poor. At the same time, a decisive focus on enhancing productive capacity, transforming the economy and reducing vulnerabilities can expedite and sustain human development. Such two-way links reflect the similarity between human development measures and the formal criteria set by the UN Committee for Development Policy for LDC graduation. Two of the three graduation criteria, per capita gross national income (GNI) and the Human Assets Index (HAI), overlap with all three dimensions of the Human Development Index (HDI). The third criterion of LDC graduation is linked to economic vulnerability, reflecting prospects for improving human development in a manner than can be sustained over time.

Human development is also crucial for timely accomplishment of the globally agreed 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). Both have close ties and commonalities. They follow principles of universalism; human development emphasizes enhanced freedoms for every human being, while the 2030 Agenda states that no one should be left behind. Both share the same fundamental concerns: eradicating extreme poverty, ending hunger, reducing inequality and realizing gender equality, among others. Both have sustainability as a core objective.<sup>6</sup>

While rapid progress on human development can make significant contributions to achieving both sustainable LDC graduation and the full promise of the 2030 Agenda, the outbreak of COVID-19 and its continued devastating tolls worldwide have posed new challenges. The pandemic has exposed deficient and fragile health systems and economies rooted in a dominant global economic system intensifying inequality, exclusion and insecurity, and undermining the role of the State. Human development is more critical than ever in coping with the disease and its consequences, and finding ways to sustain human well-being and resilience.

<sup>2</sup> UNDP 2019.

<sup>3</sup> UNCTAD 2016.

<sup>4</sup> UN 2017.

<sup>5</sup> UNCTAD 2006 and 2016.

<sup>6</sup> UNDP 2016.



## The Human Development Reports and development discourse in Nepal

Nepal's series of National Human Development Reports have advanced a people-centric development discourse in the country for over two decades. Development plans, programmes and budgetary policies have increasingly given higher priority to human development. The reports have propelled this shift, while supporting a democratic process that strengthens policy coordination, and brings people's voices into decision-making.

The first Nepal Human Development Report in 1998 took a political economy perspective, focusing on the human development standing of various socioeconomic groups. The report examined the roles of basic development structures and processes, natural and human resources, the economy, polity and culture in human development. It recommended actions to reorient policies around human development.

The 2001 report examined poverty reduction and governance. It concluded that the persistence of poverty was due to weak governance institutions and ineffective implementation of programmes and policies. Major recommendations included administrative and fiscal decentralization and the strengthening of local governance, including through partnerships with non-governmental organizations and the empowerment of marginalized groups.

In 2004, the report exclusively focused on poverty reduction from an empowerment perspective, and emphasized equal opportunities for all. It advocated building empowerment through three pillars: people-responsive state institutions, removal of social barriers and discrimination, and stronger local organizational capacity and social capital.

The 2009 report took up state transformation and human development, indicating that

the persistence of inequality in human development was both the cause and effect of exclusion. The report provided different options, particularly for state restructuring and reforming the political system to address exclusion. A 10-point agenda for federalism was proposed, aimed at fostering social justice, inclusion and participation for lasting peace and human development.

Analysis of the spatial dimensions of productive abilities was the theme of the 2014 report. It assessed both potential and actual capacities, at different, interrelated levels. Based on measures of potential abilities, the report suggested various means to enhance the capacity of the Government for orchestrating high and inclusive growth. It called for pursuing policies to narrow regional inequalities in human development and recommended a concerted effort to help lagging regions catch up. It urged expansion of inclusive policies, prioritizing urban management and rural-urban links, and tapping opportunities presented by the demographic dividend. The report suggested that triangulating both regional equalities and demographic dividends might be relevant in setting a comprehensive federal development agenda for bolstering productive ability.

## Prosperity, human development and graduation

After the promulgation of Nepal's New Federal Constitution in 2015, and its firmer grounds for political stability as well as guarantees of fundamental rights and empowerment, the national agenda has been to usher in a new era of prosperity and human well-being. A long-term vision of a Prosperous Nepal, Happy Nepali' centres on human development, and aims to transform Nepal into a developed country in 25 years, as envisioned in the current 15th Five-Year Plan.<sup>7</sup> In addition to integrating the SDGs in policies and programmes, the plan further commits to Nepal's graduation from the LDCs by 2024.

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<sup>7</sup> NPC 2019.

Sweeping changes and reforms have either been made or are underway on political, governance, economic and social fronts in the aftermath of the new Constitution.<sup>8</sup> Various acts are in place to uphold economic and social rights. The federal governance system is being strengthened through the delegation of specific power and authority to all three tiers, the federation, provinces and local levels. This is deepening democracy, enhancing people's participation in development and fostering their ownership of the outcomes. Women are guaranteed at least 33 percent of parliamentary seats; other provisions ensure the participation of people from various ethnic and minority groups, deprived communities and backward areas.



**Nepal's has already fulfilled two out of the three criteria for LDC graduation, namely, on human assets and economic vulnerability. While it is eligible for graduation, given a host of critical risks, it has decided to graduate only by 2024.**

A law upholding a minimum employment guarantee has been enacted, and a universal social protection programme, among the first in South Asia, has expanded substantially in recent years. The scheme is now open to private sector workers through a contributory social insurance programme. Various insurance schemes in several sectors are underway with a priority being health insurance to widen coverage and improve access. Along with increased access to health and education and the development of physical infrastructure, economic and governance reforms are also a policy focus, towards boosting competitive strength and productivity, transforming the economy and improving development outcomes.

The country's resource endowments, competitive strengths and future potential in several spheres, together with progress on various socioeconomic fronts and improved growth performance in recent years, suggest a bright future. Improving human development level has been notable at the aggregate level, with Nepal's score reaching 0.579 in 2018, higher than the LDC average.<sup>9</sup> This is largely due to successes in education and health. The average multidimensional and consumption poverty levels have fallen considerably, to 28.6 and 18.7 percent respectively in 2018,<sup>10</sup> while in the last three fiscal years, the average economic growth rate has been around 7.3 percent, a rate far higher than the average growth rate of about 4 percent over the last four decades.<sup>11</sup> Along with continuous changes in the structure of the economy, the contribution of the services sector to total value added has reached 57.8 percent. Access to financial services and digital payment systems has expanded at a rapid pace.

Nepal's has already fulfilled two out of the three criteria for LDC graduation, namely, on human assets and economic vulnerability. While it is eligible for graduation, given a host of critical risks, it has decided to graduate only by 2024. During the second triennial review of candidates for graduation in 2018, the UN Committee for Development Policy noted that remaining economic and political challenges warrant considering its case only in the next triennial review, scheduled for 2021. Existing country experiences indicate that graduation can bring risk, such as reversals and a middle-income trap.

Nepal's considerable existing vulnerabilities include human assets, with the LDC criterion capturing mainly 'first generation' achievements in enrolment, literacy, undernourishment and mortality. It does not reflect the quality or sustainability of such accomplishments, or capture Nepal's ongoing large gaps in service access and quality in a number of provinces and among various socioeconomic groups. Further, the criteria used by the Com-

<sup>8</sup> CAS 2015.

<sup>9</sup> UNDP 2019.

<sup>10</sup> NPC 2019.

<sup>11</sup> Khanal et al. 2012 and MOF 2019.

mittee for Development Policy (UNCDP) in 2018 to measure GNI per capita indicated that Nepal's level is US \$745. More recent UNCDP data shows that GNI per capita has reached US \$911 in 2020. Similarly, GNI per capita as per the World Bank Atlas Method is US \$1,090 for 2019, US \$970 for 2018 and US \$860 for 2017. Despite relatively robust growth in recent years, Nepal still faces challenges to reach the threshold by 2024. It contends with high income gaps in both urban and rural areas, and a threat of perpetuating higher poverty among the bottom income quartile of the population.

The current production structure and factors contributing to growth indicate the vulnerabilities in the Nepalese economy. Agriculture is still the main source of livelihoods, and dominated by weather-dependent subsistence farming. Recent years have seen continued deceleration in manufacturing, and within the expanding services sector, low productivity is problematic in a number of subsectors and activities. More worrisome has been the unprecedented rise in the external trade deficit, which, so far, has largely been funded by remittances inflows.<sup>12</sup> Such inflows have been possible as a result of huge outflows of youth searching for foreign employment, driven by an anaemic domestic labour market with a large share of informal, poor-quality employment.<sup>13</sup> As a further concern, Nepal is highly prone to multiple natural disasters and ecological and environmental vulnerabilities. All these issues have significant implications for human development, touching all three dimensions of it.

Nepal's recent introduction of a federal structure has come with many complexities in strengthening fiscal federalism. Further, multidimensional poverty and national account estimates by province show that on both fronts, there are big gaps and imbalances<sup>14</sup>. Disparities in human development combine with higher vulnerabilities in lagging provinces. The inequality-adjusted and gender-based human development indices indicate persistently high inequality<sup>15</sup> with implications for achieving the SDGs.

A critical issue after LDC graduation will be the loss of concessions and facilities currently granted through various international support measures, with likely adverse impacts in the near to long term. At present, Nepal receives benefits from LDC-targeted measures such as trade-related concessions from developed countries, including European nations and the United States of America, as well as special facilities from some developing countries. An estimated 136 LDC-specific international support measures operate across the spectrum of trade and market access, development finance, technology transfer and technical assistance. Unless it can separately negotiate new concessions with relevant partners, Nepal may be deprived of these after graduation, which could result, for instance, in an erosion in export preferences. This would have adverse implications for export competitiveness, industrial production and jobs unless compensatory measures are in place.

Nepal could also see a shift from concessional foreign aid to blended aid, and, subsequently, non-concessional finance with higher interest rates, and more stringent terms and conditions. This may have adverse economy-wide effects, including on external debt liability, which is so far within a manageable level.

All of these issues indicate the need for a closer examination of human development and LDC graduation criteria based on updated information. As Nepal now has a federal system of governance, deeper analysis at the provincial level is imperative in understanding prospects for sustainability, enhanced productive capacity and an equitable transformation of provincial economies that leaves no one behind. Given the likely loss of international support measures, it is important to take stock now of the implications of LDC graduation and identify steps required for a successful and sustainable transition. This is vital from the standpoint of minimizing risk and maximizing benefits, limiting disruption, and accomplishing the SDGs and Nepal's long-term prosperity agenda.

# \$911

More recent UNCDP data shows that GNI per capita has reached US \$911 in 2020.

<sup>12</sup> MOF 2019.

<sup>13</sup> CBS 2018.

<sup>14</sup> CBS 2019.

<sup>15</sup> HDR 2019.

COVID-19 has already left LDCs like Nepal suffering the most on multiple fronts. Despite difficulties in assessing the overall ramifications of the pandemic at this stage, amid the continued spread of the virus and future uncertainty on containing it, this report offers a brief appraisal wherever possible to help gauge the impact on human development and the scheduled graduation plan.

## Objectives

The 2020 Nepal Human Development Report explores pathways and strategies for the productive transformation of the Nepali economy beyond LDC graduation, towards sustainable human development and prosperity, and taking the impacts of COVID-19, to the extent possible, into account.

The specific objectives are to:

- a. Assess the present status of human development at both the national and provincial level.
- b. Examine human development from a gender perspective.
- c. Review Nepal's eligibility for LDC graduation by 2024, with an extended overview of current standing by province.
- d. Explore a smart transitional strategy for graduation after assessing the likely implications in terms of international trade and development finance.
- e. Define pathways and strategies for sustainable human development beyond graduation.

## Conceptual framework and methodology

### Conceptual framework

Figure 1.1 shows the conceptual framework for the report. It illustrates how productive capacities and transformation are major building blocks of both sustainable human development and LDC graduation.

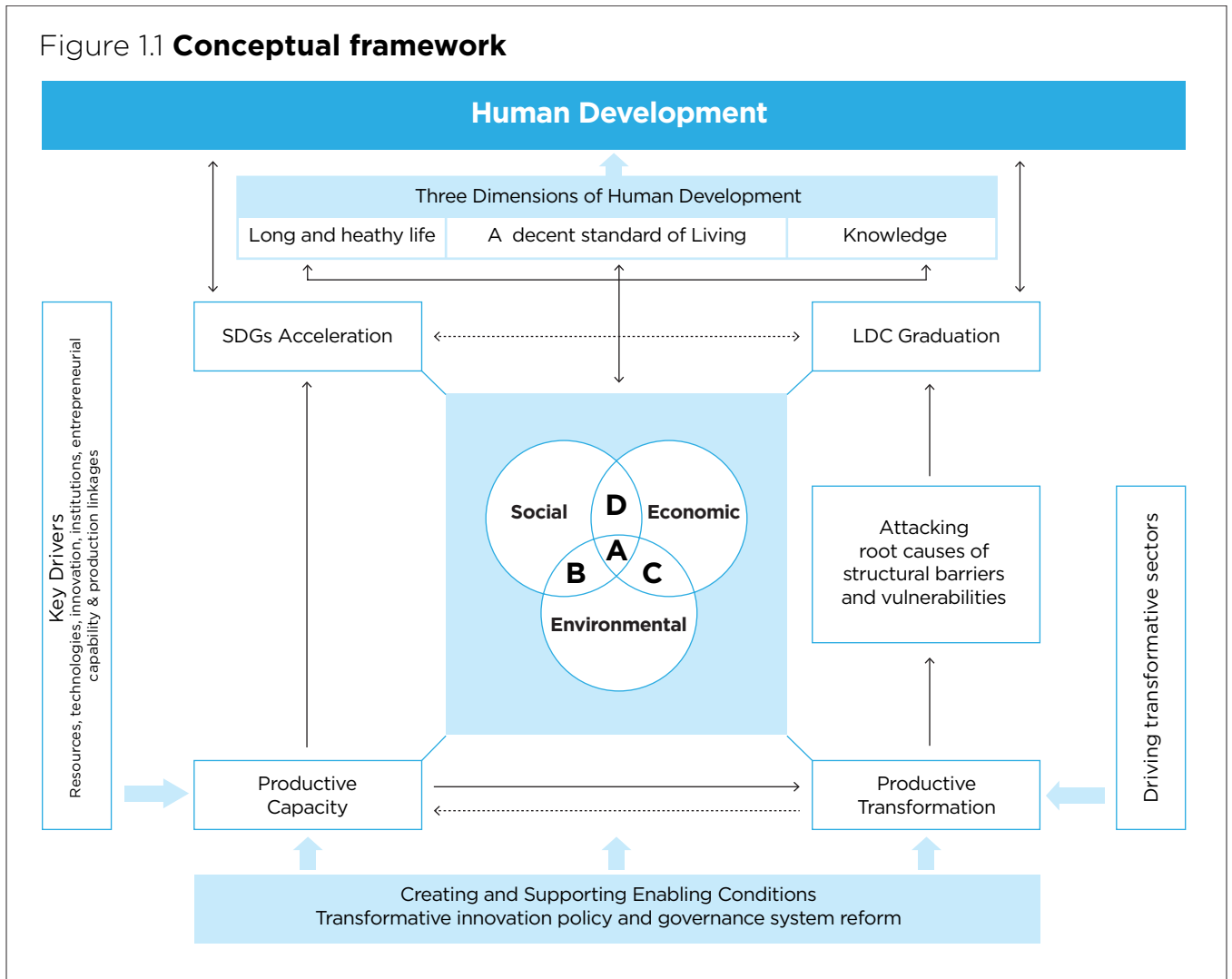
First, the framework illustrates the three essential dimensions of human development

(a long and healthy life, knowledge and a decent standard of living). These three dimensions reinforce each other, and underscore the need for an integrated and holistic approach equally applicable to the three dimensions of sustainable development (social, economic and environmental). Devising balanced, sustainable strategies will enable Nepal to continue advancing human development and achieve the SDGs through LDC graduation and beyond. The framework also clearly illustrates that sustainable graduation would have a decisive role in accomplishing the SDGs by 2030. Areas B, C and D show the potential mismatch between different dimensions of sustainable development. Area A represents a situation where development strategies successfully integrate social, economic and environmental dimensions.

Second, the framework shows a close link between productive capacity and socioeconomic transformation, and their combined critical contributions to sustainable LDC graduation, a higher level of human development and accelerated accomplishment of the SDGs. Key drivers to enhance productive capacity include productive resources and capabilities (human, physical, technological, institutional and environmental), entrepreneurial and institutional capacity, and production linkages across sectors. Rapid development of productive capacity is key to transforming the economy as it stimulates the most promising sectors, and diversifies and advances production, productivity and growth. The extent to which potentials are fully utilized depends on demand side factors as well. These in turn reflect factor distribution and overall income distribution.

As an indicator and outcome of productive capacities, transformation is conceptualized as a process in which the relative importance, interlinkages and organizational structures of different sectors and activities within an economy change over time through the dynamic reallocation of resources from less productive to more productive sectors and activities. For this, the framework envisages identifying, prioritizing and driving transformative 'leading sectors', keeping in mind their economies of scale, strong backward and forward linkages, and widespread op-

Figure 1.1 **Conceptual framework**



portunities for technological progress and knowledge spill over. Nepal's 15th Five-Year Plan envisages accelerating major sectors such as agriculture, electricity, tourism and infrastructure, among others, so the report has attempted to align its analysis accordingly.

Third, the framework for toppling structural barriers, cutting the roots of vulnerabilities and risks, and building resilience calls for strategies on several fronts, including to achieve gender equality and empower women, among other marginalized groups.

Finally, the framework recognizes many direct and indirect links between the series of human development indices, LDC graduation criteria, and SDG targets and indicators, all of

which are agreed tools for assessing development progress. It also affirms that the human development paradigm is much broader than its indices and LDC graduation criteria. The framework thus takes LDC graduation as the first milestone. It makes SDG acceleration an important reference point for designing sustainable development strategies that extend beyond LDC graduation.

**Methodology and data sources**

Detailed methodologies, data and data sources are given in the appendices to the report. These include methodologies used in computing various dimensions of human development and graduation criteria at both the national and provincial levels, and the models and techniques followed to examine the likely implications of graduation.









## Chapter 2

# State of Human Development

The 2010 global Human Development Report introduced updated versions of its Human Development Index (HDI), along with new measures of the inequality-adjusted HDI, Gender Inequality Index (GII) and Multidimensional Poverty Index (MPI).

The GII replaced the previous Gender Empowerment Measure, while the MPI replaced the previous Human Poverty Index. The 2014 global report debuted an updated version of the Gender Development Index (GDI), replacing the previous Gender-Related Development Index to assess the gender gap in human development. While the concept of human development is much beyond what these composite indices capture, they provide some indication of the depth of a country's state of human development.

In this current Nepal Human Development Report, for the first time, all updated human development indices, except the MPI,<sup>16</sup> have been calculated at the national, rural-urban, ecological-belt and provincial levels. The report used the latest available data to assess human development from the

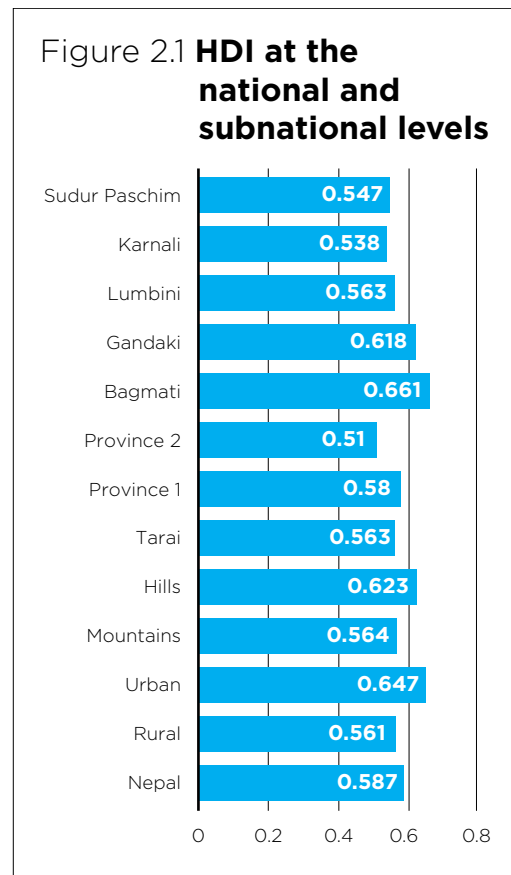
<sup>16</sup> The National Planning Commission in collaboration with the OPHI published a report on the MPI at the national and provincial levels using the 2014 MICS data. Because another round of 2019 MICS data for Nepal is being finalized, it was considered worthwhile to utilize the upcoming MICS data for assessing MPI progress rather than the 2016 NDHS data. The 2018 global Human Development Report estimated the MPI using the 2016 NDHS data for Nepal at the aggregate level, but not at the provincial and socioeconomically disaggregated levels.

broader perspective allowed by the updated indices.<sup>17</sup> Data sources and the detailed methodology for computing the indices are provided in Annex 1.

The following section examines the state of human development based on the updated indices. At the outset, the picture presented should be acknowledged as not directly comparable with those in previous Nepal Human Development Reports<sup>18</sup> assessing human development at the subnational level. The 2019 global Human Development Report, however, provides trends in Nepal's national human development indices since 1990 using the latest methodology, and based on consistent time series data and new goalposts. These data are used to assess progress at the national level and compare Nepal to other South Asian countries and country groups.<sup>19</sup> The data and analyses presented here were prepared before the outbreak of COVID-19, so these must be viewed in light of the implications of this unprecedented crisis.

## The Human Development Index

The HDI is a summary measure assessing long-term progress in three basic dimensions of human development—a long and healthy life, access to knowledge and a decent standard of living. Nepal's national HDI score stood at 0.587 in 2019, which puts the country in the medium human development category. Its score in urban areas (0.647) surpasses that of rural areas (0.561) with a large urban-rural gap (Figure 2.1). Higher per capita income, and better access to education and health services in urban areas explain such striking disparities. The HDI value also varies across provinces. As expected, Bagmati province scores the



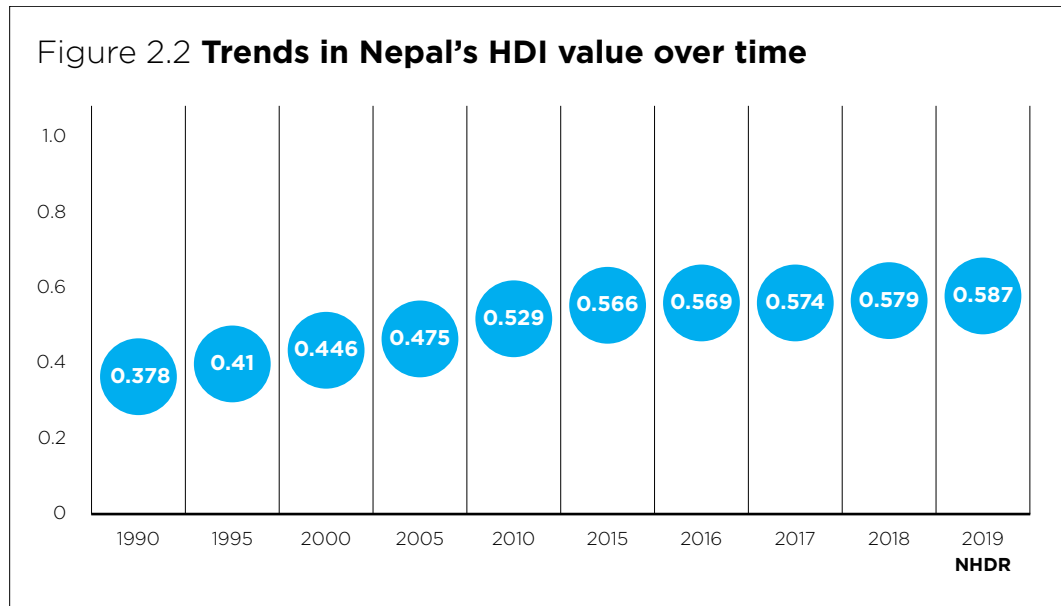
highest (0.66), followed by Gandaki province (0.62). Province 2 scores the lowest (0.51) followed by Karnali (0.538). This indicates the uneven distribution of development outcomes across different parts of the country. Among the ecological regions, areas defined as the hills continue to surpass mountain areas and the Tarai, a pattern similar to findings in previous Nepal Human Development Reports regardless of methodological differences. Contrary to the common perception that people in the mountains are poorer than those in the Tarai, these two regions score at the same level on the HDI (0.56) and lag behind the hills. The superiority of the Tarai region in terms of income and life expectancy is nullified by better performance in the mountains on education.<sup>20</sup> Among the three

<sup>17</sup> A lack of data limits the estimation of socioeconomically disaggregated human development indices.

<sup>18</sup> Nepal has prepared five previous National Human Development Reports, with the first in 1998 and most recent in 2014.

<sup>19</sup> For instance, Nepal's 2019 HDI and related indices are calculated using data as reported in Annex 1, while those for South Asian countries were taken from the 2019 global Human Development Report. Hence, the comparison only indicates Nepal's relative position.

<sup>20</sup> The observed HDI progress in the mountains is consistent with the finding of previous Nepal Human Development Reports, which stated that the pace of HDI improvement has been faster in the mountains, moving from 0.436 in 2006 to 0.496 in 2011.



dimensions of the HDI, the Tarai and Province 2 score the lowest on education, followed by income. Variations in life expectancy at birth, expected years of schooling, mean years of schooling and per capita income (purchasing power parity or PPP) across ecological regions and provinces are in Annex Table 1.

### Trends in the HDI over time

The present HDI value is not directly comparable to the HDI value reported in previous Nepal Human Development Reports due to differences in indicators and computation methodologies that were refined in the 2010 global Human Development Report.<sup>21</sup> Nepal's present HDI value of 0.587, calculated for this 2020 report, can be compared with the 2018 value of 0.579 reported in the 2019 global Human Development Report. Robust progress is evident, with the score rising by 1.4 percent.

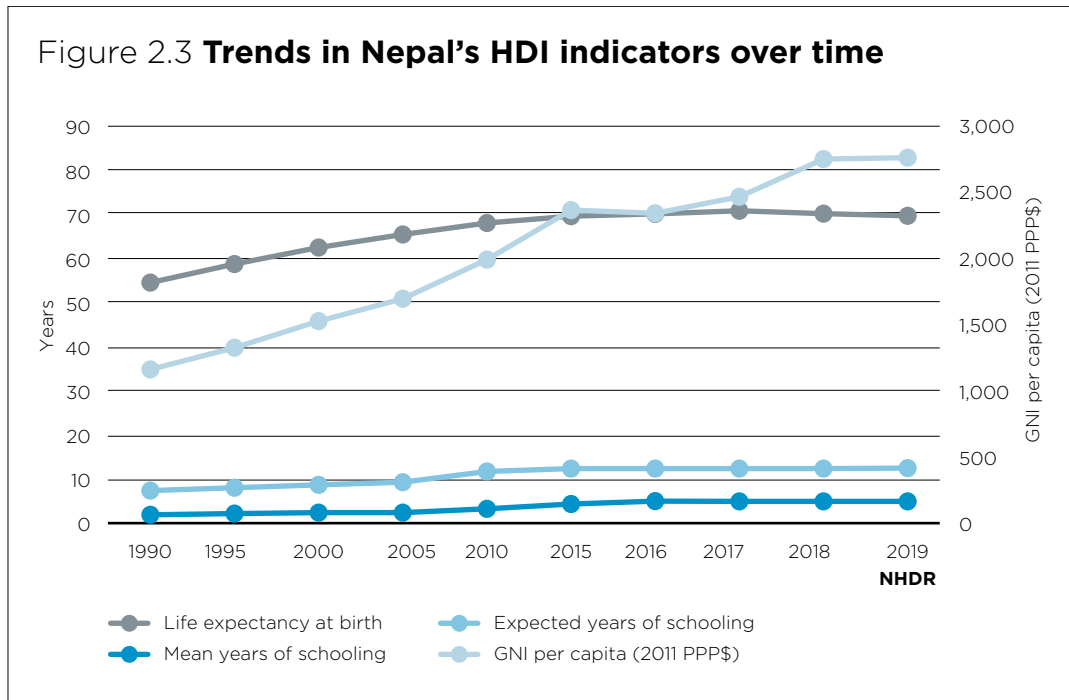
Nepal's 2018 HDI value puts the country in the medium human development category—positioning it at 147 out of 189 coun-

tries. Nepal has made continued progress on the HDI based on trends presented in the global report using the latest computation methodologies for the period from 1990 to 2018 (Figure 2.2). The figure also includes the 2019 value calculated for the present report.<sup>22</sup> Between 1990 and 2018, Nepal's HDI value increased from 0.378 to 0.579, a rise of 53 percent. During this period, life expectancy at birth climbed by 16.3 years. Mean years of schooling rose by 2.9 years, and expected years of schooling by 5.2 years (Figure 2.3).

Based on the 2019 global report, Nepal's per capita gross national income (GNI), in 2011 PPP dollars, increased by 11.2 percent from \$2,471 in 2017 to \$2,748 in 2018, a level that remains the same in the calculations of the current report. Overall, the 2019 estimate when compared with the 2018 HDI value and its components indicates continued progress in human development, mainly due to advances in education despite no increase in life expectancy.

<sup>21</sup> For example, even the 2014 Nepal Human Development Report used adult literacy instead of the newly introduced expected year of schooling, regardless of two sets of HDI values provided based on both old (arithmetic mean) and new (geometric mean) aggregation methods. To make the present HDI comparable to previous calculations requires back-casting using the same indicators and computation methodologies. Depending on the availability of data, such an exercise could be useful especially to assess progress at the subnational level. The global Human Development Reports provide time series values at the national level using the updated indicator and computation methodologies.

<sup>22</sup> Data for computing the 2019 HDI and other related indices in the present report are not directly comparable to those on Nepal presented in the 2019 global Human Development Report.



**Nepal’s HDI relative to those of other South Asian countries**

Although Nepal’s HDI score has improved gradually since 1990, and it jumped from the low to the middle human development category in 2016, Nepal is still behind most other South Asian countries. It is just ahead of war-torn Afghanistan and Pakistan in South Asia, but its HDI score is below the regional average of 0.634 and the average for the medium human development countries at 0.642 (Table 2.1). Nepal is close to or a little ahead of the average of both South Asia and the middle human development group in terms of life expectancy at birth. The average score for mean years of education for adults in South Asia is 6.4; Nepal lags at 4.9 years. Likewise, average per capita income (PPP) in South Asia stands at \$6,473 while Nepal’s is only \$2,748, putting it just ahead of Afghanistan.

**The Inequality-adjusted HDI**

The Inequality-adjusted HDI (IHDI) looks beyond a country’s average achievements in the three dimensions of the HDI by ‘discounting’ each dimension’s average value according to its level of inequality to show how these achievements are distributed among different parts of the population. The IHDI is equal to the HDI if there is no inequality among people, but is less than the HDI if inequality is present. The difference between the HDI and IHDI, expressed as a percentage, measures the loss in potential human development due to inequality. In this sense, the IHDI is the actual level of human development, while the HDI can be viewed as potential human development,<sup>23</sup> or the maximum level that could be achieved if there was no inequality.<sup>24</sup> As inequality in a country increases, the loss in human development also rises.

<sup>23</sup> The national HDI value masks inequality in the distribution of human development across the population at the country level.  
<sup>24</sup> UNDP 2010.



Table 2.1 **Nepal is behind most of South Asia and other middle human development countries on many aspects of human development**

	HDI VALUE	LIFE EXPECTANCY AT BIRTH	EXPECTED YEARS OF SCHOOLING	MEAN YEARS OF SCHOOLING	GNI PER CAPITA (PPP \$)
<b><i>Nepal Human Development Report (2019 value)</i></b>	<b>0.587</b>	<b>69.7</b>	<b>12.7</b>	<b>5.2</b>	<b>2748</b>
Comparison based on the 2019 global <i>Human Development Report</i> (2018 value)					
Sri Lanka (74)	0.78	76.8	14	11.1	11,611
Maldives (104)	0.719	78.6	12.1	6.8	12549
India (129)	0.647	69.4	12.3	6.5	6,829
Bhutan (134)	0.617	71.5	12.1	3.1	8,609
Bangladesh (135)	0.614	72.3	11.2	6.1	4,057
<b>Nepal (147)</b>	<b>0.579</b>	<b>70.5</b>	<b>12.2</b>	<b>4.9</b>	<b>2,748</b>
Pakistan (152)	0.56	67.1	8.5	5.2	5,190
Afghanistan (170)	0.496	64.5	10.1	3.9	1,746
South Asia	0.634	69.3	11.7	6.4	6,240
Medium HDI	0.642	69.7	11.8	6.5	6,794
LDC	0.528	65	9.8	4.8	2,630

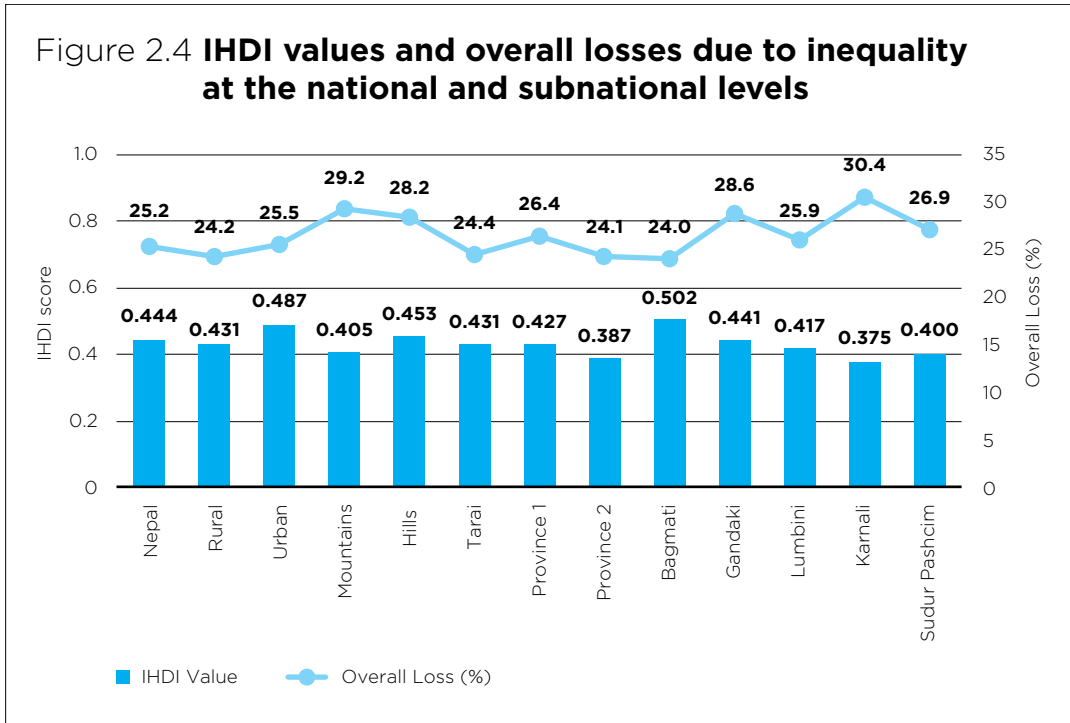
Note: Figures in parentheses refer to HDI rank. Nepal's 2019 HDI value is calculated using data reported in Annex 1, while values for South Asian countries came from the 2019 global Human Development Report. This comparison indicates Nepal's relative position only. Source: 2019 global Human Development Report.

When Nepal's HDI value of 0.587 is discounted for inequality, its HDI falls to 0.439, indicating an overall loss of 25.2 percent due to inequality (Figure 2.4).

This is almost the same as the HDI loss reported in the 2019 global Human Development Report. The highest loss for Nepal stems from inequality in income (31 percent) followed by health and education, indicating that income inequality (as measured by wealth) is higher than non-income inequality. Urban residents experience the highest HDI loss due to inequality, compared to rural residents. Among the provinces, the loss ranges from 24 percent

in Province 2 to as high as 30.4 percent in Karnali Province. Ecologically, overall HDI loss is the highest in the mountains (29 percent) followed by the hills and the Tarai<sup>25</sup> (Figure 2.4). The highest degree of income inequality (as measured by the Gini coefficient) is in Karnali Province, followed by the hills region, which could explain why these two areas experience higher HDI losses. Clearly, any overall gains in human development are largely offset by wide gaps in income and non-income inequalities. Reducing these losses means correcting multidimensional inequalities and creating equal opportunities in all three dimensions of human development.

<sup>25</sup> The 2010 global Human Development Report states that countries with low HDI experience greater losses in human development due to higher multidimensional inequality. But findings in this national report suggest that both the mountains and Tarai with the same HDI score experience different level of multidimensional inequality.



**Trends in the IHDI over time**

Based on the global Human Development Report data from 2010 to 2019, along with the present national report, Nepal’s overall

human development loss due to inequality has gradually improved since 2014. While the loss was as high as 34 percent in 2011-2012, it was around 25 percent in 2018 (Figure 2.5).

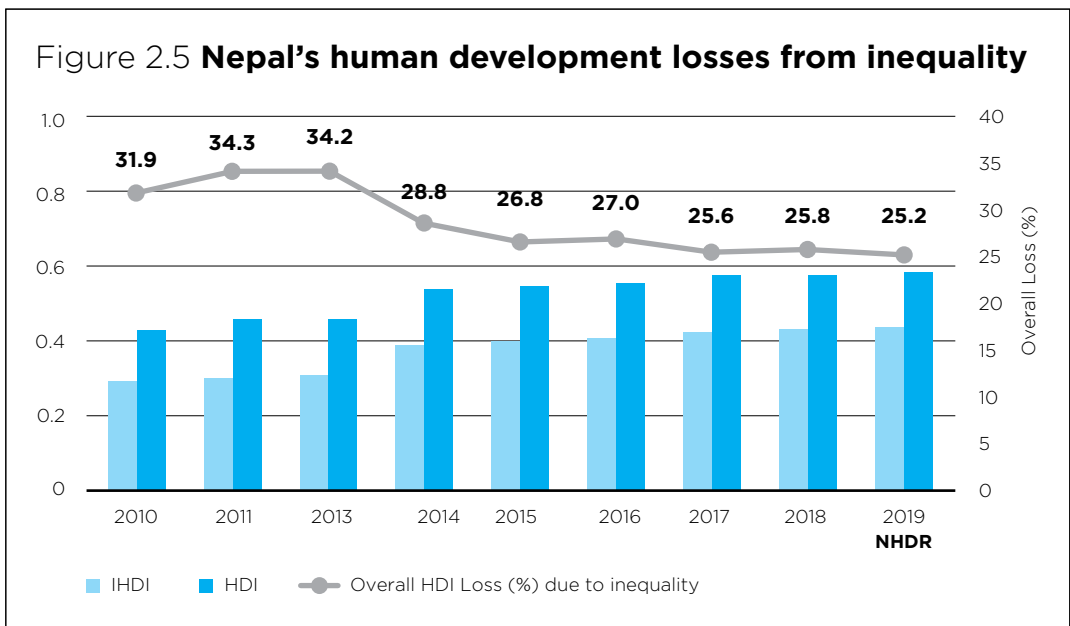


Table 2.2 **Nepal's IHDI relative to South Asian countries and groups**

	HDI VALUE	OVERALL LOSS DUE TO INEQUALITY (%)	COEFFICIENT OF HUMAN INEQUALITY (%)	INEQUALITY IN LIFE INEQUALITY (%)	INEQUALITY IN EDUCATION (%)	INEQUALITY IN INCOME (%)
<b>Nepal Human Development Report (2019 value)</b>	<b>0.438</b>	<b>25.2</b>	<b>25.1</b>	<b>20.7</b>	<b>23.7</b>	<b>31.0</b>
Comparison based on the 2019 global <i>Human Development Report</i> (2018 value)						
Sri Lanka (74)	0.686	12.1	11.8	7.4	7.4	21.0
Maldives (104)	0.568	21	20.4	29.3	8.4	25.8
India (129)	0.477	26.3	25.7	38.7	38.7	18.8
Bhutan (134)	0.45	27.1	26.3	41.7	41.7	20.0
Bangladesh (135)	0.465	24.3	23.6	37.7	37.7	15.7
<b>Nepal (147)</b>	<b>0.43</b>	<b>25.8</b>	<b>24.9</b>	<b>40.9</b>	<b>40.9</b>	<b>16.3</b>
Pakistan (152)	0.386	31.1	30.2	43.5	43.5	17.2
Afghanistan (170)	0.35	29.6	28.2	28.4	45.4	10.8
South Asia	0.47	25.9	25.4	36.3	36.3	19.6
Medium HDI	0.476	25.9	25.3	37.5	37.5	18.4
LDC	0.377	28.6	28.4	36.3	36.3	22.5

Note: Figures for Afghanistan are for 2017 as the 2019 global Human Development Report did not provide 2018 values.  
 Source: 2019 global Human Development Report.

### Nepal's IHDI value relative to those of other South Asian countries

Nepal's overall human development loss due to inequality is below the loss experienced by most South Asian countries, except Bangladesh, the Maldives and Sri Lanka. Nepal is behind all South Asian countries in terms of inequality in income, however, having among the highest disparities in the region despite relatively lower inequality in health and education (Table 2.2). Both the overall loss and the coefficient of human inequality (i.e., the unweighted average of inequalities in all three dimensions) for Nepal compare fairly well with the 2018 figure reported in the 2019 global Human Development Report, despite differences in the composition of inequality across the three dimensions.<sup>26</sup> Nepal's overall human development loss due to inequality is close to the average loss for the medium human development country group (25.9 percent) and South Asian nations, but below the LDC average.

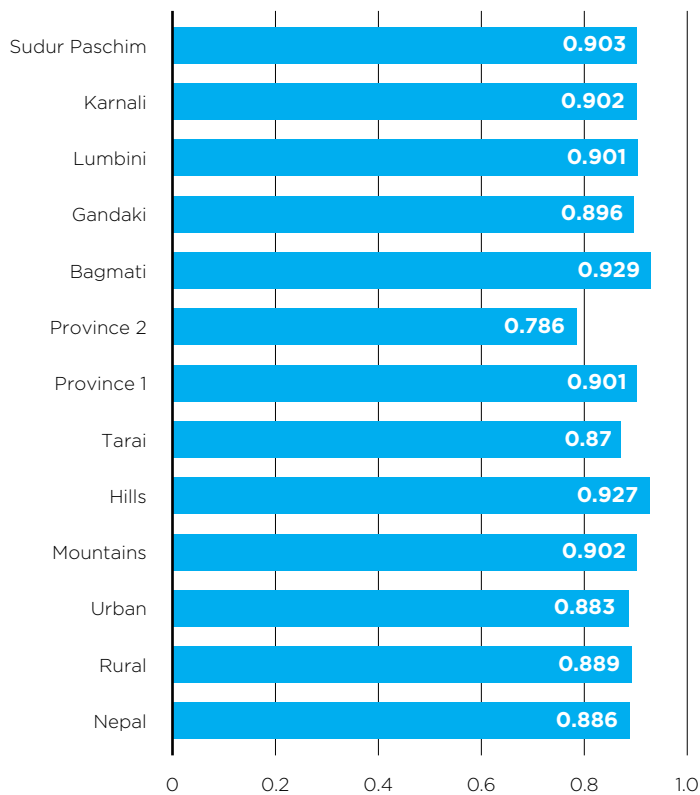
## The Gender Development Index

The GDI provides insights into gender disparities in the achievement in the three basic dimensions of human development. It is useful for designing and monitoring policies to close gender gaps. It calculates the female-to-male HDI ratio based on separate values for females and males, and using the same methodology as the HDI. The greater the value of the GDI, the lower the gender disparity in human development.

The female HDI value for Nepal is 0.549, compared to 0.619 for males. This results in a GDI value of 0.886 (Figure 2.6). It suggests that the degree of gender disparity in human development in Nepal as a whole is not very high, with the female HDI value only 11.3 percent lower than that of males. Across the provinces, the GDI value is lowest in

<sup>26</sup> The income wealth quintile-based inequality Gini coefficient used in the present National Human Development Report must explain why the estimate is higher than in the 2019 global Human Development Report.

**Figure 2.6 The GDI at the national and subnational levels**

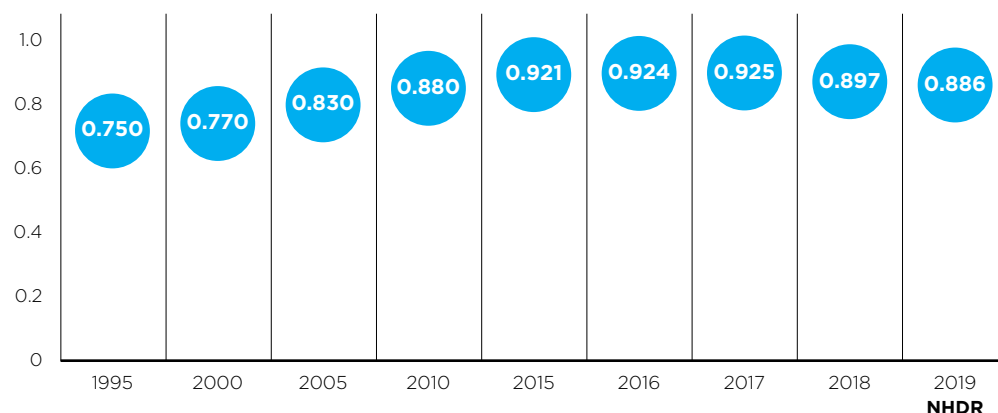


Province 2 (0.786), indicating the highest degree of gender disparity. The female HDI value for Province 2 (0.439) is roughly 21 percent lower than that of males (0.558). In contrast, Bagmati has the highest GDI value and hence the lowest gender disparity, as expected. Among the ecological belts, the degree of gender disparity in human development is the highest in the Tarai (0.870), while there is a marginal rural-urban gap. Women tend to live longer than men across all regions, as is the case everywhere in the world.<sup>27</sup> However, women throughout Nepal experience lower progress than men in education and income. Gender disparity in these two dimensions is more pronounced in Province 2, where women’s education and income index, respectively, are 19 percent and 37 percent lower than those of men.

**Trends in the GDI over time**

Nepal’s progress on the GDI over the past two decades has been satisfactory (see Figure 2.7). Using the same computation methodology introduced in the 2014 global Human Development Report, Nepal’s GDI value reached 0.886 in 2019 from 0.75 in 1995, an increase of 18 percent. As is evident from Figure 2.6, progress at the national level stagnated or slightly declined after 2015 despite notable progress between 1995 and 2015. As

**Figure 2.7 Trends in Nepal’s GDI over time**



<sup>27</sup> While in many ways women do worse than men, women have biological advantages that let them live longer than men almost everywhere in the world.

stated earlier, the GDI values calculated for this Nepal Human Development Report, however, are not directly comparable to GDI values computed using the old method in previous national reports.

### Nepal's GDI values relative to those in other South Asian countries

Nepal is well ahead of most South Asian countries, except the Maldives and Sri Lanka, in its performance in reducing gender disparity in human development.<sup>28</sup> It scores above the average for both South Asia and the medium human development country group. Although females in all South Asian countries as elsewhere outperform males in terms of longer life, females underperform men in all South Asian countries in per capita income followed by mean years of schooling. For example, the estimated GNI per capita of females in Nepal is just half of what males earn, which is low compared to all South Asian countries except Afghanistan and Pakistan (Table 2.3).

## Gender Inequality Index

Gender inequality is one of the greatest barriers to human development. Gender disparities compound other disadvantages, leading to some of the most complex and entrenched forms of inequality. As a new measure, the GII was introduced to capture women's disadvantages in three dimensions: reproductive health, empowerment and economic activity. Reproductive health is measured by maternal mortality and adolescent fertility rates; empowerment by the share of parliamentary seats held by each gender, and attainment levels in secondary and higher education by each gender; and economic activity by the labour market participation rate for each sex. While the IHDI shows the loss in human development due to inequality in the three HDI dimensions irrespective of gender, the GII shows the

Table 2.3 **Nepal's GDI relative to those of other South Asian countries and groups**

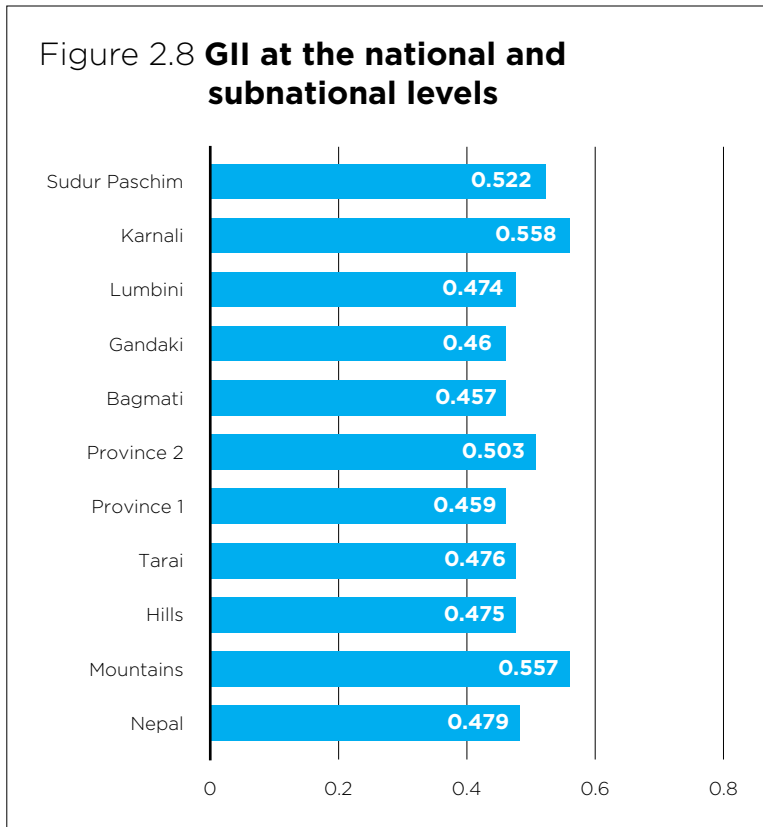
	GDI VALUE	HDI VALUES		LIFE EXPECTANCY AT BIRTH		EXPECTED YEARS OF SCHOOLING		MEAN YEARS OF SCHOOLING		GNI PER CAPITA (2011 PPP \$)	
		Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<b>Nepal Human Development Report (2019 value)</b>	<b>0.886</b>	<b>0.549</b>	<b>0.619</b>	<b>70.6</b>	<b>68.9</b>	<b>12.3</b>	<b>13.3</b>	<b>5.1</b>	<b>5.4</b>	<b>1824</b>	<b>3729</b>
Comparison based on the 2019 global <i>Human Development Report</i> (2018 value)											
Sri Lanka (74)	0.938	0.749	0.799	80.1	73.4	14.2	13.7	10.5	11.6	6766	16852
Maldives (104)	0.939	0.689	0.734	80.5	77.2	12.2	12.0	6.7	6.9	7454	15576
India (129)	0.829	0.574	0.692	70.7	68.2	12.9	11.9	4.7	8.2	2625	10712
Bhutan (134)	0.893	0.581	0.65	71.8	71.1	12.2	12.0	2.1	4.2	6388	10579
Bangladesh (135)	0.895	0.575	0.642	74.3	70.6	11.6	10.8	5.3	6.8	2373	5701
<b>Nepal (147)</b>	<b>0.897</b>	<b>0.549</b>	<b>0.612</b>	<b>71.9</b>	<b>69.0</b>	<b>12.7</b>	<b>11.7</b>	<b>3.6</b>	<b>6.4</b>	<b>2113</b>	<b>3510</b>
Pakistan (152)	0.747	0.464	0.622	68.1	66.2	7.8	9.3	3.8	6.5	1570	8605
Afghanistan (170)	0.723	0.411	0.568	66.0	63.0	7.9	12.5	1.9	6.0	1102	2355
South Asia	0.828	0.57	0.688	71.1	68.5	12	11.6	5	8	2639	10693
Medium HDI	0.845	0.571	0.676	70.9	67.8	11.9	11.5	5	7.8	2787	9528
LDC	0.869	0.489	0.562	66.9	63.2	9.3	10.2	3.9	5.7	1807	3462

Source: 2019 global *Human Development Report*.

<sup>28</sup> The Nepal GDI value estimated for this report is slightly lower than that of the 2019 global Human Development Report. It is still above the average for both South Asia and the medium human development country group, and just ahead of Afghanistan, India and Pakistan.



Figure 2.8 **GII at the national and subnational levels**



loss due to inequality between female and male achievements in these dimensions. The value of the GII ranges from zero (complete gender equality) to one (extreme gender inequality).<sup>29</sup> The greater the value of the GII, the higher the degree of gender inequality in human development. Nepal's 2019 GII value is calculated at 0.479 (Figure 2.8). This is consistent with the 2018 value of 0.476 reported in the 2019 global Human Development Report. It indicates a fairly moderate level of gender inequality.<sup>30</sup>

In Nepal, 33.5 percent of parliamentary seats are held by women, and 12 percent of women ages 25 and older have reached at least a secondary level of education compared to 43.1 percent of their male counterparts. The adolescent birth rate is 61 births per 1,000 women aged 15 to 19. Female participation in the labour market is 67 percent compared to 71.6 percent for men.

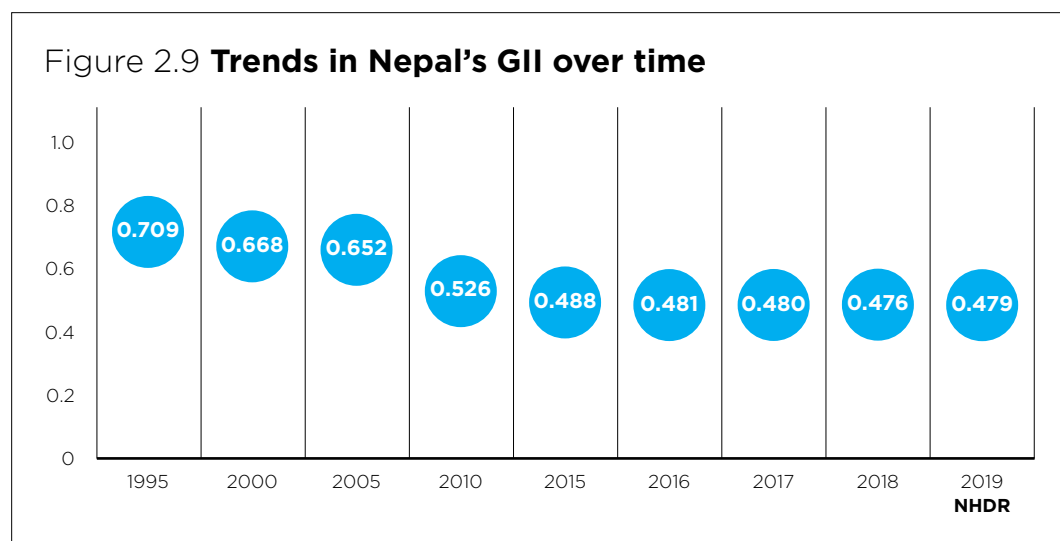
It was not possible to calculate the GII value for rural and urban areas given an absence of data on female shares of parliamentary seats. Among the ecological belts, gender inequality is more pronounced in the mountains with a GII value of 0.557. Among the provinces, Karnali Province has the highest level of gender inequality, followed by Sudur Paschim. Inequality is lowest in Bagmati. Relatively higher maternal mortality and fertility rates together with the lowest female shares in both secondary education and parliamentary seats are causes of greater gender inequality in the mountains and Karnali Province.

### Trends in the GII over time

Based on global Human Development Report data for Nepal from 1995 to 2018, along with calculations for the present 2020 report, Nepal has made improvements in reducing gender inequality in human development. Its GII value fell from 0.71 in 1995 to 0.48 in 2015, a decrease of 31 percent. Since 2015, the GII score has remained fairly stagnant at around 0.479 (Figure 2.9).

<sup>29</sup> The index is based on the general means of different orders—the first aggregation is by the geometric mean across dimensions; these means, calculated separately for women and men, are then aggregated using a harmonic mean across genders. See the technical note in Annex 1 for computational detail.

<sup>30</sup> Countries are divided into five groups based on absolute deviation to gender parity in HDI values. Nepal ranked 118 out of 160 countries on the 2017 global index.



### Nepal's GII score relative to those of other South Asian countries

Nepal is ahead of all South Asian countries except Bhutan, the Maldives and Sri Lanka in terms of lower gender inequality in human development (Table 2.4). Nepal's female share of seats in parliament is among the highest in South Asia. It significantly

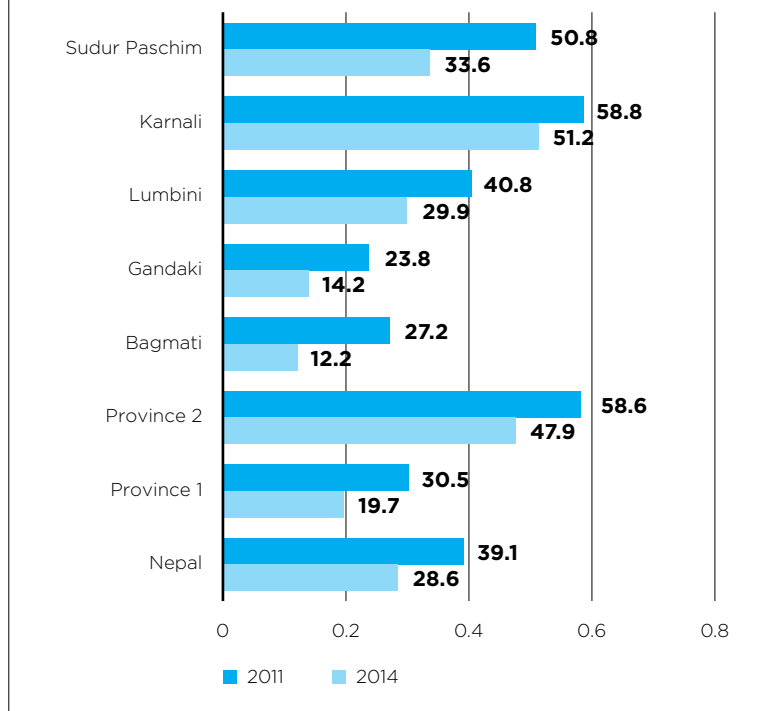
lags behind, however, in its maternal mortality ratio, fertility rate and percentage of adult females with secondary education. Nepal's GII is below the average for countries in South Asia (0.501) and those in the medium human development group, reflecting its better position in terms of overall gender inequality.

Table 2.4 Nepal's GII relative to selected countries and groups

	GII VALUE	MATERNAL MORTALITY RATIO	ADOLESCENT FERTILITY RATE	FEMALE SHARE OF SEATS IN PARLIAMENT (%)	POPULATION WITH AT LEAST SECONDARY EDUCATION (% AGED 25 AND OLDER)		LABOUR FORCE PARTICIPATION RATE (%)	
					Female	Male	Female	Male
<b>Nepal Human Development Report (2019 value)</b>	<b>0.479</b>	<b>239</b>	<b>61</b>	<b>33.5</b>	<b>11.7</b>	<b>23.3</b>	<b>67</b>	<b>71.6</b>
Comparison based on the 2019 global <i>Human Development Report</i> (2018 value)								
Sri Lanka (74)	0.38	30	20.9	5.8	82.6	83.1	34.9	72.2
Maldives (104)	0.367	68	7.8	5.9	44.9	49.3	41.9	82
India (129)	0.501	174	13.2	11.7	39	63.5	23.6	78.6
Bhutan (134)	0.436	148	20.2	15.3	7.6	17.5	58.2	74.5
Bangladesh (135)	0.536	176	83	20.3	45.3	49.2	36	81.3
<b>Nepal (147)</b>	<b>0.476</b>	<b>258</b>	<b>65.1</b>	<b>33.5</b>	<b>29</b>	<b>44.2</b>	<b>81.7</b>	<b>84.4</b>
Pakistan (152)	0.547	178	38.8	20	26.7	47.3	23.9	81.5
Afghanistan (170)	0.575	396	69	27.4	13.2	36.9 d	48.7	82.1
South Asia	0.501	198	34.3	20.8	39.5	58.7	32.3	78.9
Medium HDI	0.51	176	26.1	17.1	39.9	60.8	25.9	78.8
LDC	0.561	434	94.4	22.5	25.3	34.9	57.3	78.8

Note: The maternal mortality ratio is expressed in number of deaths per 100,000 live births. The adolescent birth rate is expressed in the number of births per 1,000 women aged 15 to 19. Source: 2019 global Human Development Report.

Figure 2.10 **Change in poverty headcount at the national and subnational levels, percentage**



Source: NPC 2018.

## The Multidimensional Poverty Index

An account of progress in human development is incomplete without exploring and assessing the depth of multidimensional poverty to know not just who is poor, but how and why they are poor across different geographical and socioeconomic pockets. In contrast to the traditional income poverty headcount measure, the MPI captures both the incidence of poverty and the average intensity of deprivation, identifying those with multi-

ple deprivations as the poorest of the poor.<sup>31</sup> The index also ascertains the relative contributions of different dimensions and underlying indicators to multidimensional poverty.

While this report does not compute the MPI, it provides some useful insights emerging from the MPI report published by the National Planning Commission in collaboration with the Oxford Poverty and Human Development Initiative (OPHI). The MPI report was based on the 2014 Multiple Indicator Cluster Survey (MICS) data plus two waves (2006 and 2011) of Nepal Demographic and Health Survey (NDHS) data,<sup>32</sup> and assessed MPI trends at the provincial level. Between 2006 and 2014, the multidimensional poverty incidence (headcount) in Nepal more than halved from 59.2 percent to 28.6 percent. Although the 2019 global Human Development Report estimates based on 2016 NDHS data show some increment in the national multidimensional headcount poverty compared to the estimates made based on the 2014 MICS data, the results are not directly comparable due to changes in the deprivation cut-off for some indicators.<sup>33</sup>

According to the 2014 MICS data, poverty incidence differs significantly by gender and social groups, rural and urban areas, ecological belt and province. The provincial analysis of the MPI shows the highest incidence in Karnali province (57 percent) and Province 2 (48 percent), both of which experienced the slowest progress in poverty reduction between 2011 and 2014 (see Figure 2.10). Provinces with higher multidimensional headcount poverty also have consistently more deprivation. Deprivation in years of schooling contributes the most (20 percent) to the MPI in Province 2 followed by nutrition (17.4 percent). In Karnali province, deprivation in child mortality contributes the most (16 percent) followed by nutrition (15.1 percent). Province

<sup>31</sup> A person who is deprived in 100 percent of the indicators has a greater intensity of poverty than someone deprived in 40 percent.

<sup>32</sup> The 2014 MICS and 2006 and 2011 DHS data share a common survey design and questionnaire, allowing exactly the same indicators to be constructed for each year and robustly compared across time. See NPC 2018.

<sup>33</sup> For example, previously, the deprivation cut-off for years of schooling was no household member aged 10 or older has completed five years of schooling. Six years of schooling is now the deprivation cut-off. Likewise, previously, any child for whom there was nutritional information was considered undernourished in terms of weight for age. Now, any adult under 70 years of age or any child for whom there is nutritional information is undernourished. The global Human Development Report using the 2016 DHS data shows the MPI at 34 percent in 2016 compared to 28.6 percent based on 2014 MICS data.

2 has over 1 million more people in multidimensional poverty than any other province. Karnali province has 600,000 people in multidimensional poverty. These two provinces, as poverty pockets, should receive considerable attention from policymakers in reducing overall poverty in Nepal.

Among the three dimensions of human development, standard of living makes the highest contribution to multidimensional poverty in Nepal at 45 percent, followed by health at 28.3 percent and education at 27.3 percent. Among the MPI indicators, the largest contributions to national poverty are deprivations in years of schooling (17.7 percent) followed by nutrition (15.9 percent). This provides useful information for policymakers to devise targeted poverty reduction programmes.

### Synopsis of provincial disparities in the human development indices

Based on the analysis, it is worth highlighting provincial disparities on the human development indices. Table 2.5 shows the ranking by province on the HDI, IHDI, GDI, GII and MPI. As expected, Bagmati ranks at the top on all composite indices. Karnali province and Province 2 generally perform the worst.

## Conclusions

Nepal has made steady progress on most updated indices of human development at the national level. Its HDI value has improved gradually since 1990, putting the country in the middle human development category in 2016. Although Nepal is still behind most South Asian countries overall, and just ahead of Afghanistan and Pakistan, it outperforms most South Asian countries on composite inequality indices such as the GDI, GII and IHDI.

Nepal has made impressive progress in reducing multidimensional headcount poverty at the national level by more than half between 2006 and 2014. While this report has unveiled, for the first time, human development at the provincial levels using updated composite measures of human development, the lack of disaggregated data did not permit an assessment of the relative position of various socioeconomic groups and administrative units within each province. Overall human development indices at the province level do, however, indicate that gaps across provinces are large. Significant policy challenges lie ahead to narrow these disparities at a faster pace.

Table 2.5 Human Development Indices by provinces

PROVINCE	HDI (2019)		IHDI (2019)		GDI (2019)		GII (2019)		MPI (2014)	
	VALUE	RANK	LOSS (%)	RANK	VALUE	RANK	VALUE	RANK	HEADCOUNT (%)	RANK
Province 1	0.58	3	26.4	4	0.901	4	0.459	2	19.7	3
Province 2	0.51	7	24.1	2	0.786	7	0.503	5	47.9	6
Bagmati	0.661	1	24	1	0.929	1	0.457	1	12.2	1
Gandaki	0.618	2	28.6	6	0.896	6	0.460	3	14.2	2
Lumbini	0.563	4	25.9	3	0.901	5	0.474	4	29.9	4
Karnali	0.538	6	30.4	7	0.902	3	0.558	7	51.2	7
Sudur Paschim	0.547	5	26.9	5	0.903	2	0.522	6	33.6	5

Note: Ranking number 1 denotes the top performer and 7 the worst.

Real progress in human development is not only a matter of enlarging people's basic capabilities and choices, such as in education and health, but also of achieving a reasonable standard of living through conditions that create meaningful opportunities to use expanded capabilities. When those with ability are denied the opportunity to contribute fully to the economy, human development is likely to suffer. Meaningful opportunities do not flow from better education and health alone. They require complementary investment in ensuring people have a voice in making choices, and that there is inclusion and accountability at all levels of decision-making.

Sustaining hard-earned human development gains also requires tackling challenges posed by climate change and the COVID-19 pandemic, the defining human development challenge of the early 21st century. Nepal is a highly vulnerable country, and will suffer some of the most damaging setbacks. Human development challenges are likely to be different from those of the past, requiring new responses. With Nepal's aspiration for LDC graduation by 2024, it must both devise a resilience-building strategy that achieves the twin goals of higher growth and social justice, while sustaining human development achievements amid a global crisis.

The pandemic strikes a triple blow to health, education and income. It could reverse human development gains to a considerable extent through several direct and indirect channels. It may exacerbate provincial disparities and pose new stumbling blocks to Nepal's graduation prospects. While it is too early to

assess the fallout, early simulation exercises based on a COVID-adjusted HDI indicate the worst plunge in the HDI globally in 2020 since the concept was introduced in 1990.<sup>34</sup> The expected fall is equivalent to wiping out the last six years of global progress on human development.

In Nepal, nationwide school closures in response to the pandemic have disrupted the education of nearly 9 million students.<sup>35</sup> This undermines learning potential in the short run and foreshadows major human capital losses in the long run.<sup>36</sup> School closures will likely result in decreased enrolment rate and increased school dropout rate, thereby widening already existing gaps in education while driving up malnutrition rates due to lack of access to school-based nutrition programmes.<sup>37</sup>

Since only 73 percent of people have Internet access and only 13 percent of schools might be able to run online classes (although 35 percent of schools have access to the Internet), running online classes would exclude most schools and the poorest children, especially in rural areas.<sup>38</sup> Further constraining access is the lack of affordability of technological devices. This will have an adverse effect on the HDI and related inequality indices.<sup>39</sup> Globally, the decline in human development among people without any access to the Internet is estimated to be 2.5 times worse, with such a drop expected to be much higher in poorer countries like Nepal. Confronting this challenge underlies the need to align education policies with the emerging dynamics of online learning platforms to facilitate and ease the process for all learners.

<sup>34</sup> The UNDP simulation is based on a massive setback in education and drop in GNI per capita worldwide. It assumes a fast recovery during the second half of 2020, following IMF projections, and counting on the full normalization of schools. It does not take into account potential indirect effects. The global per capita income this year is expected to fall by 4 percent. With school closures, 60 percent of primary school-age children without Internet access are not getting an education, leading to global levels not seen since the 1980s. The combined impact of these shocks could signify the largest reversal in human development on record, wiping out the last six years of global progress. See UNDP 2020.

<sup>35</sup> UNESCO 2020.

<sup>36</sup> Azevedo et al. 2020.

<sup>37</sup> With schools closed and stark divides in access to online learning, nearly 86 percent of children in primary education are now effectively out of school in countries with low human development, compared to just 20 percent in countries with very high human development (UNDP 2020).

<sup>38</sup> NPC 2019. Pandit 2020.

<sup>39</sup> For every 100 people in Nepal, there are 139.4 mobile phone subscriptions and 2.16 fixed broadband subscriptions (UNDP 2020).



COVID-19 is also amplifying existing health inequalities by destroying many of the gains made in child survival, health and nutrition over the last several decades. Child mortality may increase as the COVID-19 pandemic continues to disrupt routine health services, and prevent access to nutritious food and emergency health care.<sup>40</sup>

The pandemic is worsening pre-existing gender inequality in Nepal. Women are disproportionately engaged in informal employment lacking social security entitlements, and subject to a disproportionate burden of unpaid care work imposed by deeply entrenched patriarchal social and cultural norms. The crisis has affected employment especially among women from lower income groups, and differently than men. For example, 41 percent of females have already lost their jobs during lockdowns, compared to 28 percent of men.<sup>41</sup> In general, COVID-19 threatens many gender empowerment gains as measured by the GDI and GII.

The pandemic is likely to severely erode progress in the last decade in reducing income and non-income poverty. On headcount poverty, some early indicators show that a large section of the population<sup>42</sup> is likely to face significant risks of falling into extreme poverty, given the cumulative effects of reduced remittances, the foregone earnings of potential migrants, job losses in the informal sector and rising prices for essential commodities.<sup>43</sup> Although the extent of the impact on poverty is not yet clear given uncertainty around containing the virus, significant numbers of people might have fallen below the poverty line in Nepal.<sup>44</sup>

On non-income poverty, COVID-19 is likely to hit the population living in acute multidimensional poverty the hardest. Negative pressures on all indicators of deprivation across the three dimensions of the MPI will reinforce each other.<sup>45</sup> For instance, malnutrition will increase vulnerability to disease. Unclean energy for cooking and heating makes people more susceptible to respiratory illness. And lack of access to drinking water and adequate sanitation could further fuel the spread of the virus.



**On non-income poverty, COVID-19 is likely to hit the population living in acute multidimensional poverty the hardest. Negative pressures on all indicators of deprivation across the three dimensions of the MPI will reinforce each other.**

While cash transfers are very important as a safety net, they will not be able to address many of the non-monetary dimensions of multidimensional poverty. The COVID-19 pandemic clearly highlight the need for a human-centred, multidisciplinary and transformative approach, one equipped to tackle the complexity of the pandemic, and looking ahead to a looming climate crisis.

<sup>40</sup> For every 10,000 people in Nepal, there are only 6.5 physicians, 27 nurses and midwives, and 3 hospital beds (UNDP 2020).

<sup>41</sup> UNDP 2020.

<sup>42</sup> The poverty headcount ratio was estimated based on people living on between \$1.90 and \$3.20 a day (World Bank 2020).

<sup>43</sup> Remittances to Nepal are projected to fall by 14 percent in 2020 as a result of COVID-19. About 60 percent of employees of both formal and informal micro-, small and medium enterprises have already lost their jobs (World Bank 2020).

<sup>44</sup> NPC 2020.

<sup>45</sup> The 2019 global MPI indicates that about 34 percent of people in Nepal are living in multidimensional poverty with another 22 percent vulnerable to multidimensional poverty (that is, those with a deprivation score of 20 to 33 percent). See UNDP 2019.





# 3





## Chapter 3

# Assessing Human Development from a Gender Perspective

## Background

Gender equality and women's empowerment are fundamental human rights issues and central to human development. They are closely linked to a sustainable LDC graduation. Women must enjoy equal political, economic, social and cultural rights as well as opportunities to make choices without discrimination. When women are empowered in all spheres of life, they as well as their families and society benefit, with a ripple effect extending to future generations.

Gender inequality and women's disempowerment result from unequal power, economic and social relations leading to the perpetuation of discriminatory social, economic and state systems.<sup>46</sup> Prejudiced social norms, values, laws, policies, in-

<sup>46</sup> Gender refers to socially constructed roles, responsibilities and opportunities associated with men and women, as well as hidden power structures that govern the relationships between them.

stitutional set-ups and other arrangements operate as major barriers to equity. Since unjust and exclusionary practices often have deep roots, Nepal's sweeping political changes and reforms are closely associated with commitments to address exclusion and bring about structural shifts that end discrimination.



**Since the early 1990s, profound changes in state, political, economic and social systems have occurred. The 2015 federal Constitution aims to ensure an equitable society and the proportional representation of women.**

Since the early 1990s, profound changes in state, political, economic and social systems have occurred. The 2015 federal Constitution aims to ensure an equitable society and the proportional representation of women. Progress in women's human development has taken place, as shown in Chapter 2, with the human development indices indicating reductions in gender inequality and advances in women's development. Despite progress at the aggregate level, however, Nepal is still far behind other South Asian countries in a number of areas. Large gaps remain across different provinces. More importantly, the depth and breadth of gender inequality are much broader than what the GDI and GII can capture. For example, they do not reflect employment and the quality of jobs, unpaid work such as caregiving in homes, asset ownership, childcare support, gender-based violence and participation in community decision-making.

This chapter explores critical issues and options for empowering women and achieving gender equality in all spheres of life as a cornerstone of sustainable human development. The first section elaborates various aspects of women's development and empowerment, focusing on the three dimensions of human development, including large differences

across provinces. It begins by describing major structural barriers and accompanying reforms and changes made through multiple initiatives. This is followed by a review of progress in various aspects of gender and empowerment from a human development perspective. The next section offers a critical analysis of major policy gaps as well as institutional and structural barriers, while the last section presents conclusions.

## Major Structural Barriers, Turning Points and Reform Initiatives

Men and women have equal human rights. But women have faced centuries of discrimination in enjoying equal rights to political participation, property, information, education, reproductive rights, livelihoods, and so on. Structural barriers and social exclusion underpin gender discrimination and inequalities.

Social exclusion is both a cause and a consequence of inequality and discrimination on the basis of hierarchies of gender, caste, ethnicity, class, sexual orientation, disability, age and regionality. Each of these 'vectors' of discrimination is based on an ideology and values that uphold the status quo. As a consequence, social and economic institutions sustain systemic patterns of power and privilege. The most fundamental sociocultural root causes of vulnerability involve structural discrimination emanating from traditions, norms and practices developed over centuries, including patriarchy, the caste system and other causes of the economic and political domination of certain groups over others. Many women face multiple forms of discrimination in addition to gender, including related to age, class, caste, geography, language, religion and sexual orientation.

Gender-based discrimination is often faith-based, embedded with fear and myth. Examples include requiring male children to perform death-related rituals. Social ideologies

prescribing patriarchal marital relations popular among Brahmin and Kshatriya communities require daughters to leave the parental home after being married at a young age. A daughter is generally perceived as 'someone who adorns the other's house'. Discrimination manifests as well in the preference for male children.

Child marriage remains common in Nepal, promoted by societal norms and values perpetuating gender inequalities among men and women. The legal age of marriage is 20 years for both men and women, with or without the consent of a parent. But 48.9 percent of married persons are married before the age of 19.<sup>47</sup> Nepal has the third highest rate of child marriage in Asia, after Bangladesh and India. Poverty and the dowry system contribute to the early marriage of girls, who are often seen as an economic burden. The dowry system is rooted in gender inequality and encourages violence against women and girls.

Some traditional harmful practices still current today are notably related to menstruation and childbirth. Chhaupadi is a practice in western Nepal where women and girls are excluded from normal family activities during menstruation.<sup>48</sup>

The patriarchal system treats women as belonging to the domestic domain and men as family breadwinners. Men have the right to hold most property, including land and houses. This is a symbol of their status and provides them with a sense of economic security and bargaining strength in economic transactions. Such barriers keep women from rights and opportunities for education, health, marriage, reproductive rights, mobility, livelihoods etc.

Amid deep-rooted structural problems, concerted efforts on multiple fronts to strengthen gender equality involve constitutional, legal, policy, programme and other means. Nepal's progress towards ensuring women's rights has seen various steps to address in-

equalities and discrimination, including violence against women. Ratification of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1991 was a milestone in committing to ending discriminations in public life, education, health care and employment.

Nepal's adoption of the 1995 Beijing Declaration and Platform for Action was another important step. It covers 12 critical areas of concern to gender equality and women's empowerment; Nepal has implemented a number of measures related to these. It has also adopted ILO Convention 169 on ensuring land reform and land ownership, and committed to United Nations Security Council resolutions 1325 and 1820 on women's meaningful participation in the peace process. Since adopting the Programme of Action of the 1994 International Conference on Population and Development, and its follow-up agreements, Nepal has implemented various policies and programmes related to sexual and reproductive health and rights. All of these and other steps have contributed markedly to major reforms in rules and regulations to advance women's political, social and economic empowerment.

After the political change in 2006, a shift in the planning strategy took place. The three-year Interim Plan (2008-2010) introduced verifiable indicators such as the GDI and GEM for measuring progress related to women's development. Setting objectives for an egalitarian and equitable society, the Plan focused on eliminating all forms of discrimination against women, and explicitly called for gender-related sectoral policies, strategies and programmes.

A turning point in 2015 was the new Constitution, with Article 38 dedicated to the Fundamental Rights of Women. It includes the equal right to lineage without any gender discrimination; safe motherhood and reproductive health; protection from sexual and gender-based violence (physical, men-

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<sup>47</sup> CBS 2011a.

<sup>48</sup> UNFPA Nepal 2020.



tal, sexual, psychological or any other kind of violence against women, or any kind of oppression based on religious, social and cultural tradition, and other practices); the right to access and participate in all state structures and bodies on the basis of the principle of proportional inclusion; special opportunities in the spheres of education, health, employment and social security on the basis of positive discrimination; and equal rights in labour, property and family affairs.

The Constitution integrates gender equality and women's rights into the governance system through a requirement that women comprise at least 33 percent of the members of Parliament through direct election or proportional representation. Furthermore, either the speaker or deputy speaker at both the federal and provincial parliamentary levels should be female. Such a provision now is under implementation at all three levels of the legislature. Other ways to institutionalize gender equality and social inclusion include the formation of dedicated sections in the ministries of health and population, agriculture and cooperatives, education and federal affairs and local development. Gender budgets and audits have been applied over a number of years.

The Constitution guarantees inclusive socioeconomic and political development, the building of an egalitarian and pluralistic society, human dignity and opportunity for all, and the elimination of all forms of discrimination. It guarantees women's freedom, equality and social justice, with the expressed commitment to substantive equality and the translation of these principles into practice. Article 18 guarantees equality before the law and equal protection of the law for all citizens. It prohibits any discrimination based on sex, caste, class, religion, tribes and so on. It also requires special provisions by law for the protection, empowerment and development of socially or culturally backward women, including from Dalit, indigenous, Madhesi, Muslim and other oppressed groups.

The Social Security Act, 2018 provides social security allowances for single women (all divorced, widowed, unmarried and legally separated women above 60 years, and helpless

and indigent women irrespective of age), senior citizens above age 70 (60 in the case of Dalits), children under 5 (from very poor families and endangered communities), people with disabilities and other marginalized women. The Act provides contribution-based social security for women and men working in the private sector. Employers and workers contribute to the scheme, as do federal, provincial and local governments. The scheme includes medical benefits, old-age benefits, maternity protection, and protection of workers and survivors against injury, invalidity and death.

The Safe Motherhood and Reproductive Health Right Act, 2018 provides reproductive, maternal and newborn health rights enshrined in the Constitution. It upholds and explicitly protects the health rights of women, girls, adolescents and newborns, and ensures access to quality reproductive health-care services. The act legalizes abortion and provides free abortion services at all public health facilities.

A landmark was the replacement of the old Civil Code with five new codes: The National Civil (Code) Act 2017, The National Civil Procedure (Code) Act 2017, The National Criminal (Code) Act 2017, The National Criminal Procedure (Code) Act 2017 and The Criminal Offences (Sentencing and Execution) Act 2017. These have updated all legal provisions related to public offences and punishment, including for sexual and gender-based violence. According to the new Criminal Code, a conviction for murder after rape requires a life term (25 years). For victims who survive, the perpetrator is required to compensate for immediate relief and medical treatment.

The codes criminalize all forms of discrimination based on caste, gender, religion, disability and ideology, among others. Forced labour, bonded labour and enslavement are all criminalized and punishable by fines and imprisonment. Witch-hunting and other socially exclusionary and degrading practices entail imprisonment (five years) and fines (up to Nepal rupees [NRs.] 50,000). The seclusion of girls and women during menstruation can be punished with imprisonment (up to three months) and a fine (up to NRs. 3,000)

or both. Anyone found guilty of marriage without consent is liable to imprisonment of two years and a fine up to NRs. 20,000. Child marriage is automatically nullified and punishable by imprisonment of three years and a fine up to NRs. 30,000. Polygamy is criminalized and punishable by imprisonment of up to five years and a fine up to NRs. 50,000. Fetal gender screening and forced abortion are criminalized and punishable by both imprisonment and fines. Rape is a crime with elaborate provisions for punishment and fines based on the gravity of the offence. Sexual harassment in workplaces is punishable by imprisonment of up to three years and fines up to NRs. 30,000. These are important steps toward abolishing different forms of discriminations rooted structurally in society.

At the federal level, the Ministry of Women, Children and Senior Citizens is responsible for ensuring gender equality, formulating overall policies, laws and acts to advance equality and counter discrimination. Provincial ministries of social development also establish policies and strategies to address gender equality and gender-based violence. Local

judicial committees have been made more accountable for promoting gender equality.

Other bodies taking up gender-related concerns include the National Human Rights Commission, National Women's Commission, National Dalit Commission, National Inclusion Commission, Indigenous Nationalities Commission, Madhesi Commission, Tharu Commission and Muslim Commission. As per the Constitution, the Election Commission has to ensure women's representation in all three tiers of government. The Nepal Police have introduced mechanisms to document and manage information on gender-based violence. The National Strategy and Action Plan on Gender Empowerment and Ending Gender-Based Violence are being developed by the Office of the Prime Minister and Council of Ministers.

Nepal's 15th Five-Year Plan has given higher priority to gender equality through more consistent planning around implementing various policies and programmes. The major thrusts include women's dignified life through equal participation and active leadership, en-

### Box 3.1 Provisions and Recent Initiatives on Gender Equality

- The transfer of citizenship to children from single mothers and the right to security as a single mother.
- Citizenship certificates identifiable by the name of his/her mother or father.
- The right to special opportunities in the spheres of education, health, employment and social security through positive discrimination.
- The right of women to participate in all state structures and bodies on the basis of the principle of proportional inclusion.
- The right to equal wages.
- Special provisions to be taken under law for the protection, empowerment or advancement of women, and also for sexual and gender minorities.
- Equal rights of both spouses in property and family affairs.
- A policy for economic valuation of the work and contribution of women in regard to childcare and care for the family.
- A policy of representation of a minimum 33 percent of women in different government and political bodies. This includes the Federal Parliament, National Assembly, provincial assemblies, district coordination committees, municipal assemblies, village assemblies and ward committees.
- It is mandatory for either the speaker or the deputy speaker of both the House of Representatives and provincial assemblies, and the chairperson or vice chairperson of the National Assembly to be women at any given time.

hanced access to and control over resources, and eliminating all forms of gender discrimination. By internalizing the SDGs, the plan has come forward with various strategies related to health, educational attainment and the economic empowerment of women. Various reform measures have been proposed to reduce discrimination and check traditional harmful practices such as child marriage, chhaupadi, dowry and gender-based violence. A proposed policy would stipulate wage equality between men and women for similar work. Such reforms will further ensure women's rights and gender equality in line with the Constitution.

## Progress in Critical Dimensions of Women's Human Development

Nepal is making significant progress in the social, economic and political dimensions of women's human development. The gender gap is narrowing as women's position at all levels improves, including though meaningful participation and representation in politics and decision-making, key roles in technical fields, and higher levels of land ownership and property rights. It has achieved tangible results in eliminating traditional harmful practices and violence against women and girls.

### Social Status and Empowerment

Health is a human right and a major component of social development, including reproductive health and rights. In line with the International Conference on Population and Development, Nepal has made significant progress in terms of maternal mortality, child mortality, adolescent pregnancy, HIV/AIDS, nutrition status, health-seeking behaviour, family planning, and other core aspects of reproductive health and rights. As a result, women's life expectancy has increased considerably and reached 72 years today compared to 69.44 years in 2011. Yet progress is highly uneven across the country. For instance, the life expectancy of women is low in Province 2.

The rate of maternal mortality has significantly fallen from 539 per 100,000 births in 1996 to 239 in 2016. Sex selective abortion is also declining. Health-seeking behaviour and perceptions of family planning have been changing, with an increased share of women especially in urban areas using family planning devices for fewer children. In rural areas, women still bear on average two to three children. But due to better access to health services through a community-managed health system and other parallel initiatives, rural women too are choosing to give birth to fewer children.

Community-managed health systems have improved health services in rural areas, and encouraged women's meaningful participation and representation in health management committees. The Government requires each ward of a rural municipality to have a female community health worker to provide basic health-care services to women, such as information and education on family planning, nutritional counselling and antenatal check-ups.

The Ministry of Health and Population has expanded awareness programmes on women's reproductive health and rights in rural and geographically remote areas through a range of policy interventions for demand creation. In 2009, the Gender Equality and Social Inclusion Strategy for the health sector was developed in response to evidence of significant and persistent health inequalities (Box 3.2). The strategy takes a rights-based approach to three objectives: 1) create a conducive environment for mainstreaming gender equality and social inclusion in the health sector through the development of policies, plans and programmes; 2) build the capacity of health providers and ensure equal access to and use of health services by poor, vulnerable and marginalized castes and ethnic groups; and 3) improve the health-seeking behaviour of poor, vulnerable and marginalized populations so they can obtain health services based on their rights.<sup>49</sup>

The National Health Policy developed in 2014 promotes a human right-based approach by ensuring gender equality and social inclusion.

<sup>49</sup> MOHP 2009.

## Box 3.2

### Gender equality and social inclusion

Gender equality and social inclusion is a concept that addresses unequal power relations experienced by people on the grounds of gender, wealth, ability, location, caste/ethnicity, language and agency or a combination of these dimensions. It focuses on the need for action to rebalance these power relations, reduce disparities, and ensure equal rights, opportunities and respect for all individuals, regardless of their social identity.

The policy focuses on increased accessibility of health services for marginalized and vulnerable women. The Nepal Health Sector Strategy of 2015-2020 defines the means through which the health status of women and girls, including in vulnerable groups, can be improved through health services. The strategy is being implemented in partnership with local bodies to empower women and vulnerable groups. Recently, a National Health Insurance Policy was implemented with a focus on benefits for marginalized and vulnerable people.

Education is another major component of social development. Constitutional provisions such as universal basic education and other various policies and programmes including school enrollment campaign, girls schol-

arships, day meal, *Beti Bachao, Beti Padhao*, etc, are contributing to the improvements of women education. Despite number of initiatives, the female literacy rate is 60.5 percent compared to the male literacy rate of 76.2 percent. The rate for adult males is around 77.8 percent and for females 57.8 percent.<sup>50</sup> The male literacy rate is higher than the female rate in all seven provinces (Table 3.1). The literacy rate in Province 2, Karnali and Sudurpashchim is below the national average for women and men. Overall, the female literacy rate in Province 2 is very low compared to Province 1, Bagmati and Gandaki, which is a major cause of concern.

Various programmes promote women's education. The Ministry of Education, Science and Technology has established a community-managed education system by forming school management committees and community education learning centres where women's representation is mandatory, an inclusive management system helping to promote girl's education. To improve the quality of education, the Ministry has developed an early childhood development initiative for girls and boys under 5 that is built into schooling. In numbers, girls now outstrip boys in part through campaigns promoting the enrolment of girls. The Ministry also has a policy of providing scholarships to girls and marginalized groups, and an equity index tracks the needs of children from the poorest 20 percent of the population. Run by the Council for Technical Education and Vocational Training, a programme empowering out-of-school adolescents through vocational skills is being

Table 3.1 Literacy rates of population 5 years age and above by province in 2011 (Percent)

PROVINCE	MALE	FEMALE	TOTAL
Province 1	79.27	63.94	71.22
Province 2	60.09	38.88	49.54
Bagmati	82.82	67.04	74.85
Gandaki	83.54	67.72	74.81
Lumbini	75.50	58.33	66.43
Karnali	72.88	53.88	62.77
Sudurpashchim	76.37	51.93	63.48
<b>National</b>	<b>75.15</b>	<b>57.39</b>	<b>65.94</b>

Source: Education in figures 2017: At a glance. Government of Nepal/Ministry of Education, Science and Technology.

<sup>50</sup> CBS 2016-2017.

expanded across the country, reserving 40 percent of places for women and 30 percent for excluded groups.

Other reforms in education comprise a new system of higher secondary education (grades 11 to 12), where the enrolment rate of girls is increasing, in part through the recruitment of female teachers. The National Education Plan and Education for All National Plan of Action 2001-2015 emphasized raising girls' enrolment in schools. In general, education plans, policies and programmes have been more gender friendly and inclusive in recent years, in both formal and informal education. This has helped integrate a variety of marginalized communities, including more than 77,000 children with disabilities now enrolled in schools.

The School Sector Reform Plan, School Sector Development Program of 2016-2024, the SDGs and the Nepal National Framework have all contributed to increased school enrolment for girls. Today, gender parity is 1.09 in primary schools and 1.0 in secondary schools, a sign of notable progress.

Gender-based violence is a violation of human rights. Ending it is key to women's empowerment. Nepal has passed a range of acts and regulations to prevent and respond to gender-based violence, such as the Domestic Violence Act, Human Trafficking and Transportation Act, the National Strategy and Plan of Action for Gender Empowerment and Ending Gender Based Violence, the Nation-

al Action Plan on Ending Child Marriage, and the Civil and Criminal Code 2017. SDG 5 calls for the elimination of all forms of violence against women and girls, and the elimination of harmful practices such as child marriage.

Despite various initiatives and progress in some areas, women and girls still face various forms of violence—physical, sexual, social, political, psychological, cultural and economic, among others. Women are most at risk of physical and sexual violence within their homes. Those who survive face barriers to justice that include financial constraints, lengthy court procedures and language barriers. Patriarchal thinking and norms sustain violence, including through traditional harmful practices such as dowry, chhaupadi, child marriage and witchcraft. Weaknesses in enforcing rules and regulations and implementing programmes effectively allow these to persist.

Violence against women and girls appears to be still high and not decreasing in an expected way. According to the Demographic and Health Survey 2016, more than one fourth (26 percent) of women aged 15 to 29 experience physical or sexual violence. New forms of violence, like acid attacks and cybercrimes, are also evident. Child marriage is still common, with more than 37 percent of girls married before age 18 and 10 percent before age 15. This demonstrates the problems encountered in enforcing laws.

Worryingly, COVID-19 has aggravated impediments to women's social empowerment.

Table 3.2 **Women's experience of physical and other forms of violence**

WOMEN (15-19) WHO HAVE EXPERIENCED PHYSICAL VIOLENCE	PERCENTAGE OF WOMEN
Since age 15	21.8
In the past 12 months: often	1.3
In the past 12 months: sometimes	7.8
In the past 12 months: any	9.1
<b>Women (15-19) who have ever experience different forms of violence</b>	
Physical violence only	16.5
Sexual violence only	1.6
Physical and sexual violence	5.3
Physical or sexual violence	23.4

Source: Nepal Demographic and Health Survey 2016.



With women occupying a large share of positions in health services, they have faced acute risks from the virus. The lockdown has compelled women and girls more broadly to engage in more unpaid care work, including for children and the sick, and to undertake other domestic responsibilities. Women and girls suspected of carrying the disease are placed in quarantine centres that are hardly gender friendly. During lockdowns, gender-based and sexual violence, including rape or attempted rape, murder or attempted murder, suicide or attempted suicide, sexual misconduct and cybercrime, have risen as reported by Nepal's National Women's Commission.

Women and girls are face multiple health-related problems related to gaps in pre- and postnatal care as well as hygienic food. Even women with life-threatening diseases outside COVID-19 may not get the treatment they need. Although it is too early to ascertain the full impacts, it is likely that the life expectancy of women in general and the vulnerable in particular may fall moderately.

Girls' education has been badly affected. High dropout rates among girls may increase gender disparity in education again. The long disruption in study may have detrimental impacts on the quality of education as well as on mental health. Alternative online learning is not available to many children in remote areas. Although both boys and girls drop out, and may end up in farming, livestock and other income-earning activities, the probability that a higher percentage of girls will be involved in such work is high given the traditional division of work within the family as indicated by labour status surveys.

### **Economic Status and Empowerment**

Women's labour force participation rate, employment status and overall situation in the labour market show their economic status has improved. Yet the labour market remains marked by many structural barriers and forms of deep-rooted discrimination.

The labour force participation rate in general and women's rate in particular have significantly decreased in recent years. The Labour

Force Survey of 2008-2009 showed that the labour force participation rate of women was 80.1 percent, compared to 87.5 percent for men, one of the highest rates in South Asia. Though the definition of the labour force participation rate in 2008-2009 differed slightly from the one applied in the latest survey in 2017-2018, with the latter introducing a gainful employment concept, the 2017-2018 survey showed a rapid decline in women's labour force participation at 26.3 percent compared to 53.8 percent among men. Exclusion of women's unpaid work, in which agriculture accounts for a major share, has mainly contributed to such a decline.

**“ Based on the 2017-2018 survey, compared to 48.3 percent of males of working age in employment, only 22.9 percent of females were in employment. ”**

Based on the 2017-2018 survey, compared to 48.3 percent of males of working age in employment, only 22.9 percent of females were in employment. Among all working-age women, almost 52.4 percent were either own account workers or contributing family workers compared to 27.7 percent of men. Comparing the ratio of female own account workers with women's labour force participation rate suggests that most care workers are unpaid and excluded from the workforce. This is a critical shortfall in women's empowerment and economic standing.

Another gap is evident in the unemployment rate among females, which is 13.1 percent compared to 10.3 percent among males. Unemployment among young women (aged 15 to 24) is 23.9 percent against 19.7 percent for young men. Informal employment out of total employment among females is as high as 90.5 percent compared to 81.1 percent for males. The mean monthly wage income of female employees is 42.8 percent lower than that of male employees.

Table 3.3 **Share of employment by occupation and gender, 2017-2018**

OCCUPATION	MALE	FEMALE
Managers	86.8	13.2
Professionals	59	41
Technicians and associate professionals	69	31
Clerical support workers	60.7	39.3
Service and sales workers	56.6	43.4
Skill agricultural, forestry and fishery workers	42.5	57.5
Craft and related trades workers	78.4	21.6
Plant and machine operators, and assemblers	94.7	5.3
Elementary occupations	58.5	41.5
Others	92.1	7.9
<b>Total</b>	<b>62.7</b>	<b>37.3</b>

Source: Nepal Labour Force Survey 2017-2018, CBS.

Another indicator of the scale of gender inequalities in the labour market is that for every 100 males in the working-age population there are 125 females, yet when it comes to employment, for every 100 employed males there are only 59 employed females. Men hold 86.8 percent of managerial occupations. Men work 48 hours per week in more productive fields such as industries compared to 39 hours for women, but women work longer hours than men in less productive fields. The Labour Force Survey shows that an excessive household workload and preference to men to work outside the house restricts women's participation in paid employment. Women working outside the home are mainly involved in agriculture (vegetable farming), cosmetics businesses, health care and tailoring. Many are engaged in traditional home-based businesses within their communities.<sup>51</sup>

Women's integration into the labour force and economy is critical from equity as well as efficiency standpoints. Equity in the labour market implies improvement in women's relative economic position, which stimulates economic development by increasing human resources in the economy and creating space for additional demand. Consequently, this contributes to increased overall efficiency and national development potential. With the rise in economic growth and the educa-

tional level of women, the female labour force participation rate would be expected to increase over time along with expanded economic activity. This is not happening in Nepal, however. Various indicators such as the labour force participation rate, employment and management status, wage levels, ownership structure in industry and business, representation in high positions of government bureaucracy, etc., if viewed through a gender lens, clearly show women's lower economic empowerment.

The Government has made a number of policy decisions recently to make these issues a priority. An Employment Guarantees Act has been implemented in which employment of 100 days is guaranteed. From the last fiscal year, 2018-2019, the Prime Minister's employment programme opens opportunities for both wage and self-employment. Equally important, the higher average growth rate of 9.6 percent set in the 15th Five-Year Plan is guided by the aim of generating productive employment at a higher rate. Though such programmes are not earmarked separately for women, the specific provision of more productive employment to unemployed or low-wage earners may provide new opportunities for the most disadvantaged women. Moreover, recently, the President's Women Uplifting Programme has been implemented

<sup>51</sup> CBS 2019.

to generate more income and employment opportunities for women. A policy of positive discrimination has also received priority, resulting in women taking an increased share of public service positions, now amounting to 23.7 percent, up from an insignificant share a few years back. Though the effectiveness and impacts of these programmes have yet to be ascertained, they indicate some positive developments.

Despite various initiatives, structurally and institutionally imbedded discrimination on various fronts point to huge challenges on both the demand and supply sides. The latter includes challenges in developing women's entrepreneurial and employment capabilities in a more equitable way, which is linked to education in general and the cultivation of skills in particular for overcoming structural deficiencies in the market. The dominance of unskilled women in the informal labour market and spatial imbalances indicate the severity of the obstacles. The generation of employment demand for women, on the other hand, requires not only shifts in the existing structure of the economy, but also calls for overcoming inherent structural deficiencies that perpetuate discrimination in labour demand.

COVID-19 has imposed adverse impacts on women's economic empowerment, with a threat of prolonged harm. The pre-existing vulnerability of many women in informal labour has intensified. Large numbers of women have suffered from the standstill or collapse of the hospitality industry as well as wholesale and retail trade, as they have a high share of employment in these industries. The disruption in supplies has affected agricultural activities in which women engage as producers or wage earners, leading to increased food insecurity and livelihood losses. Closures of small local markets have left women vendors unable to sell their products, while women-run microenterprises are hard hit, with many unable to pay or get loans. Women migrant workers returning home without any saved income struggle to find new livelihoods.

## Political Empowerment

Women's participation at various levels of decision-making is an essential element of political empowerment and a prerequisite for an equitable society. In Nepal, an area of remarkable progress after the Constitution has been in women's political empowerment. In terms of women's share of legislative seats, Nepal ranks 48th in the world and first among South Asian countries,<sup>52</sup> largely due to the minimum 33 percent quota for women in national, provincial and local legislatures.

The Constitution guarantees women's right to participate in all structures and bodies of the State based on the principle of proportional inclusion, with the 33 percent reservation applying to government positions and parliamentary seats for women under Article 84(8). The Constitution makes it mandatory for each political party to ensure that at least one third of total elected members in the Federal Parliament are women. In the formation of the National Assembly, the upper house of the Parliament, out of 56 members, at least 21 (3 from each province) must be women. The Local Bodies' Election (Procedure) Act stipulates a mandatory 40 percent of local assembly seats for women.

The Local Level Election Act of 2017 mandates female representation in half of executive posts. For instance, the position of mayor or deputy mayor, ward chairperson or vice chairperson, and at least 40 percent of posts in local community councils have to be occupied by females. The Act also ensures that two seats are reserved for women at the ward level and at least one seat is reserved for a Dalit. As a result, women now hold 40.95 percent of local positions, although in leadership roles, most have been limited to the posts of deputy mayor and vice chairperson. Men hold 97.61 percent of mayoral posts. Almost half of ward-level post are held by women. Table 3.4 summarizes women's representation at the national, provincial and local levels.

Local judicial committees are now more accountable for promoting gender equality and preventing or responding to gender-based

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<sup>52</sup> WEF 2019.

Table 3.4 **Women's representation at the national, provincial and local levels**

SEX	NATIONAL ASSEMBLY		HOUSE OF REPRESENTATIVES		PROVINCIAL LEVEL		LOCAL LEVEL	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Male	37	62.7	185	67.3	361	65.6	20689	59.0
Female	22	37.3	90	32.7	189	34.4	14352	41.0
<b>Total</b>	<b>59</b>	<b>100</b>	<b>275</b>	<b>100</b>	<b>550</b>	<b>100</b>	<b>35041</b>	<b>100</b>

Source: MWCS statistical update.

violence. As all local governments are autonomous, they can play vital roles in promoting gender equality, including through more gender-based grass-roots programmes. But for the effective implementation of various constitutional and legal provisions, institutional and technical capacity constraints are still major constraints. To enhance women's political empowerment at the subnational and local levels, taking down these barriers will need to be a higher priority.

## Conclusions

Nepal has made notable overall progress towards gender equality and women's empowerment in recent years, helping to reduce women's vulnerability and raise their economic status, which are critical to sustainable LDC graduation. With the 2015 Constitution, and subsequent changes and reforms, progress on the political front has been substantial. Nepal is far ahead of other South Asian countries in women's representation, and the federal system, with revenue and expenditure responsibilities at the provincial and local levels, has improved prospects to empower women. Various women's rights-related rules and regulations, including laws preventing discriminatory practices, have been enacted. The SDGs, the 15th Five-Year Plan and gender-based budgeting all aim to enhance empowerment.

But deep-rooted institutional and structural barriers pose major challenges. Social taboos remain strong, and a patriarchal system sustains gender inequalities. The sharp fall in female labour force participation along with women's high unemployment and concentration in poor-quality jobs with very low wages indicate their higher vulnerability. Caste-based discrimination is a major additional barrier for marginalized women. Women at large continue to engage more predominantly in unpaid care services and less productive work.

Despite advances in women's representation, their roles in decision-making are still weak. There is a reluctance to adopt and apply the affirmative action policy. As a result, minimum reservations are not always fulfilled. A lack of adequate human resources and weak technical capacity in provinces and locally limit the scope of implementing policies effectively, which in turn adversely affects gender equality. The poor socioeconomic condition of women in some places makes achieving gender equality more challenging.

A number of policies, guidelines, strategies and mechanisms for gender equality and social inclusion have yet to be developed. For instance, gender equality and social inclusion committees for health services and school management have yet to be properly established. With limited revenues at the provincial and local levels, there is no strong policy of allocating resources to women's empower-

ment. Local judicial committees are not fully capable of addressing gender equality. In sectors such as education, the gender gap in recruiting female teacher is high.

As per the constitutional mandate, women have a legal right to access land and property, but in practice have limited ownership of property as well as financial and natural resources to engage in entrepreneurial and business activities. Though the Constitution granted equal inheritance to parental property, this provision has yet to be applied effectively. Sexual and reproductive health and rights are guaranteed to all women regardless of their caste and gender, but health education relating to them is limited. Adolescent pregnancy is closely associated with child marriages, which are not effectively checked. Gender-based violence is persistent, including a variety of harmful practices including trafficking and cybercrime.

Despite notable progresses on many fronts, more far-reaching reforms will be essential for ensuring gender equality and women's empowerment across the political, economic and social arenas essential for higher human development. Yet COVID-19 has now in-



**For instance, gender equality and social inclusion committees for health services and school management have yet to be properly established. With limited revenues at the provincial and local levels, there is no strong policy of allocating resources to women's empowerment.**

tensified women's vulnerability, threatening deterioration in both social and economic empowerment. Beyond concerted efforts to contain the virus, other measures are urgently needed to improve access to health services, restore school and college education through various alternative means, provide more targeted relief, and extend programmes for employment and empowerment with an exclusive focus on vulnerable women. Removing major structural and institutional barriers impeding gender empowerment is another priority to ensure human development advances in an equitable way.







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## Chapter 4

# LDC Graduation: Present Status

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### LDC graduation criteria: a critical assessment

Nepal has been an LDC since the category was created in 1971, defined as a group of low-income countries with structural handicaps that hamper their development and growth, making them likely to remain poor.<sup>53</sup> The international community recognized that they need special support<sup>54</sup> to overcome these obstacles, which include deficient human resources and a weak economic structure (Box 4.1). Originally, the LDC criteria covered only social and economic dimensions, but the Committee for Development Policy has refined the criteria over time with the endorsement of the Economic and Social Council and the General Assembly of the United Nations. The Committee included indicators related to environmental vulnerability in 1999. Currently, three criteria define the LDCs, namely: GNI per capita, the Human Assets Index

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<sup>53</sup> Guillaumont 2009, 2018.

<sup>54</sup> United Nations 2018.

## Box 4.1 Defining the LDCs: A brief history

The concept of the LDCs has its origins in the first session of the United Nations Conference on Trade and Development (UNCTAD I), which adopted a recommendation that “industrialized countries and regional and international organizations should endeavour to increase the flow of the technical assistance needed to accelerate the growth of developing countries, and particularly of the least developed, to achieve the maximum efficiency in the use of external resources”. It also adopted a general principle that “the adoption of international policies and measures for the economic development of the developing countries shall take into account the individual characteristics and different stages of development of the developing countries, special attention being paid to the less developed among them, as an effective means of ensuring sustained growth with equitable opportunity for each developing country” (emphasis added).

Both the concept of the LDCs and the link to international support measures were reinforced by UNCTAD II in 1968, which adopted a resolution on “special measures to be taken in favour of the least developed among the developing countries aimed at expanding their trade and improving their economic and social development”.

On 13 December 1969, the United Nations General Assembly adopted the International Development Strategy for the Second United Nations Development Decade, including a section on the adoption of measures to support LDCs. In early 1970, a working group of the United Nations Committee for Development Planning (later renamed the Committee for Development Policy) was formed to identify the LDCs. Further resolutions were passed on special measures in support of the LDCs at UNCTAD III in 1972 and UNCTAD IV in 1976. At UNCTAD V in 1979, the

Conference expressed concern that the UNCTAD III and IV resolutions had not been fully implemented, and a resolution was passed to launch a Comprehensive New Programme of Action for the Least Developed Countries. It encompassed an Immediate Action Programme for 1979-1981 and a Substantial New Programme of Action for the 1980s.

This programme was finalized and adopted unanimously by the international community in 1981 at the First United Nations Conference on the Least Developed Countries, convened in Paris by the General Assembly. A subsequent series of conferences took place in 1990 (also in Paris), 2001 (in Brussels) and 2011 (in Istanbul); each adopted a programme of action for the following decade. The most recent of these is the Istanbul Programme of Action.

Source: Adapted from UNCTAD 2016

(HAI) and the Economic Vulnerability Index (EVI).<sup>55</sup> The first measures income and overall resources available to a country, whereas the HAI and EVI assess the main structural impediments to sustainable development.

On the recommendation of the Committee for Development Policy, the Economic and Social Council reviews criteria for LDC inclusion and graduation every three years. The triennial review in 2018 set a per capita GNI of \$1,025 as the threshold for inclusion in the LDC category; the threshold for graduation is 20 percent above this, or \$1,230.

The HAI threshold consists of four indicators, three on health and nutrition (the percentage of the population undernourished, the under-5 mortality rate and maternal mortality ratio) and two on education (gross secondary enrolment ratio and adult literacy rate). Each has an equal weight in the overall index. A value of 60 on the index was set for inclusion in the LDC category in 2018, the same value as in 2012 and 2015. The graduation threshold was set at 10 percent above the inclusion threshold or 66.

<sup>55</sup> CDP 2018.

The EVI threshold involves a composite index encompassing exposure and shock indices. It consists of an indicator of size (logarithm of population); geographical exposure to shocks (index of remoteness); human exposure to shocks (share of population living in low-lying coastal areas); economic exposure to shocks (share of agriculture, forestry and fisheries in GDP; index of merchandise export concentration); natural shocks (share of victims of natural disasters in the population; index of the instability of agricultural production); and trade-related shocks (index of instability of exports of goods and services). The value for inclusion in the LDC category was set at 36 in 2018, the same value as in 2012 and 2015. Graduation was set at 10 percent below the inclusion threshold or at a value of 32.

A country becomes eligible for graduation if it meets the threshold levels for at least two of the three criteria in two successive triennial reviews. It can also become eligible under the income-only rule if its GNI per capita exceeds at least twice the established threshold (\$2,460 or more for the 2018 review). This is regardless of its HAI and EVI scores, provided it has a strong prospect of sustaining higher GNI per capita.

Only five countries have graduated from the LDC category since its creation: Botswana in December 1994, Cape Verde in December 2007, the Maldives in 2011 and Samoa in January 2014, all on the basis of GNI per capita and the HAI, and Equatorial Guinea in 2017 on the basis of its high GNI per capita. Graduation has been decided by the General Assembly for two countries: Vanuatu in 2020 and Angola in 2021. Seven LDCs have been found

eligible for graduation at least twice. Bhutan, Kiribati, Sao Tome and Principe, the Solomon Islands and Tuvalu were recommended for graduation in 2018, but Bhutan has requested that its effective graduation date align with the end of the 12th national development plan in 2023. For Nepal and Timor-Leste, the Committee for Development Policy has deferred its decision on recommendations for graduation to the 2021 triennial review owing to concerns in these countries about the sustainability of development progress.<sup>56</sup>

Continuous reviews and refinements of inclusion and graduation criteria indicate their shortcomings and inadequacy in fully capturing the structural impediments to sustainable development. The Committee for Development Policy has undertaken a comprehensive review of the criteria in response to a request by the General Assembly.<sup>57</sup> In particular, existing criteria indicate standard of living and human assets at a satisfactory level, but the measure of vulnerabilities falls short. While the EVI is supposed to capture structural economic and environmental vulnerability, it does not include any parameters on vulnerability to climate change or political fragility.<sup>58</sup> Some indicators are not applicable to landlocked LDCs, for example, such as the share of the population in low-elevation coastal zones. No indicators assess the resilience of the country and its communities. Criteria to identify LDCs also do not adequately capture prevalent inequalities, social or geographical, and other structural vulnerabilities. Gender is not sufficiently covered, which limits the ability to assess this issue in terms of human asset formation and socio-political vulnerabilities. Current criteria are silent on the quality of governance and institutions.<sup>59</sup>

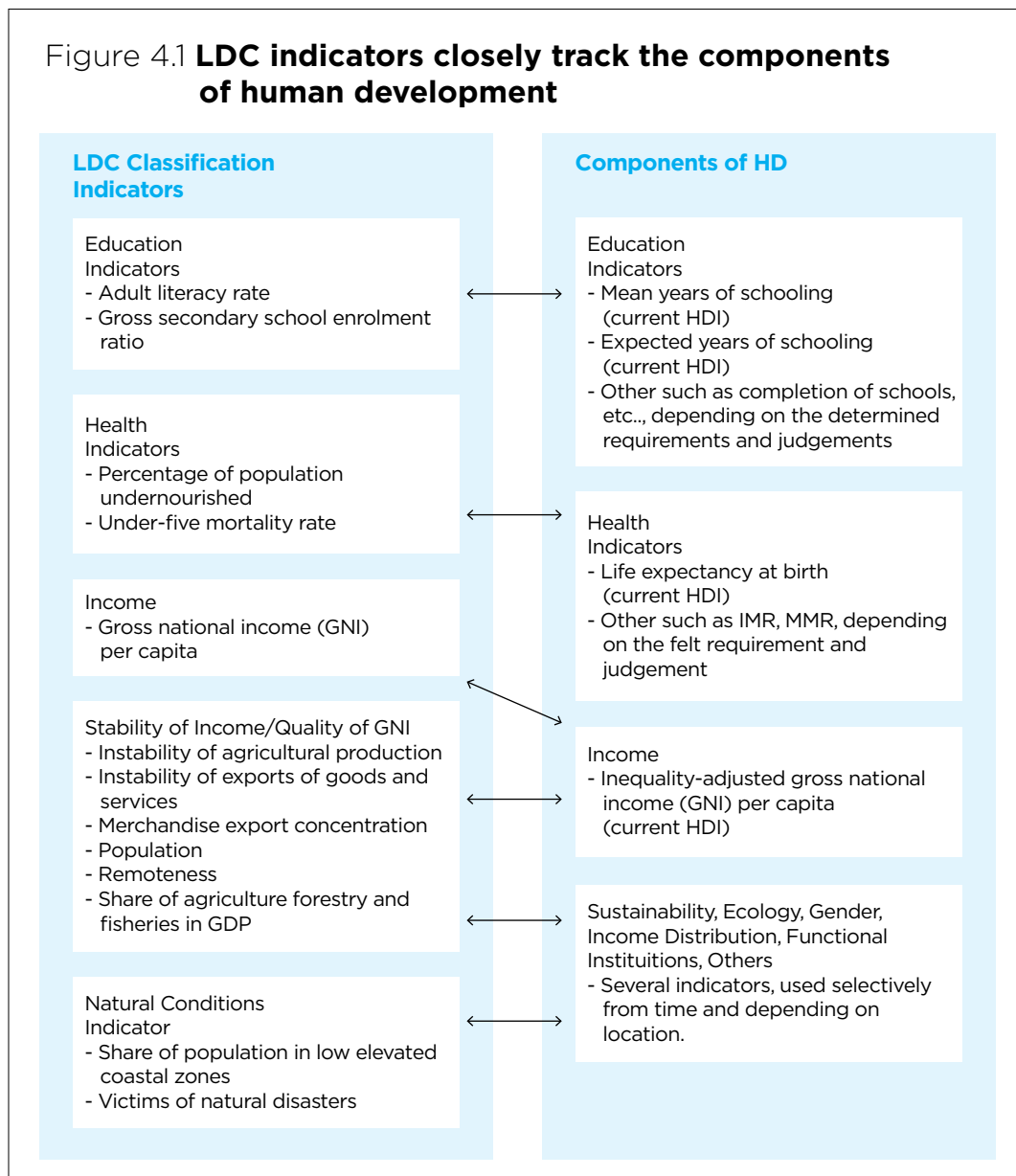
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<sup>56</sup> CDP 2018e.

<sup>57</sup> CDP 2017.

<sup>58</sup> Guillaumont 2018.

<sup>59</sup> As per General Assembly resolution 70/294 and Economic and Social Council resolution 2016/15 to carry out a comprehensive review of the LDC criteria, the Committee for Development Policy started the review in 2017 and completed it in 2020. The revised criteria will be used in the 2021 triennial review. There is no change to the income criterion. Under the HAI, the prevalence of undernourishment has been replaced with the prevalence of stunting in the health indicator, and the gender-parity index for gross secondary school enrolment has been added to the education indicator. Further, each indicator has been assigned an equal weight of 1/6. The index for measuring vulnerability to economic and environmental shocks has been renamed the economic and environmental vulnerability index but retained the abbreviation EVI. The indicator on population size was removed. Remoteness has been renamed as remoteness and being landlocked to better reflect the fact that the indicator accounts for the specific challenges of landlocked LDCs. To broaden the coverage of environmental vulnerabilities, an indicator on the share of the population living in drylands has been added to the EVI (CDP 2020).



Sources: MPI and UNDP 2016

### Human development and graduation

Since human development places people at the centre, its goal is to create an environment enabling people to live long, healthy and creative lives,<sup>60</sup> and expand what people are able to do and be—the real freedoms, irrespective of who and where they are.<sup>61</sup> Human development is embedded with notions of equity, productivity, empowerment and sustainability. It thus provides a holistic framework covering all aspects of development, whether economic growth or interna-

tional trade; budget deficits or fiscal policy; savings, investment and technology; basic social services and safety nets for the poor.<sup>62</sup> The Millennium Development Goals in 2000 and the 2030 Agenda for Sustainable Development in 2015 both endorsed human development.

Graduation from the LDC category is the process of removing critical obstacles to the structural transformation that determines economic and social advancement. While the

<sup>60</sup> UNDP 1990.  
<sup>61</sup> Jahan 2019.  
<sup>62</sup> Haq 2004.



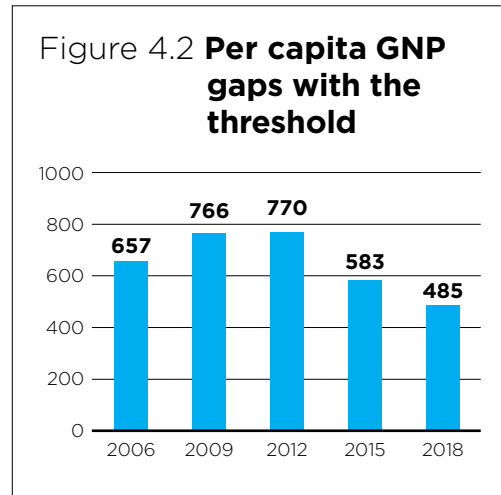
process is measured by achievements in income, human assets, and economic and environmental vulnerabilities, it is not sufficient merely to fulfil the criteria and complete the graduation. For graduation to have meaningful momentum, continuous progress in human development must be sustained. The close correspondence between the components of human development and the LDC criteria is shown in Figure 4.1.

## Graduation criteria at the national and provincial levels

### National

Nepal met the threshold level for LDC graduation on two indicators, the HAI and EVI, in the 2015 triennial review for the first time. It also met the threshold level in the 2018 review, becoming eligible for graduation by 2021. GNI per capita remains substantially below the threshold level, however. Unsure about the extent of the country's vulnerabilities and possibilities to increase per capita income in the near future, the Government requested the Committee for Development Policy in 2018 to defer the graduation process until Nepal could better prepare to make a meaningful, smooth, sustainable and irreversible transition.<sup>63</sup>

In general, per capita income measures the state of material well-being. It also reflects productive capacity. Low per capita income is the consequence of structural impediments to economic development that may hinder efforts to promote human development. In 2020, the calculated GNI per capita income of Nepal is US \$911 against the graduation threshold of US \$1,230. The gap between the two has declined, but is still at about 26 percent of the threshold level which is lower than the estimates reported in triennial review of UNCDP in 2018 (Figure 4.2). And the historical growth of per capita GDP at less than 3 percent per



Source: UNCDP, Triennial Review 2018.

annum during the last two and a half decades suggests that “business as usual” will not take the economy to the graduation threshold for income in the near future.

The COVID-19 pandemic has resulted in a countrywide lockdown for about six months that helped to contain the spread of the virus and save lives, but also dramatically slowed economic activities. The preliminary estimates of Central Bureau of Statistics, on the assumption of early normalization, show that GDP for FY 2019-20 would be 2.3 percent against the target of 8.5 percent.<sup>64</sup> It took more than five years for LDCs to recover from the 2008 global financial crisis.<sup>65</sup> This time, the remittances from migrant workers that play a critical role in the economy was initially expected to decline significantly and actually it declined by 0.5 percent in FY 2019-20.<sup>66</sup> However, a high proportion of remittance to GDP is indicative of vulnerability, given the uncertainty of global labor market. Increased vulnerability in the economy reinforces the critical importance of structural transformation and stronger productive capacities to enhance resilience.

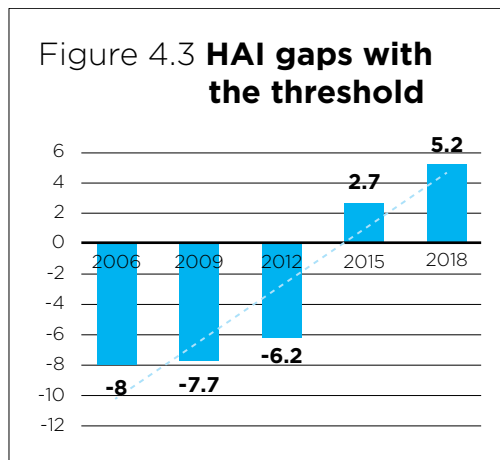
As human assets interact with physical assets to generate wealth and well-being, they are the key to future development, carrying both instrumental and intrinsic value. A low level of human capital is a major im-

<sup>63</sup> CPD 2018b.

<sup>64</sup> The IMF in its World Economic Outlook update of June 2020 projects global output will contract by 4.9 percent in 2020 with a slow recovery in 2021. It also projects a negative growth rate of 1 percent for low-income developing countries (IMF 2020). There is a possibility for negative growth for the current fiscal year in the revised estimates.

<sup>65</sup> UNDESA 2020.

<sup>66</sup> CBS 2020, NRB, 2020.



Source: UNCDP, Triennial Review 2018.

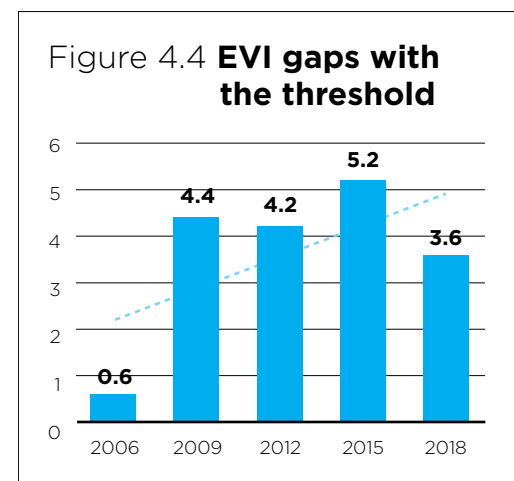
pediment, a manifestation of unsustainable development as well as a limit on possibilities for productivity and economic growth, poverty eradication, reduced inequalities and resilience to external shocks.<sup>67</sup> Nepal's HAI has shown continuous improvement but crossed the threshold level in 2015 (Figure 4.3). Recent changes in policy focus from incremental to fundamental reforms in education and health have contributed to impressive improvements in human assets. More recent UNCDP estimates show that the HAI has increased to 72.1 in 2020 which is higher than the estimates reported and analysed here.

Major policy advances in education included the decentralization of school management to communities, the preparation of individual school improvement plans, the financial and social auditing of schools, the supervision of schools by research centres, support for schools through per capita grants, the introduction of teacher licensing, the introduction of a national framework for curricula, the provision of midday meals, and health and nutrition programmes, among others.

Health sector changes have comprised effective immunization programmes, and better maternal health services and antenatal care, among others, leading to improving health indicators.<sup>68</sup> The pandemic poses risks of reversals, however. The lockdown as well as fear of infection have resulted in many women de-

living babies unattended by health workers. Unsafe practices and a drop-off in antenatal and postnatal services are already apparent; COVID-19 could cause up to 4,000 under-5 deaths in the next six months.<sup>69</sup> Deprivation in access to nutritious food and emergency health care has also increased. The World Bank has warned that 31.2 percent of the population faces significant risks of falling into a poverty trap,<sup>70</sup> with lasting consequences that could include likely reversals in secondary school enrolment, particularly among girls.<sup>71</sup>

Generally, economic vulnerability can be defined as the likelihood that unforeseen exogenous shocks will hinder a country's economic development. It is the combined result of the size and likelihood of these shocks (either natural or external), the exposure to them and the resilience to them (or the capacity to react). While the first two determinants mostly depend on a country's structural features, resilience primarily depends on current policies. As indicated above, the EVI does not adequately capture economic and environmental vulnerabilities, and as a result underestimates Nepal's vulnerability. This is why Nepal first met the graduation threshold of the EVI in 2006 despite high vulnerabilities (Figure 4.4). The gap with the threshold level fluctuates, but there is a positive trend. More recent UNCDP estimates show that the EVI has reduced to 25.4 in 2020 which is lower than the estimates reported and analysed here.



Source: UNCDP, Triennial Review 2018.

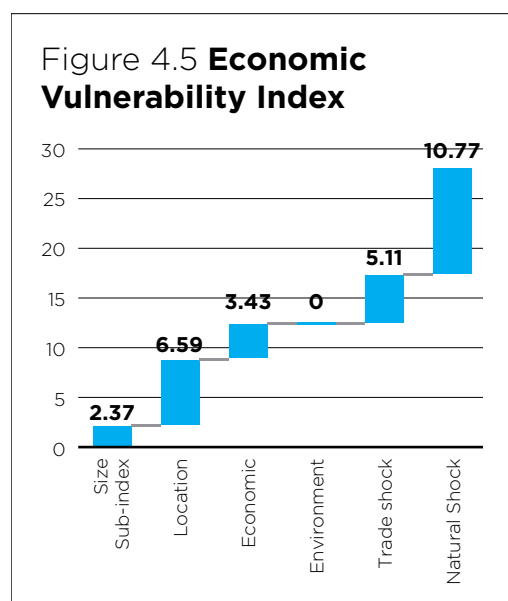
<sup>67</sup> CDP 2018f.

<sup>68</sup> NPC 2016.

<sup>69</sup> UNICEF 2020.

<sup>70</sup> World Bank 2020.

<sup>71</sup> RCW and Plan Asia. 2013. "Asia child marriage initiative: Summary of research in Bangladesh, India and Nepal." Retrieved from <https://www.icrw.org/wp-content/uploads/2016/10/PLAN-ASIA-Child-Marriage-3-Country-Study.pdf>.



Source: Author's calculation

Updated values for the three LDC criteria were calculated based on the Committee for Development Policy methodology and the latest available data, and are presented in Table 4.1 (see Annex 5 for details on the calculation). CDP updates values for these criteria to be presented in 2021 triennial meeting may show further improvements in these criteria compared to these values due to changes in the criteria. The income data were obtained from the World Development Indicators of the World Bank, which were calculated using the Atlas method. The HAI indicators were calculated based on data from the NDHS 2016 and various publications of the Ministry of Education and Ministry of Health. Required data to calculate the EVI were drawn from publications by UNCTAD, the

Centre d'Etudes Prospectives et d'Informations Internationales, the Ministry of Home and the Central Bureau of Statistics.

The calculated values show that Nepal maintains its eligibility to graduate from the LDCs. It has crossed the threshold of the 2018 triennial review for the HAI and EVI. But large gaps remain in the income criterion. Looking at the various components of the EVI shows that population size, the share of the population in low-elevation coastal zones, and stable (if at a low level) agricultural production and exports have contributed to a low EVI score. More than two thirds of Nepal's vulnerability is explained by acute natural and trade shocks and its land-locked geography (Figure 4.5). COVID-19 may increase the intensity of trade shocks due to declining demand as well as supply disruptions. The World Trade Organization (WTO) projects world trade to decline by between 13 percent and 32 percent in 2020.<sup>72</sup> Tourism in Nepal, a major part of the economy, has ground to a halt.

The EVI as adopted and calculated by the Committee for Development Policy does not adequately reflect all aspects of economic, social and environmental vulnerability, nor differences in structural and general vulnerabilities. It must be supplemented by other indicators on various dimensions of vulnerability. This would capture constraints such as the fact that economic growth is not yet driven by structural transformation and changes in productivity within specific economic sectors.<sup>73</sup> Agriculture, a mainstay of the economy, is mainly rain-fed, with only around 33 percent of arable land irrigated around the year.<sup>74</sup> Income-based pover-

Table 4.1 Nepal's status on the LDC criteria, 2019

INDICATORS	GRADUATION THRESHOLD	ACTUAL VALUE
Per capita GNI (\$)	1,230	860
<b>HAI</b>	<b>Above 66</b>	<b>67.9</b>
Health index		42.8
Education index		20.4*
<b>EVI</b>	<b>Below 32</b>	<b>28.3</b>
Exposure index		12.4
Shock index		15.9

\* The value of the education index has declined since 2018 due to changes in the definition of secondary education, which is defined as class IX to class XII.

Source: Report calculations.

<sup>72</sup> WTO 2020.

<sup>73</sup> Basnet et al. 2012.

<sup>74</sup> MoF 2019.

ty and inequality are high, and remittances still play a significant role in the economy. Remittance-driven growth fuelling the tertiary sector through large imports is vulnerable to a number of exogenous factors.<sup>75</sup>

Further, despite Nepal's physical vulnerability to climate change being lower than the LDC average, recurrent shocks are intensifying, including through rainfall that causes soil erosion, sedimentation, landslides and floods.<sup>76</sup> There are high risks of catastrophic glacial lake outburst floods (so-called GLOFs). Nepal is also among the world's most earthquake-prone countries. Overall, irrespective of the value of the EVI, Nepal is still highly vulnerable to both economic and natural shocks.

### Provincial level

The Constitution of Nepal created a federal structure with seven provinces, with significant socioeconomic differences among them. For example, Bagmati Province contributes 41.4 percent of GDP, while the share of Karnali Province is 3.4 percent. In fiscal year 2018-19, Lumbini province achieved economic growth of 7.1 percent, but Karnali Province lagged at 5.7 percent. Life expectancy in Gandaki Province stands at 71.7 years whereas it is 66.8 year in Karnali Province. The population below the absolute poverty line is 33.9 percent in Sudurpaschim Province, but 12.4 percent in Province 1. Unemployment rate is 20.1 percent in Province 2 compared to 7 percent in Bagmati province.<sup>77</sup>

The LDC inclusion and graduation criteria do not incorporate any measures to adjust for such regional disparities. To address this lacuna, per capita GNI and the HAI and EVI were calculated at the provincial level. The EVI was improvised to broaden its scope and capture vulnerabilities in the context of Nepal, in terms of the size and likelihood of exogenous shocks (either natural or external), and exposure and resilience to them.

An exposure subindex was calculated based on the Committee for Development Policy methodology using population size, remoteness as measured by the proportion of a population with access to a road within a 30-minute walk, and the share of agriculture in GDP. Equal weight was given to the three param-

Figure 4.6 **Relative positions of provinces: income**

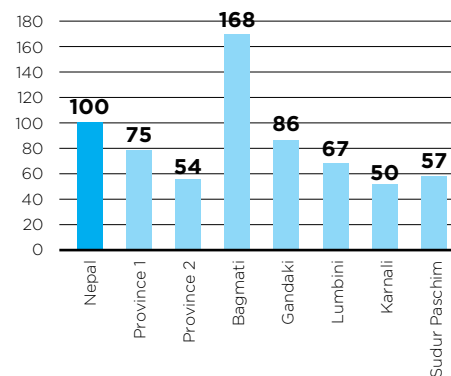
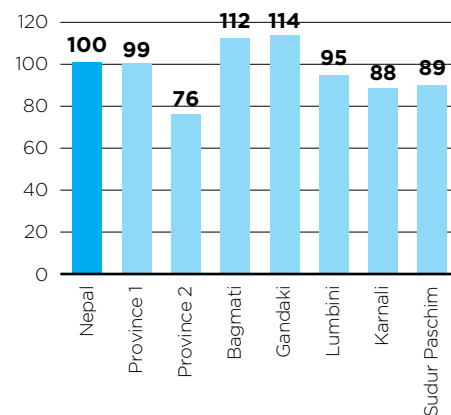


Figure 4.7 **Relative positions of provinces: human assets**



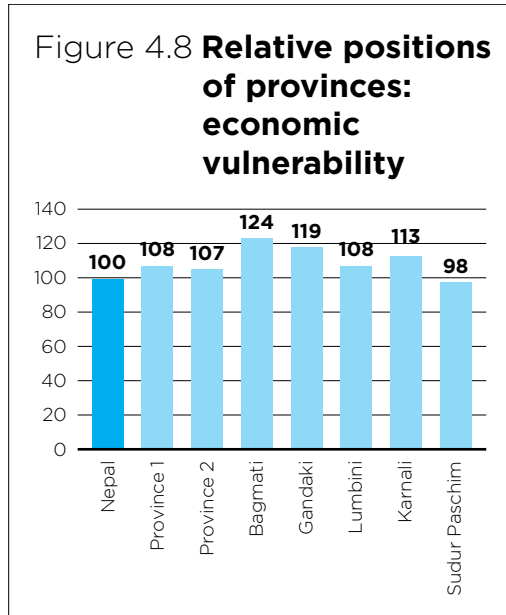
eters. A shocks subindex was calculated by the measure of instability in agriculture production and the proportion of people affected by natural disaster, with equal weight to capture economic and natural vulnerability, respectively. The new EVI includes a direct measure for resilience calculated as the percentage of the population covered by social security. Figures 4.6, 4.7 and 4.8 present the calculated values of indicators for the seven provinces (see also Annex 4).

The disparity in per capita income among provinces is stark. Per capita incomes in Karnali Province, Province 2 and Sudurpaschim Province stand at 29 percent, 31 percent and 33 percent of the per capita in

<sup>75</sup> CDP 2018c.

<sup>76</sup> Guillaumont 2017.

<sup>77</sup> MoF 2019.

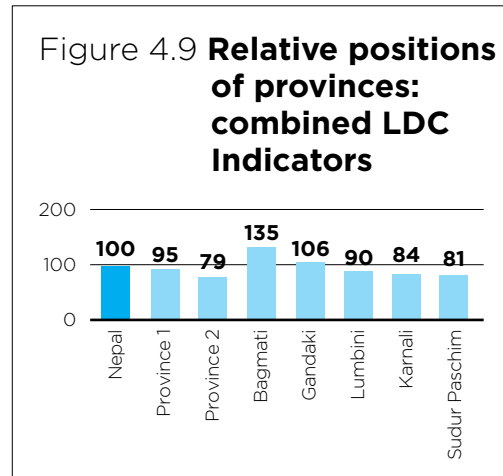


come in Bagmati Province. The difference in human assets is narrow, however, except for Province 2, which lags behind in human asset formation as well. With regard to vulnerabilities, all provinces are almost equally vulnerable to external shocks.<sup>78</sup> All provinces have a higher value on the vulnerability index than the national value, except Sudurpaschim Province. This indicates that the nation collectively is in a better position to tackle external shocks than individual provinces.

A composite index of the LDC graduation criteria was calculated for each of the provinces by assigning equal weight to the three criteria. The calculated values show that Bagmati Province and Gandak Province score higher than the national values, whereas other provinces score lower, Province 2 being at the bottom (Figure 4.9). Moving forward, the overall adverse impact of COVID-19 on growth, human assets and economic vulnerability will likely be worse in lagging provinces.

## Conclusions

Nepal is eligible for graduation from the LDCs at the 2021 triennial review of the UNCDP. It has improved on each of the performance criteria. Low per capita income and volatility in the vulnerability index, however, demand policies to build



productive capacities and propel structural transformation of the economy. The current level of structural and physical vulnerability puts the country at risk of falling into a low-level equilibrium or disequilibrium given the macro economic threats and even a poverty trap if an appropriate development pathway is not adopted postgraduation. At the provincial level, there are higher disparities in income than human assets. Lagging provinces, especially Karnali Province, Province 2 and Sudurpaschim Province, deserve special attention.

Critically, COVID-19 has affected progress on all three criteria. Nepal is likely to experience deterioration and risks development reversals through contraction in national output, increased economic dislocation, a fall in employment, increased poverty, deteriorating health, declining exports and remittances, and loss of market predictability and investor confidence, among other serious challenges. The United Nations Secretary-General, while presenting the report on progress made in implementing the Istanbul Programme of Action, recognized such negative impacts in the near term.<sup>79</sup> The Committee for Development Policy has announced that it is deeply concerned about the possible negative impacts of COVID-19 on LDCs, including those preparing to graduate or being considered for graduation.<sup>80</sup> The decision on graduation demands a detailed assessment of socioeconomic fallout, including on medium-to long-term structural changes in the economy and growth, employment, resource mobilization, trade, and economic and environmental vulnerability, among other core issues.

<sup>78</sup> The vulnerabilities index at the provincial level was calculated based on the Committee for Development Policy methodology. There was no substantial difference in the relative positions of the provinces, however.

<sup>79</sup> UN General Assembly 2020.

<sup>80</sup> CDP 2020.









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## Chapter 5

# Impact of Graduation

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LDC graduation is one milestone in a country's longer-term quest to achieve sustainable development. Graduation does not represent a solution to all development challenges, including those that are still emerging.

These may continue postgraduation if they are not managed properly during the graduation phase. Notwithstanding the system for a smooth transition, graduation entails the phasing out of access to LDC-specific international support measures to overcome severe structural impediments to growth and sustainable development.<sup>81</sup> The prospective loss of these measures requires careful consideration. They fall into three main categories: trade-related special and differential treatment; targeted official development assistance (ODA) that includes concessional financing and technical assistance; and other support measures.

The most visible of these are trade preferences, allowing preferential market access under schemes such as the European Union's Everything But Arms initiative and concessions granted under the Generalized System of Preference (GSP)<sup>82</sup>

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<sup>81</sup> UNCTAD 2016.

<sup>82</sup> The GSP was adopted in 1968 at UNCTAD II. Under this scheme, preference-giving countries grant reduced or zero tariff rates on selected products of developing countries. The LDCs receive special and preferential treatment for a wider coverage of products and deeper tariff cuts.

as well as services waivers under the WTO. Several provisions for special and differential treatment include trade-related technical assistance, flexibility in the implementation of WTO agreements and transition periods, exceptions and exemptions in implementation of some provisions of the agreements, and access to technical assistance and aid for trade funds, including under the Enhanced Integrated Framework. Some regional trade agreements such as the South Asian Free Trade Agreement also contain preferential market access provisions for LDC members.<sup>83</sup>

LDCs also benefit from ODA and concessional loans. The Istanbul Programme of Action calls for 0.15 to 0.20 percent of donor GNI to be provided as aid to LDCs.<sup>84</sup> Specific bilateral support measures include Japan's Minimal Interest Rate Initiative for low-income LDCs, and the LDC Infrastructure Fund as a joint initiative of the Netherlands Development Finance Company and the Government of the Netherlands, among others.



**Some regional trade agreements such as the South Asian Free Trade Agreement also contain preferential market access provisions for LDC members.**

The following section discusses international support measures in trade and development finance. While some measures are clearly defined and directly implementable by the international community, such as preferential market access and LDC-specific measures, others require action by LDCs themselves, including special and differential treatment provisions. The latter depend on institutional capacities, including legal and technical skills, and/or effective interministerial coordination. Some international support measures, partic-

ularly in development finance, are indicative in nature, with no concrete mechanisms for enforcement or accountability.

## Market access: goods

Preferential market access for LDCs is mainly provided through duty-free, quota-free (DFQF) market access or preferential tariffs, and preferential origin of trade. Most developed countries grant either full or nearly full DFQF market access to LDCs, and an increasing number of developing countries also extend this to LDCs on a significant number of products. Table 5.1 presents information on duty-free market access accorded to LDCs by WTO members and notified as LDC preference schemes to the WTO. The schemes of Australia, New Zealand, Norway and Switzerland provide full duty-free access. For Canada, Chile, Japan and the European Union, more than 97 percent of tariff lines are free of duties on products originating from the LDCs. China, Iceland, India and the Republic of Korea grant duty-free access to around 90 percent or more of their tariff lines. Hong Kong Special Administrative Region of China and Macao Special Administrative Region of China offer duty-free access to all products on a most-favoured nation basis; such facilities are available to the LDCs as well. In Singapore, only 6 out of 9,558 tariff lines are dutiable.

Nepal is eligible for most preferential schemes, including DFQF and bilateral preferential schemes provided by Australia, Canada, Chile, China, Iceland, India, Japan, New Zealand, the Republic of Korea, the Russian Federation, Switzerland, Taiwan Province of China, Thailand, Turkey, the United States and the European Union. To access preferential markets, the rules of origin require a minimum domestic value addition of 30 percent for India, Switzerland and the European Union, 35 percent for the United States, 40 percent for Canada and Japan, and 50 percent for Australia, Norway and Thailand (Table 5.2).

<sup>83</sup> SAARC 2004.

<sup>84</sup> United Nations 2011.

Table 5.1 **Major markets with multilateral preferential market access for LDCs**

MARKET	DESCRIPTION	DUTY-FREE TARIFF LINE COVERAGE AND MAJOR EXCLUSIONS
Australia	DFQF entry for LDCs Entry into force: 1 July 2003	100 percent
Canada	GSP Least Developed Country Tariff Programme Entry into force: 1 January 2000 Extended until 31 December 2024	98.6 percent (exclusions: dairy and other animal products, meat, meat preparation, cereal products)
Chile	DFQF scheme for LDCs Entry into force: 28 February 2014	99.5 percent (exclusions: cereals, sugar, milling products)
China	Duty-free treatment for LDCs Entry into force: 1 July 2010	96.6 percent (exclusions: chemicals, transport vehicles, machinery and mechanical appliances, electrical machinery, paper)
European Union	GSP Everything But Arms Initiative Entry into force: 5 March 2001	99.8 percent (exclusions: arms and ammunition)
Iceland	GSP tariff preference for world's poorest countries Entry into force: 29 January 2002	91.8 percent (exclusions: meat, food preparation, vegetables, dairy and other animal products, plants and trees)
India	Duty-free Tariff Scheme Entry into force: 13 August 2008	95.1 percent (exclusions: plastics, coffee and tea, alcoholic beverages, tobacco, food residues)
Japan	GSP enhanced DFQF market access Entry into force: 1 April 2007 Extended until 31 March 2012	97.9 percent (exclusions: fish and crustaceans, footwear, milling products, cereal products, sugar)
Republic of Korea	Presidential Decree on Preferential Tariff for LDCs Entry into force: 1 January 2000	89.9 percent (exclusions: fish and crustaceans, mineral fuels, oil seeds and oleaginous fruits, wood products, vegetables)
New Zealand	GSP Tariff Treatment for LDCs Entry into force: 1 July 2001	100 percent
Norway	GSP DFQF market access Entry into force: 1 July 2002	100 percent
Russian Federation	GSP scheme in the context of the Customs Union between Belarus, Kazakhstan and the Russian Federation Entry into force: 13 August 2008	37.1 percent (exclusions: machinery and mechanical appliances, chemicals, electrical machinery, iron and steel products, transport vehicles)
Switzerland	GSP Revised Preferential Tariff Ordinance Entry into force: 1 April 2007	100 percent
Taiwan Province of China	Duty-free treatment for LDCs Entry into force: 17 December 2003 crustaceans, plastics)	30.8 percent (exclusions: machinery and mechanical appliances, chemicals, electrical machinery, fish and
Thailand	Duty-free treatment for LDCs since 2015	70.4 percent
Turkey	GSP since 31 December 2005	80.5 per cent (exclusions: iron and steel products, fish and crustaceans, food preparation, meat, oil and seeds and oleaginous fruits)
United States	GSP for least-developed beneficiary developing countries; Trade Preference Extension Act of 2015 (Title II) that authorizes GSP until December 2020	82.2 percent (exclusions: apparel and clothing, cotton fibres, footwear, dairy and other animal products)

Source: WTO 2019.

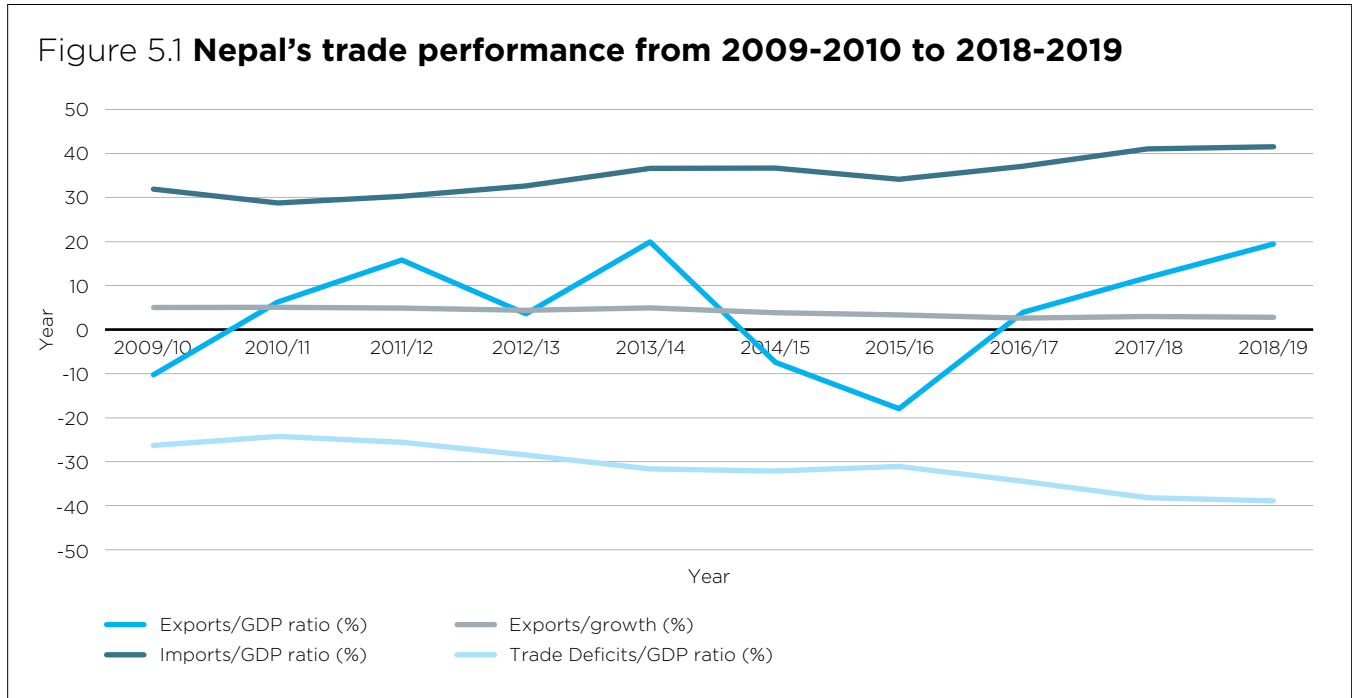


Table 5.2 **Preferential rules of origin in major preferential markets**

COUNTRY	ORIGIN CRITERIA	REQUIREMENTS	PERCENTAGE LEVEL
Australia	Last manufacturing process performed in LDC, product-specific rules	Minimum amount of allowable factory cost	Allowable factory cost should be at least 50 percent of the total factory cost; for LDCs, 75 percent with cumulation
Canada	One single rule across the board for all products except textile and apparel articles, where product-specific rules apply	Maximum amount of non-originating inputs	Maximum non-originating materials 60 percent; for LDCs, 80 percent with cumulation
European Union	Product-specific rules for all products	Change of Harmonized System heading with or without exemptions, specific working or processing requirements, and/or maximum percentage of imported inputs or combinations of requirements	Maximum amount of non-originating material does not exceed 70 percent. Exception under chapter 63: 25 percent, 40 percent and 50 percent where used in the single list
India	One single rule for all products	Change in tariff sub-heading and maximum percentage of non-originating materials	Maximum amount of non-originating materials is 70 percent
Japan	Change in tariff heading as a general rule and single list of product-specific rules	Change of harmonized system heading with or without exemptions, specific working or processing requirements, and/or maximum percentage of imported inputs or combinations of requirements	Maximum amount of non-originating materials is 40 percent
Norway	Change in tariff heading, product-specific rules	Maximum local content requirement	At least 50 percent
Switzerland	Product-specific rules	Maximum value of non-originating materials	Maximum 70 percent
Thailand	Last manufacturing process performed in an LDC	Maximum amount of non-originating inputs	Maximum amount of non-originating materials 50 percent
United States	One single percentage (35 percent) rule for all products	Minimum local content requirement certificate of origin	Minimum 35 percent, exact percentage must be written in

Source: UNCTAD 2016 and WTO 2019.

Figure 5.1 **Nepal's trade performance from 2009-2010 to 2018-2019**

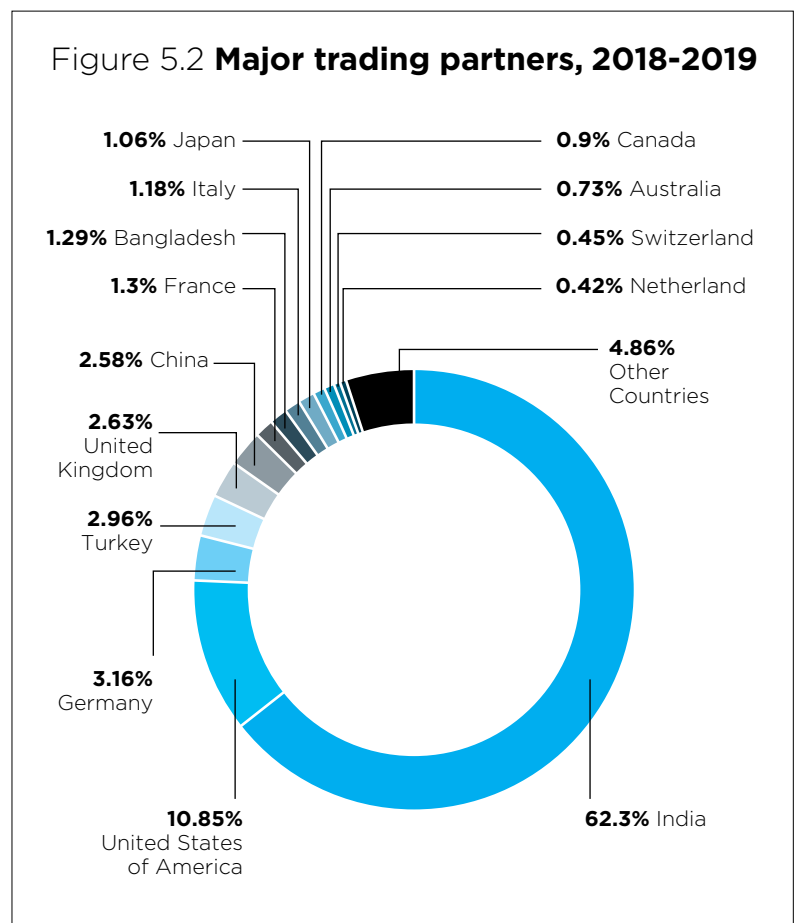


Sources: MoF 2019, TEPC 2019.

Despite preferential access to major markets, Nepal's trade performance is dismal. Although exports saw an average annual growth rate of 3.9 per cent during the last decade,<sup>85</sup> imports grew at a much higher rate and trade deficits widened. The ratio of exports to GDP declined from 5.1 percent in 2008-2009 to 2.7 per cent in 2018-2019. Trade deficits increased to an unsustainable level of 38.6 percent of GDP in 2018-2019 (Figure 5.1). Exports are concentrated in a few light manufactured products based on imported raw materials, such as ready-made garments, textiles, yarns, iron and steel, and agriculture and agro-processed products such as palm oil, cardamom, tea, jute and jute products. The top 10 export products constitute 64 percent of total exports (Figure 5.2). Aside from export products, the export market is highly concentrated, with five export markets comprising 84 percent of the total: India (64.4 percent), the United States (11.2 per cent), Germany (3.2 per cent), Turkey (3 per cent) and the United Kingdom (2.7 per cent) (Figure 5.3).

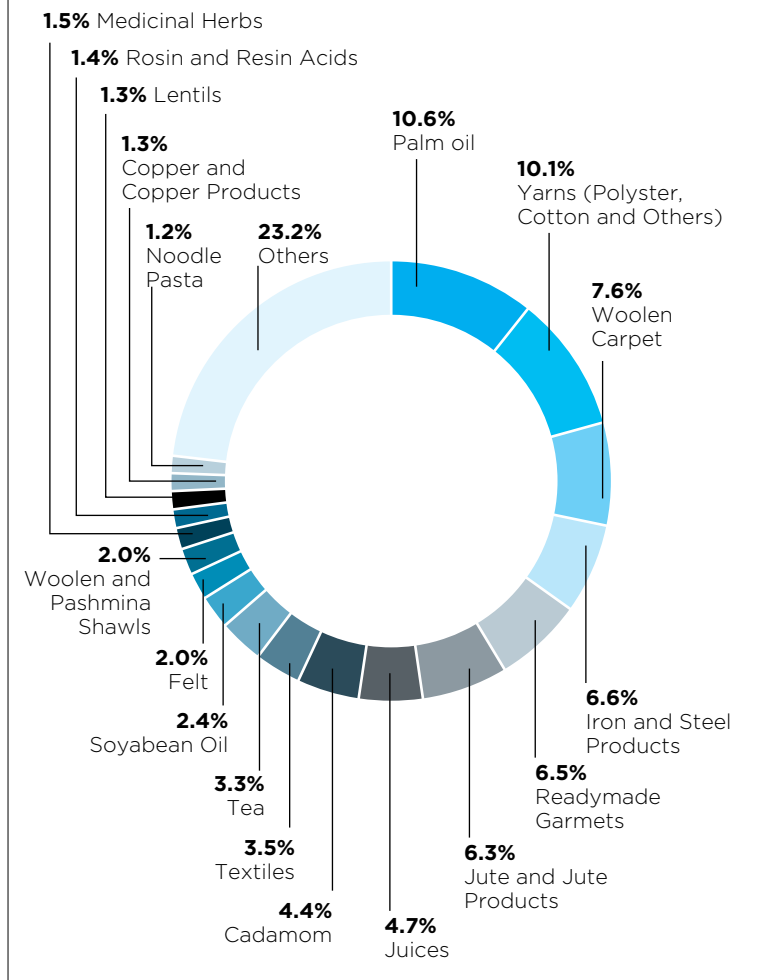
<sup>85</sup> Exports measured in dollars declined by an average annual negative growth rate of 1.4 percent. Nepal's share in world exports stands at 0.004 percent of the total (UNCTAD 2019).

Figure 5.2 **Major trading partners, 2018-2019**



Sources: TEPC 2019.

Figure 5.3 Major exports, 2018-2019



Sources: TEPC 2019.

### Preference utilization

Among Nepal's total exports, more than 90 percent go to preference-giving countries. To assess the effect of LDC graduation on exports requires understanding how Nepal is

using preferential market access. Three factors determine the impact of graduating and losing such access: the coverage and structure of preferential schemes that will end, the product composition of exports and their distribution across markets, and fallback tariffs applied after graduation.<sup>86</sup>

Table 5.3 presents the share of preference-giving countries in total exports and preference use in various markets. Among the preference-giving countries, India (64.59 percent), the United States (11.17 percent) and the European Union (10.45 percent) are the major export markets. For other markets, the share of exports is less than 1 percent, except China (2.17 per cent) and Japan (1.09 per cent). India provides duty-free market access to all products, except tobacco and liquor, under the Nepal-India Trade Agreement. The United States provides duty-free market access to 77 types of items under the Nepal Trade Preference Act; this is not contingent on being an LDC.

The rate of preference utilization is the proportion of trade eligible for preferences that receives them. Nepal has not been able to fully use available preferences, so the rate varies across countries and product groups. Preference utilization is highest in the European Union market (92 percent) followed by the United States (80.6 percent), Norway (74.5 percent) and Australia (63.1 percent). Nepal has used only 52.8 percent of available preferences in the Japanese market and 35.6 percent in the Chinese market. The reasons for low exports and low preference utilization include supply side constraints that affect productive capacity as well as trade and production costs and market access conditions in export markets.

<sup>86</sup> UNCTAD 2016.

Table 5.3 **Rate of preference utilization**

COUNTRY	SHARE IN TOTAL EXPORTS 2018-2019 (%)	PREFERENCE UTILIZATION OVERALL (%)	PREFERENCE UTILIZATION, AGRICULTURAL PRODUCTS (%)
Australia	0.75	63.1	99.7
Canada	0.92	53.4	80.4
Chile	0.01	2.3	0.0
China	2.17	35.6	35.6
European Union	10.45	92.0	93.5
India	64.59	0.0	0.0
Japan	1.09	52.8	94.2
Republic of Korea	0.23	39.5	69.9
Norway	0.00	74.5	NA
Switzerland	0.46	61.6	69.3
Taiwan Province of China	0.1	49.5	NA
Thailand	0.05	NA	0.0
United States	11.17	80.6	91.2

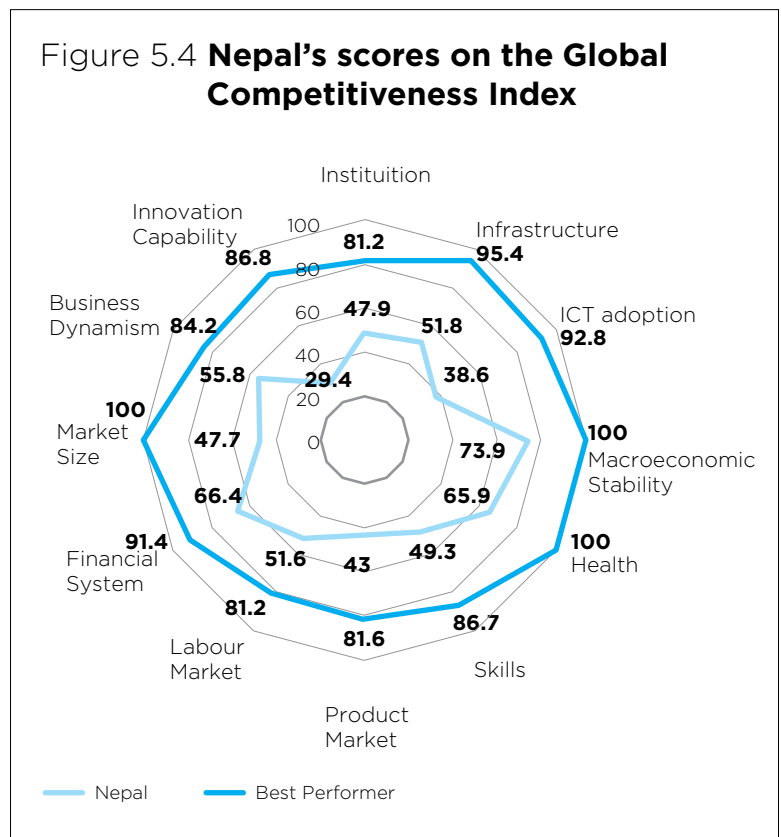
Source: TEPC 2019 and WTO 2018, WTO 2019.

**Low competitiveness**

Nepal’s productive capacity to generate an export surplus, and strength to compete in price and quality in international markets are low. It ranks 108th among 141 countries in the Global Competitiveness Index prepared by the World Economic Forum. The index includes 12 pillars of competitiveness as shown in Figure 5.4. Nepal continues to be far from the competitive frontier of all of these.

**High trade cost**

The cost of trading reflects transportation and logistics infrastructure, and the efficiency of customs and border procedures. It is high for Nepal. For major markets outside India, the cost is more than 200 percent of the value of exports (Table 5.4). High costs have adversely affected the level and pattern of trade and investment as well as the ability to participate in global value chains. They could be explained partly by Nepal’s landlocked geography along with poor infrastructure, dysfunctional transport and logistics services, and inefficient and inadequate trade facilitation measures.



Source: World Economic Forum 2019.

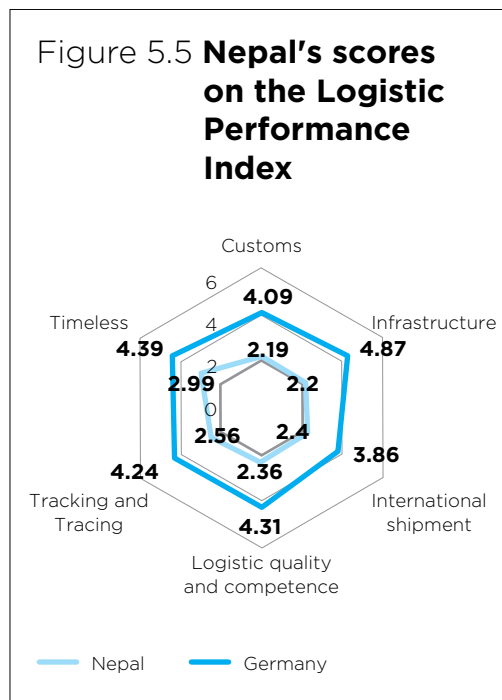


Table 5.4 **Costs impede the level and pattern of trade**

Country	Trade cost (percentage of value of trade)
China	228.4
India	99.1
Japan	276.3

#### Inefficient trade logistics

Trade logistics help connect people to markets and buyers to sellers. They play a key role in international trade, especially for time-sensitive products and participation in global value chains. The World Bank's Logistic Performance Index, which measures performance on trade logistics along six indicators, ranks Nepal 114 among 160 countries with an overall score of 2.51<sup>87</sup> (Figure 5.5). Across the six indicators, Nepal's score on customs administration is the lowest and on timeliness is highest, but it is far from the best-performing country on any of the indicators.



Source: World Bank 2019.

#### Inadequate trade facilitation

As trade tariffs have declined due to unilateral tariff liberalization<sup>88</sup> or trade negotiation, measures of trade facilitation have become key factors in export competitiveness. In a globalized world, where production is spread across countries, and goods cross borders many times before reaching consumers, inefficient trade-related procedures and processes can increase costs for exporters, delay the delivery of products to export markets, and inhibit participation in global and regional production networks (OECD 2018). Despite Nepal signing the WTO Trade Facilitation Agreement and other international conventions related to trade and transport facilitation, these measures are not adequate.

The trade facilitation indicators prepared by the Organisation for Economic Co-operation and Development (OECD), which cover the full spectrum of border procedures in 11 areas, show that Nepal's performance on most indicators is weak. Its average score is 0.68, where the value of indicators ranges from 0 to 2, with 2 being the best performance. There is a huge gap in trade facilitation performance with the best performer, the Netherlands (Figure 5.6). The values are less than 0.5 in advance rulings, documentation, automation, border agency cooperation and involvement of the trade community. The performance on appeal procedures and governance impartiality is above the national average.

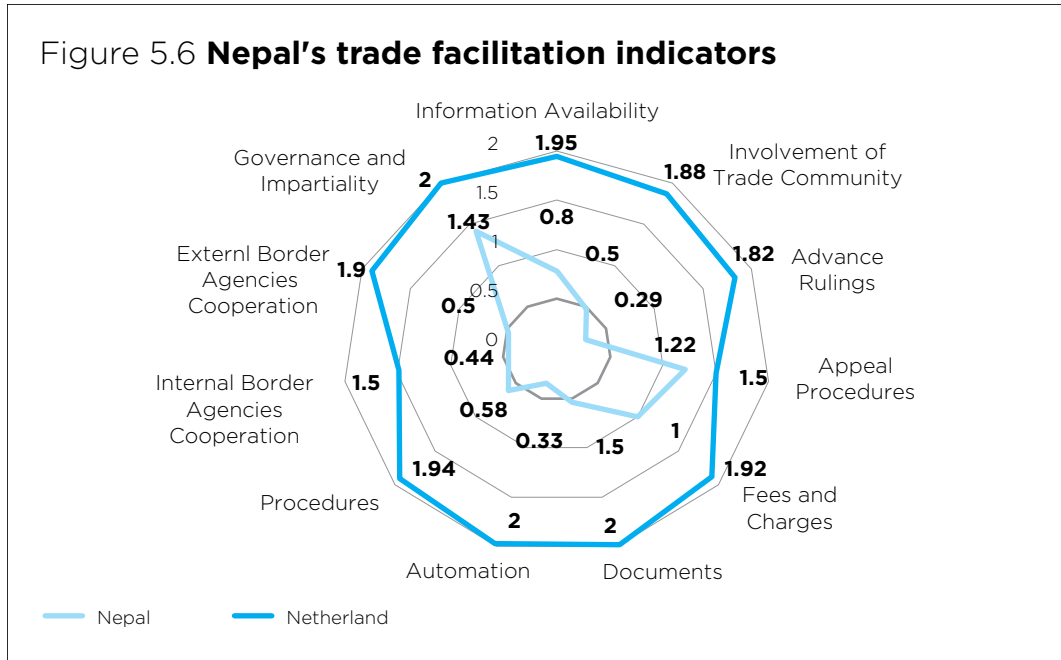
#### Exclusion of exportable products and presence of non-tariff measures

In the schemes extended by many preference-granting countries, Nepal's key exportable products are excluded. For example, the United States excludes most ready-made garments, and Turkey excludes oil. Even where preferences are allowed, countries raise non-tariff barriers through technical, sanitary and phytosanitary standards, and rules of origin. These lead to a failure to use preferences.

<sup>87</sup> The Logistics Performance Index uses a five-point scale, with 1 for the lowest score and 5 for the highest.

<sup>88</sup> There is no single definition of trade facilitation. Economic literature and international organizations have defined the term along at least three dimensions: whether the scope of measures is narrow or broad, whether it includes soft or hard infrastructure, and whether it involves modification of trade procedures or only more efficient implementation of existing procedures. This report adopts the narrow definition of the WTO, that is, simplification and standardization of customs formalities, and improved administrative procedures at the border.

Figure 5.6 **Nepal's trade facilitation indicators**



Source: OECD 2019.

### Impact of graduation

Nepal is eligible for most preferential schemes provided by Australia, Canada, Chile, China, the European Union, Iceland, India, Japan, New Zealand, the Republic of Korea, the Russian Federation, Switzerland, Taiwan Province of China, Thailand and the United States. But the export structure shows that Nepal exported 118 products, according to a three-digit Standard International Trade Classification (SITC) count in 2018, and the Herfindahl-Hirschman Index<sup>89</sup> has remained constant, indicating high product concentration and no substantive change in the structure of exports.<sup>90</sup> This is coupled with the low preference utilization rate, except in the European Union and United States, which suggests that the impact of LDC

graduation on trade performance would not be substantial.

SMART, a partial equilibrium modelling tool built within the World Integrated Trade Solution (WITS),<sup>91</sup> was used to simulate the effects of changes in tariffs and estimate the impacts of graduation on exports. In particular, for 2017, the model was used to estimate the counterfactual Nepali exports to countries providing the GSP had the applicable duty been the most-favoured nation tariff and not the current zero tariff or reduced tariff facility provided through the GSP. The analysis only considered the impact of a given policy action (a change in tariffs) without considering economic interactions between various markets.

<sup>89</sup> The Herfindahl-Hirschmann index, also known as the concentration index, is a measure of the degree of market concentration. It has been normalized to obtain values ranking from 0 to 1 (maximum concentration).

<sup>90</sup> UNCTAD 2019.

<sup>91</sup> The WITS SMART model makes two important assumptions. First of all, it assumes infinite export supply elasticity, which means that the world price of each product is exogenously given, and countries compete to supply products in that given price. It is also referred to as the price-taker assumption, since individual countries do not have the power to set the price, and can only sell their products at a determined price. This assumption is not unrealistic in Nepal as most exports are primary commodities or commodities that involve minimal processing and hence could be supplied by other countries at a given price.

Regarding the demand side, the WITS SMART equilibrium makes the Armington assumption. In other words, goods imported from different countries, albeit similar, are treated as imperfect substitutes. Because of this assumption, goods from Nepal are still imported despite the increase in price occurring from higher tariffs. Based on the Armington assumption, the imports from Nepal will be determined according to the import demand elasticity (change in demand occurring from the change in price) and the Armington substitution elasticity (elasticity of substitution between products originating from different countries).

Using the infinitely elastic supply assumption and system-defined values for import demand elasticity and Armington substitution elasticity, the hypothetical change in the export volume resulting from an increase in tariffs from the GSP to the most-favoured nation level was computed for each of Nepal's exports at the Harmonized System (HS) 6-digit level. The summary of the calculated impact of LDC graduation is presented in Table 5.6.

The table shows that there would be a minimum impact after graduation on exports to the United States, and moderate impacts on exports to other markets. In terms of export loss, the reduction would be 3.7 percent of

total exports, but the loss in the European market would be more than half of the total loss (Table 5.5). Among the preference-giving countries, the shares of the United States and European Union markets in total exports are substantial, at more than 10 percent. The impacts on the top 10 export products are presented in Tables 5.6 and 5.7. This shows no impact in the United States market except for a few ready-made garment products, as most exports enter at the MFN rate. But exports to the European Union would be hard hit, particularly exports of ready-made garments and carpets.

The analysis of the impact of preference erosion on individual products shows that ex-

Table 5.5 **Trade loss from preference erosion**

COUNTRY	LOSS DUE TO PREFERENCE EROSION (PERCENTAGE OF BILATERAL TRADE)	LOSS DUE TO PREFERENCE EROSION (PERCENTAGE OF TOTAL EXPORT)
Australia	8.1	1.6
Canada	26.1	6.5
China	24.5	14.4
United States	1.71	5.1
Japan	18.7	5.5
European Union	20.1	56.8
New Zealand	20.7	0.0
Norway	10.0	0.0
Thailand	19.7	0.3
Turkey	9.5	7.8
Chile	14.1	0.0
Republic of Korea	27.8	1.7

Source: Calculation based on WITS.

Table 5.6 **Impact of graduation on exports to the European Union**

HS CODE	PRODUCT	SHARE IN EUROPEAN UNION EXPORTS	IMPACT OF EVERYTHING BUT ARMS (PERCENTAGE OF EXISTING EUROPEAN UNION EXPORTS)
570110	Carpets of wool or fine animal hair	18.81	-17.79
621420	Shawls, scarves, mufflers, mantillas, veils and the like; of wool or fine animal hair	9.10	-20.10
570190	Carpets of textile materials	4.11	-24.28
611012	Jerseys, pullovers, cardigans, etc. of fibres from Kashmir (cashmere) goats	3.98	-30.46
410621	Tanned or crust hides and skins	2.80	-4.22
611011	Jerseys, pullovers, cardigans, etc. of wool or fine animal hair	2.58	-29.27
620442	Dresses; women's or girls', of cotton	2.42	-26.49
610910	T-shirts, singlets and other vests; of cotton	2.24	-26.13
630790	Other textiles articles	1.84	-17.78
650500	Hats and other headgear	1.81	0.00

Source: Calculation based on WITS.

 Table 5.7 **Impact of graduation on exports to the United States**

HS CODE	PRODUCT	SHARE IN UNITED STATES EXPORTS, 2017	IMPACT OF EVERYTHING BUT ARMS (PERCENTAGE OF EXISTING UNITED STATES EXPORTS)
570110	Carpets of wool or fine animal hair	26.69	0.00
970600	Antiques	11.46	0.00
230910	Dog or cat food	7.59	0.00
630790	Textiles; made-up articles	6.42	-2.93
570190	Carpets of textile materials	6.02	0.00
570291	Other carpets and other textile floor coverings	5.48	-1.92
999999	Commodities not specified according to kind	2.90	NA
621420	Shawls, scarves, mufflers, etc. of wool or fine animal hair	1.82	0.00
650500	Hats and other headgear	1.51	-2.32
950510	Christmas festivity articles	1.44	0.00
620520	Shirts, men's or boys', of cotton	1.42	0.00

Source: Calculation based on WITS.

ports of carpets and garments to the European Union will decline substantially, but there will not be any substantial loss in exports to the United States as major exportable products there do not enjoy preferential tariffs. Nepal would face difficulties in diversifying

markets and products, as most potential exports identified by the Nepal Trade Integration Strategy<sup>92</sup> and Products from Nepal<sup>93</sup> would face higher most-favoured nation tariffs and stringent rules of origin.

<sup>92</sup> MoC 2016.

<sup>93</sup> The Ministry of Industry, Commerce and Supplies (2019) identified 28 export potential products in its publication Products from Nepal.



## Market access: services

The Eighth WTO Ministerial Meeting of December 2011, through a waiver decision, decided to allow members to provide preferential treatment for LDC services and service suppliers.<sup>94</sup> The purpose of the ‘waiver’ was to promote trade by LDCs in sectors and supply modes of particular export interest to these countries. Nepal has been performing better in services exports compared to goods exports. The total value of service exports was \$2.1 billion in 2018, almost three times the export of goods. The growth of service exports (12.1 percent from 2009 to 2018) exceeded the growth of the economy as well as the growth of goods exports. Given a lack of data on the structure and destination of services exports, and the waiver becoming effective in practice in 2015, it is difficult to quantify the impact of graduation. A qualitative analysis, however, indicates that the impact is not likely to be large. For service exports, most constraints are domestic preparedness and supply-side barriers such as physical infrastructure (electricity, roads, information technology connectivity and soft infrastructure), institutions, laws and so on. Market access conditions—and the application of preferences via a service waiver—have limited roles in building supply capacity.

## Flexibility in application of WTO rules

Multilateral trade rules contain a number of provisions granting special and differential treatment to LDCs. The preamble of the Marrakesh Agreement establishing the WTO recognizes the need for positive efforts to ensure the LDCs secure a share in the growth of international trade commensurate with their

needs for economic development. Article IV(7) of the agreement instructs the Committee on Trade and Development to review periodically the special provisions in multilateral trade agreements for LDC members and report to the General Council for appropriate action. Article IX(2) grants concessions to the LDCs consistent with their individual development, financial and trade needs, or administrative and institutional capabilities. The Doha Round that began in 2001 has further recognized the vulnerability of the LDCs and the special structural difficulties they face in the global economy, and committed to enhanced market access, balanced rules, and well-targeted, sustainably financed technical assistance and capacity-building programmes for the LDCs. There are altogether 145 provisions in the WTO agreements that provide special and differential treatment to the LDCs and/or developing countries. Among these, 16 are specifically designed to support the LDCs.<sup>95</sup>

Since Nepal acceded to the WTO in 2004, it has rescinded some of the flexibilities in the implementation of rules, in particular in the transition period for implementing agreements. There are many flexibilities provided to LDCs, however, that are lost after graduation. Notable examples are flexibilities in the implementation of the TRIPs Agreement and the TRIMs measures, in promoting infant industries, and in provisions on export subsidies under the Agreement on Subsidies and Countervailing Measures and LDC-specific decisions under the Doha Round. The loss of flexibilities in the TRIPs Agreement and the exemption for protecting intellectual property on pharmaceutical products would adversely impact access to medicine. The loss of flexibilities in the use of TRIMs and subsidies contingent upon export performance would erode policy space for industrial development. There will not be any impact on policy space to subsidize agricultural production, however.

<sup>94</sup> WTO 2011.

<sup>95</sup> UNCTAD 2016.

Table 5.8 **Special and differential treatment for LDCs under WTO agreements and related decisions**

AGREEMENT/DECISION	SUPPORT MEASURE
<b>Understanding on the Balance-of-Payments Provisions of the General Agreement on Tariffs and Trade (GATT)</b>	LDCs may use simplified procedures when invoking trade restrictions for balance-of-payment reasons (paragraph 8).
<b>Agreement on Agriculture</b>	<p>LDCs and net food-importing developing countries may provide certain export subsidies until the end of 2030, based on Article 9.4 of the Agreement on Agriculture, Ministerial Decision of 19 December 2015 (WT/MIN(15)/45-WT/L/980), G/AG/5/Rev.10.</p> <p>Longer repayment periods for export financing support (WT/MIN(15)/45-WT/L/980).</p> <p>Less frequent notifications to the WTO regarding domestic support—every two years instead of every year (G/AG/2).</p>
<b>Sanitary and Phytosanitary Measures</b>	<p>Priority for technical assistance (Article 9.1). The Standards and Trade Development Facility (STDF) has a target of dedicating at least 40 percent of total project financing to the LDCs or other low-income countries (STDF Operational Rules).</p> <p>Lower co-financing requirement for technical assistance. Beneficiaries from LDCs and other low-income countries contribute at least 10 percent of the requested STDF contribution to a project, as opposed to 20 percent for lower-middle-income countries and 60 percent for upper-middle-income countries (STDF Operational Rules).</p>
<b>Agreement on Subsidies and Countervailing Measures</b>	LDCs (and other countries with GNI per capita below \$1,000 in constant 1990 dollars) are exempt from the prohibition of export subsidies, based on Article 27.2 and Annex VII of the Agreement, and paragraph 10.1 of the Doha Ministerial Decision on Implementation Related Issues and Concerns (WT/MIN(01)/17).
<b>Trade Facilitation Agreement</b>	<p>Longer notification time frames: until 22 February 2020 for category B measures; until 22 February 2021 for indicative dates and definitive dates; until 22 August 2022 for category C measures (Articles 15 and 16).</p> <p>Longer deadlines under the early warning mechanism, in case an LDC has difficulties in implementing category B and C measures (Article 17).</p> <p>Longer time frame (4 years rather than 18 months) for new implementation dates for measures shifted from category B to category C before approval from the Trade Facilitation Committee is required (Article 19).</p> <p>Longer grace period from dispute settlement (until 22 February 2023 for category A measures, and 8 years from the date of implementation of category B or C measures (Article 20).</p>
<b>Trade-Related Aspects of Intellectual Property Rights (TRIPS)</b>	<p>Exemption from applying substantive TRIPS standards until 2021 (Article 66.1, latest extension IP/C/64).</p> <p>Exemption from providing protection for pharmaceutical patents, from providing the possibility of filing mailbox applications and from granting exclusive marketing rights until 2033 (IP/C/73 and WT/L/971).</p> <p>Waiver from notification requirements for issuing compulsory licenses for exports of pharmaceutical products to LDCs or other countries with insufficient manufacturing capacities in the pharmaceutical sector (Article 31bis).</p> <p>Promotion of technology transfer by enterprises and institutions in developed countries (Article 66.2).</p>

Continued: Table 5.8 Special and differential treatment...

Continued: Table 5.8 Special and differential treatment...

Agreement/decision	Support measure
<b>Dispute Settlement Understanding</b>	<p>Article 24 refers to special procedures involving LDCs. WTO members are to “exercise due restraint both in raising matters involving LDCs and in asking for compensation or seeking authorization to suspend concessions or other obligations if nullification or impairment is found to result from a measure taken by an LDC” (Article 24.1). LDCs can request the Director-General of the WTO or the Chairperson of the Dispute Settlement Body to provide their good offices, conciliation and mediation services for settling disputes (Article 24.2).</p> <p>Related: The Advisory Center on WTO Law provides legal advice and support during WTO dispute settlement, and training. LDCs have access to these services whether or not they have joined as members.</p>
<b>Trade Policy Review Mechanism</b>	<p>LDCs may have a longer period between trade policy reviews than other countries, longer than the six years for countries that are not among the 20 largest in terms of their share of world trade (Annex 3 of the Uruguay Round Agreements).</p>
<b>Trade-Related Investment Measures (TRIMs)</b>	<p>Annex F of the Declaration of the Sixth WTO Ministerial Conference allowed LDCs to maintain, on a temporary basis, existing measures that deviated from their obligations under the TRIMs Agreement. The provision applied to measures notified within a two-year period, which were then allowed to continue for another seven years. LDCs were also allowed to introduce new measures that deviated from their obligations under the TRIMs Agreement under certain conditions. All measures are to be phased out by 2020.</p>

Source: <https://www.un.org/ldcportal/special-treatment-under-wto-rules/>.

## Development Cooperation

The debate around whether foreign aid has overall positive or overall negative consequences has been one of the most controversial in development economics.<sup>96</sup> The Government of Nepal has acknowledged the contributions made by development cooperation in overall socioeconomic development.<sup>97</sup> Foreign assistance has significant

importance in the fiscal system; net ODA flows in relation to GNI were about 5 percent in 2017. Yet Nepal has not been as successful in attracting ODA as other low-income countries, for which the ODA/GNI ratio is almost double (Figure 5.7). Measured in per capita terms, net ODA receipt was \$45.45 compared to \$72.93 for low-income countries in 2017. Although the flow of foreign assistance in absolute terms has increased, its ratio in relation to GDP as well as in total government expenditure has declined.

<sup>96</sup> Qian 2015.

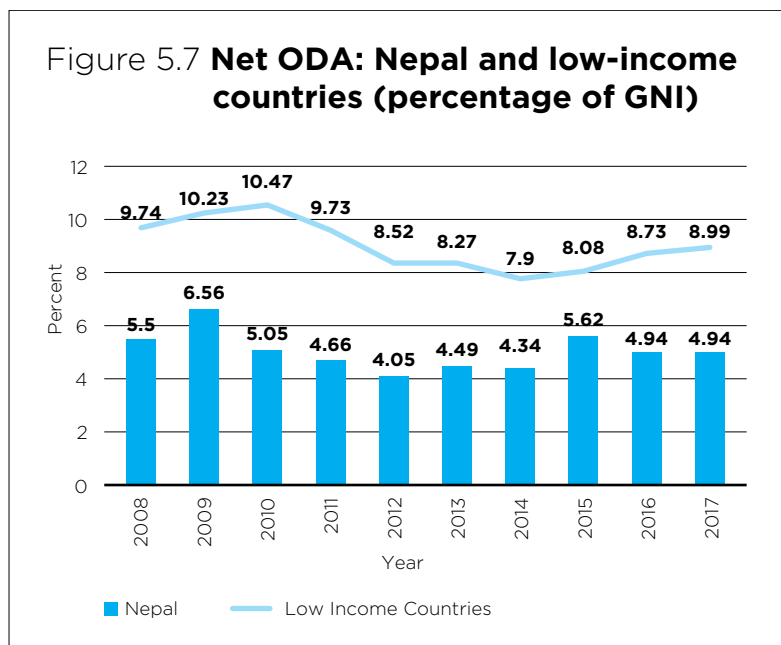
<sup>97</sup> MoF 2019b.

ODA's role in financing capital and development expenditure cannot be overemphasized, as its share is more than 60 percent. The aid utilization rate has been increasing, mainly due to the Government's growing capacity to use loans and the higher share of multilateral assistance in overall foreign aid.<sup>98</sup> The salient feature of development cooperation has been a significant shift in structure, with fewer grants and more loans. Bilateral aid is waning whereas multilateral aid is rising (Figures 5.8 and 5.9).

In 2017-2018, the World Bank Group, Asian Development Bank, European Union, United Nations and International Fund for Agricultural Development (IFAD) were the top five multilateral development partners. The United Kingdom followed by the United States,

Japan, China and India were the top five bilateral Development Assistance Committee (DAC) donors. In terms of disbursement volume, the top five multilateral development partners disbursed 63 percent of the total, and the top five bilateral development partners disbursed 29 percent.<sup>99</sup>

More than two thirds of foreign aid goes towards economic affairs, which consti-



tutes agriculture, industry, transport and energy, among other issues. Its share has increased. Environment, health and education get over 5 percent each (Figures 5.10 and 5.11).

**Table 5.9 Inflow of official development assistance to Nepal**

PARTICULARS	1999/2000	2004/2005	2009/2010	2014/2015	2017/2018
Total actual foreign assistance (NRs. billion)	17.5	23.7	49.8	55.4	131.5
Share of ODA in GDP (percentage)	4.8	4.2	4.2	2.6	3.8
Share of foreign aid in total government expenditure (percentage)	26.4	23.1	19.2	12.9	13.6
Share of foreign assistance in development expenditure (percentage)	68.8	86.5	55.1	62.5	48.6
ODA disbursement as proportion of commitment (percentage)	85.7	62.0	51.5	55.4	65.1

Source MoF 2019.

<sup>98</sup> MoF 2019.

<sup>99</sup> MoF 2018.



Figure 5.8 **Share of grants and loans in total foreign aid**

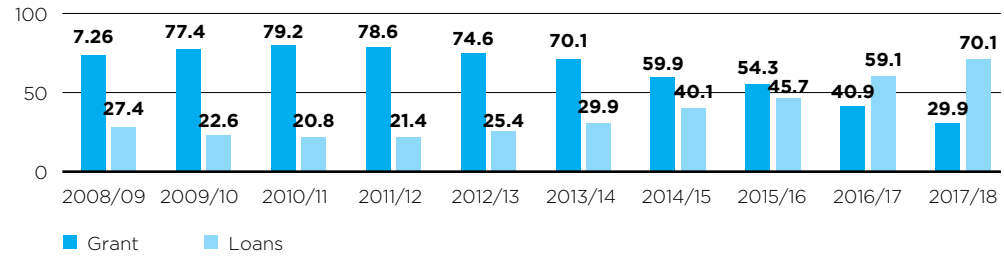


Figure 5.9 **Foreign aid by source**

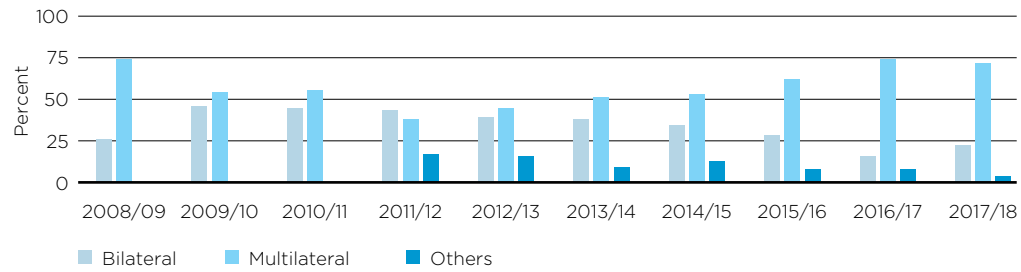
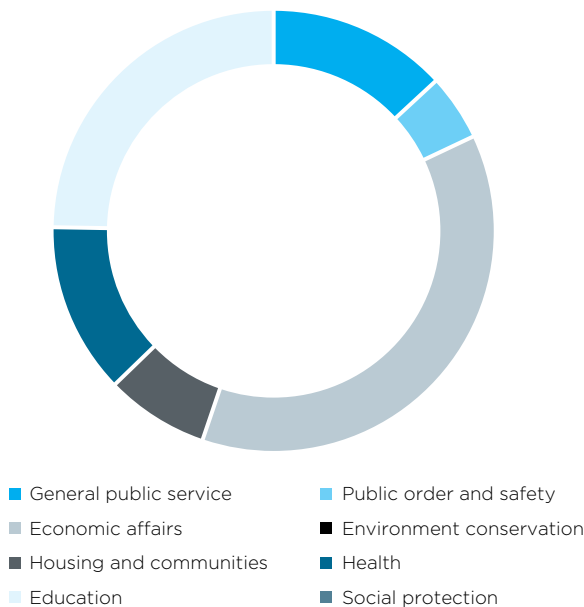


Figure 5.10 **Sectoral composition of foreign aid, 2011-2012**



Despite the increasing share of loans in development cooperation in Nepal, the ratio of external debt to GNI is lower than the low-income countries as a group (Figure 5.12). The IMF assesses the risk of external debt distress as low, which indicates ample fiscal space to invest in productive capacity. The debt service ratio in relation to exports and primary income, however, is higher than the average for low-income countries (Figure 5.12), implying very weak export performance.

**LDC graduation and development finance**

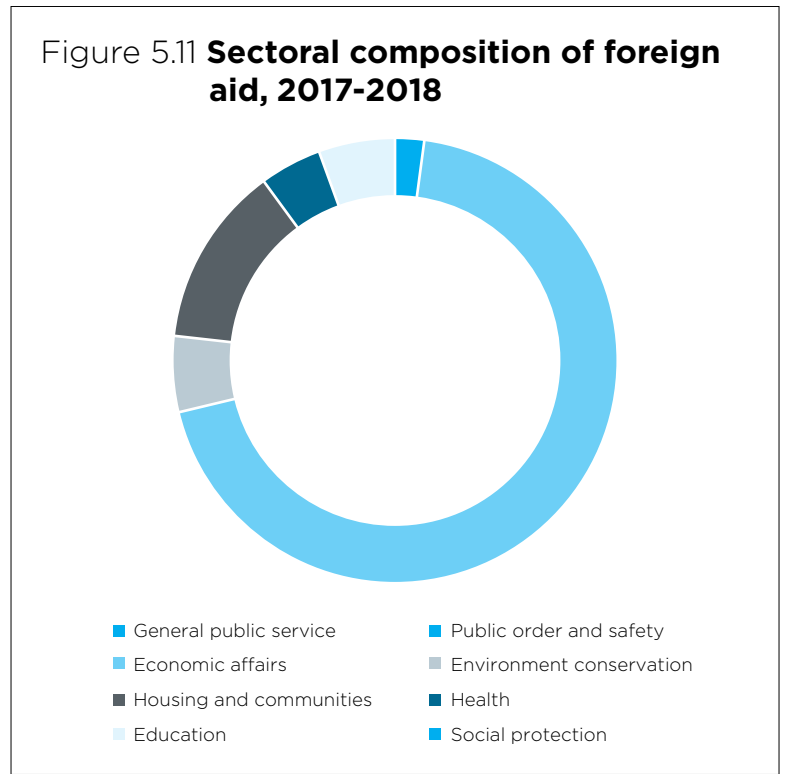
As Nepal’s development expenditures, particularly in building productive capacities, including infrastructure development and human asset development, are largely financed by development assistance, a natural question arises around the impact of LDC graduation. LDCs are given priority in resource allocation, a greater degree of concessionality or access to exclusive mechanisms in several areas of development cooperation.<sup>100</sup>

<sup>100</sup> CDP 2018f.

**Official development assistance**

ODA priorities and concessions granted to LDCs are not exclusively determined by their low-income or LDC status. Other strategic and political considerations affect the decisions of bilateral donors. Most multilateral lenders provide assistance not on the basis of a country being an LDC but according to the level of income. For multilateral financial institutions, lending terms are determined based on the recipient country's risk of debt distress, the level of GNI per capita and creditworthiness for International Bank for Reconstruction and Development borrowing. Available information shows that for Nepal, the terms and conditions of bilateral development cooperation will not be substantially affected after graduation. It could access bilateral aid on concessional loan terms, including long grace and repayment periods. Thus, graduation is unlikely to affect most current sources of support, particularly from multilateral organizations, as long as Nepal remains in a low-income category.

Figure 5.11 **Sectoral composition of foreign aid, 2017-2018**

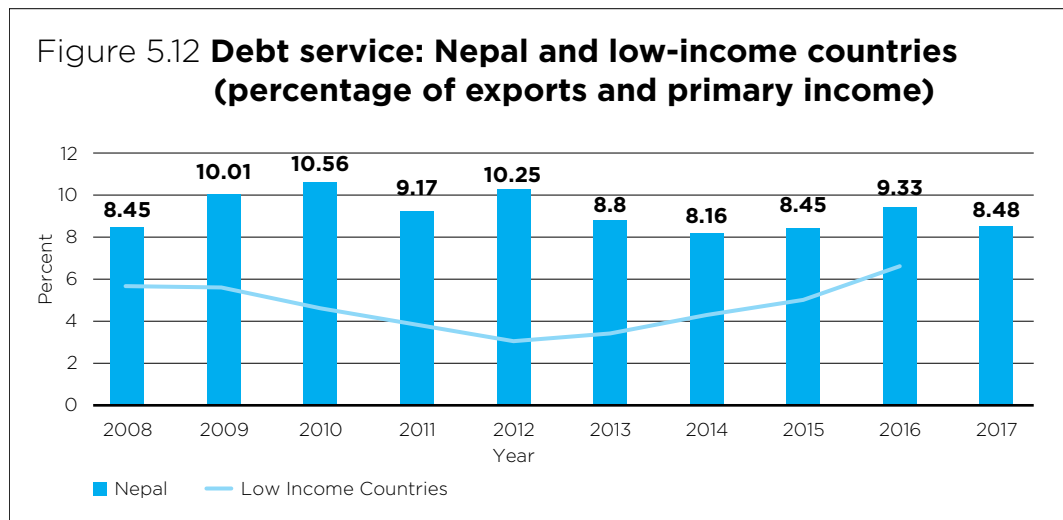


**The United Nations**

There might be a negative impact on the country's access to support provided by the United Nations. For example, the United Nations Development Programme (UNDP) and United Nations Children Fund (UNICEF) have targets allocating 60 percent of core resources to LDCs,

but the impact after graduation is not yet measurable. Nepal could not access programmes dedicated to the LDCs by other organizations such as the World Meteorological Organization, International Telecommunications Union (ITU) and Universal Postal Union after graduation.

Figure 5.12 **Debt service: Nepal and low-income countries (percentage of exports and primary income)**



### LDC-specific instruments

Certain instruments have been created specifically to support the LDCs, such as the Least Developed Countries Fund (LDCF), the Enhanced Integrated Framework (EIF), the Technology Bank for the LDCs and the United Nations Capital Development Fund (UNCDF). The LDCF was established to assist LDCs in carrying out, inter alia, the preparation and implementation of national programmes of action under the United Nations Framework Convention on Climate Change. Nepal would not be eligible to receive new funding after graduation, but projects already approved and funded will continue to completion. Nepal would be excluded from the priority group of the Green Climate Fund, but would have access to the Special Climate Change Fund for the elaboration and implementation of its national adaptation programme of action.



**The LDCF was established to assist LDCs in carrying out, inter alia, the preparation and implementation of national programmes of action under the United Nations Framework Convention on Climate Change.**

The EIF, a multidonor programme to support LDCs to increase their participation in the international trading system, assists with mainstreaming trade into national development and poverty reduction strategies; setting up structures to coordinate trade-related technical assistance; and building capacity to trade, including by addressing critical supply side

constraints, among other issues. The EIF has two funding facilities: Tier I and Tier II. The first focuses on institutional and policy-related support, and the second funds projects that address supply side constraints. After graduation, Nepal will continue to access EIF benefits automatically for three years and possibly for a further two years subject to justification and approval by the EIF board.

The Technology Bank for the LDCs implements projects and activities to improve scientific research and innovation, promote networking among researchers and research institutions, help countries access and use critical technologies, and provide links to knowledge, resources and partners. After graduation, Nepal would have access to the bank for five years.

The UNCDF is the capital investment agency of the United Nations for the LDCs. It provides access to microfinance and investment capital. After graduation, UNCDF-funded programmes can be continued under the same conditions for three years. Funding for another two years can be provided on a 50/50 cost-sharing basis with the Government or a third development partner.

### Foreign direct investment and private flows

Graduation from the LDC category would transmit a positive message to the global community about Nepal's development prospects. It can be branded as a potentially competitive destination for foreign direct investment inflows and other private investment. Graduation would improve Nepal's credit rating, reduced risk premium and access to commercial loans at preferential interest rates.

Table 5.10 **Postgraduation scenarios for major development partners**

PARTNER	POSTGRADUATION SCENARIOS
<b><i>Bilateral development partners</i></b>	
China	Aid is not likely to be affected by graduation.
Germany	A graduation would lead to a switch from mainly grants to very concessional credits in German financial cooperation loans. Due to the low rating of the country, Nepal would not gain additional access to loans with market-based financial conditions or near to market-based financial conditions.
India	Aid is not likely to be affected by Nepal's graduation.
Japan	The terms of Japanese ODA yen loans will change depending on the country's income level and projects after graduation. For instance, the interest rate may increase from 0.01 percent to 0.25 percent for a medical care project, if the country graduates and is categorized as low income.
Norway	Norway's aid does not appear to depend on Nepal's LDC status.
Switzerland	Aid by Switzerland is not likely to be affected by graduation.
United Kingdom	The United Kingdom will continue support with possibly revised strategies based on the changing context after graduation.
United States	The strategy focuses on lifting Nepal out of its LDC status, but does not indicate if this would change after graduation.
<b><i>Multilateral development partners</i></b>	
Asian Development Bank	Nepal's access to funds provided by the bank is not contingent on its status as an LDC.
European Union	No details available yet. The specific situations and vulnerabilities of Nepal are expected to be considered.
Global Alliance for Vaccines and Immunization	Support does not depend on LDC status.
IFAD	LDC status is not part of the allocation formula; graduation would have no impact.
IMF	The International Monetary Fund (IMF) does not make access to funds contingent on LDC status.
UNDP	The percentage of UNDP core resources allocated to LDCs is a minimum of 60 percent. Nepal will be out of this focus group but the impact is not yet measurable.  A number of UNDP programmatic interventions are either in place or anticipated to support Nepal's smooth transition, including around building productive capacities. The focus will be on coordinating support for a smooth transition, localizing SDG achievement as a framework for LDC graduation, increasing resilience to shocks, postgraduation financing mechanisms and trade facilitation.
LDCF	Projects already approved and funded will continue to completion. Nepal will remain eligible to access other financing sources under the United Nations Framework Convention on Climate Change, such as the Global Environment Facility Trust Fund, the Special Climate Change Fund, the Adaptation Fund and the Green Climate Fund. For the last, Nepal would be excluded from priority groups, such as the LDCs, small island developing States and African States.
UNFPA	The Country Classification System of the United Nations Population Fund (UNFPA) includes some LDC criteria, such as GNI, maternal mortality ratio, humanitarian risk and population size. As LDC status per se is not a UNFPA country classification indicator, a shift in LDC status will not automatically trigger changes to assistance.
UNHCR	The operation of the United Nations High Commissioner for Refugees (UNHCR) is not necessarily associated with LDC status.

Continued: Table 5.10 Postgraduation scenarios for...



Continued: Table 5.10 Postgraduation scenarios for...

PARTNER	POSTGRADUATION SCENARIOS
UNICEF	UNICEF has a 60 percent minimum programme budget allocation to LDCs. Nepal may lose this priority upon graduation, but the impact is not currently quantifiable because budget allocation targets are set for the LDCs as a group, not for each country.
WFP	The World Food Programme (WFP) will continue to support Nepal after graduation and is currently in the process of developing a new country strategic plan.
WHO	The operation of the World Health Organization (WHO) is not associated with LDC status.
World Bank	Access to funds is not contingent on being an LDC.

Source: Committee for Development Policy 2018d.

## LDC graduation and general support in the United Nations system

After graduation, Nepal would no longer have access to measures to assist participation in the United Nations and other international forums, including limits to mandatory budget contributions and support for travel to international conferences. UN entities that draw on assessed Member State contributions consider LDC status, income level and other factors for determining the contribution rate. Due to Nepal's relatively low income, there will not be a significant impact on its rate after graduation except contributions to UN Peacekeeping, the ITU and the World Intellectual Property Organization (WIPO) would increase substantially, and to the international criminal tribunals would increase marginally.

After graduation, Nepal will no longer be eligible for funds for representatives to travel to official meetings of the UN General Assembly. Travel support can be extended, however, with some conditions, for a maximum of three years after graduation. For reference, Nepal received travel support for five representatives totalling \$28,000 in 2016. Other UN entities that support travel to meetings include the WTO and the Secretariat of the United Nations Framework Convention on Climate Change, but they do not have a transition arrangement for LDC graduation. Scholarships and research grants provided by international organizations will also be curtailed.

Table 5.11 Nepal's contributions to UN entities

UN ENTITY	LDC PROVISIONS	RATE WITH LDC STATUS	RATE WITHOUT LDC STATUS	IMPACT OF LDC GRADUATION
UN regular budget	Ceiling of 0.01%	0.006%	0.006%	No impact
Peacekeeping	Discount level J (90% discount)	0.0006%	0.0012%	Contribution increases
Criminal tribunals	Peacekeeping discount level J applies to 50% of the budget	0.0033%	0.0036%	Contribution increases marginally
Comprehensive Nuclear-Test-Ban Treaty Organization	Ceiling of 0.01%	0.006%	0.006%	No impact
Food and Agriculture Organization (FAO)	Ceiling of 0.01%	0.006%	0.006%	No impact
International Atomic Energy Agency	Ceiling of 0.01%	0.006%	0.006%	No impact
International Labour Organization (ILO)	Ceiling of 0.01%	0.006%	0.006%	No impact
international Organization for Migration	Ceiling of 0.01%	0.006%	0.006%	No impact
International Seabed Authority	Ceiling of 0.01%	0.006%	0.006%	No impact
International Tribunal for the Law of the Sea	Ceiling of 0.01%	0.006%	0.006%	No impact
ITU	Special class of 1/8 or 1/16 units	1/16 units	¼ units	Contribution increases
Organisation for the Prohibition of Chemical Weapons	Ceiling of 0.01%	0.006%	0.006%	No impact
United Nations Educational, Scientific and Cultural Organization (UNESCO)	Ceiling of 0.01%	0.006%	0.006%	No impact
United Nations Industrial Development Organization (UNIDO)	Ceiling of 0.01%	0.006%	0.006%	No impact
WHO	Ceiling of 0.01%	0.006%	0.006%	No impact
WIPO	STer class	1/32 units	1/16 units	Contribution increases

Source: Committee for Development Policy 2018d.

## Transition strategies: experiences from Nepal and countries that have graduated

LDC graduation becomes effective three years after the General Assembly takes note of the Committee for Development Policy recommendation to graduate a country. This means Nepal's graduation will be effective in 2024, if the Committee recommends graduation at the next triennial review in 2021. At that point, Nepal is required to prepare a transition strategy, in cooperation with de-

velopment and trade partners, to adjust to phasing out over a period appropriate to its development status and existing international support measures. The strategy also has to identify actions at the national level for sustained and irreversible graduation as well as by its bilateral and multilateral development and trading partners.<sup>101</sup> The strategy is intended to facilitate a smooth transition without any disruption in the development path and with an emphasis on sustained momentum. It should involve “phasing out” arrangements (as opposed to a sudden loss of concessions), or even a partial retention of LDC benefits insofar as these are deemed vital to the country.<sup>102</sup>

Table 5.12 **Process and minimal timeline for graduation from the LDC category and Nepal's status**

TIMELINE	ACTIVITIES/ACTIONS	NEPAL'S STATUS
Year 0	<ul style="list-style-type: none"> <li>■ Preliminary review by the Committee subgroup</li> </ul>	
First finding at the Committee for Development Policy triennial review	<ul style="list-style-type: none"> <li>■ Triennial review by the full Committee membership establishes that the country has met the graduation criterion for the first time</li> <li>■ The Committee informs the Economic and Social Council and notifies country</li> <li>■ The Council takes note</li> </ul>	Completed in 2015
Years 0 to 3 Analysis and information gathering	<ul style="list-style-type: none"> <li>■ UNCTAD prepares a vulnerability profile</li> <li>■ The United Nations Department of Economic and Social Affairs (UNDESA) prepares an impact assessment</li> <li>■ Government and development partners invited to provide inputs</li> </ul>	<ul style="list-style-type: none"> <li>■ UNCTAD prepared in March</li> <li>■ UNDESA prepared in March 2018 (CDP 2018/PLEN/5.c)</li> <li>■ Nepal provided inputs</li> </ul>
Year 3  Second finding, recommendation and endorsement	<ul style="list-style-type: none"> <li>■ Preliminary review by the Committee subgroup (confirms that country meets criteria; government invited to present views)</li> <li>■ Triennial review by full Committee membership</li> <li>■ The Committee recommends graduation to the Economic and Social Council, and notifies country</li> <li>■ The Council endorses the Committee recommendation</li> <li>■ The General Assembly takes note of the Committee recommendation</li> </ul>	<ul style="list-style-type: none"> <li>■ In the 2018 triennial review, the Committee found Nepal eligible for the second consecutive time, but did not recommend graduation as per Nepal's request and will consider at the 2021 triennial review; if it recommends graduation, this becomes effective in 2024</li> </ul>

*Continued: Table 5.12 Process and minimal timeline...*

<sup>101</sup> United Nations 2005.

<sup>102</sup> United Nations 2005, 2013, 2016.

Continued: Table 5.12 Process and minimal timeline...

TIMELINE	ACTIVITIES/ACTIONS	NEPAL'S STATUS
Years 3 to 6	<ul style="list-style-type: none"> <li>■ Graduating country establishes consultative mechanism, prepares smooth transition strategy and optionally reports to the Committee on the preparation of the strategy with assistance from the United Nations system</li> </ul>	
Preparing for graduation	<ul style="list-style-type: none"> <li>■ Development and trading partners participate in consultative mechanism and provide targeted assistance</li> <li>■ The Committee monitors development progress of the country during the period and reports annually to the Economic and Social Council; graduation becomes effective in principle three years after the General Assembly takes note</li> </ul>	

Source: Adaptation based on United Nations 2018.

The United Nations system emphasizes that the graduating country should not see graduation as a cut-off point, but as one milestone in its longer-term process of sustainable development and structural transformation. Graduation does not indicate that the country resolves all development challenges, nor does it create a new set of challenges, rather it ends some preferential treatment in trade, finance and technical assistance, and generates some disruptions. The major challenges of the postgraduation period are the continuation of similar challenges encountered pre-graduation.<sup>103</sup> Thus, it is imperative that the concerned Government take ownership and leadership of graduation, since the primary responsibility for development and structural transformation lies with countries themselves. The role of trade and development partners as well as the United Nations system is to see that the graduation of a country does not hinder its development process, and to consider extending trade preferences, development finance and technical assistance, or reducing them in a phased manner.<sup>104</sup>

Already graduated countries—Botswana (1994), Cape Verde (2007), the Maldives (2011), Samoa (2014) and Equatorial Guinea (2017)—are small in size and population. Among these, Botswana is a landlocked mineral-exporting (primarily diamonds) country, and Equatorial Guinea is an oil-exporting country. Others are small island developing countries that primarily export services. Their experiences in transition and subsequent development trajectories may not fully apply to Nepal. Their policy choices, however, provide a wide range of lessons for the LDCs and the international community. None of these countries had articulated policies specifically aimed at graduation. Rather, each Government pursued national, regional and international policies directed towards broader development objectives, and graduation occurred as an indirect result. The development pathway adopted by Angola, a country recommended for graduation in 2012, was rapid economic growth based on natural resource exploitation, which ensures fast income growth but does not necessarily contribute to greater human assets and reduced

<sup>103</sup> UNCTAD 2016.

<sup>104</sup> United Nations 2005, 2011, 2013, 2016.

vulnerabilities. Graduated countries such as Cape Verde, Equatorial Guinea, the Maldives and Samoa have pursued different pathways characterized by economic specialization, and complemented by investment in human capital, which may help to increase income and human assets. Such pathways do not adequately address challenges in reducing vulnerabilities, however.<sup>105</sup>



**Based on the impact assessment of graduation, graduated countries have requested trade and development partners to extend LDC-specific international support measures after graduation.**

Botswana was the first country to graduate in 1994. While the country's success can, in part, be attributed to its substantial deposits of diamonds, a combination of prudent policies to capitalize on mineral resources, good governance, respect for the rule of law, effective macroeconomic policies to stimulate growth, and adequate investment capital ensured a path towards graduation and sustainable development.<sup>106</sup> It managed to minimize the impact of the so-called 'resource-curse' and avoid 'rent-seeking' activities, instead investing revenue in poverty alleviation programmes, basic infrastructure and social services, prioritizing health and education. It also adopted an effective industrial policy that resulted in private sector-oriented development of the mining sector. Development assistance was channelled into development priorities through proactive engagement with development partners.<sup>107</sup>

Cape Verde met the graduation criteria for the first time in 1994 but only graduated after 13 years in 2007 given structural vulner-

abilities and high dependence on external resources (development assistance and remittances). State modernization, especially in public financial management; investment in economic as well as social infrastructure, including the water supply, sanitation, public health systems and schooling; and the opening of the economy to the private sector, including through the privatization of state enterprises in telecommunications, water, energy and banking were key development strategies.<sup>108</sup>

The Maldives was initially recommended for graduation in 2007, but a tsunami delayed graduation until 2011. The development strategy adopted by the Government was tourism-led growth. The first Tourism Master Plan formulated in 1983 laid the foundation for the sustainable development of the tourism industry by integrating tourism into the social and economic development of the country. It featured consciously articulated environmentally friendly policies.<sup>109</sup> The Government invested heavily in tourism-related construction, transport and communication, and attracted investment in resort development. It also modernized and formalized the traditional informal fishing sector with more advanced and efficient technology. Employment opportunities were generated not only in tourism but also related construction. The Government devoted considerable efforts to strengthening education and health services. Its education strategies were designed to facilitate access to employment and self-employment opportunities.<sup>110</sup>

Samoa first met the LDC graduation criteria in 1991 and graduated almost 23 years later. Its development trajectory drew from its Strategies for the Development of Samoa (2002-2004, 2005-2007, 2008-2012), which increased productive capacities in the labour-intensive agriculture sector and high value added services. The key pillars were agriculture upgrading and diversification,

<sup>105</sup> CDP 2018.

<sup>106</sup> Lewin 2011.

<sup>107</sup> UNCTAD 2016.

<sup>108</sup> UNCTAD 2016, Bhattacharya and Khan 2018.

<sup>109</sup> Kundur 2012.

<sup>110</sup> UNCTAD 2016.



tourism promotion, an open economy and strengthened private sector, improved education and health services, and disaster preparedness and environmental sustainability.<sup>111</sup>

Equatorial Guinea graduated in 2017, but the Government requested deferral until 2020 (Box 5.1). The country is the third largest producer of oil in sub-Saharan Africa and has been one of the fastest growing economies there in the past decade. The Government's development agenda is guided by the National Economic Development Plan: Horizon 2020, which targets economic diversification involving fisheries, agriculture, tourism and finance, as well as poverty reduction.<sup>112</sup>

All graduating countries, except Equatorial Guinea, prepared transition strategies in cooperation with development and trade partners for a smooth graduation built on long-term sustainable development. The content of the transition strategy differed depending on the structure of the economy, challenges and vulnerabilities faced by the country,

and use of international support measures. Most national policies were directed towards strengthening productive capacity; achieving structural transformation and reducing vulnerabilities through shifting production and exports to higher value added products and sectors; upgrading technology; diversifying the economy; raising productivity; improving development governance and building resilience to natural disasters.

Based on the impact assessment of graduation, these countries have requested trade and development partners to extend LDC-specific international support measures after graduation. Major measures negotiated include the extension of the European Union initiative Everything But Arms, access to the European Union's GSP+, extension of zero duty for specific products on a bilateral level, retention of full access to EIF support and further extension on a case-by-case basis, and continuation of travel grants by the United Nations system for three years (Box 5.1).

Box 5.1

**A smooth transition: experiences of graduated LDCs**

Only five countries, Botswana, Cape Verde, Equatorial Guinea, the Maldives and Samoa, have graduated since the LDC category was created. Since specific procedures and principles to guide graduating LDCs through the transition were introduced only in 2005, they were not applicable to Botswana, which graduated in 1994.

**Cape Verde**

Cape Verde graduated in 2007. In preparation, the Government set up a donor support group to prepare a transition strategy. Given the country's heavy dependence on external financing, notably ODA

and remittances, and a high level of structural vulnerability, the major focus of the transition strategy was on the potential loss of ODA. Since graduation, ODA in relation to GNI has declined from an average of 18 percent during the 10 years before graduation, but remained relatively high at 14 percent of GNI after graduation.

Cape Verde's main trade is with the European Union, from which the Government succeeded in obtaining a three-year extension of its eligibility under the Everything But Arms initiative. In December 2010, the European Union, realizing that the transition period had not

provided Cape Verde enough time, decided to extend it until 1 January 2012. In October 2011, Cape Verde applied for benefits under the European Union's GSP+, a special incentives arrangement that provides preferential access to markets to countries that commit to effectively implementing 27 international conventions related to human and labour rights, the environment and good governance. Cape Verde became a beneficiary in late 2013.

Cape Verde had accessed the EIF, and after graduation, it was given an additional three-year transition period and a further two years

*Continued: Box 5.1 A smooth transition...*

<sup>111</sup> UNCTAD 2016.  
<sup>112</sup> World Bank n.d.

**Continued: Box 5.1 A smooth transition...**

subject to justification and approval by the EIF Board.

UNDESA in its assessment concluded that Cape Verde's development progress continues to be very satisfactory after graduation. The country remains economically vulnerable, however. Sustained efforts are needed to advance structural transformation and upgrade the economy. In this regard, the international community should continue to support Cape Verde's development.

**The Maldives**

The Maldives graduated on 1 January 2011. To prepare a strategy for a smooth transition, the Government held the Maldives Donor Forum in 2010 and presented five priority development areas—macroeconomic reform, public sector reform, social development, governance and climate change. All required external resources to ensure positive outcomes.

The Maldives benefited from a three-year extension of trade preferences under Everything But Arms. As it attained upper-middle-income country status in 2014, it ceased to be eligible for GSP

preferences. It also maintained UN travel benefits for three years after graduation. Full access to EIF funds continued until 2013, followed by partial funding on a project-by-project basis for an additional two years, until the end of 2015.

In its monitoring report, the Committee for Development Policy concluded that the Maldives' real GDP has continued to grow at a satisfactory level. There is no sign of regress on the HAI and EVI indicators, though the Maldives remains highly vulnerable. Graduation does not appear to have had a negative impact, with the Maldives continuing to make progress without disruption caused by the end of support measures.

**Samoa**

Samoa graduated on 1 January 2014 and prepared a transition strategy implemented as an integral part of the Strategy for Development of Samoa 2016/17-2019/20: Accelerating Sustainable Development and Broadening Opportunities for All. Like other graduating countries, Samoa benefited from the transition period from Everything But Arms until 2019. After that, the tariff on crude coconut oil, Samoa's main export

product to the European Union, remained at zero. Australia and New Zealand continue to grant Samoa preferential market access based on regular GSP, regional trade agreements and/or WTO arrangements. Samoa retained its access to EIF with a three-year transition to complete projects. After that, proposals will be considered on a case-by-case basis.

Overall, Samoa has continued to make progress since graduation, despite the challenges it faces as a developing country.

**Equatorial Guinea**

Equatorial Guinea graduated on 4 June 2017. It has not yet submitted a transition strategy. The Government requested the High Representative of LDCs, Landlocked Developing Countries and Small Island Developing States to postpone graduation to 2020, to coincide with the National Economic Development Plan: Horizon 2020, and to assess development progress again in 2020. The fact that the request was made after the country already graduated may underscore limited awareness of the LDC category and graduation.

Sources: UNCTAD 2016, CDP 2019/PLEN/5b, CDP2018/PLEN/3, CDP2018/PLEN/3c, CDP2012/PLEN/11.

Although the United Nations is conscious of the adverse impact of abrupt reductions in trade preferences and ODA or technical assistance on the economy of graduating countries, it does not provide systematic support to a smooth transition. It simply urges development and trade partners to consider extending trade preferences to the graduated country or reducing them in a phased manner, along with taking other appropriate

measures on a bilateral basis, so that the development process will not be jeopardized.<sup>113</sup> In practice, the ability of a graduating country to retain access to international support during transition heavily depends on its ability to mobilize technical, financial and political support from its trade and development partners, bilaterally and multilaterally (UNCTAD 2016). Since Nepal has fulfilled graduation criteria on only two counts,

<sup>113</sup> United Nations 2005, 2011, 2015.

human assets and economic vulnerability, its low income; structural and physical vulnerability, particularly landlocked status; and high dependence on remittances may disrupt its development trajectory if it is not prepared from both short- and long-term perspectives.

## Conclusions

Overall, for Nepal, the direct cost of graduation is moderate at least for the short to medium term as no larger impact on exports is foreseen. But there are possibilities of reduced exports in some markets due to high tariffs. Access to the LDCF will be adversely affected, while contributions to some UN entities will increase, particularly in peacekeeping. The loss of preferential market access and increased competition in international markets would disproportionately impact export-oriented small and medium enterprises and employment generated by them. The reduction in some bilateral and multilateral development assistance may adversely affect government and non-government resources allocated to social sectors and marginalized groups. In addition, the legal obligation of fully implementing the TRIPs Agreement may negatively affect access to medicine and in turn health care.

Despite such added costs, graduation makes countries more creditworthy by international credit rating agencies, thus improving access to commercial finance. Many challenges remain, however. They include strengthening productive capacity, advancing to a higher growth trajectory, improving competitiveness and diversifying exports from a narrow range of agriculture and low value added manufacturing products to high value added industrial products, fast reducing poverty and attaining significant progress in human development, and implementing climate-friendly socio-economic development.

For a smooth transition, Nepal should accelerate efforts to advance structural transformation, enhance productive capacity, and bolster institutional capacity. In trade, it must build trade-related infrastructure and improve efficiency, and adopt measures for trade facilitation and reduced costs. This will help diversify trade, enhance trade creation and ensure dynamic gains. To guide its transition and avoid adverse impacts of graduation, Nepal must prepare a transition strategy in cooperation with trade and development partners.

The COVID-19 pandemic may have profound impacts on the graduation criteria, with new risks of rising trade and export costs impacting external markets, and the need for more concessional aid, including debt relief, to overcome multiple crises. All of these factors may require a fresh review of the scheduled graduation plan while developing a transition strategy.



Photo © Sushil Shrestha

# 6



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## Chapter 6

# Beyond LDC Graduation: Pathways to Sustainable Human Development

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## Path to graduation and beyond

Nepal is at a critical juncture. As the previous chapter has shown, LDC graduation on the back of non-income indicators alone<sup>114</sup> will have significant implications on the economy and livelihood. Risks related to trade, development finance and investment will likely slow socioeconomic progress, and could even reverse it. Laying a solid foundation for an irreversible and sustainable graduation largely depends on accelerating productivity driven economic growth and enhancing the level of human development.

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<sup>114</sup> As stated in the previous chapter, the indicators are 'first-generation' measures of development that look into basic achievements in health, education, nutrition, economic vulnerability and average income without capturing progress in 'second-generation' development challenges dealing with quality. Moreover, not all indicators are relevant to all LDCs.



This chapter discusses how Nepal could prepare for a smooth graduation, including to tackle postgraduation challenges on multiple fronts, as part of a longer and broader human development process that extends beyond graduation. Human development is a continuous, long-term process of improving human well-being through enlarging people's choices, freedoms and opportunities in all areas of life (economic, sociocultural and political).<sup>115</sup> In this continuum, LDC graduation should be understood as the first milestone rather than as simply winning the race to leave the LDC group.<sup>116</sup> From a human development perspective,<sup>117</sup> how an LDC graduates is as important as when it graduates, if graduation is to be meaningful and sustainable. Thus, during the graduation process, economic growth should both result from and contribute to expanded productive capacities and structural transformation. Promoting both economic growth and human development will be key to sustaining progress in both.<sup>118</sup>

Based on the conceptual framework and roadmap for this report presented in Chapter 1, this chapter underscores the importance of key drivers of human capabilities and productive capacity that can propel a dynamic transformation of the production structure. In this, productive employment will be an essential foundation for national graduation strategies that can accelerate and maintain sustainable human development far beyond graduation. The chapter considers SDG acceleration as an important reference point, and emphasizes an integrated approach in-

corporating the social, economic and environmental dimensions of sustainable development to optimize potential trade-offs and synergies.

It stresses that this approach must attempt to avoid the imbalances that can result from giving disproportionate priority to one or two aspects, as this poses challenges to sustainable development, more so in a country like Nepal where natural disaster risks and other vulnerabilities are quite high. Another essential consideration is to devolve strategies to the provincial and local levels for better outcomes.

The chapter first provides the conceptual underpinning of key pillars and drivers of enhanced productive capacity and productive transformation. It explores strategic issues and options to reduce human vulnerability, and build resilience to climate change and disaster, in line with the 15th Five-Year Plan and the long-term national vision of a 'prosperous Nepal, happy Nepali'. The plan not only aims for LDC graduation by 2024, but also for Nepal to be comfortably within the ranks of middle-income countries by 2030 through achieving the SDGs.<sup>119</sup> To this end, the plan prioritizes large investments in building human capital, expanding productive infrastructure and raising productivity in agriculture and industry. It commits to preserving the environment and building resilience to natural hazards and climate change, and ensuring effective functioning of the federal governance system.

<sup>115</sup> Human development is the ultimate objective of economic development. It is also a means for promoting development. See Sen 1990. Human development offers several advantages: 1) as a people-centred strategy, it contributes directly to the well-being of people by placing a greater emphasis on human capital formation; 2) it builds from a foundation of equality of opportunity; 3) it helps to create a more equal distribution of the benefits of development; 4) it enables the linkages between the various types of investment in people to be fully exploited; and 5) it takes advantage of the complementarities between human and physical capital. See Griffin et al. 1992.

<sup>116</sup> It marks only the end of an initial stage of development, at which point LDC-specific international support measures are phased out, but the development process continues indefinitely to address challenges even at more advanced stages that result from constraints on the development of productive capacities or failures of structural transformation, notably the middle-income trap. See UNTACD 2006.

<sup>117</sup> In fact, broad indicators that define a country as an LDC also fall within the paradigm of human development (education, health and income) although the definitions of indicators in the two may differ.

<sup>118</sup> Because of a strong two-way relationship, economic growth, which is an important input into human development, is not sustainable without improvement in human development, and vice versa. See Ranis, Stewart and Ramirez 2000.

<sup>119</sup> The plan has set ambitious targets for attaining average annual GDP growth of 10.1 percent during the five-year period while also reducing both income and non-income poverty to 11 percent and 13 percent, respectively. This will require investment totalling 39.1 percent of GDP annually, on average.

## Building productive capacities and transforming the economy for human development: the essentials

### What are productive capacities and how may they be developed?

Developing productive capacities and advancing economic transformation are keys to achieving sustained economic growth, reducing pervasive poverty and vulnerability, and taking the path to sustainable graduation and higher human development. The term ‘productive capacities’ is increasingly used in development policy discussions with a plethora of definitions and overlapping concepts focusing on different aspects.<sup>120</sup> ‘Productive capacities’ and ‘productive ca-

pabilities’ are closely related but distinct concepts. From a human development perspective, the enhancement of capabilities needs to be harmonized with investment in productive capacities. Following the broad approach offered by UNCTAD in its 2006 report on various theories of economic growth,<sup>121</sup> productive capacity in this Nepal Human Development Report is understood as the whole set of productive resources (human, physical, financial and natural capital), entrepreneurial capabilities and production linkages across sectors. These three pillars together determine the capacity of a country to produce goods and services efficiently and competitively, and enable it to grow and achieve high and sustainable levels of growth, structural transformation, and the creation of employment and decent jobs. Box 6.1 summarizes key concepts central to productive capacities, which are depicted with their main components and underlying drivers in Figure 6.1.

#### Box 6.1

### Key factors central to developing productive capacities and transforming the economy

#### Three pillars of productive capacities together determine the overall capacity of a country to produce goods and services.

- Productive resources are the factors of production and include human resources (labour, and encompassing the level of education, health, nutrition and skills); natural resources (agricultural land, water, energy, environmental assets); financial capital resources (to finance production, investment and innovation); and physical capital resources (physical infrastructure facilities, transport, power, telecommunications, machinery and equipment).
- Entrepreneurial capabilities comprise both core competencies (acquisition of skills, knowledge and information required to mobilize productive resources and transform inputs into outputs) and technological capabilities (the ability to build and advance existing competencies to increase productivity, competitiveness and profitability through investment and innovation).
- Production linkages are important for using existing productive capacities while also ensuring the competitiveness of particular activities and enterprises. The term refers to flows and movements between different types of economic activity along supply chains, which can take many forms: flows of goods and services through backward and forward linkages; flows of information and knowledge; flows of productive resources; and linkages between large and small firms as well as between domestic and foreign firms.

#### The productive capacities of a country develop through the following three closely interrelated processes, with each related to the above three pillars.

- Capital accumulation is the process of increasing capital

Continued: Box 6.1 Key factors central to developing...

<sup>120</sup> While the definition of the WTO is trade-centric and that of UNIDO is industry-focused, UNDP’s definition centres on human capabilities.

<sup>121</sup> These theories emphasize the importance of economic growth of technological capabilities, entrepreneurship and the dynamics of production structures while also viewing economic growth as a cumulative process based on the interaction between supply and demand side factors. See UNCTAD 2006.

*Continued: Box 6.1 Key factors central to developing...*

stocks of all productive resources through investment that involves human capital formation, physical capital formation and natural capital.

- Technological progress is related to the development of technological capabilities of various kinds. It is the process of introducing new products, new production processes, and improved forms of organizing production through application of knowledge, experiences and skills (i.e., innovation).
  - Structural change is a continuous process in which the relative importance, interlinkages and structure of the sectors of an economy change over time through the dynamic reallocation of resources from low- to high-productivity activities. It also affects the potential for further investment and innovation in 'leading sectors', keeping in view their economies of scale, strong backward and forward linkages, and opportunities for technological progress and knowledge spillover.
- The development and utilization of productive capacities within a country are strongly influenced by the growth of demand, global integration and trade facilitation as well as supportive institutions and the right policy environment.**
- Demand: Stimulating effective demand (both domestic and external) is critically important for stimulating productive capacities and ensuring these are fully used. Both supply and demand side factors need to be taken seriously in policy efforts to expand productive capacities.
  - Global integration and trade facilitation: As an important component of the growth of demand, exporting to international markets can enable a country to mobilize productive resources. This process can address domestic

demand constraints, and accelerate structural change, capital accumulation and overall productivity through domestic production linkages as well as enhanced access to markets, knowledge, technology and foreign capital.

- Supportive institutions, governance and policies: Improving national institutions and governance is an important policy pressure point to promote productive capacities. With globalization and liberalization, international institutional regimes governing private capital flows and aid, technology transfer and international migration also matter. Underpinning a supportive policy environment are the guiding principles of ensuring efficiency, equity, inclusiveness and sustainability while building resilience to multiple shocks in order to accelerate and sustain human development.

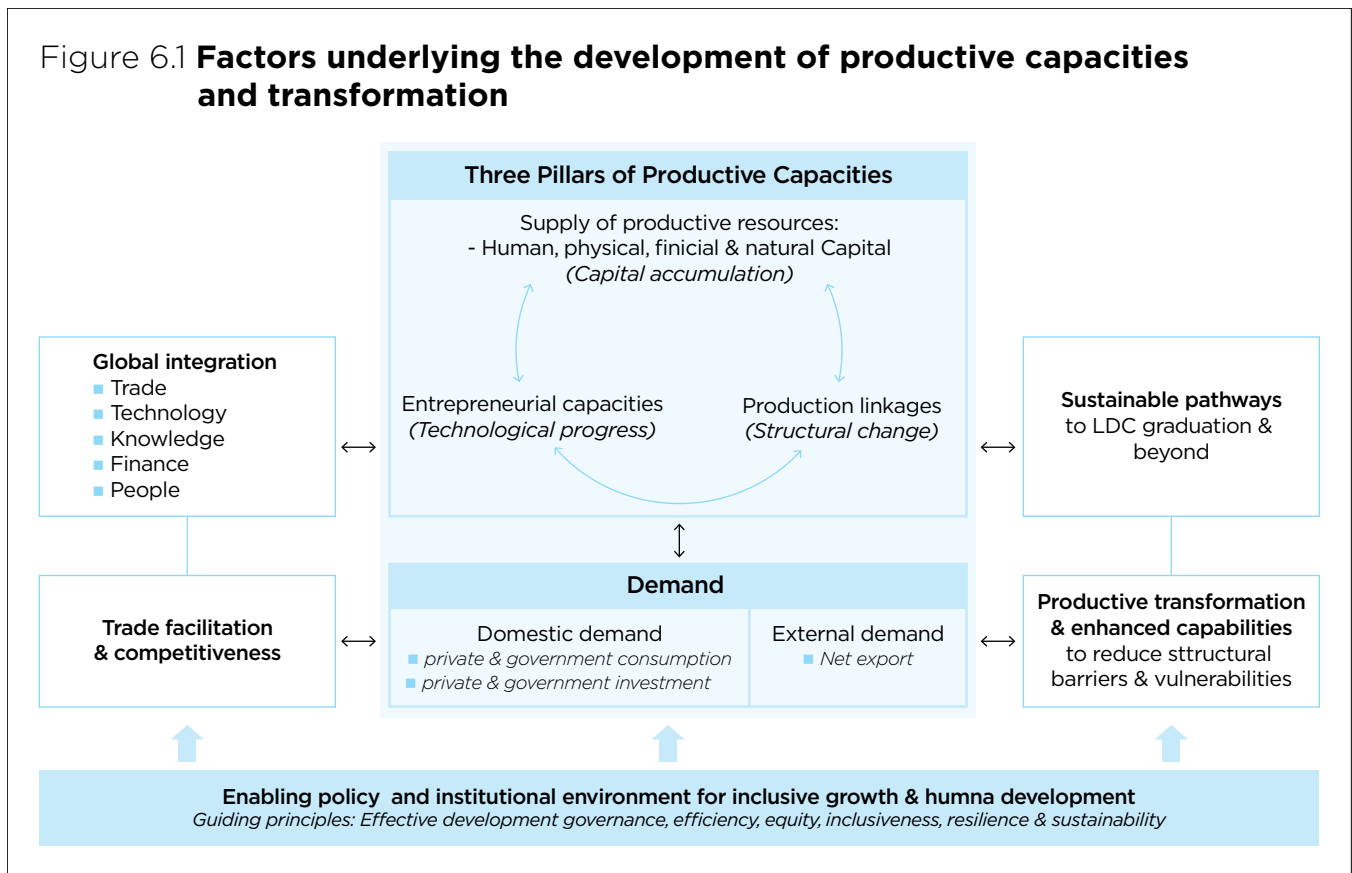
Source: Based on UNCTAD 2006.

Figure 6.1 illustrates how three interconnected core processes (i.e., capital accumulation, technological progress and structural transformation) related to the three essential pillars of productive capacities (productive resources, entrepreneurial capabilities and production linkages) together determine a country's capacity to produce goods and services that enable it to grow and develop. First, investing in all productive resources (human, physical, natural capital, etc.) is critical to capital

accumulation for developing productive capacity. Second, enhancement of various entrepreneurial capabilities<sup>122</sup> leads to technical progress necessary for introducing new products, production processes, and improved forms of organizing production through the application of knowledge, experience and skills (i.e., innovation). Third, the role of diversified production linkages across sectors is another determinant of developing productive capacity and advancing structural transformation.

<sup>122</sup> Technological capabilities have been specified in various ways, such as the knowledge and skills required or used for expanding physical facilities (investment capabilities); those for improving products and production processes (innovation capabilities); those for developing new markets and improving competitive advantage (strategic marketing capabilities); those for transferring technology within and across enterprises (linkage capabilities); and those for creating new technology (radical innovation capabilities). See Ernst, Ganiatos and Mytelka 1998: 17–23; Dahlman, Ross-Larsen and Pack 1986; Amsden 2001; Lall 1992, 2004.

Figure 6.1 **Factors underlying the development of productive capacities and transformation**



Sources: Modified based on UNTACD 2006

Fourth, the dynamics of productive transformation occur only when the development of productive capacities and the growth of effective demand (both domestic and external demand) mutually reinforce each other.<sup>123</sup> This requires broadening the sources of growth from domestic transformative sectors while also stimulating foreign demand through global integration via trade and investment facilitation and competitiveness. Finally, developing and sustaining productive capacity and productive transformation depend on supportive institutions and a policy environment that prioritizes productive employment-led growth and human development, guided by the principles of efficiency, equity, inclusiveness, resilience and sustainability.

In light of these conceptual underpinnings, the following sections describe the current status and future strategic options for key productive resources on the supply side, and priority transformative sectors on the demand side, while also dealing with strategic options for reducing vulnerability and building resilience. More specifically, strategic options for stronger, inclusive and more sustainable growth, aimed at sustainable LDC graduation and higher human development, can be grouped into four broad areas for priority action. These are addressed in this and the following chapter.

<sup>123</sup> In the absence of effective demand, existing productive capacities will be underutilized even if supply side issues are successfully resolved. The stimulus of demand is thus as important as resolving supply side issues in policy efforts to develop productive capacities and dynamic transformation.

1. Building productive capacity by scaling up investment in human capital, entrepreneurship and the demographic dividend (Chapter 6).
2. Reducing vulnerability and building resilience to climate risks and other pressures (Chapter 6).
3. Driving transformative sectors by bolstering new sources of growth that are potential game changers, while revitalizing existing sources to boost labour productivity and employment in a manner that releases labour for new sources (Chapter 7).
4. Breaking down policy and institutional barriers by dramatically restructuring public policies, investment programmes and governance systems (Chapter 7).

## Expanding human capabilities

Expanding human capabilities is the ultimate aim of human development. Human beings are not merely the means of production but also the end of the exercise.<sup>124</sup> As such, the human capability approach conceptualizes well-being in terms of a person's set of capabilities, and development as a process of expanding these capabilities as both a means and an ends. Beyond their instrumental roles in raising productivity, incomes, employability and economic growth, quality education and good health expand human capabilities and freedom. They allow people to gain meaningful choices and lead lives they value.<sup>125</sup> Sustained investment in expanded human capability is critical for human development as a foundation for a smooth LDC graduation, and for harnessing a potential demographic dividend.

Investing in people is imperative to closing existing human capital gaps. Evidence from the World Bank's Human Capital Index reveals that if Nepal invested in children's education and health so they could realize their full economic and professional potentials, GDP could be as much as two times larger than it is, showing the huge potential for growth.<sup>126</sup> A child born in Nepal today is estimated to be only 49 percent as productive when she grows up as she could be with a full investment in education and health. Even one additional year of schooling in Nepal can raise an individual's earnings by 8 to 10 percent. Undernutrition alone is expected to reduce learning potential and productivity, and hence GDP, by as much as 11 percent.<sup>127</sup>

This section will examine existing performance and emerging challenges in education and health, and offer strategic options for closing gaps while harnessing the demographic dividend and fostering entrepreneurial capabilities. It focuses primarily on access and equity, and quality from a human development perspective.

### Invigorating quality education systems

Education is central to unlocking human capabilities and freedoms necessary for sustainable human development. Besides its intrinsic value, it has tremendous instrumental value in boosting human capital and economies at large, while also making people healthier, increasing social capital, and fostering institutions that promote inclusion and shared prosperity.<sup>128</sup> SDG 4 calls for achieving inclusive and equitable quality education, and promoting lifelong learning opportunities for all, as goals in their own right and as crucial for meeting other SDGs.

Towards equitable access to quality education, the Government has developed the

<sup>124</sup> Sen 1985, 1999, 2004.

<sup>125</sup> Sen 1997.

<sup>126</sup> The index is designed to highlight how improvements in current education and health outcomes shape the productivity of the next generation of workers. It is based on the assumption that expected future education and health depend on current education and health conditions, and how children born in a given year experience current educational opportunities and health risks over the next 18 years. It has three components closely linked with SDG targets for health, education and nutrition: 1) a measure of whether children survive from birth to school age (age 5); 2) a measure of expected years of quality-adjusted school, which combines information on the quantity and quality of education; and 3) two broad measures of health—stunting rates and adult survival rates. For more details, see World Bank 2019.

<sup>127</sup> World Bank 2019.

<sup>128</sup> For more evidence, see Glowed et al. 2014.



School Sector Development Plan for 2016 to 2023 in line with the 2015 Constitution, which defined education as a fundamental right.<sup>129</sup> The Nepal National Framework for SDG 4 has set specific targets<sup>130</sup> for investing in education, estimated to account for 15 percent of the total SDG investment required from 2016 to 2030. The 15th Plan aims to transform education with specific targets. It focuses on early childhood education, equitable quality education, technical and vocational skills for employment, and capacity development, among other priorities.<sup>131</sup>

**Nepal has made remarkable progress in addressing a first-generation challenge by significantly improving access to basic education in the past decade.** The net enrolment rate reached 95 percent at the primary level and 54 percent at the lower secondary level in 2017.<sup>132</sup> Nepal has achieved gender parity at both basic (grades 1-8) and secondary (grades 9-12) levels, with the rate for girls staying in school to grade 8 at 77.4 percent, exceeding that for boys at 75.9 percent.<sup>133</sup> Between 2013-2014 and 2017-2018, the overall rate of those with six-plus years of schooling increased from 66 to 78 percent, the youth (15 to 24 years) literacy rate reached 88.6 percent, while adult (15-plus years) literacy remained fairly stagnant at 58 percent.

**Despite impressive gain, Nepal faces significant second-generation challenges from low and unequal learning outcomes.** Several rounds of the National Assessment of Student Achievement from 2011 to 2018 showed

a learning crisis marked by widespread disparities in learning outcomes in basic education by province, school type and socioeconomic status (see Box 6.2). Millions complete primary education without acquiring basic competencies for further learning. Children from poor households are far more likely than those from wealthier homes to leave school without acquiring basic skills.<sup>134</sup> This translates ultimately into shortcomings in the skills of the workforce.

On average, around 4.8 years of schooling (41 percent) are lost due to poor quality. A child who starts school at age 4 can expect to complete 11.7 years of school by her 18th birthday.<sup>135</sup> But this figure drops to 6.9 years when accounting for what children actually learn.<sup>136</sup> This highlights the urgent need to close a yawning gap between expected years of schooling and learning-adjusted years of schooling.<sup>137</sup> Nepal also underperforms on global indicators of higher education and skills, such as the Global Competitiveness Index on higher education and training, and the World Economic Forum's Know-How Index.<sup>138</sup> Low teaching/learning quality, a lack of timely distribution of textbooks, poor minimum enabling conditions in public schools, and weak evaluation and accountability are major problems in enhancing education quality. With the education system largely unable to provide youth with foundational skills needed to succeed in employment, many cannot transition from school to work, and leave the country for foreign employment.

<sup>129</sup> It was designed to complete the unfinished agenda of the School Sector Reform Plan, aligning with SDG 4, and focusing primarily on improving the equity, quality, efficiency, governance and management, and resilience of education.

<sup>130</sup> For more details on specific SDG 4 national targets, see NPC 2017.

<sup>131</sup> It has targeted an adult literacy rate of 90 percent and a youth literacy rate of 99 percent while increasing access to technical and vocational skills for 55 percent of the working-age population.

<sup>132</sup> See the UIS Education Database.

<sup>133</sup> Nepal has yet to achieve gender parity in early childhood education and the pre-primary level (0.89) or the tertiary level (0.70).

<sup>134</sup> For example, an estimated 500,000 children, mostly from disadvantaged groups comprising 14 percent of children aged 5 to 12, are out of school based on the recent School Sector Development Plan appraisal study. These students are much less likely to transition to the secondary level, where the completion rate of all students is already low at 11.5 percent. More girls than boys drop out early, perhaps due to early marriage and parental preference for boys if their financial position is constrained.

<sup>135</sup> See Chapter 2 for the expected years of schooling in South Asian countries.

<sup>136</sup> Nepal's learning-adjusted years of schooling is significantly lower than in Malaysia (9.1 years), Mongolia (9.4 years), Thailand (8.6 years) and Viet Nam (10.2 years).

<sup>137</sup> Learning-adjusted years of schooling is measured by globally benchmarked harmonized learning outcomes. See World Bank 2019.

<sup>138</sup> This index measures the breadth and depth of specialized skills. See World Bank 2018.

## Box 6.2 A learning crisis stems from low and unequal learning outcomes

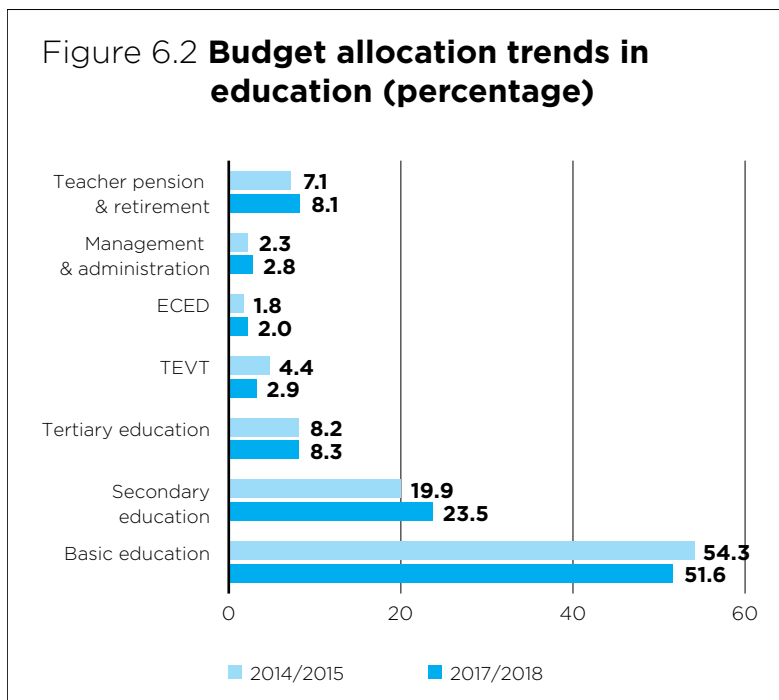
National Assessment of Student Achievement results from 2011 to 2018 showed that less than 20 percent of students in grades 3, 5 and 8 are able to master competencies in problem-solving and reasoning. A 2018 assessment for grade 5 in mathematics and Nepali indicated an alarming learning crisis, with 70 percent of students in mathematics and 55 percent of students in Nepali underperforming. Students in Province 1 and Karnali Province have lower levels of

performance than those in other provinces. Students in grades 3 and 5 from the lowest socioeconomic group scored 39 percent on Nepali, on average, while those from the highest group scored 71 percent in grade 3 and 65 percent in grade 5. The performance of public schools is poor relative to private ones, with a gap of 30 score in mathematics and 34 in Nepali.

Persistently low pass rates (only 46.2 percent and 47.4 percent

on the school-leaving certificate (SLC) exams in 2003 and 2014, respectively) together with a fairly low pass rate at the certificate level (18.4 percent of total enrolment) also indicate poor quality and low efficiency especially in public education. This clearly underscores the need for reviewing the national curriculum, teaching methods, the teacher motivation system, the learning environment and the evaluation system.

Source: Education Review Office 2018. Various series of National Assessment of Student Achievement results.



Source: MOEST 2074/75.

### Does more public spending improve learning outcomes?

Increasing public spending is necessary but not always sufficient to improve learning outcomes. It must be allocated in close align-

ment with learning outcomes, and funds must be used for their intended purposes. Current efforts to improve education have led to substantial variability in results, with similar investments and reforms producing widely different outcomes in different places.<sup>139</sup> This is especially true in Nepal where a large chunk of public spending is not leading to quality learning outcomes despite impressive gains in education access. Education accounted for 10.68 percent of the federal government budget in fiscal year 2019-20, while the education budget as a share of GDP has remained around 5 percent.<sup>140</sup> A significant proportion of the provincial and local government budget is also allocated in education.

Basic education constitutes the highest percentage of government educational spending, accounting for 50.8 percent in 2017, followed by secondary education (23.5 percent) and tertiary education (8 percent). Technical and vocational education and training (TVET) received less than 3 percent of the total education budget (Figure 6.2). This indicates that funding is skewed in favour of basic and secondary education, leaving little room for higher education and TVET, despite both being critical to cultivating employable skills.

<sup>139</sup> Joynes 2018.

<sup>140</sup> MOF 2019.

Teacher salaries absorb a large share of the education budget, limiting spending on other areas key to quality learning. As a result, many parents spend considerable amounts on the education of their children even when they go to government schools.<sup>141</sup> Out of total expenses at the pre-primary, primary and lower secondary level, households bear 59.4, 33.6 and 43.6 percent, respectively.<sup>142</sup> When all public and private out-of-pocket spending on education is taken into account, spending in Nepal is much higher.<sup>143</sup> Factors such as a high dropout ratio and repetition rate, and low pass rate and retention rate have contributed greatly to the rising costs of public education, which are now comparable to those of private schools.<sup>144</sup>

**Reforming public education with a particular focus on equitable and quality learning should remain a priority for Nepal.** High-quality education that achieves desired learning outcomes is possible, but only when learning is a clearly articulated goal for the entire system, and outcomes are regularly measured and used for evidenced-based policymaking.<sup>145</sup> Despite the large share of the national budget spent on education, the poor quality clearly highlights the urgency of education reform. Drastic improvements in quality are needed to translate inputs and processes into better outcomes.<sup>146</sup> The community school enabling programme aimed at reducing the quality gap has to be made more effective.

The great divide between education quality in private and public schools undermines the road to equitable prosperity. The politicization of public-school teachers is a particular concern, for reasons including the high incidence of teacher absenteeism.<sup>147</sup> Private schools offer a variety of potential benefits to fill existing quality and innovation gaps in the public system, but at the cost of excluding more disadvantaged students. The key policy issue is to create and support an enabling policy and regulatory framework that encourages equitable quality education, and ensures that private schooling does not undermine learning for all.

As Nepal transitions into its new federal structure, there is an opportunity to reform public schools through decentralization of administration and by giving schools autonomy in spending, the selection of teachers, flexibility in curricula, etc. The recently endorsed policy to give autonomy to schools is a positive step in this direction. Success will require effective disbursement and management of resources on the basis of close performance monitoring of schools and teachers, and through making them strongly accountable for achieving quality outcomes.

**TVET can offer a viable path to close the skills demand-supply mismatch.** But this can happen only when programmes are designed and implemented in partnership with employ-

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<sup>141</sup> Households spent 5 percent of their total consumption on education and 3.5 percent of their remittance amounts on education (CBS 2011b).

<sup>142</sup> CBS 2015.

<sup>143</sup> UIS 2016.

<sup>144</sup> Taking all sources of finance and considering only students who pass the final exam, the outcome-based cost per child between public (NRs 27,883) and private schools (NRs 28,392) was found to be almost similar, but standards of education in the two differ starkly. See Wagle et al. 2017.

<sup>145</sup> Quality education must embrace the four pillars of learning: learning to know, learning to do, learning to be and learning to live together. A successful quality education programme requires: 1) healthy, well-nourished and motivated students; 2) well-trained teachers and active learning techniques; 3) adequate facilities and learning materials; 4) a relevant curriculum that can be taught and learned in a local language, and that builds upon the knowledge and experience of the teachers and learners; 5) an environment that is gender sensitive, healthy and safe; 6) a clear definition and accurate assessment of learning outcomes, including knowledge, skills, attitudes and values; 7) participatory governance and management; and 8) respect for and engagement with local communities and cultures. UNESCO 2005.

<sup>146</sup> It is necessary to establish a rigorous, globally accepted system for assessing student achievement, monitoring classroom processes and evaluating teacher performance. The Government's ongoing effort to institutionalize the National Assessment of Student Achievement is a positive step in this direction that must be scaled up and internalized.

<sup>147</sup> Although Article 16(E) provides for the formation of a teachers' union in Nepal without any political affiliation, and forbids full-time teachers to be active political candidates, the politicization of the public-school system has been the rule rather than exception.

ers to make them relevant and responsive to market needs.<sup>148</sup> The current limited involvement of employers has left TVET courses with limited relevance to labour force needs. A better balance is needed between supply side policies for market-responsive TVET and demand side measures to generate jobs for available skilled workers.

The Council for Technical and Vocational Education and Training (CTVET) is the only apex government institute responsible for designing, developing and monitoring TVET.<sup>149</sup> The Government has announced a policy of establishing at least one TVET stream school at each local level.<sup>150</sup> TVET has long been commonly viewed as a path of second choice, however; only 2 percent of secondary and higher secondary students choose it. Given the vast pool of Nepali youths entering the labour market every year without attaining secondary education, and with less than one-quarter of those participating in any kind of TVET, there is huge potential to utilize them in development.

The current demand-supply mismatch in skills is a clear manifestation of education policy failure.<sup>151</sup> The main challenges ahead entail more funding, more up-to-date curricula, skills mapping and information systems to track supply and demand, better teacher training, and more vocational choices relevant to the job market.

**A substantial shift in policies and priorities is needed to restructure and reposition TVET providers as autonomous bodies with clear roles and responsibilities.** TVET is characterized by weak institutional leadership. It is highly fragmented into multiple programmes

under various ministries and offices, with no mechanism for effective coordination, leading to duplicated activities and a lack of standardized curricula.<sup>152</sup> From a management perspective, TVET programmes need to be integrated under one structure. Coordination should be enhanced, and management and delivery improved to respond to the demands of national, regional and international labour markets. The involvement of industry and business is critical to making TVET market-responsive, which leads to greater employability and productivity. As this area of education receives little more than 2 percent of the national education budget, substantially scaling up investment is critical to resolve financing issues that have hindered growth. With the changed context of three tiers of government, the federal government needs to further review the Nepal Education Policy 2019 and aim at strengthening TEVT.

**A move to digital infrastructure is an essential element of the response to the pandemic.** COVID-19 has had serious impacts on students' learning and well-being, and is widening gaps between advantaged and disadvantaged children in access to quality education. Nearly 9 million students have been affected by school/university closures.<sup>153</sup> With no certainty around how long the pandemic will last, moving classes online has emerged as an alternative to sustain education. Poor Internet connectivity in remote and hilly areas, however, together with the lack of affordable high-end devices like iPads or smart phones will limit prospects for online classes for most rural schools. Only 73 percent of people can access the Internet, and only 13 percent of schools might be able to run online classes (though 35 percent have access to the In-

<sup>148</sup> UNDP 2012.

<sup>149</sup> In the current system, vocational training courses range in duration from 3 months to 6 months for youths 16 years and above. The Technical School Leaving Certificate Program varies from 15 months to 29 months for grade 10 and SLC pass students. Diploma and technical certificate programmes for SLC pass students last three years (see the CTVET).

<sup>150</sup> Presently, 284 TVET stream schools are running throughout the country within the premises of community secondary schools. In 2017-2018, the number of students enrolled in technical subjects in grade 9 was a negligible 23,415.

<sup>151</sup> On the one hand, Nepal has a significant level of unemployment. On the other hand, employers complain about the lack of skilled human resources. Little is known about the exact amount of labour demanded in the market, however, making it difficult to match the supply of skills with market demand.

<sup>152</sup> It is not clear whether CTVET should focus on policy and programme coordination and quality assurance, or on training provision.

<sup>153</sup> UNESCO 2020.

ternet).<sup>154</sup> Without Internet access, globally, the decline in human development due to COVID-19 will be 2.5 times worse.<sup>155</sup>

The fragmented nature of different online teaching/learning systems provided by various institutions, public and private, calls for coordinated efforts to develop a single platform. Academic approaches need to be changed and innovative approaches taken at all levels of education. Digital and other forms of remote learning should be scaled up by strengthening the capacity of schools and universities, while ensuring equitable access to the Internet and technology.

### Rejuvenating quality health systems

Health is important both for its own sake and for other development goals, including poverty eradication, economic growth, better education and sustainability. Health status depends not just on the provision of health services, but also on a range of other social determinants, including education, occupation, income, housing, gender, inequality and environmental shocks.<sup>156</sup> Pursuing an integrated approach to universal health coverage and equitable access to affordable and quality health services is central to the attainment of a number of the SDGs, including the health targets under Goal 3. Given Nepal's inherent risks of vulnerability to natural disasters, health crises or economic shocks, all of which have implications for health and well-being, delivering quality health services; reducing inequities linked to gender, social status, income and geographic location; and promoting resilience are all critical to rejuvenating the health system and moving towards sustainable LDC graduation and higher human development.

Nepal's 2015 Constitution enshrines the right to healthy living and access to health services. The 15th Plan has set a long-term target of increasing life expectancy to 80 years while reducing the maternal mortality rate to 20 per 100,000 live births and under-5 child mortality to 8 per 1,000 live births and prevalence of stunting to 5 per cent, within the next 25 years. The Nepal Health Sector Strategy for 2016 to 2021 has adopted a multisectoral approach with a strategic focus on equitable access, quality health services and health system reform.<sup>157</sup>

### Nepal has made impressive progress in aggregate health outcomes, but this hides large disparities related to urban-rural location, income, gender, ethnicity and caste.

Life expectancy has been steadily increasing, reaching 69.7 years in 2017, compared to 54.3 years in 1990. Between 1996 and 2016, under-5 mortality fell from 118 to 39 deaths per 1,000 live births, infant mortality declined from 78 to 32 deaths per 1,000 live births, neonatal mortality decreased from 50 to 21 deaths per 1,000 live births, under-5 stunting dropped from 57 to 36 percent, and maternal mortality<sup>158</sup> retreated from 539 to 239 per 100,000 live births.<sup>159</sup> Despite these notable achievements, rates of stunting, and neonatal and maternal mortality remain unacceptably high compared to international benchmarks, with large variations across provinces and socioeconomic status.<sup>160</sup> Furthermore, there are gaps in access to quality medicine, its correct use, and the production and distribution of essential drugs and medical equipment within the country. Laboratory services and medical equipment to improve services are yet to meet quality standards.<sup>161</sup>

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<sup>154</sup> Pandit 2020.

<sup>155</sup> UNDP 2020.

<sup>156</sup> See for example, CSDH 2008.

<sup>157</sup> Ministry of Health and Population 2018.

<sup>158</sup> The rate of death during the first 28 days after birth.

<sup>159</sup> Ministry of Health, New Era and ICF 2016.

<sup>160</sup> For example, stunting rates are high in Province 6 (55 percent) and low in Provinces 3 and 4 (29 percent). Rates were relatively high among children from the lowest wealth quintile (49 percent) compared with the highest wealth quintile (17 percent) in 2016. Under-5 mortality ranged from 27 deaths per 1,000 births in Province 4 to 69 in Province 7, and the neonatal mortality rate from a low of 15 deaths per 1,000 live births in Province 4 to a high of 41 in Province 7. The neonatal mortality rate is twice as high among the poorest wealth quintile compared with the richest one. See Ministry of Health, New ERA and ICF 2017.

<sup>161</sup> DoHS 2016.



**Sustaining gains in health outcome will require tackling new challenges posed by the rise in non-communicable disease, and climate change and natural disasters.** The increased incidence of new diseases is causing high levels of premature deaths due to insufficient access to quality, affordable health-care services. Deaths attributed to non-communicable diseases have risen to 60 percent of deaths and disability, up from 51 percent in 2010.<sup>162</sup> This compares to a declining trend in communicable diseases.<sup>163</sup> Weak coordination of strategic interventions across multiple sectors and line ministries has remained a serious challenge for the Multisector Action Plan for the Prevention and Control of Non-communicable Diseases (2014-2020). COVID-19 has now severely disrupted services to prevent and treat non-communicable diseases, even as people living with some of these may be more vulnerable to becoming severely ill or dying from the virus.

**Nepal needs an umbrella policy and law governing overall management of a well-coordinated and integrated health service delivery system, with clear policy guidance for the federal structure.** This is necessary to ensure the complementarity of investments, enable synergies among various interventions, and improve quality and administrative efficiency across the three layers of government.<sup>164</sup> The ongoing Nepal Health Sector Strategy needs revision in line with the federal structure. Further, many social and health protection schemes need to be reviewed and aligned, giving the provincial and local levels a greater role to play in execution, while the feder-

al government sets policies, laws, standards and regulations. Federalism provides a great opportunity to reform outdated vertical and horizontal structures and attain greater equity, efficiency, effectiveness and accountability in service delivery tailored to local conditions. Building capacity, adopting the right incentives and strengthening accountability are all ingredients of better service delivery.

**Nepal needs to considerably increase public spending on health to achieve the national SDG health target.** Government budget allocation in health is 2.2 percent of GDP in FY 2019-20 which is far behind the recommended amount to achieve universal access to primary care services.<sup>165</sup> The percentage of the health budget against the federal government budget has decreased from 6.1 percent in FY 2013-14 to 5.1 percent in FY 2019-20.<sup>166</sup> This however excludes large portion of the budget allocated to the health services by the provincial and local governments. Household out-of-pocket payments have been the main source of funding for health care, with the Government's share decreasing over the past decade.<sup>167</sup> Out-of-pocket health spending as a share of total health spending is now high at 55 percent.<sup>168</sup> This discourages the poor from seeking health care, particularly in urban areas, where private health facilities play an important role in providing services. The landmark National Health Insurance Act 2017 could change how health services are financed provided it is reoriented to effectively identify and cover poor and other vulnerable groups in coordination with the social protection system.

<sup>162</sup> The major non-communicable diseases in Nepal include cardiovascular diseases, diabetes, cancer, chronic respiratory diseases, mental disorders and oral diseases. WHO 2014.

<sup>163</sup> Communicable diseases account for approximately 18 percent of all deaths in Nepal, down from over 32 percent in 2000. WHO 2015.

<sup>164</sup> As per the constitutional provision, federal, provincial and local governments have the authority to develop their own policy and laws as long as these do not contradict federal and provincial policies and laws (for local government).

<sup>165</sup> Nepal's per capita government spending in 2017-2018 was \$5.40, in constant terms (base year fixed to fiscal year 2000-2001). The Chatham House report of 2014 recommended that countries should spend 5 percent of GDP to progress towards universal health coverage. It also recommended that low-income countries spend \$86 per capita whenever possible, while keeping out-of-pocket payments below 20 per cent of total health expenditure to promote universal access to primary care. The 2010 World Health Report stated that public spending of about 6 percent of GDP on health will limit out-of-pocket payments to an amount that makes the incidence of financial catastrophe negligible.

<sup>166</sup> The health budget for the upcoming fiscal year 2020-2021 has reached 6.2 percent of the national budget to fight against COVID-19.

<sup>167</sup> Health has historically been financed largely by the government budget, external donor funds and out-of-pocket spending.

<sup>168</sup> This is fairly high relative to other countries with better health outcomes, like Sri Lanka (38 percent), Thailand (12 percent) and Viet Nam (43 percent).

**Nepal must tap private sector potential to improve access to services, deliver quality health care and expand health insurance coverage.** There is a need to forge effective partnerships with private and non-governmental organizations. The commercialization of health services is on the rise without proper regulation, resulting in high fees and many dishonest practices. Regulatory reform should streamline and coordinate a proliferation of health enterprises ranging from world-class facilities to those plagued by poor quality. Private health care is mainly confined to high-income groups living in the Kathmandu Valley with little or no incentives for commercial health-care providers to expand to underserved rural populations. There are untapped opportunities for the private sector to work with underserved populations, however, including through the national health insurance programme under the National Health Insurance Act 2017.

**Nepal needs a multisectoral and coordinated approach to tackle the root causes of pervasive malnutrition.** Malnutrition has far-reaching, irreversible consequences felt by individuals and families and the society and country as a whole. It reinforces poverty and underdevelopment, including by limiting cognitive development and learning potential. Estimates indicate that for every dollar invested in nutrition, a country can see \$16 in returns. The failure to address undernutrition, by contrast, causes losses of up to 3 percent of GDP.<sup>169</sup> This underscores the urgency of effective planning and national flagship programmes for nutrition such as the Multisector Nutrition Plan II, implemented under the National Planning Commission. All sectors need to be more nutrition sensitive and attuned to fighting against hunger and malnutrition through various interventions.<sup>170</sup> Reorienting agriculture and food policy could strike a bal-

ance between a few staple crops and highly nutritious, climate-resilient yet historically underutilized secondary crops like finger millet, buckwheat, millet, amaranths, legumes and so on. This requires a proper incentive structure.

COVID-19 clearly demonstrates how universal health coverage defines the resilience of health systems. Putting health first has been critical during and following the outbreak of the pandemic. This has required mobilizing support to maintain essential health service and systems, accelerating access to emerging technologies such as diagnostics, and extending treatment and tracking to reach the most vulnerable populations. The Government's Health Sector Emergency Response Plan COVID-19 Pandemic seeks to strengthen the health system response to minimize the adverse impacts of the crisis, but has faced major challenges in terms of managing quarantines, insufficient human resources, limited laboratories for testing and an inadequate stock of medical supplies.

“ COVID-19 clearly demonstrates how universal health coverage defines the resilience of health systems. ”

### Harnessing the demographic dividend

The demographic dividend arises when the share of the working-age population grows more rapidly than the number of child and elderly dependents. This creates a window of opportunity to invest in the education and health of children, increase economic outputs, and invest in technology and skills to strengthen the economy.<sup>171</sup>

<sup>169</sup> See UNICEF 2016 and World Bank 2018.

<sup>170</sup> While the Government of Nepal has made nutrition and food security a national priority, its implementation is lagging mainly due to coordination failures. The new federal structure provides an opportunity to coordinate actions at the local level, where all implementing agencies converge.

<sup>171</sup> A demographic dividend is defined as accelerated economic growth that may result from a decline in a country's birth and death rates, and a lesser percentage of a young dependent population in relation to a working-age population. The window eventually closes when the workforce ages and relatively fewer workers are available to support increasing numbers of old people. Bloom et al. 2003.

Nepal's demographic structure is currently young; 40 percent of the population was under age 18 in 2016.<sup>172</sup> Its demographic window began in 1992 and is predicted to end by 2047, so only 28 years remain, half the total duration.<sup>173</sup> It will transition very rapidly from being an 'ageing society' in 2028 to an 'aged society' by 2054, a pace significantly faster than the historical trends of today's developed countries.<sup>174</sup> Nepal is already in the middle of a youth bulge in its demographic structure, giving a much shorter demographic window of opportunity. This highlights the urgency and time sensitivity of investments to reap the demographic dividend.<sup>175</sup>

The window presents real opportunities for Nepal's economic growth and development if macroeconomic and labour market policies and institutions provide sufficient and productive employment for the next generation, and target each transitional stage of youth.<sup>176</sup> A demographic bulge can translate into a dividend only by developing a productive, quality workforce that is healthy, educated, and possesses skills as well as decent employment opportunities. The 'economic miracle' of the East Asian Tigers presents a good example of harnessing the demographic dividend for economic gains and social transformation. On the other hand, a demographic bulge becomes a challenge when educational institutions and labour markets fail to absorb a growing share of youth, resulting in their social and economic marginalization.

According to the 2017-2018 Nepal Labour Force Survey, more than 45 percent of 20.7 million people of working age were 15 to 34 years old, reflecting the dominance of a young population. This group experiences the highest unemployment rate, however, ac-

counting for 69 percent of people who are unemployed. Nearly 80 percent of people in the labour force who were either employed or looking for work did not have secondary education, and only 5 percent of the working-age population had tertiary education. No nation has achieved technological and socio-political advancement where less than 15 percent of young citizens have access to tertiary education. Nepal needs to invest more in educating its workforce to enhance its skills and competitiveness.

The Government has undertaken a number of policies and programmes to equip youth with skills required by industries, and address demand and supply gaps. But the scale of intervention does not match that of the youth bulge, as shown by the many youth who leave the country to seek employment elsewhere. The lack of a comprehensive national youth policy framework as integral to national development strategies compounds the challenges of jobless growth. The educational curriculum with poor link to the job market and limited investment in TVET also add to such a problem.

**The demographic dividend is not automatic. It depends on appropriate policy interventions in education, health, the labour market, economic growth and good governance.** The dividend is stimulated by fertility and mortality declines that make people of working-age a greater share of the population. This frees up resources that can be put into economically productive investments to expedite economic growth. At the household level, resources for investment in education per child increase in a smaller family. A country with a large working-age population and a shrinking dependent population can potentially

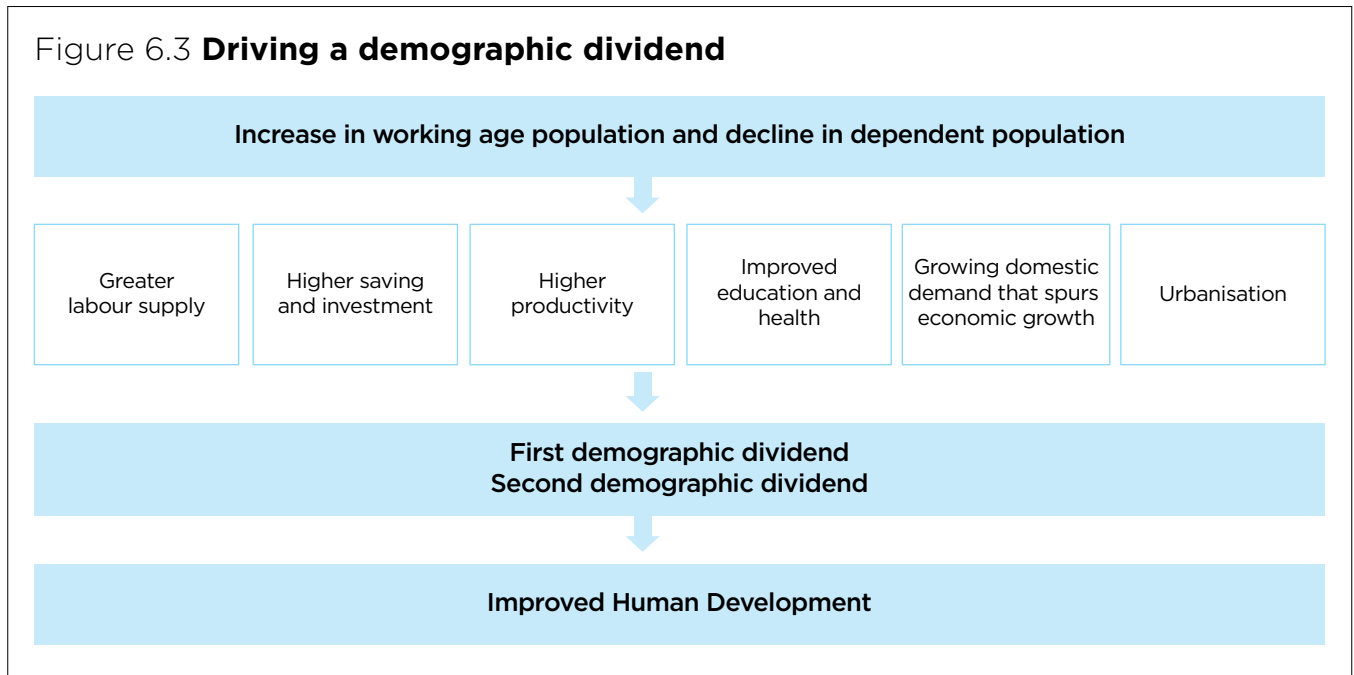
<sup>172</sup> Nepal's total fertility is below four births per woman (World Bank 2016b).

<sup>173</sup> According to calculations by the Population Council, the 55-year period for Nepal's demographic window of opportunity is not particularly long compared with those of more affluent economies, such as 60.5 years for Japan, 55 years for Malaysia, 51 years for Taiwan Province of China, and 50 years each for Hong Kong Special Administrative Region of China and the Republic of Korea.

<sup>174</sup> An ageing society refers to one where the percentage of the population aged 65 years and above accounts for 7 percent or more of the total population. An aged society refers to the same age range accounting for 14 percent or more of the total population. History suggests that there is a second type of demographic dividend, one that actually lasts longer and is more durable than the first, which emerges when the accumulated savings of an ageing population produce a surge in investment. Many wealthier countries have followed this path.

<sup>175</sup> National Planning Commission 2017.

<sup>176</sup> These transition periods—learning, going to work, avoiding risks to health, becoming good citizens and exercising citizenship—if guided well can make young people a significant factor in the growth and development of the country as a whole. See World Bank 2007.



Source: UNDP 2016

employ more people. Savings grow and finance economic growth. Lower fertility rates result in healthier women, and GDP per capita increases due to a decreasing dependency rate. This makes it essential to scale up human capital investments that can raise productivity, both for future generations through children, and among existing cohorts of youths and adults. With appropriate policies and a conducive environment, demographic changes can more broadly accelerate human development through several channels (Figure 6.3).

**Timely investments now to strengthen the next generation of workers can generate an education dividend.** The experiences of high-growth economies in East Asia suggest that well-timed investment in human capital, especially during early childhood, ensures the productivity of the future workforce. Over the longer term, it can also reduce the dependency burden by making older people more self-sufficient, and help cut the inter-generational transmission of poverty. Early childhood development is more cost-effective

than education at any other period of life in terms of increasing future productivity.<sup>177</sup> Building on its past experience and demonstrated successes, Nepal should substantially scale up its investment in early child development and expand coverage through various incentive measures, including conditional cash transfers.

**Strategic investments in education, health and employment can have the most long-term and cost-effective human development impacts, and make the most of the demographic dividend.** Poverty and unemployment can fall when large youth populations are empowered and can access opportunities to build and use human capital through better quality schooling and health, and more productive employment. In the long run, collective human capital investments in youth generate a substantial payoff.<sup>178</sup> More than 40 percent of higher economic growth in East Asia over Latin America from 1965 to 1990 could be attributed to progressive policies for human capital development.<sup>179</sup>

<sup>177</sup> Heckman 2006.

<sup>178</sup> Bell, Bruhns and Gersbach 2006.

<sup>179</sup> Bloom and Canning 2005.

Much depends on combining supply and demand-side policy interventions. On the supply side, promoting employability<sup>180</sup> through equitable access to quality education and TVET can spur human capital development, facilitate integration into the labour market and foster economic growth. For this, Nepal must develop a market-oriented TVET system through coordination and cooperation among governmental institutions, training providers and the private sector, making it more attractive and relevant to young people. These interventions in turn must be tied to measures generating sustainable employment opportunities on the demand side. A well-designed employment services programme supported by an active labour market policy and institutions can match available jobs with jobseekers through job search and placement assistance, counselling, labour intermediation and labour information systems, among other options.<sup>181</sup> By providing youth with information on job opportunities and preparing them for employment, such a programme can increase their employability and employment prospects, particularly among those who lack skills and knowledge of the labour market.<sup>182</sup>

required for technological progress.<sup>183</sup> Entrepreneurship is key to sustainable development and poverty reduction. It can make a critical contribution to attaining the SDGs, including in terms of the empowerment of youth, women and other disadvantaged groups, and full and productive employment for all.

Demand for more entrepreneurship has become increasingly important to cope with faster technological change, more competitive and volatile markets due to greater international competition, the deregulation of markets, overcapacity in capital-intensive industries and the changing demographics of the workforce, among many factors. The dominant characteristic of modern entrepreneurship is the capacity to take risk independently and individually, with a view to making profits and seizing opportunities in a market-oriented economy.

A key challenge is to create an entrepreneurial climate, sharpen entrepreneurial skills and emotional intelligence, and stimulate an entrepreneurial spirit. These steps would shape a cadre of dedicated and innovative entrepreneurs to develop productive capacity and accelerate economic transformation. A starting point is a good understanding of the forces that drive and shape entrepreneurial ecosystems.

Figure 6.4 illustrates nine components of an entrepreneurial ecosystem. Government policies, regulatory frameworks and infrastructure are the most vital elements, creating enabling conditions for other components to grow. These include a financial sector for businesses, a societal culture that supports the desire to adopt new ideas and innovations, business mentoring, advisory and support services, the engagement of universities, the provision of education and training to generate human capital and a skilled technical workforce, and access to large domestic and international mar-

“ **Entrepreneurship is key to sustainable development and poverty reduction.** ”

### Fostering entrepreneurial capabilities

Entrepreneurial capability is an essential element of productive capacities. It encompasses not only core competencies (the acquisition of skills, knowledge and information), but also technological capabilities of various kinds (the ability to build and advance existing competencies to increase productivity, competitiveness and profitability through investment and innovation)

<sup>181</sup> Jaramillo 2006, Lima et al. 2004.

<sup>182</sup> In this context, the Government's policy of establishing employment service centres in all 753 local level units under the Prime Minister's Employment Programme must be appreciated and massively scaled up.

<sup>183</sup> They include investment capabilities, innovation capabilities, strategic marketing capabilities, linkage capabilities and the creation of new technology (radical innovation capabilities).



kets, including through government supply chains.

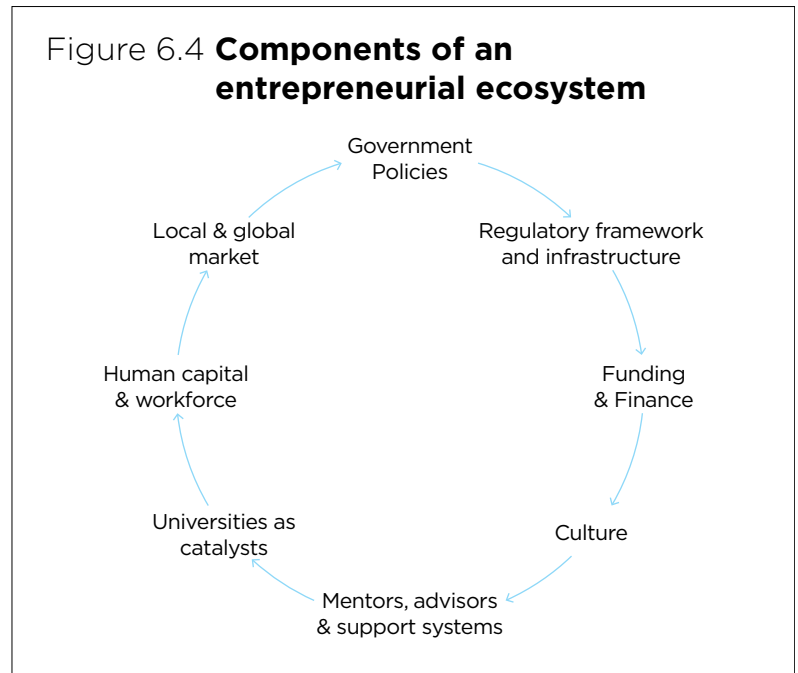
High-level government authorities need to move forward policies and programmes that address all components of the entrepreneurial ecosystem. Besides commercial entrepreneurship, innovation in the public sector, a kind of ‘institutional entrepreneurship’, is required given its key role in governing the business policy environment.

Given the looming youth bulge and unemployment, youth entrepreneurship should remain a priority, with simplified regulations as one step to address barriers that hinder young entrepreneurs. Other key areas to improve the entrepreneurial environment include building awareness and inspiration among young people, increasing education and business skills, creating networks and opportunities, providing start-up incubation services and ensuring access to capital. Policy-makers must bring together the public and private sector as well as other relevant partners to strengthen vocational training and apprenticeship, and inculcate entrepreneurial and employment skills among youth that are well aligned with labour market demands.

Nepal has already demonstrated some successes in women’s entrepreneurship through microenterprises (see Box 6.3).<sup>184</sup> It must continue in this direction as part of the women’s empowerment agenda.

The multifaceted nature of entrepreneurship, its varied definitions, and the limited availability of comparable and reliable data have remained challenges to measuring its impact on development. These bottlenecks should be removed through developing a nationally appropriate methodological framework and metrics so policymakers can evaluate the effectiveness of entrepreneurship programmes. UNCTAD’s Entrepreneurship Policy Framework could be one useful reference.<sup>185</sup>

Figure 6.4 **Components of an entrepreneurial ecosystem**



Source: UNDP 2016

Box 6.3

**Good practice example from Nepal microenterprise development model**

UNDP’s microenterprise development model is recognized by many countries as effective in supporting those living below the poverty line to become successful microentrepreneurs. The model has had a transformative

effect in Nepal for over 131,000 individuals, the majority of whom have become entrepreneurs and leaders in their communities. It is now being integrated in national programmes by the Government of Nepal.

Source: UNDP 2018.

**Reducing vulnerabilities and building resilience**

Nepal falls among the V20 countries and 9th in terms of climate risk. Climate change is one of the greatest challenges facing humanity, posing an existential threat. It has

<sup>184</sup> UNDP 2018.

<sup>185</sup> UNCTAD 2012.

the potential to stall and even reverse human development through impacts on agriculture and food production, ecosystems, water and other natural resources, disaster risk management and health, among others. The expected rise in temperature and associated climate variability come in a context of failure to address the root causes of poverty and vulnerability.<sup>186</sup>

Addressing vulnerability and building resilience will be of paramount importance for sustained progress in human development as climate changes take even firmer hold.<sup>187</sup> As the 2014 global Human Development Report strongly emphasizes, human development must shift the structural causes of vulnerability to any adverse event that could threaten people's capabilities and choices. This does not imply an exclusive focus on particular threats such as economic shocks, hunger or natural disasters in a narrow sense. It stresses the need to go beyond reducing vulnerability to building resilience. This depends on bolstering the strengths of individuals and societies, including through active policies and investments. Better understanding and analysis of vulnerability and resilience, and underlying key factors and policies from a human development perspective are key to making the right choices.

Reducing vulnerability and building resilience should remain top priorities for Nepal to move towards a sustainable LDC graduation, as part of the transition strategy and beyond. As noted, graduation on the back of non-income criteria alone with a low real income base carries the risk of reversibility, given the country's inherent vulnerability to internal and external shocks. These emanate from marginal employment, inequality and poverty, natural disasters and climate change, and constricted capacity to react to shocks and achieve inclusive and resilient economic growth. While Nepal has met the EVI criteria for LDC graduation, vulnerability takes various forms not captured by the index (see Box 6.4).<sup>188</sup> Exploring and ad-

ressing vulnerability and resilience for sustainable graduation requires taking a more holistic systems approach, applying a human development lens.

#### Box 6.4

### Limitations of the Economic Vulnerability Index

The EVI is presently designed as a partial assessment of structural economic vulnerability. It does not account for the structural components of resilience—the capacity to cope with and adapt to exogenous shocks, which are numerous and depend on the overall level of development. Nor does it capture physical vulnerability to climate change. Its exposure component only accounts for exports of merchandise and not of services, in particular tourism, which is a relevant source of vulnerability for Nepal. Its environmental component only captures the risk of flooding related to sea-level rise, but not to the melting of glaciers, which is a particular risk for Nepal. Likewise, its shock index on the instability of exports of goods and services does not take into account the level and possible instability of remittances, as remittances are not a service income when migrants are residents of the host country.

Source: Adapted from ADB 2017.

The following sections assess critical issues and strategic options for reducing vulnerability and building resilience in four critical areas: employment, equity and poverty, social protection, and adaptive capacity in the face of climate change and natural disaster.

### Augmenting productive employment

Universal access to decent employment is a vital prerequisite for human development and for reducing human vulnerability. Secure employment fosters social stability and social cohesion, and strengthens people's abilities to manage shocks and uncertainty. Given

<sup>186</sup> Lisa, E; Schipper, F 2007.

<sup>187</sup> People experience many vulnerabilities from economic risks, inequality, health risks, environmental and natural disasters, food insecurity and physical insecurity. These are especially acute from infancy to early childhood.

<sup>188</sup> ADB 2017.

## Box 6.5 The Prime Minister's Employment Programme

The Prime Minister's Employment Programme aims to provide a minimum employment guarantee as a safety net and reduce dependence on foreign employment by promoting domestic employment. It envisions guaranteeing the registered unemployed at least 100 days of work a year in labour-intensive public works programmes, or providing a subsistence wage for those with less than 100 days

of work or equivalent income. The programme specifically targets unemployed individuals and prioritizes households that are the poorest of the poor and disadvantaged groups. Beneficiaries receive subsistence wages equivalent to 50 percent of the total wage for unworked days, amounting to approximately \$235 per household. The programme also makes provisions for special skills-based training of up to 10

days through the Vocational Skills Development and Training Center, with a goal of training 50,000 individuals per year. Plans call for establishing employment service centres in all 753 local units to implement the programme and coordinate with all three tiers of government, covering all sectors with potential for significant job creation. The programme seeks to create 100,000 jobs.

Source: Prime Minister's Office.

the high economic and social costs of prolonged unemployment,<sup>189</sup> a stronger national commitment to full employment and active public policies geared towards creating and protecting jobs is imperative. Decent employment is crucial for achieving most SDGs and particularly SDG 1, 4, 8 and 10, which explicitly refer to youth and employment.

While the expanding demographic youth bulge presents real opportunities for Nepal's economic growth and development, risks arise from failing to provide sufficient, suitable employment that is productive and remunerative for youth. The quantitative dimension of the employment challenge in Nepal due to jobless growth is evidenced by the fact that hundreds of people leave the country every day. Around 3 million Nepali migrants now work abroad.<sup>190</sup> Foreign employment offers benefits, yet the lack of domestic employment for youth and excessive dependency on foreign labour migration are hallmarks of fragility in Nepal.

To tackle these challenges, the National Employment Policy in 2015 became an umbrella policy to coordinate and harmonize efforts

to promote decent and productive employment. Jobs are a high priority in the 15th Five-Year Plan, national SDG targets, and the National Youth Policy 2015 and Youth Vision 2025.<sup>191</sup> The Prime Minister's Employment Program debuted in 2019 as a flagship initiative (Box 6.5).

Despite some policy efforts, complex challenges hinder Nepal's labour market. These include inadequate structural transformation, a lack of productive employment (low productivity, low wages and poor working conditions), weak educational standards, skills mismatches, and a lack of a labour market information system and labour administration.

### Current employment status and challenges

Data gaps and inconsistencies, including no time series sectoral employment figures, have prevented a rigorous assessment of the relationship between economic growth and job creation. Even available employment data from the National Population Census and Nepal Labour Force Surveys are not comparable, making it difficult to credibly assess labour market trends. The latest 2017-2018 Labour Force Survey may not be comparable with

<sup>189</sup> Such costs may range from permanent loss in output and a decline in labour productivity to serious threats to human capital and other social problem (poor health, crime, suicide, violence, etc.).

<sup>190</sup> The ILO (2016) estimate that there are about 450,000 new entrants per year into the labour market, requiring at least 500,000 jobs per year. See also NPC 2013.

<sup>191</sup> In this regard, the Government has approved the New Labour Act 2017, the Social Security Act 2017 and the Right to Employment Act 2018 to improve industrial relations and ensure social security for workers.

previous rounds due to changes in the definition of employment.<sup>192</sup> Working-age people producing goods for their own final use were not included as employed even though they constitute roughly 60 percent (12.3 million) of 20.7 million working-age people.<sup>193</sup>

Some key 2017-2018 Labour Force Survey results included:

- The employment-to-population ratio was 34.2 percent, and the unemployment rate was 11.4 percent. Informality accounted for 62 percent of the total economy and 85 percent of employment,<sup>194</sup> with Province 2 experiencing the highest rate of both unemployment (20 percent) and informality (78 percent). See Figure 6.12.
- Young people (aged 15-34 years) experienced the highest rate of unemployment, accounting for 69 percent of the total unemployed population.
- Nearly 80 percent of the labour force did not have secondary education. Only 5 percent of the working-age population had tertiary education.
- Taking together all those who were unemployed, underemployed and potential jobseekers, nearly 40 percent of the extended labour force remained underutilized.<sup>195,196</sup> Nearly 70 percent of jobseekers were young people.

- As growing numbers of employed persons face precarious employment, irrespective of the formal or informal sector, the survey revealed the significant extent of vulnerable employment.<sup>197</sup> About 85 percent of the employed are in informal work. Nearly 60 percent of those employed in the formal sector have informal employment.

Given Nepal's inability to create productive jobs in the formal sector, the informal sector is an important source of employment for the poor, the unskilled, and those with little or no education. Underemployment, especially of youth and women, aggravated by the predominance of self-employment without pay, has increased vulnerability in the labour market. The many unskilled workers in the labour market, the payment of low wages in general, and reduced wages for female workers in particular have perpetuated discriminatory practices and exacerbated vulnerabilities.<sup>198</sup> With the vast majority of the workforce trapped in vulnerable employment or informal jobs outside the jurisdiction of labour legislation and social protection, together with the pressing challenge of creating many more new jobs to accommodate a looming youth bulge, Nepal needs to vigorously pursue full employment to reduce vulnerability and build the resilience of its people and society.

**Nepal must take a transformative approach to employment.** No sector is currently performing the role of a dynamic lead in terms of employment growth. An employment

<sup>192</sup> The new standard was followed after the 19th International Conference of Labour Statisticians. As per the new definition, 'people in employment' refers to those working-age people engaged in any activity to produce goods or provide services for pay or profit during a short reference period, while 'unemployment rate' measures the proportion of the labour force that is trying to find work.

<sup>193</sup> This segment of the working-age population includes those involved in subsistence food production, manufacturing of household goods, fetching of water, collection of firewood, and construction or major repairs to own dwelling.

<sup>194</sup> While 'people in employment' refers to those working-age people engaged in any activity to produce goods or provide services for pay or profit during a short reference period, the 'unemployment rate' measures the proportion of the labour force trying to find work. The unemployment rate was higher among females (13.1 percent) than among males (10.3 percent) with the female employment ratio (23 percent) more than half the male employment rate (48 percent). CBS 2018.

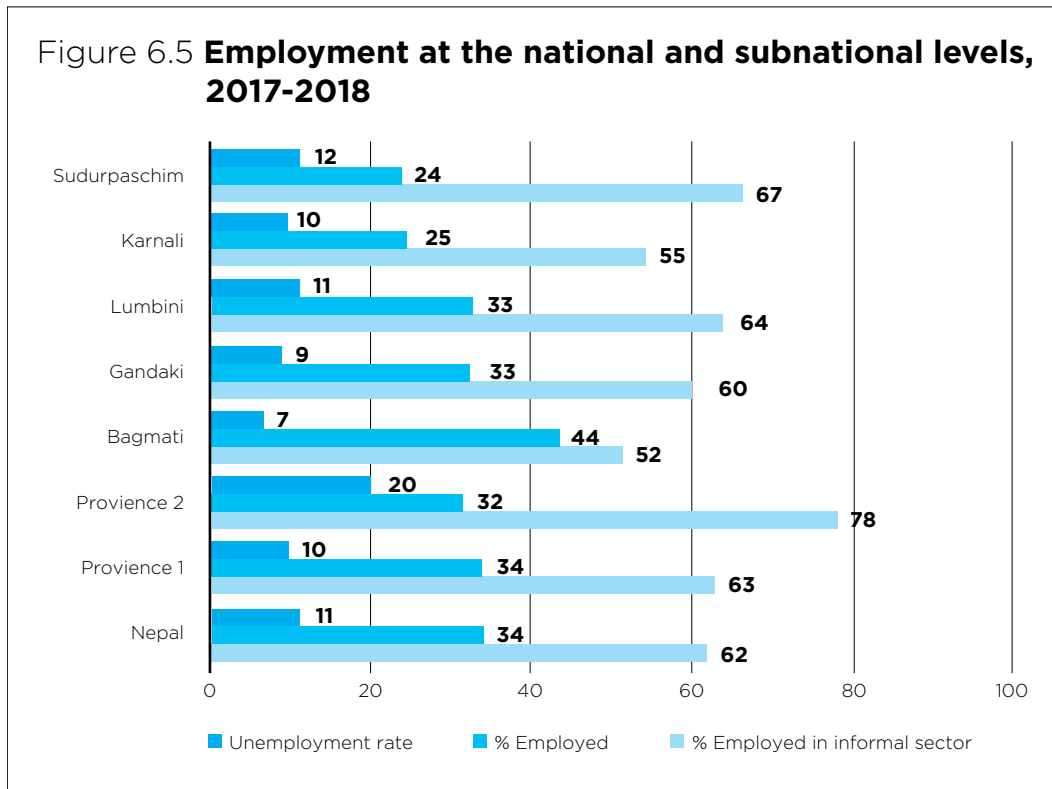
<sup>195</sup> An extended labour force is a group of people with some degree of attachment to the labour market. They include the labour force (employed plus unemployed), unavailable jobseekers and available potential jobseekers.

<sup>196</sup> The potential labour force includes both available and unavailable jobseekers. The extended labour force is the sum of the labour force and potential labour force. CBS 2018.

<sup>197</sup> Informal employment includes employers, own-account workers and contributing family workers who are employed in informal sector establishments, as well as employees and paid apprentices/interns who do not have paid annual leave or sick leave benefits, and whose employers do not contribute to their social security. Even among those employed in the formal sector, roughly 60 percent are in informal employment with no paid annual leave, sick leave benefits or social security. See CBS 2018.

<sup>198</sup> Khanal 2018 and CBS 2018.

Figure 6.5 **Employment at the national and subnational levels, 2017-2018**



Source: CBS 2018.

strategy needs to be part of a discourse on reallocating the workforce from agriculture to industry and other potential sectors, aiming for smooth transitions grounded in transformative structural changes led by productivity enhancement. To change existing remittance-fuelled, consumption-driven growth, Nepal needs a more diversified and comprehensive production-driven growth strategy. This will boost investment, and accelerate both productivity and employment by developing key sectors, while fostering more private sector investments to create decent jobs. A priority is sectors with higher potential for both employment and output growth, such as agribusiness, manufacturing, hydropower and tourism, in order to avoid growth that is jobless, voiceless, ruthless and futureless. It is equally important to explore other service sectors and develop those where growth is linked to the rest of the economy. Such a diversified and tailored ap-

proach grounded in potentials and competitive strengths would be rewarding in terms of employment and broader development. A systematic approach to both supporting job-seekers and generating employment will be key.

Such an approach also requires comprehensive reforms to correct policy inconsistencies, and remove structural and institutional impediments to employment-led inclusive growth. Much depends on the right mix of well-crafted macroeconomic and sectoral policies. Macroeconomic policies need to facilitate increased productive investment by maintaining a favourable investment climate through low and positive real interest rates, strong growth in demand (through a competitive real exchange rate) and low levels of volatile capital outflows<sup>199</sup> Fiscal policies need to support greater public investment for improving productivity and market ac-

<sup>199</sup> This demands a shift in emphasis from restrictive monetary policies that target low inflation rates and hence reduce the growth of domestic demand to an alternative monetary policy framework oriented towards expanding domestic markets, maintaining a competitive exchange rate and improving access to credit on affordable terms.



cess. A combination of non-market interventions and the use of market-generated information is necessary to achieve an employment-friendly development path.

**Formalizing the informal economy requires renewed efforts to bring informal organizations and their representatives into policy-making.** Since informal workers are among the most vulnerable and insecure, designing and implementing a legal and regulatory framework to reduce insecurity is critical for enhancing productivity and value added. This calls for greater collaboration and knowledge exchange, and extending labour laws and social protection to informal workers. Such a framework could support informal workers in making their voices heard, and encourage recognition of them as citizens and entrepreneurs.

More specifically, formalizing the informal economy would first require moving beyond existing dichotomist approaches. On one side, the capital view of formalization is to regulate the informal sector to create level playing field for competition and gain revenue through taxes. On the other side, the labour view of formalization focuses on including informal workers in the social security system. From a broader perspective, it is necessary to create enterprises and decent jobs in the formal economy while also promoting wider coverage of social security. Bringing together occupational training, employment services and self-employment under one comprehensive programme could improve income security, and extend opportunities for livelihoods and entrepreneurship. In this process, preventing the informalization of formal economy jobs is equally necessary.

Second, evidence-based policy interventions require a properly designed comprehensive national survey on informal workers.

This should be the basis for a national human resource development plan for informal workers. Such a plan must recognize and institutionalize the contributions of informal workers in the national accounting and information system by enforcing a compulsory identification and registration system for all workers, launching specific programmes for skills development, and incentivizing the private sector to transform informal work into decent jobs.

Third, a minimum employment guarantee scheme should aim at productive employment for all with a focus on the deprived, including women and youth. It should be accompanied by more effective targeted employment programmes, especially for young men and women. Finally, complementary social policies are necessary to assist people with severe disabilities, and those who are too sick or weak to participate in paid employment. These are necessary to enhance the redistributive impact of an employment-led inclusive development strategy.

COVID-19 has reduced remittance income and brought tens of thousands of Nepalis home. Nepal now faces the formidable task of creating employment for those who have returned. With limited scope for creating large-scale employment in other sectors, agriculture will become the major viable option for immediate relief in the form of jobs and food security, both to people returning and the half million youth who join the labour market each year.<sup>200</sup> Nepal has to revitalize its productive agricultural lands and look for possible sites to accommodate its workers. The World Bank reports that at least 700,000 migrant workers are back from India after losing employment, while 5 million to 7 million urban poor who are landless squatters have lost their daily livelihoods.<sup>201</sup>

<sup>200</sup> Various estimates put the number of youth who have emigrated between 6 to 8 million. Of the half million youth who join the labour market each year, only a fraction find jobs within Nepal. The rest emigrate to 59 different countries. See Bhattarai et al. 2020.

<sup>201</sup> Cited in <https://www.np.undp.org/content/nepal/en/home/blog/2020/From-policy-paradox-to-post-COVID-resilience.html>.

## Ensuring equity and reducing poverty

Without reducing inequality and poverty, human vulnerability will persist long into the postgraduation era and limit hopes for the SDGs. Inequality is one of the biggest contributors to poverty and vulnerability, imposing diverse costs. Diminishing it is enshrined in the 2030 Agenda for Sustainable Development, with several SDGs aspiring to close inequalities in multiple dimensions.

Inequality of opportunity poses a considerable threat to human development as it limits the impact of growth on poverty reduction,<sup>202</sup> facilitates rent-seeking by influential groups, distorts resource allocation, undermines democracy, increases social friction and erodes trust.<sup>203</sup> Economist Thomas Piketty warned that in an economy where the rate of return on capital outstrips the rate of growth, inherited wealth will always expand faster than earned wealth, and the richest classes will accumulate great wealth that in turn will ultimately lead to social and economic instability.<sup>204</sup> High inequality between groups (horizontal inequality) fuels dissatisfaction and grievances, and threatens political stability.<sup>205</sup> Climate change and disasters that hit the poor and minorities hardest further exacerbate existing inequalities and vulnerabilities. Often, the poor are concentrated in environmentally sensitive areas and forced to resort to harmful coping strategies to survive.

The 2019 global *Human Development Report*<sup>206</sup> articulates the bitter realities of entrenched sociocultural and political challenges beyond income, the widespread disparities in human development beyond averages, and the emergence of a new intergenerational transmission of inequality beyond today. It

advocates for a wider and more systemic approach to policies and a revolution in metrics to achieve meaningful, long-lasting improvements in reducing income and a broader range of other inequalities in human development.

“ **Inequality and poverty do not change at the same pace, and they may even change in opposite directions. The pace of progress in reducing income inequality in Nepal has been slower than that of poverty reduction.** ”

**Inequality and poverty do not change at the same pace, and they may even change in opposite directions.** The pace of progress in reducing income inequality in Nepal has been slower than that of poverty reduction. While the income poverty rate fell from 41.8 percent in 1996 to 18.7 percent in 2018, and non-income poverty as measured by the MPI fell by more than half between 1996 and 2014, per capita consumption-based inequality as measured by the Gini coefficient dropped only from 0.35 in 1995 to 0.3 in 2014.<sup>207</sup>

The level, pace and direction of inequality vary greatly, depending on whether it is being measured on the basis of actual income, consumption and wealth at a per capita or household level.<sup>208</sup> With more than 66 percent of people dependant on land for livelihoods, unequal distribution of land ownership is one of the most fundamental types of

<sup>202</sup> Evidence from Asian countries shows that rapid economic growth could have lifted 240 million more people out of extreme poverty in South-East Asia between 1990 and 2010 if growth had not been accompanied by growing economic inequality. See Asian Development Outlook 2012.

<sup>203</sup> Stiglitz 2012.

<sup>204</sup> See Piketty (2014) who states that we can expect a more equal society only if growth is high and the returns on capital can be suppressed, but explains why this is unlikely to occur due to weak labour bargaining power, slow technological innovation, the magnitude of the power of capital globally and an unequal economic system.

<sup>205</sup> Stewart et al. 2007. Also see Tiwari 2010.

<sup>206</sup> See UNDP 2019.

<sup>207</sup> At the international poverty line of \$1.90 per day (2011 PPP), the poverty rate fell from 62 percent in 1995 to 15 percent in 2010. See NPC 2019.

<sup>208</sup> See Oxfarm International and HAMI 2019.

wealth inequality. Around 31 percent of agricultural land is in the hands of the wealthiest 7 percent of households, and the incidence of landlessness is high at 29 percent.<sup>209</sup>

Unequal access to education, health and income has resulted in an average loss of 25.6 percent on the HDI due to inequality, despite significant progress in human development overall. Apart from vertical inequality, horizontal inequality among different ethnic groups resulting from exclusionary development processes has caused instability and conflict.<sup>210</sup>

**Inequalities in assets and opportunities and jobless growth are driving disparities in income and wealth in Nepal.** Significant spatial, gender and other socioeconomic disparities in health and education collide with the inability to use acquired human capital due to underdeveloped labour markets. While most poverty reduction has resulted from the massive outmigration of labour and an unprecedented increase in private remittances, remittances have also increased income inequality.<sup>211</sup> Generally, the unequal distribution of income and income-earning capital assets as well as physical, financial, human and social capital has resulted from exclusionary growth-oriented development processes.

Political capture and the nexus between political elites and unethical businesses facilitated by a highly corrupt bureaucratic apparatus are other factors propelling inequality.<sup>212</sup> Though Nepal has climbed up the Corruption Index from a rank of 124 in 2018 to 113 in 2019, out of 180 countries, it scores more poorly than Bhutan at 25, India at 90 and Sri Lanka at 93,<sup>213</sup> indicating the need to effectively enforce anti-corruption legislation. Deliberate and concerted action should counteract political capture, so that the needs of many powerlessness groups are prioritized over the interests of a powerful few. Empowerment must come to the forefront of societal transformation as it has revolutionary potential to drive policy frameworks towards attaining pro-poor and inclusive growth and social justice.

**Inequality reduction should be integral to national development strategies.** Nepal's development policy agenda in the past largely centred on poverty reduction with little or no attention to inequality or social injustices that are discriminatory and disempowering. This limited the impact of growth on reducing inequality, keeping progress at a slower pace than for poverty reduction. As the distribution of wealth is more unequal than income in any country, an inequality reduc-

<sup>209</sup> If inequality in total wealth is measured encompassing all other fixed assets (for example, house/building, vehicle, credit, loan and livestock), in addition to land, experiences from other underdeveloped countries reveal that total wealth inequality will be 50 percent higher than inequality based on land alone. Tiwari 2010.

<sup>210</sup> Tiwari 2010.

<sup>211</sup> Remittances have increased income inequality in Egypt, Ghana and Nepal, while in China and Viet Nam they have decreased income inequality. In Nepal, income inequality among remittance-receiving families (0.397) was 17 percent higher than among families not receiving remittance (0.345). This is because only 12 percent of households receiving remittances belong to poor income classes, compared to 32 percent belonging to wealthier income classes. This might be attributed to richer families having greater access to more opportunities to earn income abroad.

<sup>212</sup> This is exemplified by value added and other tax scandals, the institutionalization of rent-seeking practices in contracts and other public service delivery systems, and a flourishing parallel economy. See Oxfam International and HAMI 2019.

<sup>213</sup> See Transparency International 2019.

tion policy based on income alone cannot reduce overall economic inequality. The 15th Five-Year Plan has set a long-term target of reducing wealth-based inequality measured by the Gini from 0.31 to 0.25 in the next 25 years. Achieving this target must start with comprehensive studies to investigate the degree of inequality and underlying drivers, across economic, social and political dimensions, and among individuals and different social groups. Without such insights, simply continuing with conventional anti-poverty approaches alone will not address the structural causes of inequalities in human development. Given as well the need for a revolution in metrics as flagged by the 2019 global Human Development Report, there is scope to come up with Nepal-specific metrics for informed policy interventions.

Second, an exclusive focus on horizontal inequality without addressing key drivers of vertical inequality is not always helpful, and in some cases, may be outright harmful to reducing income and wealth inequalities.<sup>214</sup> Direct policy measures such as affirmative action, which includes targets, quotas and preferential treatment to improve access to jobs, assets, services and political representation among disadvantaged groups, address some symptoms of discrimination, but are not always able to fix the structural drivers behind persistent inequality and historic injustices. Such measures can work best only

when broader pro-poor policies and sunset clauses are in place to prevent reverse discrimination.<sup>215</sup>

Finally, reducing existing inequality will not occur through income redistribution policies alone. The Government must prioritize and implement all inequality-reducing policy reform measures suggested in the preceding section. They include enhancing human capability by expanding quality education and health services, including social services; pursuing employment-led pro-poor growth strategies; and implementing minimum wages and protections for all workers, especially in the informal sector. These are more necessary than ever now to mitigate the worsening effects of COVID-19 on pre-existing inequalities.

### Protecting vulnerable populations

Social protection plays an important role in addressing structurally generated poverty, vulnerability, post-conflict uncertainties and deeply entrenched social exclusion.<sup>216</sup> It is also the most appropriate means of enhancing adaptive capacity while building resilience. Properly designed and implemented social protection policies and programmes, in tandem with moves to strengthen labour and social institutions, and promote pro-poor employment and macroeconomic environments, can help vulnerable populations successfully respond to environmental and

<sup>214</sup> He argues that an emphasis on group differences quickly spills into identity politics as this is politically easy and does not go to the core of the problem. Pushing for the reduction of overall income and wealth inequality may be preferable even if the primary objective is to reduce specific gender or racial income inequalities. See Milanovic 2016.

<sup>215</sup> Without broader policies in place, direct measures can be seen as perpetuating social cleavages and increasing stigma, and pose risks of elite capture and reverse discrimination. See UNDP 2014.

<sup>216</sup> For a more detailed discussion, see Khatiwada and Koehler 2014.

socioeconomic shocks and risks. By tackling the outcomes and drivers of social exclusion, such schemes contribute to a socially harmonious and resilient society that supports sustainable development over the long run.<sup>217</sup>

SDG target 1.3 aims for universal implementation of nationally appropriate social protection systems offering substantial coverage for poor and vulnerable populations, towards ending poverty in all its forms. Nepal's 2015 Constitution guarantees the right to social security for the economically and socially vulnerable, and underscores the need to expand coverage to all citizens in vulnerable groups, such as single mothers, children and people with disabilities. Making Nepal's current social protection system more comprehensive and sustainable hinges on substantially increased and assured funding.



**Social protection has become an increasingly prominent public policy tool in Nepal over the past two decades with a wide range of objectives, from increasing income and food security to overcoming social exclusion.**

Social protection has become an increasingly prominent public policy tool in Nepal over the past two decades with a wide range of objectives, from increasing income and food security to overcoming social exclusion.<sup>218</sup> From a starting point of universal pension schemes for the elderly, single women and disabled in the mid-1990s, social protection

programmes expanded after the major political changes of 2006. Nepal is now ahead of many other South Asian countries in terms of access to social protection programmes, which cover more than 17 percent of the population. It scored well on the 2013 Social Protection Index compared to most of its neighbours.<sup>219</sup>

There are three types of social security programmes: social insurance, social assistance and labour market interventions. The newly enacted Social Security Act 2017 has provided eight social insurance schemes while defining the legal authority of the Social Security Fund as an autonomous corporate entity for managing all contribution-based social security schemes.<sup>220</sup> Social assistance schemes vary but can be grouped into the universal old-age pension, the child protection grant, the disability allowance, caste-based school stipends and a birthing grant.<sup>221</sup> Some schemes follow a universal approach while others are targeted.<sup>222</sup> The minimum employment guarantee law has been enacted, and various insurance schemes are underway with health receiving the highest priority to widen coverage. The new contribution-based Social Security Scheme launched in 2019 is a bold step towards achieving decent work for all especially in the formal sector (see Box 6.6). Extending such a scheme to the informal sector should be the medium- to long-term strategy, given the extent of the informal economy.

Despite the universal approach of some social security schemes, a key challenge lies in reaching people at all levels, especially across provinces and localities. The total number of beneficiaries of various schemes was only

<sup>217</sup> Exclusionary behaviours and practices underpinned by social norms, values and beliefs that produce and reproduce structural forms of social exclusion at all levels (i.e., intrahousehold, community, institutional and national levels) are translated into exclusion by formal and informal institutions and policies. See Das 2013 and Bachelet 2011.

<sup>218</sup> Koehler 2011.

<sup>219</sup> It scored 0.068, compared to 0.051 for India, 0.047 for Pakistan, 0.043 for Bangladesh and 0.036 for Bhutan. It scored lower than Sri Lanka at 0.121, however. See ADB 2013.

<sup>220</sup> People over age 70, all single women, and people from endangered communities now receive NRs. 2,000 (\$18.50) per month, and the Government is committed to providing a health insurance facility of up to NRs. 100,000 (\$850) for people over the age of 70.

<sup>221</sup> Koehler 2014.

<sup>222</sup> For instance, the Child Grant launched in 2009 as an unconditional cash transfer for mothers with children under the age of 5 to improve child nutrition. It is universal in the Karnali region and targeted to Dalit households in the rest of the country.



## Box 6.6 The contribution-based Social Security Scheme

Under the newly launched contribution-based Social Security Scheme, both workers and employers make mandatory contributions. The scheme includes medical, health and maternity benefits; accident and disability benefits; benefits for dependent

family members and old-age benefits. It will be implemented first in Province 3 and gradually expanded to other provinces.

In 2017, Nepal promulgated two major labour laws, the Labour Act 2017 and the Contribution-

based Social Security Act 2017, and prepared regulations for implementation. The latter and its regulations provide the legal foundations for the new Social Security Scheme. A contributory pension system for civil servants was introduced in 2019.

about 7.6 million in 2014, or 27.3 percent of the total population.<sup>223</sup> Based on the latest 2017-2018 Labour Force Survey data, the percentage of households reporting access to at least one type of social security varies considerably across provinces, ranging from 4.5 percent in Sudurpashchim to 41 percent in Province 3. Similar disparities can be observed across the ecological belts, with only 5 percent of mountain households having access compared to 50 percent in the hills and 45 percent in the Tarai.<sup>224</sup>

Social protection programmes are beset with some major problems. Implementation is fragmented and managed through different agencies in a scattered way, with no effective coordination to harmonize policies and programmes.<sup>225</sup> These issues are compounded by the launch of ad hoc programmes, poor institutional capacity, and misused or delayed funds, with no progressive fiscal system to ensure that future scaling up will be sustainable.

A study<sup>226</sup> identified three sets of factors that help explain the limited impact of these programmes on social inclusion: 1) the combination of economic, social and institutional factors that mediate programme impacts; 2) financial resources and service delivery capacity that affect implementation processes and programme outcomes; and 3) the

objectives and nature of social protection and labour instruments that may limit their potential impact. Designing an appropriate social protection programme with adequate financial resources and service delivery capacity and institutionalizing policy linkages is crucial to more effectively address drivers of exclusion and maximize outcomes.

**A comprehensive social security and protection policy should be formulated as an integral part of the national development strategy.** It should guide a coherently designed and implemented social protection system grounded in human rights, and that is both universal and targeted as necessary. Guaranteeing that such systems can provide income security and facilitate employability requires adopting a transformative approach focused on creating decent jobs and enhancing employability, so that the transition between social assistance and social insurance can be a smooth one. A two-pronged approach of income security and employability ensures that all households working in both the formal and informal sectors come within the orbit of social security, in line with immediate actions to benchmark labour force data through registration or the social security card system, using a bottom-up approach to regularly furnish information from the grassroots.<sup>227</sup>

<sup>223</sup> MoLE 2017.

<sup>224</sup> CBS 2018.

<sup>225</sup> Ministry of Finance 2014, ILO 2015.

<sup>226</sup> Babajanian, Hagen-Zanker and Holmes 2014

<sup>227</sup> Khanal 2012.

While Nepal has already incorporated certain elements of a social protection floor in its social welfare programmes, it still must organize these programmes as part of a coherent social protection strategy with horizontal and vertical dimensions, and towards achieving universal coverage. The national social protection floor framework drafted by the National Planning Commission provides a solid foundation for a comprehensive strategy, but must ensure improved coordination and delivery systems, and clarify the roles of the three levels of government.

**Adaptive social protection programming should be an integral part of the disaster risk management strategy.** Achieving greater resilience to shocks and disasters depends on adaptive social protection programming that sits within the national disaster risk management strategy. The provisions of the 2017 Disaster Risk Reduction and Management Act to target responses to vulnerable groups together with the responsibility of the Ministry of Home Affairs for coordinated planning and implementation of all disaster-risk-management-related activities offer a unique opportunity to establish adaptive programmes. These should accompany resilience-building, and be replicable, scalable and sustainable. They should come with stronger institutional links between disaster risk management and social protection at all three levels of government.

The COVID-19 crisis is compounding pre-existing poverty, inequalities and vulnerabilities. There is an urgent need to rapidly design, implement and scale up resilient and pro-poor social protection systems, taking into account different impacts on vulnerable groups such as small and medium enterprises, farm workers, the self-employed, daily wage earners, migrant workers, women shouldering additional unpaid care work and those working in the informal sector. Social protection measures should include emergency social assis-

tance, extending access to unemployment benefits to informal sector workers, assisting enterprises and workers in the informal economy, universal health care, labour market interventions and more comprehensive social insurance systems.

### Building adaptive capacity and resilience

What development options are available for Nepal to become more resilient to climate change and other pressures today while also contributing to the resilience of future generations? Although both emissions mitigation and adaptation measures must be pursued simultaneously to alleviate the worst of climate change, adaptation is the most pressing policy priority for developing countries like Nepal. They are among the most adversely affected by climate change<sup>228</sup> even as they have limited resources to contend with it. Adaptation can reduce vulnerability and build resilience by enhancing adaptive capacity. It strengthens the ability of social, economic and ecological systems to withstand shocks and revitalize if damaged.<sup>229</sup> Activities that enhance adaptive capacity in many respects are equivalent to those that lead to sustainable development.<sup>230</sup> An integrated response strategy ensures the security of climate-sensitive sectors such as water, energy, food and ecosystems by enhancing resource use efficiency, minimizing trade-offs and maximizing synergies.

Nepal's extreme vulnerability to climate change and natural disaster intensifies its risks. Despite being responsible for a negligible share of total greenhouse gas emissions,<sup>231</sup> Nepal is one of the most vulnerable countries to climate change because of potentially adverse impacts on all sectors through floods, forest fires, drought and other climate-induced disasters.<sup>232</sup> Melting glaciers, flash floods caused by glacial lake outbursts, unpredictable precipitation patterns, temperature fluctuation, extreme rain-

<sup>228</sup> Sharma et al. 2008.

<sup>229</sup> Vulnerability is the extent to which human and natural systems are susceptible to, or unable to cope with the adverse effects of climate change. It is a function of the character, magnitude and rate of climate variation, as well as the sensitivity and adaptive capacity of the system concerned. When referring to human systems, the term 'resilience' can be considered a synonym of adaptive capacity. See IPCC 2001.

<sup>230</sup> Smit and Pilifosova 2001.

<sup>231</sup> Nepal has contributed negligible greenhouse gas emissions, 0.027 percent of the global total. MoPE 2016.

<sup>232</sup> NPC 2011.

fall events, the drying up of springs in the hills and downstream flooding, more droughts, dwindling agricultural outputs, and degraded ecosystem services all pose threats to livelihoods and environmental security across the country. Many worsen the already harsh conditions of poor and disadvantaged groups. A recent landmark study shows that elevation amplifies climbing temperature caused by greenhouse gas emissions in the Hindu-Kush Himalaya, a region with borders among eight nations including Nepal. Temperatures are predicted to rise by 5°C by 2100, with the loss of glacier volume due to increased glacial melt reaching as high as 69 percent.<sup>233</sup>

According to the Global Climate Risk Index for 2018,<sup>234</sup> Nepal ranks among the top 20 countries in the world most prone to multiple hazards. It ranks 8th among all countries in fatalities from natural disasters, 10th in fatalities per 100,000 inhabitants, 56th in total monetary losses and 47th in losses per unit of GDP. Based on average values from 1999 to 2018, Nepal has been identified as among the nine most affected countries. Its average weighted ranking and the four indicators relative to the bottom 10 most affected countries appear in Table 6.1.<sup>235</sup>

**Table 6.1 The Climate Risk Index: The 10 countries most affected from 1999 to 2018 (annual averages)**

CLIMATE RISK INDEX 1999-2018 (1998-2017)	COUNTRY	CLIMATE RISK INDEX SCORE	DEATH TOLL	DEATHS PER 100,000 INHABITANTS	TOTAL LOSSES IN MILLIONS OF DOLLARS (PPP)	LOSSES PER GDP IN PERCENTAGE	NUMBER OF UNIT EVENTS (TOTAL 1999-2018)
1 (1)	Puerto Rico	6.67	149.9	4.09	4567.06	3.76	25
2 (3)	Myanmar	10.33	7052.40	14.29	1630.06	0.83	55
3 (4)	Haiti	13.83	274.15	2.81	388.93	2.38	78
4 (5)	Philippines	17.67	869.8	0.96	3118.68	0.57	317
5 (8)	Pakistan	28.83	499.45	0.3	3792.52	0.53	152
6 (9)	Viet Nam	29.83	285.8	0.33	2018.77	0.47	226
7 (7)	Bangladesh	30	577.45	0.39	1686.33	0.41	191
8 (13)	Thailand	31	140	0.21	7764.06	0.87	147
9 (11)	Nepal	31.5	228	0.87	225.86	0.4	180
10 (10)	Dominica	32.33	3.35	4.72	133.02	20.8	8

Note: Figures in parenthesis indicate average value over the period 1998-2017.  
 Source: Global Climate Risk Index 2020.

<sup>233</sup> In the future, even if global warming is kept to 1.5°C, warming in the Hindu Kush Himalaya region will likely be at least 0.3°C higher, and in the northwest Himalaya and Karakoram at least 0.7°C higher. See Wester et al. 2019.

<sup>234</sup> The Global Climate Risk Index analyses the quantified impacts of extreme weather events (meteorological, hydrological and climatological) using four indicators, and in terms of fatalities as well as economic losses. The index is based on data from the Munich Re NatCatSERVICE, considered one of the most reliable and complete databases. The index does not provide an all-encompassing analysis of the risks of anthropogenic climate change, but should be seen as just one explanation of countries' levels of exposure and vulnerabilities to climate-related risks based on the most reliable quantified data available. It is based on current and past climate variability, and, to the extent that climate change has already left its footprint on climate variability over the last 20 years, also on climate change. See Global Climate Risk Index 2020.

<sup>235</sup> Nepal's ranking has worsened from 11th in 1998-2017 to 9th in 1999-2018.

Table 6.2 **Nepal's position on the 2019 World Risk Index relative to South Asian countries**

RANK	COUNTRY	WORLD RISK INDEX 2019	HAZARD EXPOSURE	VULNERABILITY			
				VULNERABILITY	SUSCEPTIBILITY	LACK OF COPING CAPACITIES	AVERAGE VULNERABILITY SCORE
10	Bangladesh	18.78	32.48	32.93	86.13	54.44	57.83
53	Afghanistan	9.21	13.73	49.21	92.36	59.75	67.11
73	Sri Lanka	7.5	16.01	22.3	78.38	39.94	46.87
80	Pakistan	7.08	12.53	33.08	84.85	51.62	56.52
85	India	6.77	12.58	34.61	78.45	48.4	53.82
116	Nepal	4.92	8.71	35.99	84.6	48.85	56.48
143	Bhutan	3.31	6.89	24.51	72.93	46.65	48.03

Source: World Risk Report 2019.

Since the society-wide levels of development and resilience are equally important to assess disaster risk, the World Risk Index provides an indication of risk from a disaster due to an extreme natural event in the future.<sup>236</sup> Nepal ranked 116th out of 180 countries in the 2019 index.<sup>237</sup> Despite Nepal having a better position than most South Asian countries, except Bhutan, the World Risk Index puts it in a high-risk category in terms of both hazards and the vulnerability dimensions of risk (Table 6.2). Nepal is also the 11th most earthquake-prone country in the world and ranks 30th in terms of flood risk.<sup>238</sup>

The indices do not account for all important aspects. They should be taken as warnings to prepare for more frequent and/or more severe events in the future, however.<sup>239</sup> Nepal experienced a total of 22,372 disasters from 1971 to 2015.<sup>240</sup> In April 2015, a devastating earthquake took 8,790 lives and injured over 22,300 people, with total damages and losses amounting to about NRs. 706 billion.<sup>241</sup> Nepal has recently experienced 24 glacial lake outburst floods, several of which caused

considerable damages and loss of life. The social, economic and fiscal impacts of disasters have been considerable, with current climate variability and extreme events costing the equivalent of 1.5 to 2 percent of current GDP, or approximately \$270 million to \$360 million a year. Future costs resulting from climate change impacts on vulnerable sectors (including agriculture and electricity production) have been estimated to be as high as 3 percent of GDP by 2050.<sup>242</sup>

The Government has formulated and implemented various laws and policies on climate change adaptation and disaster risk management, and put adaptation at the centre of development plans. The 2011 Climate Change Policy, the 2011 Local Adaptation Plan of Action, the Constitution, the 2017 Local Government Operation Act, the 2017 Disaster Risk Reduction and Management Act and the 2018 National REDD+ Strategy are prominent frameworks making significant contributions to the sectoral integration of climate change adaptation initiatives.<sup>243</sup> The 2017 Disaster Risk Reduction and Management Act for the first time

<sup>236</sup> The World Risk Index combines 27 indicators into two dimensions of risk: Hazards exposure and vulnerability (susceptibility, lack of coping capacities and lack of adaptive capacities). It is based on the notion that a less developed society will be more vulnerable to natural events than if it is better prepared with regard to susceptibility, coping capacities and adaptive capacities. Bündnis Entwicklung Hilft 2011.

<sup>237</sup> Nepal's performance has markedly improved as it was ranked 104th out of 172 countries on the 2018 index.

<sup>238</sup> MoHA 2016.

<sup>239</sup> See, for instance: Herring et al. 2018, Trenberth et al. 2018, Zhang et al. 2016.

<sup>240</sup> From 2005 to 2015, over 700,000 people lost their lives, over 1.4 million were injured and approximately 23 million were left homeless. See MoHA 2016.

<sup>241</sup> NPC 2015.

<sup>242</sup> Ministry of Science, Technology and Environment 2014.

<sup>243</sup> Sharma 2019.

recognized the need to address all stages of disaster risk management (preparedness, response and rehabilitation, and mitigation) with the provision of a functional institutional set-up from the centre to the local level.

Despite these efforts, Nepal's vulnerability is exacerbated by weak planning and coordination; rudimentary early warning systems; insufficient preparedness for disaster risk; and inadequate relief, recovery and reconstruction capacity. More importantly, the lack of a climate change act and an institutional mechanism to fully put existing policies into practice in the changed context of federalism are major obstacles. An umbrella act and revision of the 2011 National Climate Change Policy to squarely address climate change under the new federal system is a crucial step. It should be accompanied by a clear and strong institutional configuration for implementation.<sup>244</sup> Since a number of policies and plans are designed mostly for sectoral integration of climate change adaptation issues, they miss a holistic approach to managing trade-offs and capturing synergies.

**Sustainable adaptation measures must be pursued to target both poverty and vulnerability, using a systemic and integrated approach.** Successful adaptation will require interventions addressing a spectrum of challenges related to climate change and underlying drivers of vulnerability and poverty, such as structural factors hindering long-term sustainable development.<sup>245</sup> In this sense, focusing on adaptation before aligning development processes to enable adaptation is like putting the proverbial cart before the horse.

A sustainable adaptation process requires both top-down strategies involving adjustments in policies, institutions and attitudes, and bottom-up activities through a community-centred approach that is integrated and holistic. Most national and local adaptation plans to date have been prepared to meet sectoral goals, without adequate consider-

ation or coordination of cross-sectoral interactions among key climate-sensitive sectors such as water, energy and food.<sup>246</sup> Sectoral adaptation strategies that do not account for interactions with other sectors can increase vulnerability or undermine net resilience by decreasing capacity or increasing risks in another sector, resulting in maladaptation.<sup>247</sup> Prevailing approaches see adaptation largely as a local issue, and ignore the national, regional and global policies and institutions that shape adaptation options. Climate change brings multiple stresses, and adaptation requires comprehensive, integrated approaches, with coordination between different sectors and at different scales (local, national and regional).

**Disaster risk management must move from reactive to more proactive efforts using a coordinated, integrated approach.** Disasters in Nepal were traditionally managed as and when they occurred. Most disaster risk management policy interventions have long emphasized preparedness and response at the national level, with less attention to rehabilitation and mitigation at the national and local level.

A proactive approach helps assess how climate-induced disasters might impact the sustainability of a proposed development plan and vice versa.<sup>248</sup> Such an approach enhances the resilience of a development plan by addressing the multidimensional impacts of climate and natural disaster, and establishing links that often lie outside conventional sectoral plans. The newly endorsed Disaster Risk Reduction and Management Act moves in the right direction. But the sole responsibility for implementing disaster management activities goes to the Ministry of Home Affairs, leaving other ministries as passive partners. Success will depend very much on coordinated efforts between and among various ministries and departments to operationalize policies at all three tiers of government.

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<sup>244</sup> Ampaire et al. 2017.

<sup>245</sup> People are vulnerable not only to climate change but to a range of other stresses, depending on factors such as access to resources and other structural factors, and socio-environmental circumstances shaped by political and economic processes (Kelly and Adger 2000, O'Brien et al. 2004).

<sup>246</sup> Rasul and Sharma 2016.

<sup>247</sup> Barnett and O'Neill 2010.

<sup>248</sup> NPC 2011.



**The transboundary nature of air pollution and climate change requires regional sustainable solutions.** Black carbon emissions, which are short-lived climate pollutants,<sup>249</sup> have emerged as the second strongest contributor to global warming, after carbon dioxide.<sup>250</sup> Black carbon has a particular impact on a climate-sensitive Himalayan country like Nepal, where it accumulates from biomass burned in homes and fuel combustion in transport, and is accelerating the melting of glaciers. This threatens the major source of freshwater for millions of people in Nepal and the surrounding region, besides impacts on public health, and environmental and livelihood security.<sup>251</sup> More than 50 percent of black carbon emissions in Nepal come from the South Asian plains,<sup>252</sup> making air pollution a transboundary issue. This clearly signifies the importance of coordinated regional action apart from national actions to reduce impacts on health, crops and the environment.

While an integrated regional approach to both air pollution abatement and climate change is perhaps the most desirable pathway, Nepal could also integrate the economic costs of pollution into product pricing as an immediate measure to incentivize producers to reduce their pollution footprint and adopt better practices. This would require a progressive approach to avoid penalizing smaller and more marginal enterprises. With no explicit national policy focused on short-lived climate pollutants,<sup>253</sup> national mitigation strategies are an important first step, along with a dedicated regulatory institution with

resources and capacity for effective implementation, monitoring and enforcement of mitigation measures.

While it is still too early to predict the full impact of COVID-19, the climate crisis and the pandemic are reinforcing each other, causing substantial harm especially to the poorest and most vulnerable people. The priority should be to reduce their vulnerability and build resilience to both the health and climate crises. While the suppression of economic activity has temporarily cut emissions, they will pick up again. Global warming in turn may bring new viruses and disease outbreaks. The pandemic has been a wake-up call to stay within planetary boundaries, and move away from the old paradigm of growth without limits. It has demonstrated the urgency of building the resilience of social and economic systems to future shocks through massive investments in adaptive capacities.

How we respond to COVID-19 may in fact offer lessons for building resilience against the climate crisis. This means a recovery plan should go beyond merely responding to the pandemic. It should build in resilience to climate change, biodiversity collapse and widening inequality in the spirit of the 2030 Agenda. A coherent response strategy could fight against both crises simultaneously, such as through green economic stimulus packages that manage fallout from the pandemic while looking ahead to more sustainable future development.

<sup>249</sup> Short-lived climate pollutants are released by the incomplete combustion of fuels and biomass. They have atmospheric lifetimes of between a few days and roughly a decade. They mainly include black carbon, methane, tropospheric ozone and some hydrofluorocarbons.

<sup>250</sup> Ramanathan and Carmichael 2008, UNEP and WMO 2011, IPCC 2014.

<sup>251</sup> Sharma 2016.

<sup>252</sup> The national emissions of black carbon, methane and particulate matter under 2.5 microns under the business-as-usual scenario will increase by 86 percent, 300 percent and 57 percent, respectively, by 2050. With mitigating measures, over 80 percent of these emissions could be reduced, avoiding the loss of 29,000 lives and 1.7 million tonnes of crops. See Nakarmi et al. 2020.

<sup>253</sup> Gyawali 2016.

## Conclusions

This chapter shows how Nepal should prepare human development strategies both for a smooth LDC graduation process and to anticipate postgraduation challenges so it can sustain its achievements. Towards building productive capacity and achieving productive transformation as essential foundations for graduation, this chapter has explored key productive resources for expanding human capabilities, while addressing human vulnerability and resilience in the face of climate change, disasters and other shocks. While graduation in principle indicates greater resilience and/or reduced exposure to structural vulnerabilities, current structural bottlenecks and the growth structure, inherent fragility and risks to multiple shocks go far beyond what the LDC graduation threshold captures. Worryingly, the large gap among provinces in human development and graduation indices accompanied by very high vulnerabilities on multiple fronts pose added and complex challenges. Unless these are systematically addressed through major breakthroughs in health, education, job creation, and measures addressing climate change, disasters and human vulnerabilities, both sustainable human development and LDC graduation will be a mirage.

Some key conclusions and policy messages pertinent across the country are as follows.

*There should be heightened commitment to scaling up productive investments in human capital, entrepreneurship and the demographic dividend.* Evidence suggests that if children have sufficient education and health care to realize their full economic and professional potentials, Nepal's GDP could be twice



**With nearly 80 percent of the labour force lacking a secondary education, the current education system has not produced a sufficiently skilled workforce for the economy, despite impressive gains in educational enrolment.**

as large, showing its immense potential for growth. The demographic structure, already in the middle of a youth bulge, presents a real opportunity for economic growth and development, but only if the right macroeconomic, social and labour market policies and institutions are urgently established to promote employability and create productive employment. The window of opportunity is relatively short, but at the same time, demographic trends cannot be steered quickly. Advance planning and consistent investment will be key.

With nearly 80 percent of the labour force lacking a secondary education, the current education system has not produced a sufficiently skilled workforce for the economy, despite impressive gains in educational enrolment. The alarmingly low level of learning outcomes and skills mismatches given the poor quality of public schools warrant substantial educational reforms. These should make equitable learning outcomes a clearly articulated goal of the whole education system. TVET should become more relevant and responsive to market demands to reduce the

demand-supply mismatch. Boosting entrepreneurial capabilities and innovation as an integral part of the formal education system and national long-term development strategy could go far in coping with escalating technological change and greater international competition after graduation.

With no certainty on how long the COVID-19 pandemic will continue, the gradual incorporation of online/virtual education has emerged as an alternative way to teach students. Given poor Internet connectivity in remote and hilly areas together with the high costs of technological devices, ensuring equitable access to online education for most students should be of paramount importance, starting with rural schools. More broadly, the pandemic has shown the immense value of digital transformation and rapid innovation across almost all sectors, and underlined the value of investing in digital entrepreneurship.



**More broadly, the pandemic has shown the immense value of digital transformation and rapid innovation across almost all sectors, and underlined the value of investing in digital entrepreneurship.**

Nepal needs an umbrella policy and law governing the overall management of a well-coordinated, integrated health service delivery system in the changed context of the federal structure. It should ensure equitable access to affordable and quality health services, and be equipped to end the pervasive malnutrition challenge facing the country. Putting health first has been critical during and following the outbreak of the Covid-19 crisis, which has also demonstrated how universal health coverage will be key to the resilience of people and health systems.

*Reducing vulnerability and building resilience should remain top priorities on the path to sustainable graduation and equitable prosperity.* This is particularly important given the country's inherent vulnerability to climate and non-climatic shocks, and its current limited capacity to respond. For climate-induced threats, Nepal needs to pursue a more integrated adaptation strategy that moves beyond sectoral, policy and disciplinary siloes, while taking a proactive, coordinated approach to disaster risk management. Successful adaptation and resilience-building will require addressing structurally generated poverty, vulnerable employment, social exclusion and inequality. Given the alarmingly high unemployment rate among youth and pervasive informality, with the vast majority of the workforce trapped in vulnerable employment, Nepal needs to vigorously pursue productive, employment-led, inclusive growth. This encompasses a well-coordinated national social protection strategy, and calls for bringing informal organizations and representatives into policymaking. It is equally important to prioritize and implement all measures to reduce inequality, as integral to national development strategies, since the forces driving inequality pose a considerable threat to human development.

*The pandemic is amplifying Nepal's pre-existing vulnerabilities, and adding new challenges to sustaining hard-earned progress. The crisis could derail graduation by 2024.* It is already compounding pre-existing poverty, inequalities and vulnerabilities, which in turn can exacerbate climate change risks. Yet Nepal could use the crisis to move to a better development path that would support a sustainable graduation and attainment of the SDGs. It could take on two crises at once through recovery plans that respond to the fallout from COVID-19, while building resilience to climate change and reducing inequality. Green economic stimulus packages open a window of opportunity for addressing both pandemic impacts and climate risks.

*Women's empowerment must be integral to national strategies for sustainable graduation and higher human development.* Existing LDC graduation criteria are assumed to be gender blind. But structural transformation and the development of productive capacities for sustainable graduation cannot be fully effective unless women are empowered to develop their full potential as actors in and leaders of the economy. Structural transformation is also an opportunity to correct longstanding forms of gender discrimination, such as those that trap many women in low-paying, insecure work, or impose unfair burdens from unpaid care work at home.

Government policy is limited mostly to meeting targets for women's participation in various programmes and projects, rather than systematically uprooting gender inequality. For graduation strategies to become instruments for poverty alleviation, sustainable development and wider realization of women's rights, gender considerations must be taken fully into account in all areas of policy. Women must be able to equally lead and participate in this process, which may require support to overcome barriers such as heavy workloads at home, poor access to finance, low literacy and entrenched gender norms.









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## Chapter 7

# Beyond LDC Graduation: Transforming the Economy, Policies and Institutions

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The preceding chapter explored productive capacity and transformation as essential for sustainable graduation and human development, and considered strategic pathways to enhance productive capacity, reduce human vulnerability, and build resilience to climate change and disaster.

This chapter discusses options for driving the economic sectors that contribute to productive transformation. It also looks at revamping economic policies and institutions essential for sustaining transformation.

## Prioritizing and driving transformational sectors

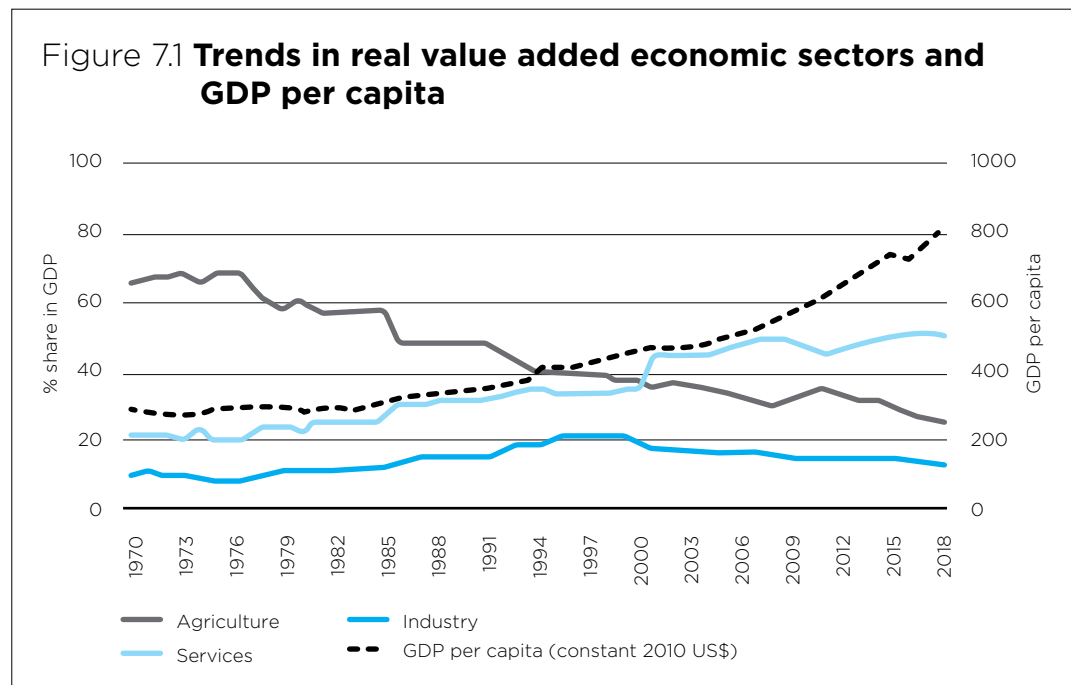
The sustained development and maximum use of productive capacities only occurs when supply and demand mutually reinforce each other. With economic growth critical for both sustainable human development and LDC graduation, driving leading economic sectors with large potential for productive transformation is important. This calls for a new growth path that prioritizes those sectors, with measures to resolve supply side issues and develop productive capacities.

Through the movement of labour and other productive resources from low-productivity to high-productivity economic activities, productive transformation simultaneously

generates productivity growth and creates more jobs that are better remunerated, more likely to be formal and higher in productivity.<sup>254</sup> Many of today's high-income countries, historically, began deindustrializing and experiencing decreased manufacturing shares in employment and value added as they crossed a relatively high level of income.<sup>255</sup>

By contrast, Nepal jumped from an agricultural to a service economy at lower levels of GDP per capita, bypassing growth in the industrial sector. This course was set in part by remittances and their investment in construction and services (Figure 7.1).<sup>256</sup> It has not been a productive structural change.

Nepal's industrial sector currently accounts for just 14 percent of GDP, while the agricultural sector accounts for 28 percent and the service sector a whopping 57 percent. In



Source: World Development Indicators.

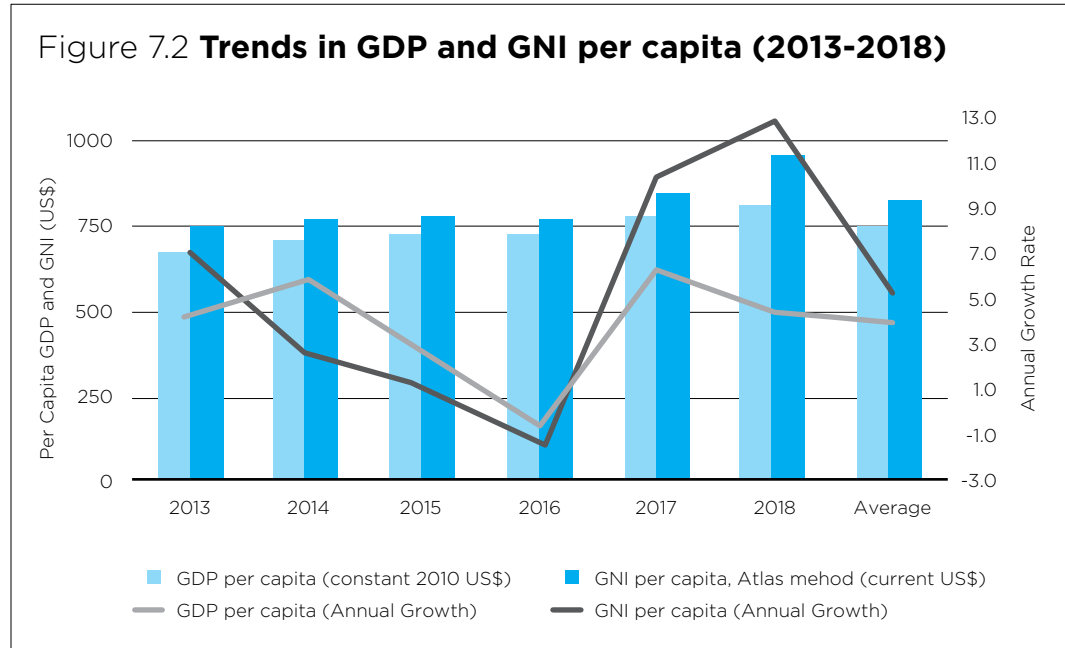
<sup>254</sup> The process of structural transformation entails not only the growth of output and the employment share of services, but also diversification within the services sector itself, especially the transition from low value added and often informal services towards higher value added services

<sup>255</sup> This has taken place not only in advanced nations, which deindustrialized over five decades, but in developing countries that have also deindustrialized, especially since the 1990s. Studying the relationship between manufacturing employment and income per capita in 70 countries in 1990, Rowthorn (1994) showed a stable inverted-U relationship between the two. Unlike positive deindustrialization, which occurs in developed economies as a natural result of sustained economic growth and is a sign of economic success, negative deindustrialization is a product of economic failure that occurs at all income levels when a country has poor economic performance or its manufacturing industry faces challenges. See Rowthorn and Wells 1987, and Felipe et al. 2014, p. 5.

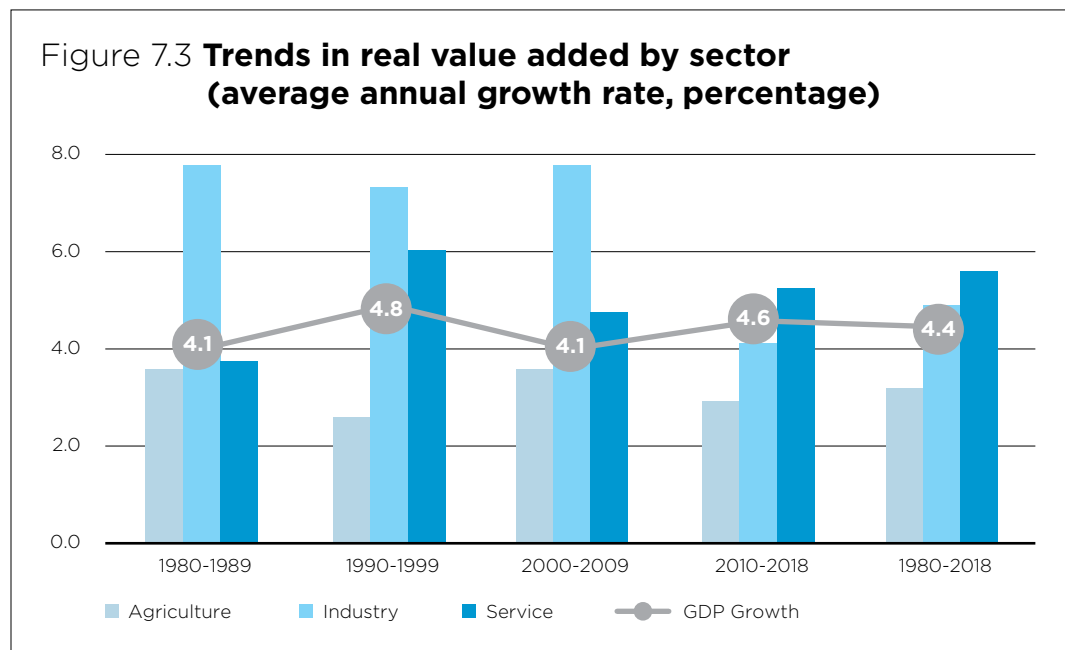
<sup>256</sup> World Development Indicators.

the last four decades (1980-2018) the average GDP growth rate was modest, hovering around 4 percent. From 2000 to 2018, the value added growth rate in both services and

industry witnessed some increases amid almost stagnating patterns in agriculture (Figure 7.2).<sup>257</sup> The average annual GDP growth is 4.4 percent during 1980-2018 (Figure 7.3).<sup>258</sup>



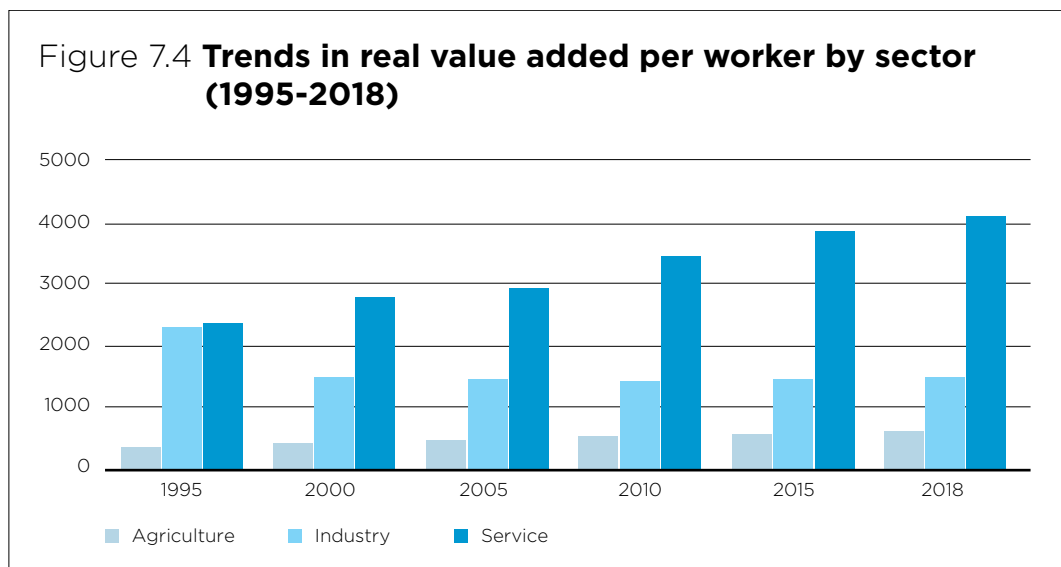
Source: World Development Indicators.



Source: World Development Indicators.

<sup>257</sup> World Development Indicators.

<sup>258</sup> World Development Indicators.



Source: World Development Indicators.

Growth in past decades was primarily due to the contribution of labour, mainly in the service sector given the negative growth in total factor productivity in the overall economy (Figure 7.4).<sup>259</sup> The low capacity of the service sector to absorb labour from agriculture, however, explains why sectoral growth paths were not supported by enhanced employment in more productive parts of the economy. The service sector has been able to absorb only 20 percent of the labour force over the last decade, forcing many workers to leave the country for work elsewhere.<sup>260</sup>

Although the structure of employment remains dominated by low-productivity agricultural and increasingly informal service jobs, a lack of time series data on sectoral employment generation limits the scope for disentangling GDP growth per capita into employment and productivity effects at the aggregate level, or for identifying intra- and intersectoral productivity and employment effects on GDP growth. Based on the past three national censuses (1991, 2001 and 2011), the employment structure has not exhibited any discernible change. Agriculture continues to provide employment for two thirds of working-age people. Jobless growth, the lack of change in employment structures, the ca-

sualization and informalization of jobs and a skills mismatch have pushed many youth in particular to leave the country for 'distress employment' elsewhere. About three fourths of those entering the labour market annually find employment abroad. Clearly, Nepal needs to prioritize and drive transformational sectors to sustain and boost the per capita growth necessary for sustainable LDC graduation, and the attainment of its long-term vision and commitments.

## Transformational sectors in Nepal

While the global financial and trade regimes differ significantly from those in place when today's developed economies grew at high rates, Nepal still has significant opportunities to spur high growth by harnessing untapped potentials, mainly in hydroelectricity, tourism, light manufacturing and high-value agricultural products. These could all unlock rapid structural transformation, based on available studies of the unexploited comparative advantages of Nepal's economy. A recent feasibility study rigorously assessed the relative

<sup>259</sup> Khanal 2018, World Development Indicators.

<sup>260</sup> The service sector is largely informal and dominated by wholesale and retail trade, with transport and communications, education, and real estate being the fastest-growing subsectors. See Sharma 2018.

contributions of different sectors and also suggested agro-processing, light manufacturing, tourism and hydropower as important priority sectors for achieving growth, transformation, jobs and inclusivity.<sup>261</sup>

Although there is no silver bullet formula for raising productivity across all sectors of the economy, prioritizing and driving transformational sectors can spur growth in a given sector and achieve positive spillover effects across the entire economy. Nepal needs to change its development model and growth pathways and tap new sources of growth in hydropower and tourism. At the same time, it needs to revitalize existing sources in manufacturing along with the commercialization of agriculture. Rapid productive transformation requires shifting the growth strategy towards productive investment and moving away from existing remittance-dependent private consumption.

### The transformation of agriculture

Productive transformation of the Nepalese economy is not possible without modernizing agriculture. A robust, vibrant and commercial agricultural sector would improve productivity and tackle problems related to the trade deficit, food and nutrition insecurity, income generation, poverty reduction and employment generation. Despite agriculture being a vital sector, it has remained largely at a subsistence level and fairly stagnant in terms of productivity growth. Its share of GDP declined to 27 percent in 2019, but it employs about 57 percent of the working-age population according to the National Population Census 2011. The fact that its output share is declining faster than that of employment<sup>262</sup> implies differences in factor productivity between agricultural and non-agricultural sectors, and a relatively slow increase in overall labour productivity. Transforming agricultural production from subsistence to a commercial system through

the promotion of high-value farm activities should be a priority in Nepal's development agenda. This requires a holistic and pro-poor value chain strategy that integrates backward and forward linkages.

The 15th Five-Year Plan recognizes agriculture as a leading sector for productive transformation, and envisages achieving a 5.4 percent average annual growth rate. Building on lessons from the 20-year Agricultural Perspective Plan 1995-1996 to 2014-2015,<sup>263</sup> the Government formulated another 20-year strategy for 2015 to 2035 for structural transformation of agriculture through four strategic outcomes: improved governance, higher productivity, profitable commercialization and increased competitiveness. If properly reoriented in the changed context of federalism and fully implemented in a coordinated way, the strategy can go far in unleashing the potential of agriculture for spurring productive transformation.

### What is holding agriculture back?

The Government has given a high priority to agriculture since the first national five-year plan in the mid-1950s. From 1995 to 2015, the Agriculture Perspective Plan helped to commercialize and modernize the sector. Yet it continues to have several underlying structural drains on productivity. These include increased land fragmentation and poor economies of scale; lack of proper land use planning and reform; small farm size and absentee landlordism; the feminization of agriculture; inadequate irrigation and transport infrastructure; poor access to and low rates of adoption of modern farm inputs and technology; weak service delivery mechanism; limited investment in agricultural research; weak promotion of agribusiness development; and coordination failures. The distribution of agricultural land ownership is uneven as the majority of small farmers work only 18 percent of total agricultural land.<sup>264</sup>

<sup>261</sup> The criteria to identify promising sectors included: 1) past sectoral growth performance and the contribution to aggregate growth; 2) the labour productivity level; 3) past record in creating jobs; 4) inclusivity (direct impact), and the percentage and number of jobs that are informal or rural; and 5) the number of studies indicating a sector is promising. See Henley et al. 2017.

<sup>262</sup> For example, Nepal's agricultural output share in GDP has declined since the 1970s at about 2.8 percent per annum while the employment share has declined at about 1.7 percent (slower than the world average). As an economy develops, the relative contribution of both agriculture and employment to GDP must decline. Evidence from developing Asia shows that the output elasticity with respect to income per capita is larger than the employment elasticity. (See Briones and Felipe 2013).

<sup>263</sup> The plan identified irrigation, fertilizer, technology and infrastructure as four priority areas, with a policy emphasis on demand-led commercialization, and coordinated production and marketing.

<sup>264</sup> CBS 2014.



Among rural households, 29 percent are landless. The distribution of land is highly unequal with a Gini coefficient of 0.65, especially in the Tarai.<sup>265</sup> Year-round irrigation facilities are limited to only 25.2 percent of total irrigable land,<sup>266</sup> while fertilizer usage is very low at 50 kilogrammes per hectare compared to South Asia regional rates of 150 to 200. Investment in agricultural research has remained less than 0.3 percent of agricultural GDP, far beneath the internationally recommended 1 percent.<sup>267</sup> The share of crops produced for market is low, averaging about 10 percent in the hills and mountains and 20 percent in the Tarai. Increased use of technology in the Tarai has been offset by a decline in technical efficiency, suggesting that farmers are not appropriately using it.

**Nepal must harness its natural comparative advantage in agriculture, given its unique and diverse agro-climatic conditions, with high potential for niche products that could increase diversification and commercialization.** Agribusiness is one promising subsector for commercializing agriculture due to its extensive backward and forward links, and opportunities to develop high-value niche products and horticulture for growth and employment. With the vast majority of people working in agriculture, creating markets in high-potential agribusiness value chains could drive structural transformation towards higher value added activities. Nepal could build on the perceived uniqueness of products that align well with market trends towards organic foods, for example. It has comparative advantages in resource and labour-intensive exports such as dried vegetables, coffee, tea, vegetables and roots, ginger and cardamom, and potential for import replacement in vegetables, fruits, beverages, dairy and meat. Spices, fruit juices and tea are already the largest export-generating

and fastest-growing agribusiness subsectors. Fresh apples, coffee, honey and cut flowers have potential given Nepal's agro-climatic conditions.<sup>268</sup>

Despite these potentials, agribusiness is currently highly fragmented, relying heavily on the domestic market, and dominated by millions of small landholdings and thousands of small agribusinesses and traders. On the Enabling the Business of Agriculture index, Nepal ranked lowest on transport and water (52nd out of 62 countries).<sup>269</sup> A lack of product-specific, coherent agribusiness promotion policy strategies, weak intra- and intersectoral linkages, coordination failures in private and public investments, and inadequate infrastructure have hampered agribusinesses and global competitiveness. Despite agribusiness successes in the recent past, these have remained scattered and need large-scale replication (see Box 7.1).

Nepal's 20-year Agricultural Development Strategy (2015-2035) must generate roadmaps for creating a sustainable, competitive and inclusive agricultural sector. Success of the strategy depends very much on political will and credible policy commitments, an improved investment climate for profitable commercialization, timely and quality agricultural inputs and mechanization, a decentralized extension system, improved policy and institutional coordination, and effective implementation support, among other essential factors, all of which need to align with the federal structure. Ensuring multisectoral coordination and policy harmonization at all levels while restructuring policies and programmes and backing them with adequate financial and institutional support will be key. Currently, the resources allocated for the Prime Minister's Agriculture Modernization Programme, one of the largest initiatives to

<sup>265</sup> The Gini coefficient of landownership among all rural households is also higher in the Tarai (0.65) than in the rest of Nepal (0.47 to 0.51). See Jacoby 2017.

<sup>266</sup> In Nepal, 67 percent of cultivated land is irrigable. Unless year-round irrigation is extended to at least 80 percent of total arable land, doubling agricultural productivity by 2030 as envisaged by SDG target 2.3 is only a remote possibility.

<sup>267</sup> IFPRI 2017.

<sup>268</sup> Nepal is the global market leader in large cardamom in terms of both production and value, whereas in tea, it is establishing itself as a niche player in the whole-leaf and organic tea markets.

<sup>269</sup> Enabling the Business of Agriculture focuses on legal barriers for businesses that operate in agriculture in 62 countries and across 12 topics, including seeds, fertilizer, machinery, entrance, markets, transport, water, information and communication technology, environmental sustainability, gender, land and livestock. See World Bank 2017h.

promote high-value cash crops, do not match the scale of what is envisaged.

Proper understanding of differences in factor productivities across various regions is equally crucial.<sup>270</sup> The agricultural sector is likely to face even more long-term challenges due to climate change intensifying competition for resources and trade-offs among food, water and energy security. This urgently requires coordinated strategies for climate-resilience alongside diversification and commercialization.

Several measures are of great importance in transforming agriculture through commercialization and modernization. First, land reform is one of the most important elements. It should be linked to the market system. Initially, landless and the most vulnerable people should be provided with minimum holdings essential for their livelihoods, which will help in eliminating hunger and assuring no one is left behind. A complementary policy would be to establish a land bank to provide loans against land as collateral for those willing to adopt agriculture as their occupation. The successful implementation of land reform that addresses both the issue of a land ceiling and absentee landlordism will demand strong political will and firm determination, given past experiences with failed reforms.

Second, improved delivery of a package of quality agricultural inputs, technology and extension services as well as infrastructure will facilitate agricultural diversification and commercialization. Both input and output commercialization should be fostered simultaneously, with high priority given to market development and expansion near the adjoining areas of farmers, and taking advantage of new digital opportunities. Reforming the government fertilizer subsidy programme through more effective targeting and smart subsidies will be crucial, along with creating a national seed development programme to supply farmers with improved varieties to meet the specific requirements of high-value niche markets. Market support policies

Box 7.1

## Lessons from Nepal's successes in backward linkages and value chain development

The traditional tea sector is a success story not only in terms of yielding major exports but also involving more than 8,000 farmers with small land holdings and consolidating their production on a commercial scale. Offering a study on niche market identification and adaptation, the organic farming sector has shown strong recent growth and holds opportunities for further investment.

Poultry, with an average growth rate of nearly 20 percent, provides valuable lessons on trade in domestic markets, and the integration of markets and the supply chain. Dairy has succeeded in not only attracting private sector investment but also strengthening backward linkages to cater to the domestic market. All of these high-value commodities rely on private extension services and serve as models for attracting further private sector investment.

In value chain development, the government partnership with the Asian Development Bank on the Commercial Agriculture Development Project involved working with grass-roots organizations to facilitate the farm-to-market process and create sustainable value chains. Success in the Eastern Region shows the merit of capacitating local organizations (especially farmers' cooperatives) to develop value chains.

Public-private partnerships, such as the 'One Village One Product' joint initiative of the Federation of Nepalese Chambers of Commerce and Industry and the Government, offer other examples of value chain development. Success in this case built on specialization and economies of scale. A considerable amount of private-sector involvement in extension services sustains rural value chains through entrepreneurial junior technical assistants.

Source: ADB 2013a, MoAD 2012.

can promote commercial farms through improving regulation, introducing quality standards and encouraging contract farming to increase agricultural returns.

Third, a well-calibrated strategy should promote exports of agro- and forestry products while at the same time enhancing self-sufficiency in certain food commodities as well as timber and non-timber forest products that

<sup>270</sup> Research has shown that the output elasticity of irrigation is relatively higher in the Tarai (0.31) compared to both the mountains and hills (0.08). The reverse is the case in terms of the output elasticity of labour in the Tarai (0.06) compared to the mountains and hills (0.33 and 0.2, respectively).

now constitute major imports. Forests can potentially be leveraged to access flows of carbon finance aimed at preserving and increasing the stock of carbon locked in trees and soils. Enhancing import substitution and promoting exports would help to reverse patterns of excessive dependency.

Finally, in view of the success of cooperatives in many areas, legal, structural and institutional reforms could encourage these on a large scale, including through specific schemes that exclusively benefit poor or small farmers. Parallel production, exchange and distribution organizations may need a further boost by bringing cooperatives of farmers, workers, and cottage and small-scale businesses within the value chain. Savings and credit could be another important component.

**Achieving food and nutrition security should remain an urgent priority amid the COVID-19 crises.** Given disruptions in domestic food supply chains affecting production and causing income losses, Nepal must formulate a food security strategy at the local level to help people develop resilience. This requires assessing the impact of the pandemic on the overall agricultural economy, including food security and livelihoods, in order to develop evidence-based policy interventions. Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences, and supports an active and healthy life.<sup>271</sup>

Since food security is a multidimensional concept, it requires an integrated approach linking four components: availability, accessibility, utilization and stability.<sup>272</sup> With COVID-19 already putting small-scale producers and landless farmers under strain, economic stimulus measures (both cash and in-kind) should be designed to safeguard them against economic slowdowns. Investing in agriculture is also key and perhaps the only viable option for immedi-

ate relief in the form of jobs and food security for the large number of workers forced to return to Nepal due to the pandemic. The Government should adopt a pragmatic policy of discouraging imports to encourage domestic production, and bring agricultural research and technology dissemination, currently spread over three tiers, under one umbrella.

### Revitalizing manufacturing

Manufacturing propels structural change, provides productive jobs and can generate sustainable economic growth because of its strong backward and forward links and spillover effects across other sectors of the economy.<sup>273</sup> Given higher tradability compared to agriculture and services, manufacturing allows a country to increasingly engage in international trade while catering to demand that is not constrained by a small domestic market.<sup>274</sup> Manufacturing is considered the 'engine of growth' because it offers greater opportunities for growth of output, productivity and capital accumulation; technological progress; economies of scale; positive spillover effects; and transfer of surplus resources from agriculture to manufacturing, among other benefits.<sup>275</sup>

SDG 9 emphasizes the importance of inclusive and sustainable industrial development with its two major targets of more than doubling the share of manufacturing value added as a percentage of GDP and in per capita terms, while also doubling manufacturing employment as a percentage of total employment. Currently, the share of manufacturing in total output in Nepal remains just 5.6 percent. This sector employs less than 7 percent of the labour force. The national target for SDG 9 is to increase the share of manufacturing to 15 percent and of employment in manufacturing to 13 percent.<sup>276</sup>

Unlike more developed economies, including South-East Asian countries, Nepal has experienced deindustrialization at a low level of per capita income.<sup>277</sup> A turning point occurred in

<sup>271</sup> World Food Summit 1996.

<sup>272</sup> FAO 2008.

<sup>273</sup> The industrial sector includes manufacturing, water and electricity, and construction.

<sup>274</sup> Manufacturing is a key source of employment for both skilled and semi-skilled workers.

<sup>275</sup> Felipe 2018.

<sup>276</sup> Nepal's current 15th Five-Year Plan aims to increase the share of industry in GDP to 30 percent by 2043.

<sup>277</sup> Empirical evidence from Nepal using data from 1975 to 2016 shows an inverse-U curve relationship between the share of manufacturing output and per capita GDP. See, for example, Dahal 2017.

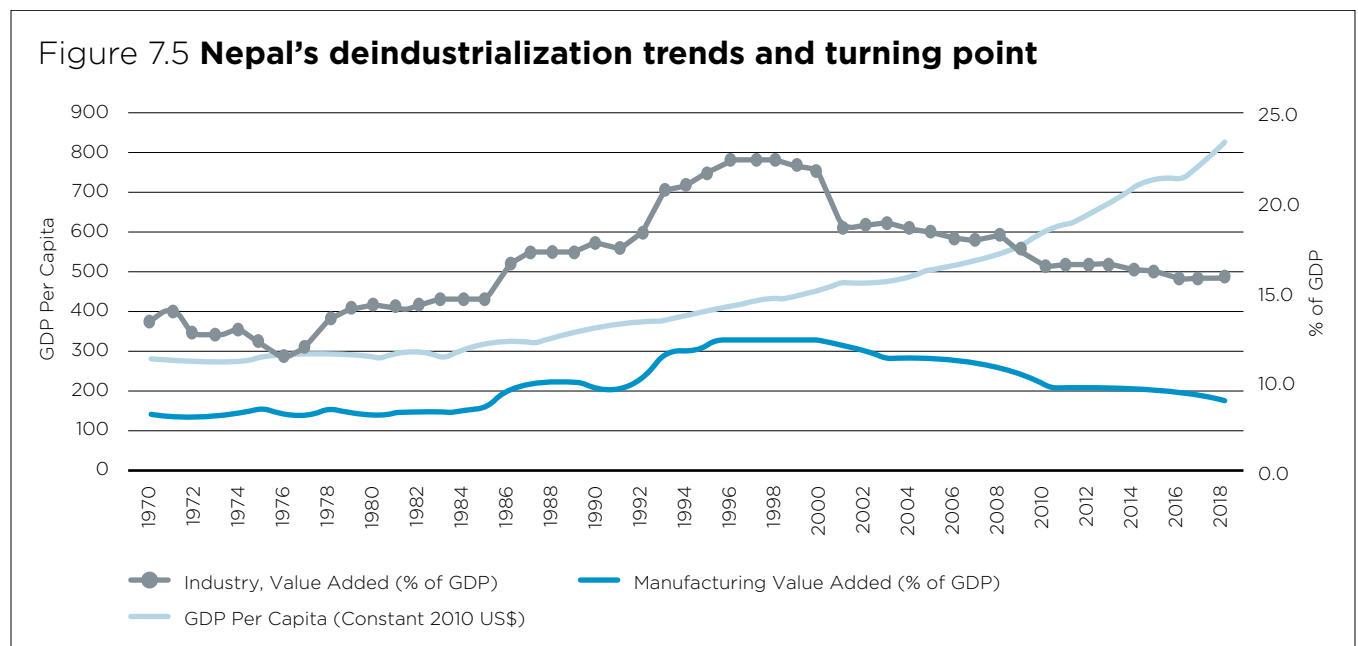
1996, when the share of manufacturing as a percentage of GDP peaked at a very low level of real per capita GDP and then began to continuously shrink (Figure 7.5).<sup>278</sup> It was also because of the expiry of Multi Fiber Agreement (MFA). It peaked at a lower level than the average of other developing economies that have experienced deindustrialization.<sup>279</sup>

From 2000-2001 to 2017-2018, the share of manufacturing in total value fell from 9 percent to 5.4 percent with low and stagnant labour productivity trends. Intercensus data show a sharp deceleration in manufacturing employment from 8.8 percent from 1991 to 2001 to 5.5 percent from 2001 to 2011.<sup>280</sup> Employment elasticity in manufacturing is low, ranging from 0.25 to 0.70 with no firm trend across industries.<sup>281</sup> The estimated coefficient of diversification over manufacturing census years suggests that industry has remained largely stagnant across sectors with low value added and a lack of leading sectors.<sup>282</sup> The fact that the service

sector has surpassed agriculture and manufacturing is not unique to Nepal; most South Asian countries have not followed the classical development path from agriculture to manufacturing to services.<sup>283</sup> In light of the shift in the global centre of economic gravity towards Asia, and the rise of global value chains, however, Nepal must accelerate industrialization. It cannot afford to bypass manufacturing in its growth process. The fragile nature of growth and lopsided structural changes aggravating unemployment and external dependency reinforce the importance of industrialization.

**What holds back manufacturing?**

Shifts in public policy, particularly neoliberal economic policies of trade liberalization, product markets liberalization, financial sector liberalization and austere monetary policies, have been identified as major causes of premature deindustrialization in developing countries.<sup>284</sup> Nepal is no exception to such policy-induced deindustrialization. It was also



Source: World Development Indicators.

<sup>278</sup> Dahal (2017) points out that Nepal's turning point in 1996 was at real per capita GDP of NRs. 16,318 or \$218 on average. The share of manufacturing started declining thereafter.

<sup>279</sup> Rowthorn and Coutts (2004) estimated that the global average turning point was at around \$9,500 in per capita income at 1995 purchasing power parity.

<sup>280</sup> From 2001 to 2011, sectors like electricity, manufacturing and trade registered negative employment growth at -16, -3.7 and -1.3 percent, respectively.

<sup>281</sup> It is low with the exception of a few industries like textiles, apparel and light manufacturing.

<sup>282</sup> CBS 2014.

<sup>283</sup> South Asia has experienced service-led growth while South-East Asia has seen manufacturing-led growth over the last three decades. See Amjad and others 2015.

<sup>284</sup> Tregenna 2016a.

affected by a decade-long conflict from 1996 to 2006 followed by another decade of policy uncertainty from 2008 to 2017. Since the restoration of multiparty parliamentary democracy in 1990, Nepal has adopted economic liberalization with privatization of a number of public enterprises. Although the 1992 Industrial Policy created an environment favourable for increased private investment in manufac-

turing activities, it failed to expand manufacturing.<sup>285</sup> Nepal introduced a new Industrial Policy in 2010 emphasizing tariff protections for local industries and employment creation, among other promises.<sup>286</sup> Despite a range of periodically updated policies and strategies, however, Nepal's manufacturing sector continues to face policy, institutional and structural constraints as summarized in Box 7.2.<sup>287</sup>

## Box 7.2 Major constraints to manufacturing

**Policy asymmetries and a weak regulatory system:** Clarity on balancing the roles of the State and market for correcting both market-distorting and State-capturing practices has yet to be explicitly internalized in the overall policy framework. A shift towards neoliberal economic policies with no strong linkages between macroeconomic and other sector policies and industrial policy has amplified the increased concentration of investment and lending in finance, trade and service activities, constraining productivity-induced diversification in agriculture as a base for industrialization.

**Infrastructural bottlenecks and supply side constraints:** Inadequate and low-quality infrastructure is hindering industries and inhibiting internal domestic markets for produced goods. This is further compounded by shortages of high-quality human resources, energy shortages, weak entrepreneurial skills and capabilities, a poor business environment, a low savings rate (below 10 percent of GDP), and investment with high production and transaction costs.

**Absence of restructuring and continued erosion in the competitiveness of industries:**

Without restructuring industries towards high value added and employment generation, and with rigid labour policies and worsening labour productivity, industrial competitiveness eroded markedly, leading to deindustrialization. Nepal's fixed exchange rate regime with India has drastically eroded the competitive edge of Nepalese industries because of the misalignment of prices between the two countries.

**Low foreign direct investment, minimal participation in global value chains and shallow regional integration:**

In industrial and trade policy liberalization, no proper attention was given to policy coherency, strengthening market institutions and maintaining efficient incentive structures to expand and diversify exportable industries. Internally, a long political transition and policy uncertainty adversely affected foreign direct investment inflows. A weak and ineffective industrial policy reduced chances to enter global value chains. Externally, Nepal faces additional global market problems and regional

barriers to reaping maximum benefits from intraregional trade expansion, foreign direct investment and value chains. These include the absence of incentive mechanisms and a preferential investment policy, in addition to a negative list, high tariff and non-tariff barriers, and regulatory obstacles, among others

**Problem in transit and trade**

**facilitation:** Lengthy export and import times, cost escalation in transit due to very cumbersome procedures, and weak governance at custom points have remained pressing problems in making trade facilitation a means to enhance competitiveness, from the perspectives of both export promotion and import substitution linked to industrialization.

**Coordination and implementation**

**failures:** Given very weak governance and accountability, limited coordination is a major bottleneck with no built-in system to ensure compliance. Provisions to make decisions in a coordinated way are hardly enforced or implemented. A common tendency of refusing to comply with decisions suggests this will be a continued challenge in the future.

Source: Adapted from Khanal and Pandey 2019.

<sup>285</sup> CBS 2014.

<sup>286</sup> CBS 2014.

<sup>287</sup> For more detailed explosion on these constraints, see Khanal and Pande 2019.



Nepal's rank on the Competitive Industrial Performance Index is very low at 131th out of 150 countries.<sup>288</sup> It ranks 144th out of 150 in terms of the capacity to produce and export manufacturing goods. Ranked regionally, Nepal's score on the overall index is equally weak, placing it at 13th out of 15 South and South-East Asian countries.<sup>289</sup> Although Nepal's score on the Ease of Doing Business Index for 2020 has improved from the 110th to the 94th position among 190 nations, primarily due to regulatory reforms,<sup>290</sup> it has spiralled down on the indicator on starting a business, from 107th to 135th place, and declined on the paying tax indicator, which reflects procedural delays that have deterred investors. Nepal ranked 114th out of 160 countries on the Logistics Performance Index for 2018, showing some improvement compared to 2016, except on international shipment and infrastructure.

### Strategic options for industrialization

While Nepal as a landlocked country faces less favourable conditions for following the export-led growth path of South-East Asian countries, it needs a balanced path navigating both agrarian transformation and industrialization, given their natural economic interactions and potential to generate more jobs for the growing labour force. Contrary to neoliberal premises, industrialization demands policy incentives and integrated development interventions in all key sectors, including the commercialization of agriculture as a priority. It also entails selected import substitution strategies.<sup>291</sup>

In this context, a new industrial policy should address the twin challenge of supporting innovation and increasing diversification of the productive structure as an important complement to the macroeconomic policy regime. For meaningful and sustainable LDC graduation, the value added contribution of manufacturing in total output and employment has to go above 20 percent.

This requires a robust strategy, focusing on industrialization linked to export promotion and import substitution. Innovation and technological breakthroughs will be integral to enhancing efficiency and competitiveness simultaneously. Nepalese industries should be systematically encouraged to be part of global and regional supply and value chains, support that has long been neglected.

**A substantial shift in policy should revitalize manufacturing and ground industrialization in comparative advantages.** Successful industrial policies require a well-crafted mix of policy instruments and strong institutions with competent and efficient bureaucrats and officials. Fiscal, monetary, trade and labour policies should be coherent and primarily focused on development. Given weak delivery and a lack of transparency in public institutions, regulatory reforms are an important ingredient of governance reform for improving business, investment and trade. Rebalancing the role of the State and the market must ensure their complementary roles in correcting market imperfections by limiting government investment to areas where the private sector may not operate, leaving other areas for private enterprise. Higher levels of regulation lead to inefficiency, and South Asia is an important example of controls being given too much time to fail, while business-friendly policy incentives are given too little time to succeed. New initiatives may be necessary to make business processes much easier through, among others, automated systems and the removal of unnecessary procedural and administrative regulations producing delays and increasing costs.

**Industrial policy reforms should promote both import-substituting and export-promoting industries.** A strategy of restructuring and technology-based upgrading of industries should be pursued along with assurances of both productivity enhancement and employment generation. Industries drawing on both domestic resources and im-

<sup>288</sup> It is ahead of Bhutan and Pakistan but lags behind Bangladesh, India and Sri Lanka (UNIDO 2018).

<sup>289</sup> The ranking adjusted for carbon emissions places Nepal as the third worst country (UNIDO 2018).

<sup>290</sup> Nepal has amended laws pertaining to labour and technology transfer to improve the investment climate. Out of 10 indices, 5 have improved and the rest have either deteriorated or remained stagnant. Nepal scored highest on access to credit information (37 out of 190) and lowest in paying tax (175th).

<sup>291</sup> See Memiş and Montes 2008.

ported raw materials have to be promoted and made competitive by various incentives, taking advantage of location, labour and other positive factors. A strategy of promoting large and strategic industries with the help of foreign investment should be coupled with encouraging domestic investors to engage in labour-intensive micro, small and medium enterprises, with a focus on women's entrepreneurship. Giving high priority to small enterprises and IT-based industries requires improving taxation, the tariff structure, the credit system and institutional arrangements to build an effective incentive structure.<sup>292</sup> Initiatives to promote and expand free economic and export-processing zones must be guided by the aim of importing new technology and retaining high value added in the country. Increasing labour productivity through various means, including social security and regulatory reforms for improving industrial relations, will enhance the competitiveness of both export-oriented and import-substituting industries.

### Bridging gaps in infrastructure

As with human capital resources, physical infrastructure<sup>293</sup> is fundamental for productive capacity and structural transformation. Nepal requires massive infrastructure development, particularly roads and for air transport connectivity within and across its borders. Removing infrastructure bottlenecks could boost investment in areas of competitive advantage, improve spatial development and the distribution of economic activity, enhance internal markets, widen internal production consistent with potential, and raise productive capacity.

Nepal's road network is small and poorly maintained. Road density at only 0.63 kilometres per square kilometre is low compared to other South Asian countries.<sup>294</sup> Only 50 percent of the national transport network

is adequate in all weather conditions. Very few rural roads are passable during the rainy season.<sup>295</sup> Air transport services are limited given the saturated capacity of Tribhuvan International Airport in Kathmandu, the only international airport.<sup>296</sup>

Nepal ranked 112th out of 141 countries in terms of the infrastructure pillars of the Global Competitiveness Index, the worst score in South Asia. Among transport infrastructure subindicators, Nepal performs worst in the quality of road infrastructure and the efficiency of air transport, ranking 120th and 130th, respectively. It ranked 144th out of 160 countries on the 2018 Logistics Performance Index, doing better than Mongolia at 130th and Bhutan at 149th, but worse than Lao People's Democratic Republic, another landlocked Asian country at 82nd. Among logistics indicators, Nepal's ease of arranging competitively priced international shipments is the weakest relative to other landlocked countries, followed by the quality of infrastructure (roads, access to ports, railroads, and information and communication technology) and the efficiency of border clearance processes. This underscores the need to prioritize investment in road infrastructure.

The Government is committed to closing large infrastructure gaps and improving road connectivity through a massive infrastructure development plan. Nepal's current 15th Five-Year Plan charts long-term strategies towards increasing the blacktopped national and provincial road network by nearly fivefold or 33,000 kilometres in the next 25 years. It has prioritized large strategic road projects as game changers while completing ongoing projects and ensuring their quality.

A unified and comprehensive transport development plan with a clear policy framework and prioritized actions must guide de-

<sup>292</sup> This is necessary because tax and other concessions or facilities in Nepal today are nullified by its free trade and 'open-up' policies. See Khanal 2018.

<sup>293</sup> Although physical infrastructure resources include mainly transportation, communication and hydropower systems, this section deals mainly with transportation as hydropower will be discussed in a following section.

<sup>294</sup> NPC 2020a.

<sup>295</sup> The total length of roads is 31,393 kilometres; 44.9 per cent have been blacktopped. See MOF Economic survey 2019.

<sup>296</sup> It is already stretched with 4.3 million international and 2.8 million domestic passengers in 2018. The Gautam Buddha and Pokhara airports are being upgraded to international airports.

velopment of the transport system. It should recognize the synergies and complementarities among various modes of transport, road, rail and air, and according to the patterns, demands and needs of users. The development of railways provides opportunities for transformation given higher energy efficiency. Building the East-West Railway would provide a significant economic return. Towards that end, a railway development fund could be an important step forward. Managed through the Railway Board or Government of Nepal, the fund could mobilize financial resources domestically (both private and public) and internationally (loans and grants) for constructing railway infrastructure and managing railway services.

Given its vast hydropower potential, Nepal has a unique opportunity to adopt low-carbon transport systems such as electric vehicles and railways; the Government has already embarked on building a national network of electric railways. Two big airports are likely to begin operation soon, while a newly proposed international airport could give impetus to the tourism industry. The Government still has to devise a comprehensive business plan, however, to ensure the new airport is commercially viable and contributes to the national economy.

A massive scale-up in infrastructure investment should be linked with production, markets and sustained spatial development, with greater efficiency in spending. Increased public investment is important for productive transformation and international trade integration. Nepal needs a transport network expansion across the east-west, north-south, interprovincial and municipality levels, in a coordinated manner across the three tiers of government. Current gross public investment in infrastructure averages less than 5 percent of GDP, which is below the average of South Asia. And spending has averaged only 70 to 80 percent of the amount budgeted in recent years.<sup>297</sup> A high incremental capital-output ratio means that investment is highly inefficient and cost-ineffective, reflecting Nepal's poor public investment management.

Other issues relate to addressing constraints to private investment in infrastructure through improving the policy and legal environment. This will be critical to closing infrastructure gaps and avoiding the past failures of public-private partnership models to deliver on a major corridor project, the Fast Track Highway, despite several attempts since 1996.<sup>298</sup> It will be important to identify commercial corridors with potentially high traffic for private-sector investment and public-private partnerships. Foreign investment in key strategic infrastructures could help accelerate infrastructure development, but requires overcoming complex procedures and inadequate investment facilitation.

An infrastructure plan should be prioritized and sequenced based on economic, social, equity and environmental criteria. Despite massive infrastructure plans in the past, including rail and road connections with neighbouring countries, many issues around funding and the modality of project execution have yet to be determined. Ongoing performance shortfalls, including time lags, cost escalation, and quality and environmental gaps raise questions around the ability to execute such ambitious programmes. Prioritization and sequencing are needed, steered by economic, social and equity criteria, and in tandem with a focus on enhancing institutional capacity at different levels and minimizing costs. Strengthening the institutional capacity of subnational governments could improve resource use and service delivery, including through stronger links between planning and budgeting, credible accounting and reporting, and more robust procurement and project management.

Partnerships and participatory approaches must improve, guided by criteria for involving central, provincial and municipal entities, as well as the private sector and communities in different forms of transport. Often, the community participation approach has backfired; it needs attention from both a cost and sustainability point of view. Continued care is imperative to ensure that investments provide advantages to both people and the economy.

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<sup>297</sup> World Bank 2017e.

<sup>298</sup> World Bank 2017e.

As Nepal moves towards greater decentralization of power, there is considerable opportunity for embracing safer and more sustainable road development, and avoiding unsustainable road construction, particularly given the high environmental and maintenance costs of haphazard and poorly constructed dozer roads in mountain areas. Well-established road engineering designs with basic standards of grading, alignment, drainage and bioengineering, and centred around green road concepts, could be introduced and eventually required.

The COVID-19 lockdown and its economy-wide ramifications have struck manufacturing hard. With small and medium industries constituting a large share of total industrial value added and employing the majority of the industrial workforce, adverse impacts on output and employment have been severe. The predominance of both enterprises and employment in the informal sector has worsened the impacts. With the disruption of global supply chains and international trade, and with uncertainty on the future direction of globalization, there is an escalating need for a new drive for industrialization that revives and restructures manufacturing. An early revival of the economy could move Nepal to a higher growth trajectory and enhance transformation, but demands bold steps and new thinking.

### Harnessing hydropower and other renewable energy sources

Human development depends on access to affordable, reliable, sustainable energy, which is also at the heart of the 2030 Agenda, through SDG 7, and the Paris climate agreement. Nepal has a vast hydropower potential of 83,000 megawatts (MW) of which 43,000 MW is commercially viable. Yet it has man-

aged to generate only a negligible amount of 1,250 MW or 2.9 percent of the commercially viable in FY 2019-20. Nepal ended the power shortages and load shedding that affected it for a decade by adding some new capacity and increasing imports from India at peak times.<sup>299</sup>

Through optimum exploitation of hydropower resources with seasonal and daily storage capacities, along with the use of locally available renewable energy sources like solar and wind, Nepal can jumpstart a transition to a sustainable and inclusive green economy, and decouple future growth from rising carbon emissions. This could drive transformation across the entire economy, with both power and non-power gains for society and the environment,<sup>300</sup> and should be at the forefront of Nepal's long-term development vision. Realizing the vast potential of hydropower and other renewables, the Government has set an ambitious target of generating 5,000 MW over the next five years and 15,000 MW by 2030.<sup>301</sup> It has also set a specific target for SDG 7, requiring an enormous NRs. 3.9 trillion,<sup>302</sup> which clearly points to the need for substantial foreign direct investment.

Despite its potential for hydropower and other renewables, Nepal today remains energy poor and energy vulnerable. While 95 percent of the population has access to electricity,<sup>303</sup> per capita electricity consumption at 260 kilowatt hours (kWh) is well below the South Asian average of 550 kWh. In the energy mix for 2017, electricity constituted less than 4 percent of Nepal's total final energy consumption,<sup>304</sup> while traditional biomass dominated at 73 percent, followed by petroleum products at 18 percent and coal at 6 percent.<sup>305</sup> About 76 percent of total final energy consumption is residential, where a vast

<sup>299</sup> Nepal has to import around 400 MW electricity annually from India to fulfil rising energy demand.

<sup>300</sup> Power-related benefits include clean and flexible generation and storage, as well as reduced dependence on fossil fuels and avoidance of pollutants. The non-power benefits include economic improvements to livelihoods and local supply chains, enhanced navigation and transportation, and investment in community services. International Hydropower Association Limited 2019.

<sup>301</sup> International Hydropower Association Limited 2019.

<sup>302</sup> Nepal also envisages a substantial share of electricity and renewables (33 percent) next to traditional biomass (34 percent) in the projected energy mix for 2050. For the national target for SDG 7, see the NPC baseline report on SDG 2017 and NPC SDG costing report 2018.

<sup>303</sup> A quarter of which is through mini-grid and off-grid supplies.

<sup>304</sup> Nepal's total final energy consumption for 2017 was 13.3 million tonnes of oil equivalent. About 47 percent of total electricity consumption is residential followed by industry (35 percent). See: <https://www.iea.org/countries/nepal>.

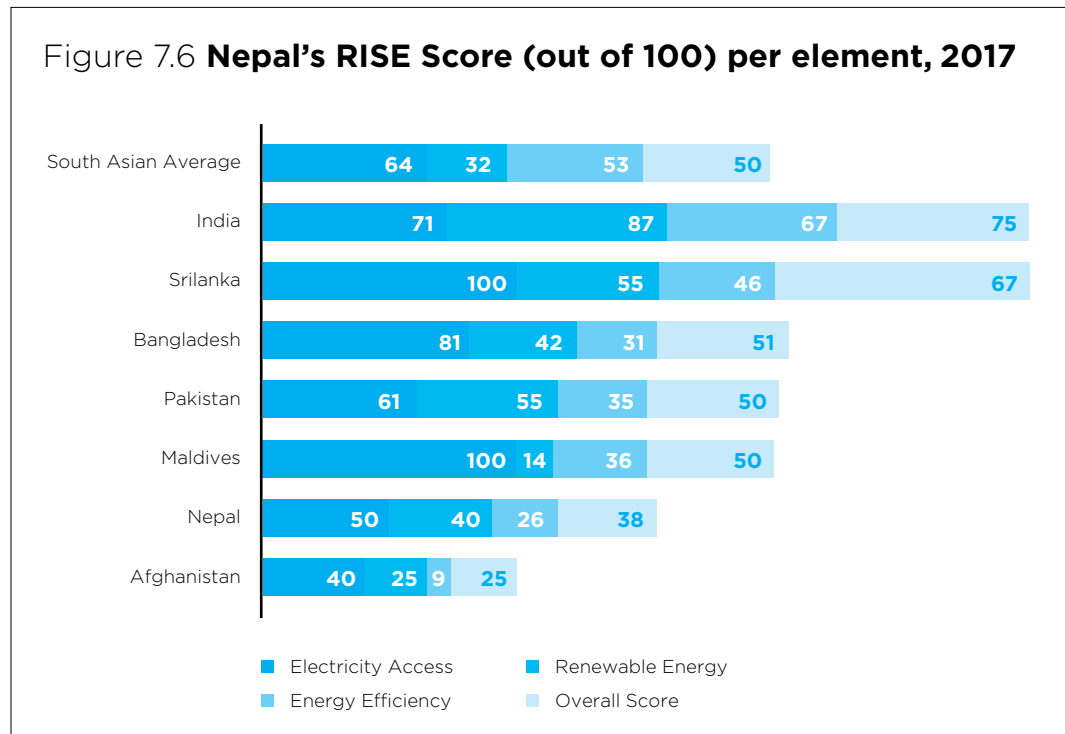
<sup>305</sup> Modern renewables (hydro, solar, wind, etc.) contributed just 7 percent of total final energy consumption in 2017 (ibid.).

majority of the population (about 70 percent) still relies heavily on traditional solid fuels for cooking due to the non-availability and/or inability to afford modern energy services. Rural women and girls in particular suffer from energy poverty. They face a variety of health hazards from indoor pollution as they spend many hours each day preparing meals on traditional stoves in a smoky environment, in addition to the drudgery of collecting firewood.

Climate change and air pollution pose major threats to energy security, with greater uncertainty particularly on hydropower and biomass resources. The global Environmental Performance Index released in January 2018 ranked Nepal as one of the worst for air quality among 180 countries. Performance in terms of the Regulatory Indicators for Sustainable Energy (RISE) score shows the persistence of manifold policy and regulatory barriers on three elements of SDG 7—energy access, renewable energy and energy efficiency.<sup>306</sup> Nepal’s overall score is below the South Asian average with policy and regulatory barriers being more pronounced in terms of energy efficiency (Figure 7.6).

To address multifaceted challenges of energy security, climate change and energy poverty, Nepal needs an ambitious energy transformation agenda. It must ensure universal electricity access, through grid-connected and off-grid power for lighting and productive uses, and work towards the complete replacement of traditional, inefficient cooking and heating sources with clean sustainable energy options that are efficient, reliable, affordable and demand-responsive. Translating this new energy vision into action will depend on an ambitious policy and institutional reform agenda committed to taking an integrated, holistic approach to climate-resilient hydropower development and its governance. It must create enabling conditions for multistakeholder partnerships and investment-friendly inclusive business models that can be scaled up, replicated and sustained.

Improved governance and regulatory reforms are needed. The recently formed Nepal Electricity Regulatory Commission (NERC) is an independent body to regulate electricity generation, transmission and distribution, and the cross-border power trade. It has ushered in a



Sources: Modified based on UNTACD 2006

<sup>306</sup> For more details on the RISE method and country results for 2017, see Foster et al. 2018.



new era of improved governance and development of Nepal's hydropower sector.<sup>307</sup> Notwithstanding the challenge of unbundling the Nepal Electricity Authority (NEA), the sole public utility in the sector, the Government has created a generation company and a transmission grid company. Seven distribution companies are being planned for different provinces. Other new initiatives include one-window service and the Water-Citizen's Investment Programme.<sup>308</sup> How these reforms will overcome many past problems and create an enabling environment for foreign investment has yet to be seen. The policy provision under the 2017 NERC Act that helps to establish the NEA as a monopoly buyer and supplier of electricity will ultimately burden its ability to handle a major electricity load, with adverse implications for attracting investments in mega-hydroelectric projects.<sup>309</sup> An efficient and effective regulatory framework should level the playing field for the private sector, and open access to the transmission system and the domestic and regional electricity markets.

A more integrated approach should move beyond policy siloes to address links among energy, water and food. Integrated decision-making is a powerful tool to increase efficiency, optimize synergies, manage trade-offs and improve governance, yielding multiple benefits.<sup>310</sup> Yet water resources development in Nepal is mostly single-purpose and sectoral, despite the wide range of potential benefits from moving to strategies such as an integrated river basin approach. Contrary to the commonly held view that the potential benefits of water resource development projects in the Koshi river basin are limited

to hydropower, recent research has shown that irrigation and flood regulation account for 40 percent of total benefits.<sup>311</sup> The multidimensional nature of climate change further warrants such an emphasis, aimed at climate-resilient solutions. As another example, integrating renewable energy within the agri-food chain could contribute to food security objectives, while sustainably managed modern bioenergy can positively affect both energy and food security.

Climate resilience should feature in hydropower investments and broader power planning and investments. It is crucial to plan and prepare hydropower projects with careful attention to managing risks arising from climate change, environmental sensitivity, resource conflicts and social dynamics. This will promote the resilience of individual plants and the power system as a whole.<sup>312</sup> Variable climate conditions make Nepal's hydropower projects, which are mostly run-of-the-river types, susceptible to climate risks due to their dependency on precipitation and runoff. To improve public support for hydropower projects, especially multipurpose dam-type projects for power generation, irrigation and flood control, an appropriate benefit-sharing mechanism should be explored. It should go beyond compensation for and mitigation of project impacts, and be built into domestic electricity pricing systems, while maintaining a clear sense among users of the true cost of electricity.<sup>313</sup>

The pace of regional energy trade and cooperation needs to accelerate. Given unevenly distributed and largely untapped comple-

<sup>307</sup> As per the NERC Act 2017, although the Commission's consent is mandatory for all new power purchase agreement, the NEA has the sole responsibility to buy and sell electricity, with the power to collect fees from various sources.

<sup>308</sup> For example, the Government has also launched the one-window service to overcome bureaucratic hurdles and encourage foreign investors to start projects. The Water-Citizen's Investment Programme is another initiative to mobilize financial resources from the public as an equity share for hydropower development and to develop a sense of ownership.

<sup>309</sup> Additionally, coordination challenges between the Energy Ministry and Nepal Investment Board have come to the fore, discouraging large-scale investors. See Khanal 2019.

<sup>310</sup> For a more detailed exposition of the nexus approach and how it delivers policy outcomes that underpin the three sustainability dimensions, see Rasul and Sharma 2016.

<sup>311</sup> Amjath-Babu et al. 2019.

<sup>312</sup> Social conflicts are surfacing around large hydropower projects, which can entail significant rural resettlements and negative environmental impacts, along with domestic anger and equity concerns around the export of electricity being prioritized over domestic development. These environmental and social sensitivities are likely to increase hydropower project costs and make projects more challenging.

<sup>313</sup> For example, Nepal can correct its electricity pricing mechanism in terms of power purchase agreement rates signed with the private developer and tariff rates charged to the different consumer groups.

mentary energy resources in the South Asian region, Nepal, like other countries, faces a stark choice between rapid development and energy self-sufficiency. It cannot achieve both without energy interdependence and a collaborative approach.<sup>314</sup> Realizing this, Nepal has undertaken a number of regional and subregional power interconnection initiatives to benefit from the cross-border electricity trade. Yet despite the huge potential benefits of regional energy cooperation,<sup>315</sup> far too little has been done outside small pockets of bilateral power exchanges with India.<sup>316</sup> International experience with integrated planning for sustainable transboundary water resource management shows how this kind of approach can deliver multiple benefits such as flood control, and improved irrigation and navigation. It also reduces costs and brings technical, operational, economic and environmental benefits to countries and regions.<sup>317</sup> Efforts to develop regional energy cooperation could refer to increasing climate change-induced human security threats to make a compelling case for overcoming the longstanding disputes, political exigencies and mistrust among countries that have effectively blocked even modest efforts to enlarge the regional energy trade.

The right use of energy can increase the productivity and competitiveness of key industrial sectors.<sup>318</sup> The promotion of productive energy use has long been neglected in Nepal. There has been no deliberate policy emphasis on designing a rural electrification programme as part of a broader energy plus development approach. The existing national

energy policy framework primarily stresses rural electrification (the power sector) with limited attention to end use. And despite impressive progress made by the Alternative Energy Promotion Center in encouraging distributed off-grid renewable systems, decentralized renewable energy systems have yet to realize their potential in rural mountain areas in terms of economies of scale and the creation of vibrant markets.

A broad range of barriers stand in the way, including related to policies and regulations, finance, technical knowledge, awareness and capacity. Minigrids may be shut down once the central grid reaches villages if they not connected with the central grid. A harmonious mix of on- and off-grid systems, where feasible, should be backed through power purchase agreements on feed-in tariff rates and by improving the use of supply capacity. The latter could build on productive end-use strategies around, for instance, electric cookstoves and agro-processing mills. This would go far in making off-grid systems financially sustainable.<sup>319</sup>

Access to sustainable energy is critical in the response to COVID-19, not only for preventing and addressing the pandemic, but also for accelerating recovery and building back towards a more sustainable, just and resilient future. The country has already witnessed a sharp drop in overall energy demand due to the closure of transportation, industries and services. Amid reduced economic activities, electricity demand is less than two thirds of what it used to be. This imposes a mounting

<sup>314</sup> See Dhakal et al. 2019.

<sup>315</sup> For example, unrestricted electricity trade provision through optimal expansion of electricity generation and a new cross-border transmission interconnection capacity of 95,000 MW would save \$226 billion in electricity supply costs from 2015 to 2040. Timilsina et al. 2015.

<sup>316</sup> The Bangladesh, Bhutan, India and Nepal initiative for creating an energy cooperation model must also be appreciated in this regard. Likewise, the recent Power Trade and Transmission Interconnection Agreement with India, understandings with Bangladesh and China for power sector cooperation, and the understanding reached for the establishment of the BIMSTEC grid interconnection are expected to lay foundations for the cross-border electricity trade.

<sup>317</sup> Experiences from the South African Power Poll and the greater Mekong subregion, with their long history of bilateral arrangements that later led to the development of regional power sector cooperation, have special relevance (USAID 2013, Price and Mittra 2016).

<sup>318</sup> These include, for example, food processing, manufacturing of high-value niche products and tourism, while creating new income and job opportunities.

<sup>319</sup> There is significant potential to promote the productive use of energy from unused micro- and small-scale hydro-power systems operating in Nepal. This calls for creating and supporting a more conducive and enabling policy environment for large-scale replication of several best-practice business models and off-grid renewable energy solutions making inroads in other South Asian countries.

financial burden on the NEA,<sup>320</sup> and has halted most construction of hydropower plants by independent power producers.<sup>321</sup> The targets set by the Government to increase installed capacity of electricity to 10,000 MWs (or per capita consumption of 1,500 kWh) and total exports to 5,000 MWs by 2030 will likely be severely affected by the pandemic. Various measures have to be taken to mitigate adverse effects, from both medium- and long-term perspectives.

### Tapping untapped tourism potential

Tourism is another unexploited potential sector and growth driver for transforming Nepal's economy and moving towards sustainable human development. Nepal has a strong comparative advantage in tourism by virtue of its unique natural and cultural assets, which offer an opportunity for export diversification and job creation.<sup>322</sup> While the country has a limited overall merchandise export capacity, it has great potential in tourism to compete in large export markets and create jobs with high spillover effects to other sectors.<sup>323</sup> As a labour-intensive service sector, tourism in Nepal has higher employment elasticity than in other countries. One new job is created by every six tourist arrivals, almost double the global average.<sup>324</sup> SDG 8 explicitly calls for policies to promote sustainable tourism that creates jobs and promotes local culture and products, while SDG 12 highlights tools to monitor sustainable development impacts from tourism.

According to the World Travel and Tourism Council, the total contribution (direct and indirect) of travel and tourism to Nepal's GDP in 2017 was 7.8 percent (\$1.9 billion). They supported roughly 6.6 percent of total employment, or nearly 1 million direct and indirect jobs.<sup>325</sup> Although tourism investment amounted to 2.3 percent of total investment in 2017, visitor exports generated 28 percent of total exports<sup>326</sup> and contributed 5 percent to total foreign exchange earnings, making tourism an important source of foreign exchange.

Despite being one of the most beautiful countries in the world, Nepal ranked 103rd out of 136 countries on the World Economic Forum's 2019 Travel & Tourism Competitiveness Index, far behind regional competitors such as India (34th) and Sri Lanka (77th).<sup>327</sup> While Nepal does well on competitiveness pillars such as natural assets (33rd) and price competitiveness (15th), it fares poorly with regard to environmental sustainability (134th), tourist service infrastructure (126th) and business environment (113th). This suggests significant potential for the sector, if it can diversify towards medium- and higher-end products, and strengthen destination management. In tandem, Nepal must manage protected areas more effectively, build key connective infrastructure and make the regulatory environment predictable, among other elements.<sup>328</sup>

<sup>320</sup> The NEA reported a decline of about 20 to 25 percent in peak demand and around 30 to 35 percent in energy demand in the period after the lockdown. The import of electricity from India has fallen to just 100 MW during peak hours. The average demand for a day is 650 MW, and average generation is around 700 MW, while the nighttime peak demand is around 450 MW. This has caused electricity to be wasted, resulting in a loss for the NEA. See: <https://myrepublica.nagariknetwork.com/news/how-can-we-revive-the-energy-sector-post-covid-19/>.

<sup>321</sup> Hydropower plants that could generate around 3,000 MWs are under construction. Most have been halted, increasing costs and completion times. Without any support from the Government, interest rates alone would amount to around NRs. 130 million per day.

<sup>322</sup> Nepal has been variously described as a "once in a lifetime experience" or "one of the 50 places to see before you die." See Sharma, Upreti and Pyakuryal eds. 2012.

<sup>323</sup> Tourism is an in-situ export where the consumer comes to the product, not the other way around. Sharma 2016.

<sup>324</sup> This is based on the estimate from the Nepal Tourism Employment Survey 2014 (MoCTCA 2015) with caveats that the estimate may be lower as it does not fully capture the economic impacts of tourism. Some studies estimate that every tourist generates nine direct or indirect jobs. See Pradhan et al. 2014.

<sup>325</sup> This contribution is expected to rise 3.9 percent annually to \$2.9 billion, 8.2 percent of GDP in 2028. The total contribution of tourism includes direct contributions and wider impacts on the economy such as travel and tourism investment spending; government spending that helps the travel and tourism sector, such as tourism marketing and promotion; and domestic supply chain purchases by sectors directly dealing with tourists. Direct contributions include total spending within a country on travel and tourism by residents and non-residents for business and leisure, and spending by a government on travel and tourism services directly linked to visitors such as museums. See WTTC 2018.

<sup>326</sup> This refers to spending within the country by international tourists for both business and leisure trips, including spending on transport, but excluding international spending on education.

<sup>327</sup> See: [http://www3.weforum.org/docs/WEF\\_TTCR\\_2019.pdf](http://www3.weforum.org/docs/WEF_TTCR_2019.pdf).

<sup>328</sup> World Bank 2018.

The Government in 2012 formulated its Tourism Vision 2020 followed by the comprehensive National Tourism Strategic Plan 2015–2024. These seek to establish Nepal as a leading tourist destination in South Asia and to diversify current tourism offerings. Nepal declared the “Visit Nepal 2020 Lifetime Experience” initiative to bring in 2 million international tourists by 2020, but this plan lacks a clear approach to revenue generation much less a coordinated, holistic approach to managing tourism at the destination level. In the context of federalism, solving coordination challenges will require creating and rolling out well-designed selected destination master plans through better horizontal and vertical coordination, improved governance, better identification and implementation of tourism investments by local governments, regulatory reforms for improved sustainability, and capacity-building for communities and local private firms.

A properly designed tourism-led development strategy with sound, integrated planning and sustainable destination management can offer several advantages in diversifying the economy. The country has much to offer the lay traveler as well as the intrepid adventurer.<sup>329</sup> It can capitalize more fully on these endowments by diversifying and moving up the value chain towards medium- and high-end tourism, such as through developing leisure and outdoor adventure activities in destinations with high potential. A recent feasibility study by the World Bank grouped Nepal’s 12 destinations into those with high (Mid-West, Tarai) and low (Kathmandu Valley, Everest, Chitwan) potential development impact, along with lower priority remote areas over the medium term (Far West, East Nepal).<sup>330</sup> Despite several destinations in different geographic areas with

the potential to attract a significant number of mid- to high-end tourists, the majority of tourist flows<sup>331</sup> continue to be concentrated in a ‘tourism triangle’; 95 percent of all trekkers remain between the Annapurna region, Sagarmatha (Everest) and Chitwan National Park.

Nepal’s tourism sector needs to move beyond being essentially demand led. This requires a deliberate policy emphasis on developing and managing supply components as integral to national development strategies. The primary focus has always been to increase the number of tourists, with little attention to improving the quality and diversity of tourism offerings. A tourism product comprises five closely interrelated supply components that maximize the length of visitor stays in destinations: attraction, services, transportation, information and promotion. Evidence shows that the average length of stay by tourists has a stronger impact on employment generated than the number of tourist arrivals.<sup>332</sup> By overlooking this, Nepal’s tourism sector is operating below its full potential, with limited diversification across locations and along the value spectrum. By remaining a destination for high-volume, low-value tourism,<sup>333</sup> Nepal’s tourism receipts are relatively low compared with competing destinations.<sup>334</sup> This has also led to unsustainable economic gains from using environmental and natural assets beyond their carrying capacity.

An integrated approach to tourism development at selected destinations should build on well-designed master plans. Effective planning and management at destination sites will maintain their integrity and protect unique attractions. Plans must reflect how tourism functions as a system, and encompass the extent of tourism assets at a desti-

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<sup>329</sup> Sharma 2016.

<sup>330</sup> World Bank 2018.

<sup>331</sup> With a low of 540,000 visitors after the 2015 earthquake, the international tourist flow to Nepal rebounded to an estimated 940,000 visitors in 2017.

<sup>332</sup> Islam 2014.

<sup>333</sup> Tourism market segments in Nepal include: 1) a low-end market segment comprising ad hoc domestic travelers, individual long-haul and regional visitors staying typically more than two weeks, or group visitors for religious and pilgrimage purposes; 2) a mid-range market segment comprising more affluent domestic travelers, regional independent leisure travelers and organized travelers from long-haul markets; and 3) a high-end market segment comprising individual/small group travelers who pay special attention to the quality levels of the experience over price as well as specialized hard adventure travels. See World Bank 2018.

<sup>334</sup> With an average of \$592 per international visitor in 2016, Nepal’s international receipts are almost half of the global average and one third of those of India and Thailand. See UNWTO Tourism Highlights 2017 edition.

nation; how well services are provided; how well sites are developed and managed; and how attractively tourism products are developed, marketed and promoted.

Nepal needs to urgently address key demand and supply constraints on the value capture and competitiveness of its tourism sector. Priority actions on the supply side include investment in transport infrastructure, transport services and connectivity; upgrading the reliability, safety and efficiency of the airport system; and new trekking trails such as the Great Himalayan Trail. New product standards and labels aimed at climate-smart solutions should be designed and enforced, and local capacity developed around new products and standards. Improving tourism statistics could underpin effective marketing and promotion strategies. Clarifying tasks and responsibilities for tourism and related infrastructure among the federal, provincial and municipal governments is of utmost importance.

On the demand side, it is equally important to strengthen links between tourism and other sectors such as agriculture (through dairy products, food crops, fruits and vegetables) and manufacturing (apparel, craft products, etc.) to boost productive employment while maximizing the retention of tourist-generated income in the local economy. Royalties and entrance fees could be revised to adapt to the willingness to pay of different visitors. In destinations with upscale potential, private-sector firms and investment could be involved in the management and maintenance of tourism infrastructure.

Tourism may be the sector most affected by the COVID-19 crisis,<sup>335</sup> particularly at a time when Nepal was prioritizing steps to tap tourism's enormous potential, including to generate jobs. More than three in four workers in tourism hold informal jobs and lack access to social protection, rendering them particularly vulnerable. While the number of tourists

is likely to increase again only over the longer term, Nepal could take the opportunity now to steer tourism in a new direction. A robust crisis response strategy should focus on laying foundations for more high-value and quality-oriented tourism practices rather than relying on existing mass tourism models. This could entail resetting the adventure tourism industry while also encouraging domestic tourism as an equal priority for many destinations. Cultural tourism, local food tourism and other unique experiences could all be developed so that tourism-generated income remains in localities, buoying local economies and the broader economy.

## Revamping economic policies for productive transformation

### Economic policies direction: a brief review

Well-coordinated fiscal, monetary and financial, exchange rate, trade and industrial policies are critical for the productive transformation of an economy. With positive economy-wide effects, they can propel structural change and enhance productive capacity, ensuring sustained, broad-based and equitable growth. They can accelerate higher productivity and productive employment-driven diversification within and across sectors, as well as technological upgrading and innovation.

Nepal's economic policies have contributed little towards that end, however.<sup>336</sup> As in many poor countries, structural changes have reduced economic growth due to premature deindustrialization that suppresses income levels.<sup>337</sup> Strikingly, a structural shift in many poor countries has largely been through people compelled to move to urban informal services from stagnating agriculture with low productivity and low income.<sup>338</sup> Alternatives

<sup>335</sup> The global impact of COVID-19 on the tourism sector has been devastating. The World Tourism Organization estimates that in 2020, global international tourist arrivals could decline between 20 and 30 percent, from an estimated growth forecast of 3 to 4 percent in January 2020. See: <https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020>.

<sup>336</sup> For details, see UNCTAD 2011 and UNIDO 2013.

<sup>337</sup> For such a conclusion based on an empirical study, see McMillan and Rodrik 2011, and Rodrik 2015.

<sup>338</sup> Such a conclusion is based on a rigorous study carried out in some developing African and Asian countries. See UNRISD 2010.



are clearly needed to economic policy that is largely grounded in market fundamentalism and unresponsive to human development.<sup>339</sup>

Guided by the Constitution, the SDGs and the national prosperity agenda, Nepal is beginning to reform its approach to economic policies. Emerging priorities include production, physical infrastructure and human resource development, including through enlarging social protection. The most distinguishing feature of this shift is a focus on augmenting the economy's base of production to replace a model heavily dependent on remittances and imports.<sup>340</sup>

Under fiscal policy, apart from focusing on economic stabilization to prevent fiscal imbalances, the priority is to improve public expenditure and financial management through better resource allocation and use. The practice of framing a medium-term expenditure framework has been revived with the ranking of projects on a prioritized basis, and a fiscal responsibility act enacted. A new system of categorizing selected projects in terms of national pride projects and then allocating resources to implement them as a high priority is also in practice. Furthermore, higher-level officials and project managers now have contracts to track fulfilment of their responsibilities. Towards better project screening, a project bank system was initiated. Improvement in the public procurement system for expediting construction work and other purchases is underway.

Beyond distinguishing gender and the environment in budgets, Nepal has introduced a system of aligning budgetary programmes with the SDGs. A targeted scheme of subsidies and grants for farmers and poor income groups and the most disadvantaged families is an important element of fiscal policy, as is expanded insurance facilities in agriculture and health. Towards improved monitoring and supervision, important components of public expenditure management, separate

progress monitoring of the SDGs has been instituted. Digitalization of the budgetary system, including the payment system, is in progress. The devolution of expenditure and revenue responsibility to the provinces and localities is moving forward, with associated fiscal transfers.

On revenue and taxation, the focus is on expanding direct taxes, enhancing taxpayer compliance and making the tax system simple and transparent. A value added tax is now one of the main components of indirect taxes. Apart from digitalization of the tax system, including the valuation system, revenue administration is being strengthened. A low tax rate and lower tax incidence for poor and low-income people coupled with higher compliance is a focus of revenue policy. At the same time, there are continued attempts to maintain a low corporate tax rate to provide incentives to the private sector, and special tax rebates as well as facilities for repatriating returns, including for foreign investors.

In terms of monetary and financial policy, the financial sector liberalization that began in the 1980s is continuing, with a big jump in the expansion of private banks attracting joint ventures. Interest rate deregulation has been an important step. Autonomy granted to the Nepal Rastra Bank through the Act of 2002 insulated the central bank from government intervention, with such autonomy retained in the second amendment Act of 2016. The acts confine the role of the central bank to both domestic and external stabilization through containing inflation and maintaining the balance of payments, de-emphasizing the direct growth role of monetary policy.

As a part of liberalization, the priority sector lending programme started in the early 1970s was phased out in 2007. Only a deprived sector lending policy initiated in 1991 continued. In 2010-2011, however, the priority sector lending approach was reintroduced with the central bank directing commercial

<sup>339</sup> The need for a paradigm shift in macroeconomic policies has long been advocated. For a forceful argument, see Ocampo and Vos 2006. The underlying reasons for the failure of neoliberalism and the need for alternatives are found in Stiglitz 2019. The recent focus on the revival of industrial policy for reindustrialization is due to similar reasons. For details, see Ocampo, Rada and Taylor 2009, UNCTAD 2011, UNIDO 2013 and Salazar-Xirinachs et al. 2014.

<sup>340</sup> Such a focus is the main feature of two budgets of the Government. See MoF 2018 and 2019.

banks to channel at least 20 percent of their total lending to the productive sector, which includes agriculture, energy, tourism, and cottage and small industries. This lending ratio was raised to 25 percent in fiscal year 2017-2018, and further refined in fiscal year 2019-2020, when lending to the agriculture, tourism and energy sectors was earmarked at 10, 10 and 15 percent, respectively. A new investment bank was established recently.

With marked increases in financial deepening, the greater lending capacity of the banking system and increased access to financial services, the central bank has complemented its supervisory and regulatory role through various macroprudential measures to minimize the risk of financial instability. A supervisory information system and some parts of the Basel III capital framework have been introduced. A policy of activating a counter-cyclical capital buffer by pushing banks to increase their capital base has been continued in the fiscal year 2019-2020.

Liberalization has been the highest priority in trade policy, with the expectation that trade can work as an engine of growth and higher productivity. A liberal trade policy initiated in the early 1990s has been revised and updated continuously, providing a major role to the private sector in promoting trade in general and exports in particular, with the State consigned to a limited place in guiding, facilitating and regulating trade. The Nepal Trade Integration Strategy developed in 2010 and updated in 2016 emphasized reducing transaction costs through developing infrastructure and trade facilitation measures. Integral legal and regulatory reforms have focused on increasing competitiveness both regionally and globally, and various incentives have been provided for export-oriented industries. Specific incentives elaborated in various policies and strategies include the exemption of exports from customs duties and domestic taxes, a product development fund, the establishment of export-processing and special

economic zones, the identification of products with comparative advantages and export promotion programmes for them, and the development of skills and technology for export development. Simplified import procedures for raw materials and export trading houses are also stipulated. Recently, cash incentives have been provided to exporters, while a drastic reduction in tariff rates and slabs has made Nepal one of the most liberalized countries in South Asia.<sup>341</sup>

Various policy, legal and institutional measures in recent years have sought to revive and expand the industrial sector. For promoting private investment, including foreign direct investment, the Investment Board Nepal became a separate, independent body entrusted with attracting investment in larger projects in priority areas such as agriculture, industry, infrastructure, energy and tourism. An additional policy focus has been on developing and diversifying the capital market, broadening its scope for the production and infrastructure sectors, and attracting institutional investors, including foreign investors, as part of mobilizing investment through different means.

As an element of overall economic policy reform, Nepal is pursuing a pegged exchange rate system where except for the Indian currency, all other currencies are market driven as cross rate between Indian rupees and other currencies. With distinct economic and trade relations given its open border with India, such a system is arguably justified.

The various initiatives adjust policies and introduce new ones have improved overall performance of the economy in recent years. Higher economic growth and some incremental positive changes in the structure of the economy indicate progress.<sup>342</sup> There are signs of some reversals from the deterioration in the share of the manufacturing sector in total value added, however. In fiscal policy, noticeable progress on revenue mobilization<sup>343</sup> has enabled Nepal to maintain a fiscal

<sup>341</sup> For a trade sector review, see Khanal et al. 2005, and Khanal and Pandey 2019.

<sup>342</sup> The average growth rate of the last three fiscal years, 2016-2017, 2017-2018 and 2018-2019, comes out at around 7.3 percent (MoF 2019). Noticeably, the rate was below 4 percent from 2004-2005 to 2009-2010 (Khanal et al. 2012).

<sup>343</sup> The revenue share in total GDP is above 27 percent, which is high in comparison to other many low-income countries.

deficit within reasonable limits despite the need to transfer resources to the provinces and local level<sup>344</sup> and continued pressures to expand current expenditure. In monetary and financial policy, together with a rapid expansion in banking and financial institutions, and financial deepening, financial stability has been maintained to a great extent, with a low and decreasing ratio of non-performing assets. Inflationary pressures have subsided. Access to financial services is growing, with most rural municipalities gaining banking facilities.<sup>345</sup> In trade, some diversification in export trade is evident with a major share of manufacturing products in exports along with expansion in the services trade resulting from steady expansion in the tourism industry.<sup>346</sup> Prospects for foreign direct investment have markedly improved<sup>347</sup> with possibilities for enhanced investment capacity, which is key to higher growth and productivity.

Notwithstanding various positive outcomes, the fundamental problem with current economic policies is that they are still rooted in market fundamentalism and not fully compatible with transformation or human development. The overriding focus on fiscal balance and stabilization-centric, procyclical policy undermines efforts to address structural and institutional problems, and limits the development role of the State in ensuring higher investment in the most productive areas with economy-wide multiplier effects.

An emphasis on the fiscal balance and a system of earmarking budgetary deficits without a closer look at the composition and expenditure pattern has led to unproductive expenses and limits on resource efficiency and expenditure quality. This has produced a fast rise in current expenditure and poor resource allocation decisions. The inability to follow the basic norms of the medium-term expenditure framework has aggravated such problems further, including in terms of prioritization at the sectoral, programme and project levels. As a result, the expenditure system faces structural constraints emanating from stagnating capital expendi-

tures compounded by untimely, poor-quality, ad hoc transfers and out-of-budget spending practices on a large scale. Poor expenditure tracking and monitoring add to inherent deficiencies.

For revenues, there is major dependency on international trade, with imports still the major source of value added taxes. In addition to the predominance of indirect taxes and low progressivity in direct taxes, the tax system faces tax evasion, poor compliance, a limited revenue base and cumbersome tax administration problems constraining revenue elasticity. Low elasticity in turn compels frequent tax policy changes that raise uncertainty among investors. Weak tax design and inadequate enforcement of offered facilities in a coordinated way that is linked with stated targets encourage distortionary practices and disincentivize entrepreneurs.

More serious problems are apparent in trade policy. Under the liberal trade regime, trade is expected to induce export industries given comparative advantages in specific areas. With relatively lower labour costs and various incentives through taxation and other policies, export industries would rise with an investment boost. Instead, free trade policy with a massive reduction in tariffs through cascading tariff structures, negative protection for local industries and little space for a level playing field for domestic investors has intensified a trade system predominantly based on imports and facilitated by remittances. Problems in trade facilitation, including infrastructure-related facilities adding non-tariff barriers, have further constrained exports.

Another issue is the pegged exchange rate with India, which has been detrimental to export competitiveness and exportable industries. India's low inflation rate compared to Nepal has led to a misalignment in prices that has been instrumental in inducing imports and discouraging domestic production.<sup>348</sup> Amid various policy asymmetries, a tendency towards siphoning remittances for

<sup>344</sup> The fiscal deficit is within the limit at around 4.5 percent of GDP (MOF 2018 and 2019).

<sup>345</sup> Khanal and Shreshtha 2017.

<sup>346</sup> Khanal and Pandey 2019.

<sup>347</sup> The commitments and signing of memoranda in a number of large foreign projects increase such a possibility. See [www.ibn.gov.np](http://www.ibn.gov.np).

<sup>348</sup> MOF 2019.

trade financing and other unproductive areas through banking and finance is discouraging private investment in productive areas. Relatively higher spread rates, the overconcentration of bank lending in limited urban centres, and the lack of access to banking services by the majority of the population are all hurting small production activities at the grassroots.

Two asymmetrical phenomena in particular affect production and trade structures to the detriment of productive transformation. First, trade policy, despite raising the trade share in GDP, has primarily widened the trade deficit due to the rapid climb in imports and deterioration in exports.<sup>349</sup> In parallel, the low priority given to internal trade linkages and market expansion has provided little boost to local production. Second, while financial deepening has expanded the lending capacity of the banking and finance sector, the investment portfolio has not adequately channelled financing towards productive areas. The emergence of the service sector as around 58 percent of the economy has been due to stagnating or declining output and productivity in production sectors.<sup>350</sup> Grounded in recent reform initiatives, major policy overhauls will be required, and have been made even more urgent by the abrupt shock transmitted by COVID-19 to all sectors of the economy in general and critical sectors in particular.

### Revamping economic policies

**Economic policies must be coherent and focused on driving structural reforms.** They should aim at overcoming low productivity, supply bottlenecks and erosion in the productive base. Reforms have to target more specifically the structure of production and trade in a way that enhances efficiency, distributional gains, fairness and productivity within and across sectors. All major economic policies, including fiscal, trade, monetary and exchange rate policies, need to be considered. One step entails restructuring resource allocation decisions. Another involves setting criteria for better returns and higher productivity of public expenditure, tax and other policies, towards realizing a more fa-

vourable business and entrepreneurial environment, and reducing production and transaction costs. In effect, this will discourage the diversion of resources towards unproductive areas, including by the banking and financial system. A policy of a broad production chain to develop internal markets and link with regional and global value chains is another priority, including through the use of technology. Towards changing the production structure and linking with external trade in general and exports in particular, adjustment in the exchange rate policy will be equally critical.

The stabilization-centric, procyclical, demand management policy approach often regarded as the principle component of macroeconomic policy must be substantially changed. To make it compatible with supply side policies, a countercyclical policy has to be followed, which requires a priory alertness and countervailing measures to enhance resilience to unexpected shocks. Under an aggregate demand management policy framework, distributional and wage aspects will need consideration beyond investment and consumption demand, with a direct bearing on raising the purchasing power of the people and extending markets. This in turn would induce production and supply. From both a supply and demand side, coherent economic policies focusing on structural reforms are required. This implies broadening macroeconomic policy beyond a focus on fiscal policy-led demand to cover all major economic policy areas.

**Fiscal policy reforms must pursue major restructuring in public expenditure and financial management.** In the near term, there is a need to overhaul ongoing projects and programmes imposing liabilities over decades. They should be dropped or terminated. Others that may still be viable should be restructured and continued. All new projects should pass through the project bank of the National Planning Commission for inclusion in the budget and annual programme. In the medium term, a performance-based budgetary system should replace the present re-

<sup>349</sup> The goods and services trade deficit as a share of total GDP has exceeded 40 percent (MoF 2019).

<sup>350</sup> MoF 2019.

source-draining expenditure-based system, and be implemented in provinces and localities as well. It will require a new results-based input and output framework for project or programme design, selection, resource allocation and performance evaluation. It will help to introduce policy costing practices in the annual programme formulation exercise towards assessing cost implications in a more exhaustive way.

Substantial improvement in the medium-term expenditure framework will be key as in principle it requires inclusion of input, output, outcome and impact indicators. In parallel, a medium-term budgetary expenditure framework at the ministry level, grounded in long-term sectoral strategic plans, will help stop larger out-of-budget spending practices, 'as and when' transfer practices, and the expenditure of major resources at the end of the fiscal year. In such a framework, a policy of strong budgetary rules that ensure implementation of projects and programmes on time and in a transparent manner, with an integral focus on procurement and monitoring, will be needed. Project contracts and accountability systems have to be more effective. Such a framework should be applied at the provincial and local levels, and public enterprises brought under it.

To contain current and other recurring expenses, and divert more resources towards the most productive areas, the present classification is highly defective. Considering the diverse nature of government expenses and their impact, public security and services, social and economic rights including social security-related expenses, fiscal transfers to subnational governments, and core projects contributing to productive capacity should be separately classified. This will facilitate their roles in systemic reform.

A separate investment plan covering national pride and game-changing projects would be a breakthrough in enhancing effectiveness in both planning and budgeting. As part of improving overall efficiency and raising the cost-effectiveness of the budget, strong criteria to justify expenditures claimed under current expenditure and various expenditure heads must be introduced. Initiation of a ze-

ro-based budgeting system could be a better option. As part of improving financial management, a cash payment system could be replaced by an accrual system. Reforms will also be required to ensure compatibility between physical achievement and payments against financial claims. All of these measures will help spur much-needed reforms in the public expenditure and management system, and allow more space for more accommodative fiscal balancing rules.

**Progressive taxation, effective tax incentives and wider revenue base should receive priority.**

The primary focus of the tax system should be to expand internal revenue towards reducing external trade-based revenue dependency. This will require enlarging the internal revenue base at a faster pace, which depends on raising production, increasing productivity, and enhancing the progressivity and elasticity of the tax system. The initial focus should be on expanding the base of direct taxes to raise overall tax elasticity by bringing expanded economic activities into the tax net and thwarting tax evasion. Tax policy should encourage the formalization of economic activities, including trade-related activities, through more transparent and simplified procedures that encourage people to pay taxes. Cumbersome processes and use of discretionary power must be reformed and checked. The income tax system should be more progressive. More incentives should be provided to investors, for example, but with a focus on small and medium entrepreneurs through low taxes, rebates and concessions on income derived from investment in industries and other productive areas. These measures should be coupled with high tax rates on income from investments in unproductive areas.

Under the indirect tax system, the potential for increasing revenue from value added taxation is significant through widening taxation and increasing compliance. Strong steps are needed to control tax evasion by institutions and individuals. For promoting local resource-based industries and industries with comparative advantages, the cascading tariff and revenue structure has to be changed, and the homogeneous tariff structure for consumption, raw material and capital goods must be reformed given its detrimental impact on high value



added or import substitution industries. Under the federal system, implementing a policy of single taxation in a coordinated way based on the revenue responsibilities of the three tiers of government will prevent distortions or disincentives among producers at different levels, including the microlevel.

More revenues could also be raised through non-tax sources. Apart from raising revenue through greater productivity in public enterprises, there should be a robust policy on the protection and use of state property that covers revenue generation potential. The regular review of taxation policy and practices should be strengthened and a feedback system institutionalized for timely steps to control revenue leakages, tax evasion and poor compliance. It could also be used to strengthen incentives for producers to reduce high external dependency and related vulnerabilities. The reform and restructuring of revenue and taxation policy is a priority particularly in looking towards the post-LDC graduation period, where there are potential risks of revenue losses, and declining concessional aid and development finance.

**Monetary and financial policy should foster investment in productive areas apart from playing a stability role.** A well-developed, healthy and competitive monetary and financial system is a prerequisite for expanding access to financial services, enhancing efficiency in resource use, enlarging the productive base of the economy, achieving higher growth and maintaining stability. Through intermediation, it promotes saving and investment. In view of such critical roles, the orthodox view on the role of the monetary and financial policy focused on price and balance-of-payments stabilization is changing. Today, many advanced countries have brought employment objectives within the orbit of monetary policy.

In countries like Nepal, monetary and financial policy should be recognized as playing critical roles in enhancing economic growth and raising the productive capacity of the economy. Though priority sector lending has

been reintroduced, such a role has to be explicitly recognized and made an integral part of ongoing practice. The share of priority sector lending should be further increased, while substantial improvements are made in the investment environment in both urban and rural areas. Given their roles in the stability of the external payments system, monetary and financial policy should divert more resources towards goods and services, including tourism, that notably enhance export capacity. A policy on specialized banking should boost investment in priority areas and sectors with comparative advantages, while a tendency towards overconcentrated lending in urban areas and for limited groups should be countered. Through both institutional and structural reforms, the gap between deposit and lending rates should be narrowed. The practices of cartels and syndicates in the banking system have to be controlled.

Higher priority should go towards extending access to institutional credit for rural populations and marginalized and poor people, and taking steps to divert more financial resources to backward areas. Checking exploitation by moneylenders through high interest rates depends on more aggressive financial inclusion policies targeting all households in all municipalities. To sustain their effectiveness, lending to deprived groups and other targeted credit programmes require credit tracking and monitoring by the central bank. As an offshoot, a clear-cut policy should streamline microcredit institutions and cooperatives. It should boost their role in mobilizing household savings and channelling investments into the production, exchange and distribution of goods and services to bring various socioeconomic groups into mainstream market systems.

**Trade creation and diversification through internal production and external trade linkages should be the major thrust of trade policy.** From an export perspective, Nepal has comparative advantages in a number of agricultural, manufacturing and services industries.<sup>351</sup> Yet trade policy so far has been driven by promoting free trade without linking to an internal production and external

<sup>351</sup> Nepal's trade integration strategy identifies more than two dozen goods and services with high comparative advantage potentials. See MoC 2016.

trade creation strategy focusing on exports. A trade creation policy requires links with industry, among others, and should promote intra-industry trade domestically and externally. Investment is a prerequisite, and banking and finance, tariff, exchange rate and other policies need alignment with investment, production and trade in a coordinated way. The minimization of transaction costs and enhancement of competitiveness require quality infrastructure, trade facilitation and other institutional supports.

Reforms in the cascading tariff structure, and a differential tariff policy in imports for consumption, intermediate and capital goods will be vital. Incentives should be designed and implemented to attract investors to engage in exportable industries on a large scale, and advances made towards a more competitive environment and favourable governance system. Promoting internal production chains linked with domestic markets and external value chains linked with international markets will be particularly critical. Free economic and export-processing zones can promote supply and value chains. Closing the investment gap calls for not only technology transfers but also integration with international value chains simultaneously; both require infusions of foreign direct investment.

An integral part of trade policy reform should be new trade relations with key partners to improve prospects for exports. Trade relations should be guided by creating trade with each trading partner, country-wise trade creation and the diversification of exportable products. More concerted efforts are required to obtain transit rights, ensure trade facilitation, and overcome non-tariff and other barriers at the borders, along trade routes and in sea ports. Overdependence on trade with a single country must be reduced by augmenting trade with China and other countries in the South Asian Association for Regional Cooperation (SAARC). Alternative transit routes and port facilities should be tapped to boost exports. Considering the likely erosion in international support measures for trade post-LDC graduation, Nepal requires a more robust trade strategy for ensuring net gains, driving product diversification and enhancing productivity.

**The pegged exchange rate be reviewed.** This would be geared towards enhancing export competitiveness and encouraging import substitution, and could address, among other factors, the issue of price misalignment. Other countries have been successful in keeping the exchange rate in line with productivity growth by correcting price misalignment with a dominant trading partner.



**Reforms in the cascading tariff structure, and a differential tariff policy in imports for consumption, intermediate and capital goods will be vital.**

**The capital market should be developed and the investment structure diversified.**

Capital market expansion calls for bringing in production and infrastructure-related companies, which will also help diversify investment. Diversification through attracting specialized institutional investors will be required. For including more people in the market, particularly those in poverty, and ensuring distributional gains, a policy of shared distribution should be prioritized. A selective government support system could be introduced, targeting poor and disadvantaged people who have no capacity to purchase company shares, with a payback mechanism. Local resource benefit-sharing arrangements and local ownership rights should be further advanced and institutionalized, replacing ad hoc arrangements, and again ensuring benefits to the poor and disadvantaged.

**An integrated and robust investment policy should be developed.**

So far, Nepal has scattered investment-related practices based on various laws and policies. Among these, the foreign direct investment and technology transfer act is most noticeable. A new act on special economic zones aims at attracting investment, both domestic and foreign. Industrial, trade, capital market development, public-private partnership and other sector specific policies also focus on investment promotion. But a coherent investment policy is lacking, which poses problems in attract-

ing investment in priority areas, ensuring the right facilities and resolving coordination problem effectively. This leads to poor use of both internal and external investment commitments. Under the federal system, added problems arise in coordination. Encouraging investment in a wider way, involving small and large investors, and including foreign investors depends on an integrated and comprehensive investment policy.

Revamping economic policies towards productive transformation of the economy has become more fraught in the time of COVID-19. Yet reformulating and sequencing economic policies, and identifying the nature and extent of the crisis faced by different economic sectors will be essential for early recovery and continued advancement of the economy. The disruption in globalization necessitates considerable adjustments to enlarge internal capacity and strengthen the role of the State as decisive in stimulating the private sector, among other tasks.

## Reforming institutions and improving governance

Institutions are pillars of national transformation, sustained growth, governance, competitive strength, well-being and the happiness of people.<sup>352</sup> Institutions can make or break the success of a development path,<sup>353</sup> and there is a strong correlation between the quality of institutions and the overall performance of an economy.<sup>354</sup> Productive transformation in Nepal calls for removing barriers to institutions and strengthening their effectiveness.

Effective institutions take many forms, such as robust legal frameworks, representation in parliaments with strong capacity for oversight, proficient civil services providing time-

ly and quality delivery of public services, efficient judiciaries that uphold the rule of law, vibrant and actively engaged civil societies, and free and independent media. The fairness and effectiveness of such institutions largely depend on decision-making processes at the centralized and decentralized levels, which are influenced by political institutions. Both formal and informal institutions determine how power is managed and used, how States and societies arrive at decisions, how they implement those decisions, and how they measure and account for the results.<sup>355</sup> Reforms in diverse institutions, touching the political, economic, social and environmental arenas, can be a formidable task, but necessary to break the status quo and achieve tangible results through improved governance.

In Nepal, following the 2015 Constitution and State restructuring, substantial changes in institutions are underway. These centre on upholding the rule of law, enhancing access to services, containing corruption and misuse of power, fortifying transparent and accountable systems, improving development governance at all three tiers and building market institutions.

Under the federal system, apart from a process of streamlining various institutions and the bureaucratic apparatus at the central level, institutions created at the provincial and local levels are being strengthened to perform their assigned roles and responsibilities. In parallel, the strengthening of market institutions through revising or creating new rules and regulations is in progress. Public-private partnerships are being encouraged to improve institutional performance, among other ends. In addition to strengthening inclusive and participatory decision-making, the Parliament and assemblies are actively engaged in oversight. Various other efforts are striving to make political institutions more inclusive and accountable to the people.

<sup>352</sup> A growing literature is devoted to examining the multiple roles of institutions in economies. For comprehensive analysis and forceful arguments, see North 1990 and 1994, and Acemoglu, Johnson and Robinson 2005.

<sup>353</sup> For seminal work on the reasons for the diverse growth performance of various countries, see Hall and Jones 1999.

<sup>354</sup> A short review of theories and empirical studies on the role of institutions in economic performance can be found in Vitola and Senfelde 2015.

<sup>355</sup> Access to justice for all and building effective, accountable and inclusive institutions at all levels are major ingredients of SDG 16.

The Commission for Investigation of Abuse of Authority, a constitutional body, has been mandated to check the abuse of authority and control corruption, and the Government has declared a zero-tolerance policy on corruption. Civil society and media have grown markedly in recent years as independent watchdogs. The current 15th Five-Year Plan has given added priority to better outcomes and delivery, with a focus on improved supervision and monitoring.

The Constitution advanced a philosophy of the State, private sector and cooperatives as three pillars of the economy, outlining their catalytic and complementary roles. This was an attempt to avoid possible tradeoffs and ambiguities in the development functions of critical institutions. Guaranteeing fundamental rights, ensuring social protection to people in general and vulnerable people in particular, strengthening the regulatory system and above all leading transformation and prosperity comes within the responsibility of State institutions. Property rights, the freedom to choose an occupation, and guaranteed free movement for factors of production as well as goods and services support private sector institutions and create a suitable level playing field. The role of cooperatives in mobilizing resources and channelling them to boost production from the grassroots is duly recognized.

Various initiatives to reform institutions and improve governance are deepening democratic practices, creating an environment favourable to development, fostering better systems for reducing vulnerabilities in the economy, and transforming the economy in a more sustained way. Governance and corruption-related global indices indicate that Nepal has made progress in recent years in comparison to many low-performing countries.<sup>356</sup> But in absolute terms, it still lags far behind on both fronts. Inefficiencies and ineffectiveness, poor outcomes and delivery worsened by corruption, rent-seeking and unfair practices pose major challenges. Weak institutional capacity constraining the rule of law and contract en-

forcement as well as a tendency for the status quo to block institutional transformation are added obstacles. More robust reforms to take down critical barriers are imperative.

Systems upholding responsiveness, transparency and accountability should be institutionalized at all levels. This remains a major task. It requires replacing ad hoc decisions, pursuing a system of following up and tracking decisions, preventing the avoidance of responsibilities, and creating effective rewards and punishment both horizontally and vertically across various entities. In tandem with guaranteeing the right to information, controls should curb decisions made without proper democratic processes. While a responsive and accountable system demands transparency at all levels, a current tendency is for no one to be accountable or punishable despite the misuse of power, and weak performance and delivery. This approach has to be fully revamped through effective systems that prevent abuse of power, misuse of resources and irregularities, and operate across all three tiers of government. This will make institutions more responsive, transparent and accountable in general, and in particular will strengthen the rule of law, and discourage clientelism and patronage systems. Much depends on instituting a performance-based reward and punishment system.

Streamlining and strengthening state institutions is a high priority. Ambiguity in and overlaps among different authorities and responsibilities at the central, provincial and local levels need to be resolved to achieve coherency with constitutional arrangements. The principle of fiscal federalism has to be strictly followed and enhanced, including through more effective mechanisms for coordination among the three tiers, and by streamlining institutions to bolster efficiency and effectiveness. Creating institutions without a strong rationale should be discouraged, and robust criteria defining small and smart entities with high returns established and followed. A high priority is to build institutional and technical

<sup>356</sup> See the International Transparency Corruption Index 2020, where Nepal now ranks 113th out of 180 countries. The 2019 Worldwide Governance Indicators showed that despite fluctuations over the years, some steady improvements in indices like voice and accountability, political stability and no violence as well as the rule of law have taken place.

capacity at the provincial and local levels. Cooperatives and other community organizations also require strong support for institutional capacity, as does the private sector, especially small enterprises.

Political institutions have to be more responsive and accountable. A genuine democracy and robust governance system are possible only where political institutions follow democratic practices and develop mechanisms to hear and respond to people, including through

tors, products and financial markets require strong and transparent regulations.

Oversight committees in Parliament and at the provincial and local levels need to be more effective. Though various parliamentary committees perform oversight roles, and are central to responsive and accountable governance, the Government's huge financial obligations due to out-of-budget expenses, rampant financial irregularities in the payment system and policy manipulations indicate a need for more clarity on obligations to carry out committee decisions. Similar clarity is required for oversight committees at the provincial and local levels, which also require development of their capacities and functions.

Anti-corruption and auditing bodies need enhanced roles. The Commission for Investigation of the Abuse of Authority and the Auditor General's Office help control the abuse of power, contain corruption, and ensure proper resource use following accounting and financial rules. Bolstering their roles should aim at further strengthening rule-based governance systems, and bringing efficiency and effectiveness into public expenditure and financial management systems.

The roles of stakeholders, civil society and media should be specified and made effective through a policy that promotes a multiple system of cross-checks and verification. Beyond deepening decentralization through strengthening local governance capacities, a mechanism should be activated to involve concerned stakeholders and civil society organizations, including media, to play independent oversight roles at different levels, particularly on public service delivery and development-related issues. The system should encourage feedback and ensure prompt responses. State support could further develop the oversight role of media.

Performance-based progress monitoring and supervision should be introduced at all three tiers of governance. Nepal's development performance clearly shows that ongoing monitoring and supervision is inadequate.



**The roles of stakeholders, civil society and media should be specified and made effective through a policy that promotes a multiple system of cross-checks and verification.**

civil society organizations. Nepal's experience affirms that political institutions have to be inclusive, transparent and forward-looking to align with required changes in the State's governing structures and development agenda. This requires the introduction of systems upholding responsiveness and accountability, including through transparency around sources of income and expenses.

Market institutions and regulatory systems should be strengthened, and market capture practices contained. Market imperfections and market capture through monopolies, cartels and syndicates indicate a need to firm up market institutions to ensure the fairness and healthy functioning of a market system. This process could support the formalization of informal institutions and contain the informal economy, channel resources towards productive sectors and activities, and limit income and wealth inequality. Apart from correcting loopholes in rules and regulations that induce market capture or other distortions, a leading priority is to make regulatory systems effective and results-oriented. Fac-



A performance-based progress monitoring system, starting at the central level, can make development-related governance more results-oriented and effective. Such a system should uphold more responsive and accountable systems at all levels, cultivate a meritocracy, and introduce an effective rewards and punishment system in the bureaucracy.

To gear up for systemic reform, a top priority is to expand institutional use of information technology. Despite increasing uptake at all levels, use has yet to be sufficiently internalized to bring about reforms related to raising resource use efficiency, and improving delivery and performance. Information technology systems could support the more coordinated flow of information across all levels and entities, and ensure regular dissemination of information as part of better transparency and accountability.

## Conclusions

This chapter shows how Nepal should change its development paradigm and growth pathways. It can make major breakthroughs by driving economic sectors with the most potential, backed by economic policies and institutions equipped to accelerate rapid growth and sustain productive transformation. This will help to shift labour and capital from less productive to more productive sectors while creating more productive jobs and achieving higher labour productivity and value addition. Unleashing leading economic sectors with the greatest prospects for productive transformation will be as important as expanding the supply of productive resources as Nepal looks towards a meaningful and sustainable LDC graduation along with faster SDG progress and higher human development.



An integrated approach can optimize potential trade-offs and synergies among the social, economic and environmental spheres as part of a longer and broader human development process. In general, a much more ambitious policy and institutional reform agenda is required, going far beyond business as usual. It should address supply side bottlenecks; stimulate aggregate demand, both domestic and external; and build capacity to adapt and remain resilient to internal and external shocks. Underpinning this strategy should be the guiding principle of leaving no one behind. Stakeholders should collaborate with each other and synergize their efforts, and pursue proactive engagement with development partners.

*With a vision of productive transformation, Nepal needs to change its existing model of growth, which is fuelled by remittances and private consumption. It should aim for growth led by productive investment supported by aggressive import substitution and export promotion strategies.* The challenge is to diversify into a broad range of new economic activities, and promote domestic and foreign demand in order to generate more decent and productive jobs. Both hydroelectricity and tourism have strong potential as new sources of growth. Stimulating these sectors could accompany efforts to revitalize existing sources of growth in manufacturing and advance the commercialization of agriculture. Spurring growth and employment in all of these sectors will bring large-scale changes to the production structure through positive spillover effects in the overall economy.

As the key driver for economic transformation, hydropower resources require a holistic approach that aims at optimum exploitation and factors in climate resilience. With an ambitious energy transformation agenda, Nepal can jumpstart its transition to a sustainable

and inclusive green economy. The Government has a major responsibility in ensuring that the impacts of COVID-19 will be minimal in the energy sector in view of its central role in mitigating the health crisis while also accelerating the post-pandemic recovery for a more sustainable, just and resilient future.

For tourism to play a part in transforming the economy, a deliberate policy emphasis should be on developing the supply components of tourism products. A well-designed, integrated destination management plan should improve the quality and diversity of tourism offerings to maximize the length of visitor stays. Since tourism is one of the sectors most affected by COVID-19, recovery will likely be slow, but this provides an opportunity to restart tourism on a new footing. Post-crisis recovery planning must begin now to define more high-value, quality-oriented tourism practices rather than sustaining the reliance on mass tourism models. The adventure tourism industry has an opportunity to reset, and new forms of cultural and domestic tourism can be developed where income generated is retained in local economies.

Nepal cannot afford to bypass manufacturing and agriculture in its growth process. More aggressive industrialization through labour-intensive manufacturing could simultaneously boost productivity, productive employment creation and exports. Agricultural transformation calls for long-term agricultural development strategies that put a premium on employment-led inclusive growth, technological upgrading and diversification. Investing in agriculture in the near term will ensure food and nutrition security in the face of the current crisis, and may be the only viable option to provide immediate relief in the form of jobs and food security to a large number of migrant workers forced to return to Nepal due to the pandemic.

Nepal's road to equitable prosperity will be contingent on how fast it can improve its transport connectivity to relax supply side bottlenecks. A strategic expansion of its road network should fully integrate economic, social equity and environmental considerations in all stages of policy formulation, project planning, implementation and investment.

*Revamping economic policies, and reforming institutions and governance systems are prerequisites to steer the productive transformation of the economy.* Ongoing efforts to change economic policies largely rooted in market fundamentalism should be expedited and the policies made operational. Fiscal, monetary, finance and trade policies should be aligned behind inducing investment in higher production and productivity in the most promising sectors. These policies also should be calibrated to simultaneously push the supply and demand sides of the economy in ways that expand purchasing capacity through higher income and better employment. The pandemic, with its profoundly adverse effects on the economy in general and critical sectors in particular, underscores that revamping economic policies in a rap-



**Revamping economic policies, and reforming institutions and governance systems are prerequisites to steer the productive transformation of the economy.**

id way will spur faster recovery. Depending on the severity of impacts, prioritization and sequencing of policies will also be necessary. Policy adjustments and corrections should reflect the urgency of augmenting internal production and productive capacity given the disruption of globalization.

A similar imperative applies to reforming institutions to make them more responsive, accountable and results-oriented, aiming for substantial improvements in governance and service delivery. Enhancing institutional resilience especially at a time of abrupt shocks is one priority, as is bolstering institutions with the most critical roles in recovering from the pandemic and orchestrating the transformation of production.







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## Chapter 8

# Conclusions and Ways Forward

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Along with sweeping changes in its governance system, including reforms in regulations, policies and programmes in the aftermath of its 2015 Constitution, Nepal is embarking on a path to sustainable human development and more equitable prosperity. It aims to graduate from the LDC category by 2024 and accomplish the SDGs by 2030, rising into the middle-income group of countries in the process.

Human development indices and LDC graduation criteria at both national and provincial levels indicate notable progress. More disaggregated analysis, however, including an assessment of the likely impact of graduation, reveals high risks and vulnerabilities. Yawning gaps among provinces in both human development and graduation criteria, wide inequality between the ‘haves and have nots’, and gender disparities all reinforce the barriers to progress. The ways forward proposed here take both strengths and critical challenges into account.





## Conclusions

### **Nepal has made notable strides in overall human development and poverty reduction.**

With progress on all three basic dimensions of human development, it has reached the middle human development category. Between 2006 and 2014, the multidimensional headcount poverty ratio fell by more than half, and Nepal has outperformed many other South Asian countries on inequality indices measuring gender gaps as well as losses to human development. Major reforms in policies and institutions have scaled up girls' access to primary and secondary education, and extended better health care to women particularly in rural areas. A 33 percent reservation of parliamentary seats for women was a historic step. Overall, Nepal has created a strong basis to expedite human development in a sustainable way. Ongoing reforms to strengthen the federal system, and correct structural deficits to deepen democracy and achieve more equitable and sustainable development enhance its prospects.

**Nepal meets the graduation criteria.** More recent and updated estimates reconfirm that Nepal may qualify for LDC graduation by 2024. Of the three graduation criteria, it has kept up momentum on improving human assets and reducing economic vulnerability. The former has been fuelled by striking progress in higher gross secondary enrolment and literacy rates, and a steady reduction in undernutrition and under-5 mortality. On the latter, satisfactory progress is evident in expanding transport and other infrastructure, including to link remote areas; gradual changes in the structure of the economy through a continued reduction in dependency on agriculture; an increased share of manufactured products in total exports; and improvements in curbing the number of victims of natural disasters. Although Nepal lags behind on the graduation criterion for per capita income, realizing at least two of the three criteria speeds up preparations for graduation.

**Large human development disparities remain, however, between rural and urban areas, and among provinces.** Through higher income-earning opportunities and better access to education and health services, hu-

man development in urban areas has soared beyond that of rural areas. Similar disparities, including the uneven distribution of resources, big differences in access to health and education, and infrastructural and institutional capacity gaps, are evident among provinces, with Bagmati at the top and Province 2 at the bottom followed by Karnali. Gender disparities are particularly pronounced in Province 2, as are shortfalls in education and income. Gandaki province also has acute gender disparities. Human development lost due to inequality is highest in Karnali, indicating that in addition to lagging behind other provinces, it has substantial gaps within the province itself. Multidimensional poverty remains prevalent in Karnali, Province 2 and Sudurpashchim province compared to the national average. Overall gains in human development are offset to a great extent by poor performance on income and other dimensions across provinces.

### **Province-wise productive transformation with priority on lagging provinces.**

A closer analysis reveals that in terms of per capita income, all provinces except Bagmati are below the national average. Per capita income in Karnali, Province 2 and Sudurpaschim province is far below the national average. Similarly, the EVI is higher than the average for all provinces except Sudurpaschim province. With the provinces a kind of ground zero for sustainable graduation, the existing situation poses serious challenges to fast growth and transformation in an equitable way.

### **The impact of LDC graduation on international support measures in trade and development finance will be moderate.**

A quantitative analysis of the existing export structure shows that the abolition of trade preferences will affect less than 1 percent of exports to all preference-giving countries, except for the USA and European Union, where the share could be slightly above 10 percent. At the same time, no substantial loss in exports to the USA is anticipated as major exportable products do not enjoy preferential tariffs. There would be notable fallout in terms of the loss of flexibility in the implementation of the TRIPs Agreement, flexibilities to promote infant industries and access to LDC-specific decisions under the Doha Round negotiations.

The erosion in preferential treatment would have adverse implications for promoting domestic resource-based industries such as pharmaceuticals, expanding and diversifying the external export market, and embarking on a path to industrialization that includes protecting intellectual property rights, among others, given that Nepal is very rich in biodiversity. No major adverse impacts on ODA through multilateral financial institutions would be likely as their concessional loans are on a GNI per capita basis. Most bilateral donors rarely use LDC status to guide allocations of assistance, and additionally, they support countries after graduation in overcoming their specific challenges. Some countries, such as Germany, Japan and the Republic of Korea, do apply most favourable terms to aid, which may influence access. Other supports, mainly through the United Nations system, could be adversely affected.

In sum, net losses are likely due to the withdrawal of special facilities and supports in both trade and development finance. But the postgraduation experience of various countries also shows that foreign direct investment inflows may rise as a result of enhanced status internationally.

**Structural and institutional barriers, policy gaps and vulnerabilities pose major challenges.** Despite continued structural changes in the economy, these have not transformed productivity or produced sustained and high-quality growth. Stagnation in agriculture and deceleration in industry have compelled people to move to low-wage, low-productivity and vulnerable service sector jobs, or opt for foreign employment. This pattern has undermined productive capacity, and constrained growth and per capita income. Despite progress on several social fronts, the inequality embedded in the ownership of production factors, including assets and opportunities, has produced widening gaps in distributional gains, exacerbated by less responsive and in some cases discriminatory institutional systems at various levels. Resources, including human resources, are not used in the most productive ways. Although the federal governance system can make positive contributions to improving institutions, capacity constraints, poor coordina-

tion, and ambiguities in the division of power and authority are major hurdles.

Low income compared to the LDC graduation threshold level and high vulnerability in various provinces are added challenges to an equitable and sustainable graduation. Limited entrepreneurial capability, large infrastructure gaps and the inability to maximize a demographic dividend circumscribe economic transformation. Economic policies in general and macroeconomic policies in particular, with their longstanding exclusive focus on short-term stabilization, make limited contributions to changing production and trade structures in ways that could bolster productive capacity. Consequently, production is poorly linked to internal or external markets. Policy inducements for imports and consumption together with investment in unproductive areas, the erosion in export competitiveness and a sharp decline in the share of exports in total trade have expanded the trade deficit to an unprecedented degree.



**Low income compared to the LDC graduation threshold level and high vulnerability in various provinces are added challenges to an equitable and sustainable graduation.**

**Higher vulnerabilities are more apparent in the labour market.** The latest labour force survey shows a sharp fall in the participation rate, with women seeing an even steeper decline. Women's larger involvement in own account or family work without pay poses a major obstacle to economic empowerment and gender equality. A low overall participation rate is accompanied by a very high unemployment rate, especially among youth, both men and women. Labour market vulnerability is pronounced given that almost 84.5 percent of the labour force, or 81.1 percent of men and 90.5 percent of women, are employed in informal work. Despite continued expansion in social protection and the inclu-

sion of private-sector workers under contribution-based schemes, the informal sector is still out of the social protection net.

**Nepal is one of the most vulnerable countries to climate change and natural disasters including earthquake, storm, landslide, glacier lake outburst.** Floods, forest fires, droughts and other climate-induced disasters are all significant concerns. Livelihood and environmental security threats loom large especially for poor and disadvantaged groups. Current structural bottlenecks to growth and equitable distribution and numerous other constraints add to the inherent risk of multiple shocks in ways that go far beyond the current LDC graduation criteria.

## The way forward

Notwithstanding notable progress in many areas, Nepal's structural impediments and gaps require strategic breakthroughs on multiple fronts to make graduation a milestone in achieving and sustaining human development and equitable prosperity.

A radical shift must take place, simultaneously, on both the supply and demand sides of the economy. On the supply side, the focus should be on enhancing productive capacity and transforming the economic structure through the expansion and efficient use of productive resources. In this, strengthening institutional capacity, entrepreneurial capability and production linkages will be crucial. Gender equality, human resources and equity dimensions are other integral elements. On

the demand side, major changes in the structure of investment should directly enhance productive capacity. In tandem, consumption demand among a larger segment of the population would grow through better employment, wages and distributional effects. Market networking with production links is important to firm up both supply and value chains, especially amid a changing trade structure and towards the promotion of exports.

This strategic shift should be accompanied by significant reforms in national policies and institutions. Transformation should also be pursued and intensified at the provincial and local levels, taking resource endowments, comparative advantages and potentials into account through complementary strategies and effective coordination by the centre. The private sector needs to be mobilized behind expanding and changing investment in productive capacity, prompted by economic policies and market institutions. Co-operatives are vital in channelling resources towards production, productivity, marketing and distribution at the grassroots. Enhancing resilience will be critical.

Nepal needs a robust transitional strategy for smart and non-reversible graduation. The recommendations that follow suggest some directions.

## Beyond graduation: pathways to sustainable human development

Human development involves improvement in well-being through enlarging people's choices, freedom and opportunities in all areas of economic, sociocultural and political life. Equity, empowerment and sustainability are critical dimensions. LDC graduation is a milestone towards human development. Moving past that point in a sustainable fashion requires enhancing human capabilities and transforming the economy in a productive way. The pathways presented here take



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various tradeoffs, risks, vulnerabilities and constraining factors into account, in the spirit of the 15th Five-Year Plan and the SDGs.

### Expanding human capabilities

Expanding human capabilities is the major aim of human development. The human capability approach perceives well-being in terms of a person's set of capabilities, and development as a process of expanding these. Investing in human capability expansion on a sustained basis will be critical for a smooth LDC graduation. This also requires creating opportunities for people to use capabilities. Education, health, entrepreneurship and demographic dividends are dimensions requiring substantial investment.

### Prioritize access to quality education in lagging provinces

With all children receiving a full education and health care, Nepal's GDP could be two times larger. Access to quality education for all calls for substantial reforms in public education with a particular focus on equitable access to quality learning. High dropout rates at secondary level must be reduced. Targeted scholarship programmes for girls need to be more effective and linked to clear results. Wide gaps in education across provinces must be eased through effective coordination with the federal and local levels, with an initial major policy focus being disparities and gender gaps in Province 2 and others lagging furthest behind.

More technical education at the provincial level will help close skills mismatches in the labour market. Broadly, boosting entrepreneurial capabilities and innovation should be integral to education and the national long-term development strategy to cope with faster technological change and greater international competition. Reforms, changes and priorities should be incorporated in the proposed Education Sector Plan (2022-2030).

### Focus on integrated health services delivery system

Nepal needs to develop an umbrella policy for overall management of well-coordinated health service delivery under the federal structure that ensures equitable access to

affordable and quality health care. Achieving the national SDG health targets will require a massive increase in public spending, particularly at the provincial and local levels. Scaled-up investment is also imperative to shrink the gap in health services between urban and rural areas. Private and public partnerships could help improve access, deliver quality health care and expand health insurance coverage.

A related priority is to tackle the malnutrition challenge by applying a multisectoral and coordinated approach. Sustaining gains in health outcomes will require new responses to threats from rising non-communicable diseases.

### Harnessing the demographic dividend

Nepal's demographic structure is in the middle of a youth bulge, which presents a real opportunity for transforming the economy. Major economic and social policies, including labour market policies, must be redesigned and implemented, however, and backed by the right institutional supports. Strategic investments in education, health and employment to reap the demographic dividend can be cost-effective and make lasting contributions to human development. Along with reforms in education, measures to enhance skills should be prioritized to increase the employability of youth. The creation of productive employment should be viewed as integral to nation building.

### Policy framework for fostering entrepreneurial capabilities

Entrepreneurial capabilities are essential elements of productive capacities, and key to sustainable development, poverty reduction, gender equality and environmental sustainability. The restructuring and reorientation of education systems to emphasize entrepreneurial aptitude should take swift technological changes into account, which are making older capabilities obsolete. There should also be marked improvement in the environment for entrepreneurship to attract investment in transformative sectors. A comprehensive entrepreneurship policy framework would be an important step. It should give priority to boosting entrepreneurial capability at both

the provincial and local levels, while also strengthening the institutional capacities of provincial and local governments.

### **Reducing infrastructure gaps and strengthening connectivity across provinces**

Transformation and equitable prosperity in Nepal will, to a great extent, depend on how fast it expands transport connectivity throughout the country. Massive scale-up in connectivity in backward provinces like Karnali and Sudurpaschim is urgent. Relaxing supply side bottlenecks, reducing production and transaction costs, attracting investment in productive areas, augmenting markets and enhancing more equitable development all demand strategic policy shifts across the three tiers, operating in a coordinated, non-redundant and efficient way. Unlike in the past, connectivity has to be linked with strategies that induce production, businesses and services, and facilitate multiple spillover effects.

### **Transforming high-potential sectors for high-quality growth and prosperity**

Agriculture, manufacturing, energy and tourism are the most promising sectors for economic transformation. With more robust and forward-looking strategies, they could push the economy in a more dynamic direction, achieving higher growth and productivity, employment generation, internal production capacity and exports. Current low per capita income indicates the need for a more forward-looking strategy. It is equally necessary to reprioritize related programmes, within and across sectors, and revamp policies and institutions to make them effective and results oriented.

In the federal context, spatial dimensions should be the overriding priority. Province 2, for instance, possess very high potential in agriculture and a simultaneous industrialization drive. Large areas of Province 1 have huge potential for commercial agriculture and scope for agro-industries. All provinces possess comparative advantages in various types of manufacturing, as do all provinces except Province 2 in energy. Each province also has prospects for tourism given religious

or archeological sites, natural beauty or modern tourism amenities.

Nepal needs to harness its comparative advantage in agriculture as a priority, given unique and diverse agro-climatic conditions with high potential for niche products that could advance economic diversification and commercialization. The 20-year Agricultural Development Strategy (2015-2035) needs a new roadmap under the federal structure for creating a sustainable, competitive and inclusive agricultural sector across provinces. An operational strategy of import substitution for food, vegetables, fruits, livestock and other essential products has to be developed to give such products a competitive edge. Apart from value chains in production, supply chains through cooperatives should be promoted via policies to integrate agricultural markets throughout the country.

Both hydroelectricity and tourism have strong potential as new sources of growth and employment, and for changing production structures with positive spillover effects. Optimum exploitation of hydropower resources is in fact a key driver for transforming the entire economy. This calls for taking a more integrated, holistic and climate-resilient approach, along with accelerating the regional energy trade and cooperation. Tourism is still an unexploited source of transformation. Realizing its strong potential calls for a deliberate policy emphasis on the supply components of tourism products. A well-designed and integrated destination management plan should focus on improving the quality and diversity of tourism offerings to encourage tourists to maximize their visits.

Industrialization is integral to productive transformation and prosperity, as proven time and again in countries around the world. Many countries, including Nepal, have suffered from the neglect of industries in recent decades. It is time for industrialization to be given renewed priority, including through an aggressive strategy to back export and import-substituting industries. In the process, the policy of negative protection for industries has to be overhauled, and adequate incentives for domestic resource-based in-



dustries provided factoring in spatial dimensions. The development of local micro and small-scale industries is a priority. Industrialization in general should be linked with internal market potentials and exports to address an unsustainable trade deficit, more so given the likelihood of adverse implications from LDC graduation.

### **Addressing vulnerability, reducing inequality and building resilience**

Reducing high risks, vulnerabilities and inequalities requires robust strategies for resilience and the reduction of inequality. These must be coordinated and complementary across all three tiers of governance, and address structurally generated poverty, vulnerable employment and social exclusion. Given the alarmingly high unemployment rate among youth and pervasive informality, with the vast majority of the workforce trapped in vulnerable employment, Nepal needs to vigorously pursue productive employment that leads to inclusive growth, along with a well-coordinated national social protection strategy. It must bring informal organizations and representatives into policymaking process, and prioritize reforms to reduce inequality as integral part to national development strategies.

Addressing multidimensional inequalities depends on more equitable access to capabilities and opportunities, alongside measures to increase access to assets and other productive resources, improve income and institute progressive taxation. A new strategic plan for climate change and natural disaster management should aim at sustaining inclusive and resilient growth and development over the longer term. To tackle climate-induced human security threats, Nepal should pursue a more integrated adaptation strategy that operates across sectors and policies, while also taking more proactive and coordinated efforts to manage disaster risks. An umbrella law will be instrumental in bringing together the different strands.

### **Enhancing gender equality and empowering women**

Ambitious reforms on multiple fronts are required to uproot gender inequality. Discriminatory norms, values and practices must be



**Addressing multidimensional inequalities depends on more equitable access to capabilities and opportunities, alongside measures to increase access to assets and other productive resources, improve income and institute progressive taxation.**

brought to an end. Besides policies encouraging changes in property ownership, equal inheritance rights to parental property need to be granted to women as per the Constitution. Gender gaps within and across provinces need to be closed, giving priority to women's economic empowerment through labour market and employment policy reforms. Beyond increasing women's participation in the labour market, this requires developing skills that boost employability, and incentivizing a greater share of women in productive employment. Unpaid care work should be recognized as productive work, and rules designed and implemented accordingly. More specifically, a transformative approach should be followed in which recognition of the value of unpaid care work, redistribution of care work, appropriate mechanisms of reward for care work and promotion of the representation of care workers in decision-making and policy processes will be required. Preferences for male workers and wage discrimination have to be checked, and incentives devised to bring more women into higher decision-making roles in businesses. More meaningful application of gender-based budgetary system and gender equality and social inclusion policies is needed across all three tiers of governance. Rights-based education and awareness programmes are other priorities.

### **Revamping economic policies and reforming institutions and governance for productive transformation**

Revamping economic policies and reforming institutions and governance will undergird sustainable LDC graduation and human development. For rapid expansion in the productive base of the economy and structural transformation, the foremost necessity is to

overhaul economic policies rooted in market fundamentalism and driven by procyclical stabilization premises. Fiscal, monetary, finance, trade and exchange rate policies all have to be redirected to unleash productive resources in a more efficient and equitable manner. They should simultaneously augment production and productivity, and facilitate changes in demand structure through inducing productive investment, creating decent employment and enlarging purchasing capacity. Policy coherency will ensure that both the supply and demand sides of the economy are well balanced and integrated, playing complementary roles. This is necessary for overcoming supply bottlenecks, low productivity, eroding opportunities and the decelerating purchasing power of a large section of the population.

On the fiscal policy front, major restructur-

controlling tax leakages, and orchestrating incentives to boost productive investment and enlarge internal production capacity. Monetary and financial policies should play both stabilizing and growth roles, moving beyond the orthodox view that prices are simply monetary phenomenon. This will require a substantial shift in the banking and financial sector lending portfolio. Boosting productive investment, higher production and growth with positive supply side effects could help contain prices and stabilize the economy more effectively.

A trade policy focused simply on stimulating imports, avoiding protection of domestic investors and eroding the productive base of the economy has to be reversed. Trade creation and diversification through incentives for internal production that facilitate industrialization and strengthen external trade linkages through supply chains should be major thrusts. Raising the competitiveness of exports requires reducing transaction and other trading costs. The pegged exchange rate system be reviewed to correct the misalignment of prices that encourages imports and erodes export competitiveness. Another priority is to develop and diversify the capital market. Policies should aim at bringing the poor into the market system with fair access to benefits. An integrated policy could link disparate pieces together to steer investment in desired directions.

Structural barriers and poor delivery underscore the need for deeper reforms in institutions and governance. Institutions at all levels need to be more responsive, transparent, accountable and results oriented. A credible and effective reward and punishment system should be in place. State institutions should be streamlined and strengthened in line with the new federal system, and political institutions should be made more responsive and accountable through ensuring that they follow democratic rules in decision-making, and uphold transparency around funding sources and expenses. Other priorities are to strengthen market institutions, fortify regulatory systems and contain market capture practices. Enhancing the effectiveness of oversight committees in parliament, and at



**A trade policy focused simply on stimulating imports, neglecting incentives to the domestic investors and eroding the productive base of the economy has to be reversed.**

ing and reforms in public expenditure and financial management must be preceded by a system that ensures efficient resource allocations through an improved planning and budgetary system. In addition to restructuring the medium-term expenditure framework, a medium-term budgetary framework needs to operate at the ministry level, and a medium-term outcome and performance-based monitoring system applying to all development initiatives should be introduced at all three levels of government. This will help to strengthen a performance or outcome based budgetary system, which, in turn, will help to enhance efficiency in resource use and raise the productivity of government investment.

A greater focus on restructuring the tax system through an expansion in direct tax bases should entail strengthening tax progressivity,

the provincial and local levels is essential, as is bolstering anti-corruption and auditing bodies. The roles of stakeholders, civil society and the media should be defined and supported through a system of cross-checks and verification. Institutionalizing information technology systems in all public entities, including public services, can accelerate reforms, including through more effective performance-based progress monitoring and supervision.

### Transform the local level as a pillar of equitable human development and prosperity

Most provinces lag behind on the LDC graduation criteria. Human development gaps are significant, amid widening inequality and continued deprivation. These issues underscore the imperative for a productive transformation that begins from the grassroots. The local level is in many respects the starting point for tapping potentials and comparative advantages in a more efficient way, reaping demographic dividends, and ensuring shared prosperity through equitable access to resources, services and opportunities.

Planning, budgetary and policy processes must recognize the power of localities in cutting the roots of persistent problems and enhancing resilience. This will require a major transformation at the local level, building on enhanced institutional and technical capacities, among other priorities. Human development and vulnerability indices should be established for each locality to accurately depict local needs, and comprehensive local human development and prosperity agendas initiated in a coordinated manner.

## A sustainable graduation strategy

In aiming for sustainable human development beyond LDC graduation, Nepal needs a three-year transition strategy to make graduation smart and non-reversible by minimizing risks and maximizing opportunities. Based on the transition experiences

of graduated countries, and an assessment of Nepal's socioeconomic structure and the potential impacts of graduation, the following are suggested elements of the strategy.

**1** Since graduation will result in the loss of preferential market access and concessional loans, which could potentially affect various sectors of the economy and government budgetary allocations, an inclusive and high-visibility national committee for LDC graduation should be formed. The committee should take the lead and coordinate with other government agencies, the private sector and civil society on LDC graduation-related activities. It can coordinate with the UNDP country office, and negotiate with relevant development and trade partners to prepare a detailed transition strategy.

**2** An effective institutional system is required to navigate the new development cooperation landscape, effectively compete for finance, and conduct development-friendly negotiations around bilateral and regional trade and private foreign direct investment. Institutional capacity will be crucial in maintaining the trade share in different markets and implementing international agreements, such as the TRIPS Agreement. Nepal needs to elaborate institutional gaps in the transition strategy, and may request development partners and United Nations system to support initiatives to strengthen institutions.

**3** To assist smooth LDC graduation processes, the UN General Assembly passed a resolution in 2005 inviting "development and trading partners to consider extending to the graduated country trade preferences previously made available as a result of LDC status, or reducing them in a phased manner in order to avoid their abrupt reduction."<sup>357</sup> Accordingly, the European Union decided to extend market access under the Everything But Arms programme for an additional three years following graduation. The WTO's EIF extended support for three years and an additional two years on a case-by-case basis. The Technology Bank

<sup>357</sup> United Nations 2005.

**“ Nepal should request additional financial and technical support to strengthen productive and trade-related capacities, and mitigate the adverse consequences of lost international support measures.**

for the LDCs also offers support to graduating countries for an additional five years. Nepal should negotiate with trading partners, including Japan, the United States and developing countries, to extend existing DFQF schemes for at least five years beyond graduation. The South Asia Free Trade Area contains a provision in Article 12 that the Maldives will be accorded LDC treatment after its graduation; Nepal should request the same treatment.

**4** Nepal needs flexible and lenient rules of origin for its exports under preferential arrangements. Under the standard GSP schemes for developing countries, the rules of origin are more stringent and difficult for Nepal to satisfy. For example, under Everything But Arms, the rules of origin for LDCs require a single transformation for exports of apparel, while under the standard GSP, certain items require a two-stage transformation.

**5** After graduation, Nepal will lose flexibilities to implement WTO agreements. This may adversely impact policy space for industrial and agricultural development. It is imperative to request WTO members to allow flexibilities under Article 15.2 of the Agreement on Agriculture, which exempts LDCs from commitments to reduce tariffs and subsidies. Similarly, there is a need to extend export subsidies provided under Article 27.2 and Annex VII of the Agreement on Subsidies and Countervailing Measures. Since TRIPS and public health decisions of the WTO exempting LDCs from protections on intellectual property through patented pharmaceutical products will expire in January 2033, efforts should be made to secure their continuity for several more years.

**6** Nepal should request additional financial and technical support to strengthen productive and trade-related capacities, and mitigate the adverse consequences of lost international support measures. Additional resources are needed to more effectively leverage domestic resource mobilization.

COVID-19 is now a mounting health, humanitarian and economic crisis profoundly affecting critical dimensions of human development and LDC graduation. Nepal must pivot to address an unprecedented crisis on multiple fronts, even as it attempts to sustain an agenda for human development, productive transformation and graduation.



Epilogue

# Mitigating the COVID-19 Crisis and Building a Resilient Future

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The global COVID-19 pandemic was just beginning when this report was being finalized. It is still unclear how long the pandemic will last and when the economy will be back to normal or a ‘new normal’. Either way, the ramifications may be felt long after the virus is under control. Different sections of this report have flagged some considerations. This epilogue pulls them together and sketches some options for future policy directions.

Nepal experienced its first case of COVID-19 in January 2020. The Government suspended all international flights followed by a country-wide lockdown that started in March and lasted almost four months. Since then, lockdowns have continued in hotspots experi-

encing outbreaks of the virus. As a combined health, humanitarian and economic crisis, the pandemic has severely affected both the aggregate demand and supply sides of the economy, constraining the ability of people to work and firms to produce. The possibility of a slow



recovery or protracted economic slump—with growing vulnerability among women, low-income earners and older people, leading to higher poverty and inequality—looms large. A prolonged slowdown implies loss of incomes, rising joblessness and unemployment, an accumulation of public debt, bankruptcies of industries and businesses on a mass scale, and threats to the financial stability of the banking system. It could halt or even reverse progress made on human development and the LDC graduation criteria, and cast doubt on achieving the SDGs by 2030.

Nepal faces a number of structural impediments to coping with the multiple shocks of the crisis. These comprise a fragile health system, embedded inequalities, excessive external dependency, a highly informal economy and labour market, and weak governance, among other factors. In Nepal and other countries, the crisis has revealed just how fragile societies have become, their dysfunctional relationship with nature, and the perils of a development model rooted in market fundamentalism. The pandemic has taught an important lesson around investing in health infrastructure now since economic strength and public health are inextricably linked and mutually reinforcing.

Nepal has taken a number of steps to manage the crisis, providing relief to those who have lost jobs and other vulnerable people, and attempting to mitigate deepening economic shocks to sustain and eventually reinvigorate development momentum. Initially, the top-most priority was improving the institutional and technical capacity of a fragile health system. In parallel, to deal with the livelihood problems emanating from the lockdown and movement restriction, the Government introduced relief packages with food and other necessities. The Prime Minister's Employment Program provided additional relief through discounts on utility bills. Tax rebates and delayed payments assisted the business and industrial community, and concessional loans were extended to severely affected sectors.

The Nepal Rastra Bank announced liquidity support to banks for facilitating credit to the private sector. Key measures included relaxing regulatory requirements for banks and financial institutions, and a reduction of targeted interest rates as part of the country's interest rate corridor. The bank also allowed delayed loan and interest payments. A refinancing facility focused on small businesses and industries, drawing on NRs 60 billion, a sum later extended to NRs 100 billion. The central bank directed other banks to reduce interest rates by 2 percentage points for the fourth quarter (mid-April to mid-July), and instructed microfinance companies to lower their interest rates by up to 3 percentage points.

In the budget for fiscal year 2020-2021,<sup>358</sup> a major step was a 32 percent increase in funding for the health sector. Of this, NRs. 6 billion is allocated exclusively to health needs from COVID-19. The budget sustains the relief package, and features various rebates and facilities for severely affected sectors, such as tourism, agriculture and industry in general, and cottage and small enterprises in particular. Income tax, value added tax and customs duties exemptions were announced. The central bank gained a NRs 50 billion fund for refinancing. A scheme of direct employment for more than 700,000 people will operate through the Prime Minister's Employment Program, the Prime Minister's Agriculture Modernization Project and other local development programmes. Agriculture, manufacturing, energy and infrastructure are designated as major drivers for reviving the economy, generating employment and enhancing resilience.

Monetary policy for 2020-2021 is a comprehensive package focusing on relief to the hardest-hit industries and businesses, and restarting the economy.<sup>359</sup> The loan and interest payment schedules of businesses and industries have been extended from six months to one year. Through a refinancing facility with a 1 to 3 percent interest rate, banks and finan-

<sup>358</sup> Budget speech of the MoF for the current fiscal year 2020/21. MoF 2020.

<sup>359</sup> NRB 2020a.

cial institutions will charge only 2 to 3 percent interest for export-oriented and struggling micro, cottage and small industries. Banks will channel 40 percent of total lending to three priority sectors, agriculture, energy, and micro, small and medium industries, and cannot charge more than 5 percent interest in these areas. Of total loans, 15 percent has to go to micro, small and medium industries, not exceeding a limit of NRs 10 million. For ensuring enough liquidity and maintaining financial stability, the upper bound of the interest rate corridor has been maintained at 5 percent. The repo rate as a policy rate has been reduced to 3 percent, while the deposit collection rate as a lower bound has been fixed at 1 percent.

Though prompt action on multiple fronts enabled Nepal to contain the pandemic for some months, an open border and a continued rise in COVID-19 cases in neighbouring countries accompanied by the return of a large numbers of migrants has increased risks that the virus will spread. Capacity and supply constraints, weaknesses in preparedness including slow testing and tracking, limited coordination vertically and horizontally, and certain lapses in governance are ongoing challenges.

Inadequate health services and interrupted access to nutritious food are now compounding health problems. With fear of infection in hospitals, pregnant women are increasingly opting for unattended deliveries. More children under 5 and newborns lack adequate nutrition and emergency health care, leaving them prone to malnutrition, stunted growth and infections. Children in poor households face the most acute vulnerability, losing physical growth and brain development at crucial stages of life. Non-COVID-19 patients in general and elderly people fighting life-threatening diseases in particular are deprived of treatment in hospitals. Mental health and psychosocial problems are rising, along with rates of suicide and gender-based or other type of domestic violence. All of these issues are exacerbating inequalities in health care, with the most adverse effects on women and other vulnerable people.

COVID-19 has severely disrupted education. School closures intensify risks of declines in enrolment and increased drop-out rates, potentially more so for girls. Out-of-school children are also struggling with psychological problems including depression. Despite attempts to continue learning online, most remote rural areas lack computer and Internet facilities. Technical education in particular has been badly affected given the need for access to laboratories and field visits, with potential medium- to long-term impacts on human resource development. A long gap in reopening colleges and universities could increase education costs and dampen student interest in education, while in poor families that have lost income or employment, children may be compelled to leave school for work and family support activities.

Though various relief programmes have eased fallout on those who have lost jobs and assisted the most affected businesses to some extent, on balance, they have been inadequate in view of a humanitarian and economic crisis that continues to grow. The measures announced so far have not included a stimulus package, which is key for economic recovery from a protracted disruption in production, supplies, exchange, income, employment, consumption and livelihoods. The preliminary estimates show around 2.3 percent of economic growth<sup>360</sup> in fiscal year 2019-2020 due to a sharp fall in sectors like mining and quarrying, manufacturing, tourism, construction and transport, recent trends indicate that growth may be further lower given very adverse effects on manufacturing and selected service sectors like tourism and transport.

Slow growth coupled with the weak structure of the economy in terms of its sources of growth, income, employment and productivity exacerbate the downturn, underlining the imperative of a stimulus package. Remittance inflows, a lifeline of the economy, have decelerated, for instance. Such trends may affect the lending capacity and financial stability of the banking system, foreign exchange and government revenue, among other aspects,

<sup>360</sup> For a growth estimate, see MoF 2020a.

leading to further negative spillover effects. Other pressures stem from the large numbers of youth returning from foreign employment, the loss of tourism as one of the promising sectors, trade disruption, and breakdowns in supply chains and markets.

Workers continue suffering in a mostly informal labour market. With no immediate push for economic revival, many face lasting joblessness, even as they also lack social protection.<sup>361</sup> Further, a large number of Nepalese are returning from abroad, with implications not only in terms of the loss of remittances but also in swelling demand for employment. Relief packages for the jobless have fallen short, providing insufficient funds to purchase food, for instance. Many of the people most in need reportedly do not access even this limited benefit. A more comprehensive strategy is required to cope with immediate health, humanitarian and economic needs, and, looking forward, to create grounds for revitalizing development and accelerating productive transformation of the economy.

Nepal has been conducting comprehensive impact assessment in different sectors. Broadly, on the health front, major concerns comprise very limited diagnostic facilities; insufficient health workers; limited resources such as hospital beds, personal protective equipment, intensive care units and ventilators in hospitals; and weak administrative capacity, among others. On the economic side, the crisis has afflicted almost all sectors while amplifying pre-existing inequalities, unemployment, exclusion, poverty and other vulnerabilities.

At the same time, despite many pressures, the crisis represents an opportunity to re-vamp existing social and economic systems. The urgency of improving the health system, addressing people's livelihood deficits and strengthening the welfare role of the State has started, to some extent, a move in that direction. Further advances and systemic reform should aim for realizing the social and economic rights of the most deprived, pursuing equitable economic growth, enhancing productive employment, accelerating pros-

perity more broadly and realizing greater resilience. This will require reprioritizing the prosperity agenda and the SDGs as the current unprecedented situation continues to evolve, keeping in mind that the State has committed to economic and social rights, including an employment guarantee, through existing laws.

Amid multiple crisis, recovery measures should go beyond merely responding to the pandemic, seeking to build resilience to a variety of risks, including climate change, biodiversity collapse, widening inequality and worsening vulnerabilities. They should address the underlying causes of systemic risks, through inclusive, practical and targeted reforms and investments that balance socio-economic and environmental priorities. Re-designing and scaling up relief programmes to combine both short-term emergency employment programmes and longer-term employment-intensive public works schemes for vulnerable populations is of paramount importance. Also critical is social protection for vulnerable populations, particularly women, youth, low-wage workers, people in small and medium enterprises, and the informal sector. A universal minimum income approach should integrate social security, social protection, employment and other related programmes.

A medium- to longer-term recovery plan should pursue a demand-led strategy of job creation in strategic economic sectors, prioritizing drivers of growth, diversification and productive transformation, while addressing supply side bottlenecks by augmenting human capabilities and addressing vulnerabilities. During and after the COVID-19 pandemic, the SDGs could be the basis for a new framework for reviving and accelerating development, given the imperative of a multi-dimensional approach to health, economic, social and environmental issues. Nepal must also overhaul policies, institutions and governance systems to remove structural bottlenecks that have stalled past progress in reducing vulnerabilities and achieving productive transformation.

<sup>361</sup> ILO 2018.

### Priority Options for a Transformative COVID-19 Recovery Plan

Recovery plans should be guided by the principles of green economy to build long-term resilience and prosperity,<sup>362</sup> and by the participation of all stakeholders as core to a transformative recovery. Some priorities are:

1. Design and implement evidence-based policy and programme interventions informed by a socioeconomic impact assessment. Judicious policy sequencing should aim at short-term relief in terms of livelihoods and the recovery of the economy, medium-term recovery, and long-term resilience to maximize economic, climate and social outcomes. Implementation calls for strengthening fiscal federalism; articulating the enhanced role of the private sector, cooperatives and communities; and participation of people at large.
2. Balance socioeconomic and environmental priorities, and go beyond responding to the pandemic to build resilience to risks, including future health pandemics, natural disasters, climate change, biodiversity loss and widening inequality.
3. Integrate inclusive green economy approaches into immediate relief policies, medium-term economic stimulus packages and longer-term transition planning. This could reduce vulnerabilities and promote inclusive growth by accelerating clean energy and natural capital investment, creating green jobs and restoring the environment.
4. Support universal access to the Internet and associated technology among students, and align education policies with the emerging dynamics of online learning.
5. Build resilience to external economic shocks through investing in energy, agriculture, water, health and sustainable infrastructure, while accelerating uptake of digital technologies and green solutions.
6. Adopt a systems approach that emphasizes multidisciplinary and multisectoral approaches to improve preparedness for and resilience to future pandemics.
7. Pursue a gender-responsive recovery plan that can effectively address gender-differentiated impacts and drivers of continued gender inequalities.
8. Support small and informal enterprises as the vanguard for formalizing the informal economy.
9. Develop universal minimum income threshold criteria, and integrate social security, social protection, employment and other related programmes that reduce social and economic vulnerability, and enhance development overall by raising the purchasing power of people at large.
10. Expand sustainable agriculture, including diversified food production and supply systems through mechanization and subsidies based on agroecology and climate-smart principles, as a means of bolstering rural employment and food security.
11. Strengthen public-private partnerships and business-to-business cooperation while improving global cooperation and coordination to resolve the lack of fiscal space for recovery and its impact on progress towards the SDGs.
12. Finally, Nepal is likely to experience deterioration on all LDC graduation criteria, in line with other LDCs, as reflected in a report by the UN Secretary-General<sup>363</sup> and expressions of concern by the Committee for Development Policy. The Committee noted that COVID-19 may negatively impact preparations for graduation at the next triennial review.<sup>364</sup> A decision on graduation demands a detailed socioeconomic impact assessment accompanied by further consideration of the likely impact on exports, remittances, investment, domestic resource mobilization and concessional development finance in a difficult and challenging environment.

<sup>362</sup> These principles include well-being, justice, sufficiency and efficiency, planetary boundaries, and good governance that leaves no one behind, upholds human rights, protects the most vulnerable in our societies and creates new, green jobs.

<sup>363</sup> UN General Assembly: Implementation of the Programme of Action for the Least Developed Countries for the Decade 2011-2020, Report of the Secretary-General, 19 March 2020, A/75/72.

<sup>364</sup> CDP 2020.

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# ANNEXES

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## Annex 1

# Technical Notes on Human Development Indices

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This technical note presents the methodological underpinning and computation illustration of updated version of human development indices such as human development indices (HDI), inequality adjusted HDI (IHDI), Gender Development Index (GDI) and Gender Inequality index (GII) used for this report together with the data sources and underlying assumptions.

### Human Development Index (HDI)

The HDI measures the average achievement in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Calculating the HDI requires first transformation of different units of dimension indicators to a unit-free scale ranging from zero to one using the minimum and maximum values (goalposts) set for each indicator. In recent times, changes have been made to the HDI in terms of indicators, goalposts and aggregation

method. Table 1 captures such changes in a summarized fashion. Prior to 2010, the HDI was calculated as the arithmetic mean of the dimension indices which allowed for perfect substitution between dimensions such that a low achievement in one dimension could be compensated for in the HDI calculation by high achievement in another dimension. To reduce the level of substitutability between dimensions, aggregations are made using the geometric mean of the dimension indices. This approach ensures that a one per cent decline in, for example, life expectancy at birth, has the same impact on the HDI as a one per cent decline in education or income.

Table 1 **Summary of HDI reforms in terms of indicators, goalposts and aggregation method**

DIMENSIONS	PREVIOUS HDI PRIOR TO 2010 GLOBAL HDR			HDI NOW IN 2018 GLOBAL HDR		
	INDICATORS	TRANSFORMATION		INDICATORS	TRANSFORMATION	
		MINIMUM	MAXIMUM		MINIMUM	MAXIMUM
Health	Life expectancy at birth (years)	25	85	Life expectancy at birth (years)	20	85
Knowledge	Adult literacy rate (%)	0	100	Expected years of schooling	0	18
	Combined gross enrolment ratio (%)	0	100	Mean years of schooling	0	15
Standard of living	GDP per capita (PPP US\$)	100	40,000 (capped)	GNI per capita (2011 PPP US\$)	100	75,000
Aggregation	<b>Arithmetic mean</b>			<b>Geometric mean</b>		

Source: UNDP Global HDR 2010, 2014 and 2019

### Data sources

- Life expectancy at birth:** Nepal Demographic and Health Survey, NDHS (2016), Ministry of Health and Population. Calculated taking Under-5 mortality rate obtained from NDHS 2016 to construct the life tables (separately for male and female) and overall life expectancy is calculated using male and female life expectancies. The UN General Model Life Table pattern is used for the construction of life table.
- Expected years of schooling:** Education Statistics of Nepal 2018; Ministry of Education Science and Technology. Calculated using enrollment percentage by level of education (Basic, Secondary and tertiary) and duration of the enrollment as recommended by UN - UIS method.
- Mean years of schooling:** National Population and Housing Census PHC (2011) Central Bureau of Statistics. UNESCO Institute for Statistics (UIS), 2018 method adopted for compiling Mean Years of Schooling
- GNI per capita:** National Accounts of Nepal Central Bureau of Statistics (2019) and UNDP Global Human Development Report (2018).

### Illustration of HDI Calculation (Example: Mountains)

#### Dimensions' Indicators

Life expectancy at birth (years) = 67.69

Mean years of schooling for ages 25 + = 4.648

Expected years of schooling = 13.08

GNI per capita (2011 PPP \$) = 2286

#### Dimensions' indices

$$\text{Life Expectancy Index} = \frac{67.69-20}{85-20} = 0.733$$

$$\text{Mean Years of Schooling Index} = \frac{4.648-0}{15-0} = 0.310$$

$$\text{Expected Years of Schooling Index} = \frac{13.08-0}{18-0} = 0.726$$

$$\text{Education Index} = \frac{0.310+0.726}{2} = 0.518$$

$$\text{GNI Index} = \frac{\ln(2286) - \ln(100)}{\ln(75000) - \ln(100)} = 0.4727$$

$$\text{Human Development Index} = \sqrt[3]{0.733 \times 0.518 \times 0.473} = 0.564$$



## Inequality-adjusted HDI (IHDI)

The HDI masks inequality in the distribution of human development across the population. The IHDI adjusts the HDI for inequality in each of the three dimensions (health, education and income) of the HDI by ‘discounting’ each dimension’s average value according to its level of inequality. The IHDI is equal to HDI if there is no inequality among the people, but is less than the HDI as inequality increases. The difference between HDI and IHDI measures the loss in potential human development due to inequality. The ‘loss’ in potential human development due to inequality is given by the difference between the HDI and the IHDI, and can be expressed as a percentage. The IHDI draws on the Atkinson (1970)<sup>1</sup> family of inequality to measuring the inequality in the distribution and sets the aversion parameter  $\epsilon$  equal to 1. In this case the inequality measure is  $A=1-g/\mu$ , where  $g$  is the geometric mean and  $\mu$  is the arithmetic mean of the distribution. This can be written as:

$$A_x = 1 - \frac{\sqrt[n]{X_1 \dots X_n}}{\bar{X}}$$

where  $\{X_1, \dots, X_n\}$  denotes the underlying distribution in the dimension of interest.  $A_x$  is obtained for each variable (life expectancy, mean years of schooling and disposable household income or consumption per capita). In this report, Atkinson measure of inequality is used for all variables except income per capita for which Gini coefficient is used.

### Data sources

Inequality in the distribution of HDI dimensions is estimated for:

- **Inequality in life expectancy:** calculated using the same data as for HDI with the life table contrasted for each age interval (0–1, 1–5, 5–10, ... , 85+) based on The UN General Model Life Table and NHDS 2016
- **Inequality in mean years of schooling for adults ages 25 and older:** calculated using the same official data as for HDI with the distribution specified for each level of education attainment based on UN - UIS method.
- **Inequality in disposable household income or consumption per capita** using the estimated Gini coefficient of wealth asset reported in the NDHS (2016)



### Illustration of IHDI Calculation (Example: Hills)

#### Dimension' Indicators

Life expectancy at birth (years) = 72.50

Mean years of schooling for ages 25 + = 5.83

Expected years of schooling = 13.77

GNI per capita (2011 PPP \$) = 3118

#### Dimensional indices

$$LI = \text{life Expectancy Index} = \frac{67.69-20}{85-20} = 0.808$$

$$\text{Mean Years of Schooling Index} = \frac{5.83-0}{15-0} = 0.388$$

$$\text{Expected Years of Schooling Index} = \frac{13.77-0}{18-0} = 0.765$$

$$EI = \text{Education Index} = \frac{0.388+0.765}{2} = 0.577$$

$$GI = \text{GNI Index} = \frac{LN(3118)-LN(100)}{LN(75000)-LN(100)} = 0.520$$

#### Inequality-adjusted dimensional indices

$$\begin{aligned} ILI &= \text{Inequality adjusted Life expectancy index} \\ &= (1 - A_L) \times LI = (1 - 0.775) \times 0.808 = 0.626 \end{aligned}$$

$$\begin{aligned} IEI &= \text{Inequality adjusted Education index} \\ &= (1 - A_E) \times EI = (1 - 0.759) \times 0.577 = 0.437 \end{aligned}$$

$$\begin{aligned} IGI &= \text{Inequality adjusted Income Index} \\ &= (1 - A_G) \times GI = (1 - 0.37) \times 0.520 = 0.327 \end{aligned}$$

$$\text{Inequality adjusted HDI (IHDI)} = \sqrt[3]{ILI \times IEI \times IGI} = \sqrt[3]{0.626 \times 0.437 \times 0.327} = 0.447$$

$$\text{HDI Loss due to inequality (\%)} = \left(1 - \frac{IHDI}{HDI}\right) \times 100 = \left(1 - \frac{0.447}{0.623}\right) \times 100 = 28.2$$

$$\text{Health Index Loss due to inequality (\%)} = \left(1 - \frac{ILI}{LI}\right) \times 100 = \left(1 - \frac{0.626}{0.808}\right) \times 100 = 22.5$$

$$\text{Education Index Loss due to inequality (\%)} = \left(1 - \frac{IEI}{EI}\right) \times 100 = \left(1 - \frac{0.437}{0.577}\right) \times 100 = 24.1$$

$$\text{Income Index HDI Loss due to inequality (\%)} = \left(1 - \frac{IGI}{GI}\right) \times 100 = \left(1 - \frac{0.327}{0.520}\right) \times 100 = 37.0$$

$$\text{Coefficient of human inequality (\%)} = (22.5+24.1+37)/3 = 27.9$$

## Gender Development Index (GDI)

The newly introduced GDI measures gender inequalities in achievement in three basic dimensions of human development: health (measured by female and male life expectancy at birth); education (measured by female and male expected years of schooling for children and mean years for adults aged 25 years and older); and command over economic resources (measured by female and male estimated GNI per capita). The GDI is calculated as the female-to-male HDI ratio to measure the gender gap in human development.

### Data sources

- **Life expectancy at birth:** gender-differentiated estimates derived from the same data sources and method as for HDI
- **Expected years of schooling:** gender-differentiated estimates derived from the same data sources and method as for HDI
- **Mean years of schooling for adults ages 25 and older:** gender-differentiated estimates derived from the same data sources and method as for HDI
- **Estimated earned income:** gender-differentiated estimates derived from female and male shares of the economically active population (NLFS, 2018), female and male share of population from CBS population projection (2018) and the Population and Housing Census (2015), the ratio of the female to male wage in all sectors from NLFS (2018) and gross national income in 2011 purchasing power parity (PPP) terms from CBS National accounts of Nepal (2018) and UNDP (2018)

### Estimating the female and male earned income

To calculate estimated earned incomes, the share of the wage bill is first calculated for each gender. The female share of the wage bill ( $S_f$ ) is calculated as follows:

$$S_f = \frac{(W_f/W_m) \cdot E_{Af}}{(W_f/W_m) \cdot E_{Af} + E_{Am}}$$

where  $W_f/W_m$  is the ratio of female to male wage,  $E_{Af}$  is the female share of the economically active population and  $E_{Am}$  is the male share. The male share of the wage bill is calculated as:

$$S_m = 1 - S_f$$

Estimated female earned income per capita ( $GNI_{pcf}$ ) is obtained from GNI per capita ( $GNI_{pc}$ ), first by multiplying it by the female share of the wage bill,  $S_f$ , and then rescaling it by the female share of the population,  $P_f = N_f/N$ :

$$GNI_{pcf} = GNI_{pc} \cdot S_f / P_f$$

Estimated male earned income per capita is obtained in the same way:

$$GNI_{pcm} = GNI_{pc} \cdot S_m / P_m$$

where  $P_m = 1 - P_f$  is the male share of population.

### Normalizing the indicators

The indicators are transformed into indices on a scale of 0 to 1 using the same goalposts that are used for the HDI, except life expectancy at birth, which is adjusted for the average five-year biological advantage that women have over men. For example, the minimum and maximum values fixed for female life expectancy are 22.5 and 87.5 respectively compared to 17.5 and 82.5 for male life expectancy.

### Illustration of GDI Calculation (Example: Tarai)

INDICATOR	FEMALE VALUE	MALE VALUE
Life expectancy at birth (years)	70.2	67.8
Expected years of schooling (years)	11.2	12.4
Mean years of schooling (years)	4.6	5.0
Wage ratio (female/male)	0.701139	
GNI per capita (2011 PPP \$)	2492	
Share of economically active population (%)	39.46	60.54
Share of population (%)	51.0	0.49

#### Female wage bill:

$$S_f = (0.7011 \times 0.394) / [(0.7011 \times 0.394) + 0.6054] = 0.3136$$

#### Estimated female earned income per capita:

$$GNIpc_f = 2492 \times 0.3136 / 0.5100 = 1532.648$$

#### Male wage bill:

$$S_m = 1 - 0.31365 = 0.68634$$

#### Estimated male earned income per capita:

$$GNIpc_m = 2492 \times 0.68634 / 0.490 = 3490.89$$

$$\text{Female health index} = (70.2 - 22.5) / (87.5 - 22.5) = 0.733$$

$$\text{Male health index} = (67.8 - 17.5) / (82.5 - 17.5) = 0.774$$

$$\text{Female education index} = [(4.6 / 15) + (11.2 / 18)] / 2 = 0.464$$

$$\text{Male education index} = [(5.0 / 15) + (12.4 / 18)] / 2 = 0.513$$

#### Estimated female earned income index:

$$[\ln(1533) - \ln(100)] / [\ln(75,000) - \ln(100)] = 0.412$$

#### Estimated male earned income index:

$$[\ln(3491) - \ln(100)] / [\ln(75,000) - \ln(100)] = 0.537$$

$$\text{Female HDI} = \sqrt[3]{0.733 \times 0.464 \times 0.412} = 0.5197$$

$$\text{Male HDI} = \sqrt[3]{0.774 \times 0.513 \times 0.537} = 0.5971$$

$$\text{Gender Development Index (GDI)} = 0.5197 / 0.5971 = \mathbf{0.870}$$

## Gender Inequality Index (GII)

The GII reflects women's disadvantage in three dimensions - reproductive health, empowerment and economic activity. Reproductive health is measured by maternal mortality and adolescent fertility rates; empowerment is measured by the share of parliamentary seats held by each gender and attainment at secondary and higher education by each gender; and economic activity is measured by the labor market participation rate for each gender. The GII shows the loss in human development due to inequality between female and male achievements in the three GII dimensions. It ranges from 0 (perfect gender inequality) to 1 (perfect gender equality).

Aggregation of the GII dimensions is first done separately for each gender group using geometric means. The gender-specific means are then aggregated using harmonic means which capture the inequality between women and men and adjust for asso-

ciation between dimensions. Finally, the GII is expressed as the relative difference (loss) between the harmonic mean and the reference mean. The reference mean is obtained assuming equality of genders in all three GII dimensions. The GII is calculated using the association-sensitive inequality measure suggested by Seth (2009).<sup>1</sup>

### Data sources

- **Maternal mortality rate:** NDHS (2016), UN General Model Life Table.
- **Adolescent birth rates:** Central Bureau of Statistics (2011) Nepal Population and housing Census (2011)
- **Share of parliamentary seats held by each sex:** Parliament Secretariate of Nepal (2019)
- **Population with at least some secondary education:** Central Bureau of Statistics (2011) - Nepal Population and housing Census 2011. This refers to proportion age 25 and over who have attained any one or more classes from 9 to 12 in secondary education.
- **Labor force participation rate:** Central Bureau of Statistics, NLFS (2018)

## Illustration of GII calculation (Example: Karnali)

### Dimensions' Indicators

Maternal mortality Ratio (**MMR**): deaths per 100,000 live births = 301.4

Adolescent fertility Ratio (**AFR**): births per 1000 women aged 15-19 = 96.3

Share of parliamentary seats held (**PR**) (% of total): Female = 26.1; Male = 73.9

Attainment of at least secondary education (**SE**) (% Population aged 25 & above): Female = 5.3; Male = 17.8

Labor Force Participation Rate (**LFPR**) (%): Female = 75.4; Male = 74.7

### Dimensions' indices by gender

The MMR is truncated symmetrically at 10 (minimum) and at 1,000 (maximum).

$$\text{Female Reproductive health index} = \sqrt{\left(\frac{10}{MMR}\right) \times \left(\frac{1}{AFR}\right)} = \sqrt{0.0332 \times 0.0104} = 0.0186$$

$$\text{Male Reproductive health index} = 1$$

$$\text{Female Empowerment index} = \sqrt{PR_F \times SE_F} = \sqrt{0.2609 \times 0.05256} = 0.1171$$

$$\text{Male Empowerment index} = \sqrt{PR_M \times SE_M} = \sqrt{0.7391 \times 0.1778} = 0.36253$$

$$\text{Female Labor Market Index (LFPR}_F) = 0.75445$$

$$\text{Male Labor Market Index (LFPR}_M) = 0.74682;$$

$$\text{Gender Index for Female } G_F = \sqrt[3]{\sqrt{\left(\frac{10}{MMR}\right) \times \left(\frac{1}{AFR}\right)} \times \sqrt{PR_F \times SE_F} \times LFPR_F} = \sqrt[3]{(0.0186 \times 11.709 \times 0.7544)} = \mathbf{0.5473}$$

$$\text{Gender Index for Male } G_M = \sqrt[3]{1 \times \sqrt{PR_M \times SE_M} \times LFPR_M} = \sqrt[3]{1 \times 0.36253 \times 0.754} = \mathbf{0.64692}$$

*Aggregating across gender groups by the harmonic mean to account for inequality*

$$HARM(G_F, G_M) = \left[ \frac{(G_F)^{-1} + (G_M)^{-1}}{2} \right]^{-1} = \left[ \frac{(0.5473)^{-1} + (0.6469)^{-1}}{2} \right]^{-1} = \mathbf{0.19947}$$

*Treating genders equally*

$$G_{F,M} = \sqrt[3]{\text{Health} \times \text{Empowerment} \times LFPR} = \sqrt[3]{0.5093 \times 0.2398 \times 0.7506} = \mathbf{0.4509}$$

$$\text{Where } \overline{\text{Health}} = (\sqrt{0.0332 \times 0.0104} + 1)/2 = \mathbf{0.5093}$$

$$\overline{\text{Empowerment}} = (\sqrt{PR_F \times SE_F} + \sqrt{PR_M \times SE_M})/2 = (0.11709 + 0.36253)/2 = \mathbf{0.2398}$$

$$\overline{LFPR} = \frac{(LFPR_F + LFPR_M)}{2} = \mathbf{0.7506}$$

$$\text{Gender Inequality Index (GII)} = 1 - \frac{HARM(G_F, G_M)}{G_{F,M}} = 1 - \frac{0.19947}{0.4509} = \mathbf{0.558}$$



Annex 2

# Human Development Statistical Tables

Table A 2.1 Human Development Index for Nepal by Province and Region

	HUMAN DEVELOPMENT INDEX (HDI) VALUE	LIFE EXPECTANCY AT BIRTH (YEARS)	EXPECTED YEARS OF SCHOOLING (YEARS)	MEAN YEARS OF SCHOOLING FOR AGES 25 & ABOVE (YEARS)	GNI PER CAPITA (2011 PPP US\$)	LIFE EXPECTANCY INDEX	EDUCATION INDEX	GNI INDEX	RATIO TO NATIONAL HDI
Nepal	0.587	69.70	12.73	5.23	2748	0.765	0.528	0.501	100.0
Rural	0.561	68.54	12.34	4.89	2217	0.747	0.506	0.468	95.6
Urban	0.647	70.84	14.44	7.21	3550	0.782	0.641	0.539	110.2
Mountains	0.564	67.69	13.08	4.65	2286	0.734	0.518	0.473	96.2
Hills	0.623	72.50	13.77	5.83	3118	0.808	0.577	0.520	106.2
Tarai	0.563	69.00	11.79	4.81	2492	0.754	0.488	0.486	96.0
Province 1	0.580	72.01	13.14	4.28	2393	0.800	0.508	0.480	98.8
Province 2	0.510	68.90	10.19	3.92	1673	0.752	0.414	0.426	86.9
Bagmati	0.661	72.01	14.07	6.37	5244	0.800	0.603	0.598	112.6
Gandaki	0.618	73.27	13.76	5.94	2665	0.820	0.580	0.496	105.3
Lumbini	0.563	68.84	12.60	5.01	2086	0.751	0.517	0.459	95.9
Karnali	0.538	67.03	13.19	4.64	1551	0.724	0.521	0.414	91.8
Sudur Paschim	0.547	66.30	13.28	4.82	1773	0.712	0.530	0.434	93.3

Source: NHDR 2019

Table A 2.2 Inequality Adjusted Human Development Index (IHDI) for Nepal by Province and region

	HUMAN DEVELOPMENT INDEX (HDI) VALUE	INEQUALITY-ADJUSTED HUMAN DEVELOPMENT INDEX (IHDI)		INEQUALITY ADJUSTED LIFE EXPECTANCY INDEX		INEQUALITY ADJUSTED EDUCATION INDEX		INEQUALITY ADJUSTED INCOME INDEX		COEFFICIENT OF HUMAN INEQUALITY (%)
		IHDI VALUE	OVERALL LOSS (%)	VALUE	LOSS (%)	VALUE	LOSS (%)	VALUE	LOSS (%)	
Nepal	0.587	0.439	25.2	0.607	20.7	0.403	23.7	0.345	31.0	25.1
Rural	0.561	0.425	24.2	0.597	20.1	0.382	24.4	0.337	28.0	24.2
Urban	0.647	0.482	25.5	0.588	24.9	0.490	23.7	0.388	28.0	25.5
Mountains	0.564	0.399	29.2	0.554	24.5	0.392	24.3	0.293	38.0	28.9
Hills	0.623	0.447	28.2	0.626	22.5	0.437	24.1	0.327	37.0	27.9
Tarai	0.563	0.426	24.4	0.555	26.4	0.377	22.7	0.369	24.0	24.4
Province 1	0.58	0.427	26.4	0.607	24.2	0.411	19.1	0.312	35.0	26.1
Province 2	0.51	0.387	24.1	0.529	29.7	0.330	20.1	0.332	22.0	23.9
Bagmati	0.661	0.502	24.0	0.624	22.0	0.452	25.1	0.449	25.0	24.0
Gandaki	0.618	0.441	28.6	0.639	22.0	0.430	25.8	0.312	37.0	28.3
Lumbini	0.563	0.417	25.9	0.580	22.8	0.394	23.7	0.317	31.0	25.8
Karnali	0.538	0.375	30.4	0.557	23.1	0.394	24.4	0.240	42.0	29.8
Sudur Paschim	0.547	0.400	26.9	0.546	23.3	0.402	24.0	0.291	33.0	26.8

Source: NHDR 2019

Table A 2.3 Gender Development Index (GDI) for Nepal by Province and region

	GENDER DEVELOPMENT INDEX (GDI)		HUMAN DEVELOPMENT INDEX (HDI)		LIFE EXPECTANCY AT BIRTH		EXPECTED YEARS OF SCHOOLING		MEAN YEARS OF SCHOOLING		ESTIMATED GNI PER CAPITA (2011 PPP \$)	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Nepal	0.886	0.549	0.619	0.619	70.6	68.9	12.3	13.3	5.1	5.4	1824	3729
Rural	0.889	0.526	0.592	0.592	69.4	67.5	11.9	12.9	4.7	5.1	1557	2937
Urban	0.883	0.597	0.676	0.676	71.7	69.9	14.2	14.7	6.9	7.0	1950	5221
Mountains	0.902	0.535	0.593	0.593	68.9	66.5	12.4	13.8	4.3	5.0	1808	2792
Hills	0.927	0.599	0.646	0.646	73.7	71.4	13.4	14.2	5.7	5.9	2489	3800
Tarai	0.870	0.520	0.597	0.597	70.2	67.8	11.2	12.4	4.6	5.0	1533	3491
Province 1	0.901	0.562	0.624	0.624	73.7	70.4	12.9	13.4	5.8	5.7	1511	3354
Province 2	0.786	0.439	0.558	0.558	70.2	67.8	9.2	11.2	3.4	4.4	782	2595
Bagmati	0.929	0.634	0.682	0.682	73.7	70.4	13.8	14.3	6.3	6.5	3690	6799
Gandaki	0.896	0.581	0.649	0.649	74.6	71.9	13.4	14.3	6.0	5.9	1705	3793
Lumbini	0.901	0.532	0.590	0.590	70.4	67.3	12.2	13.1	4.9	5.1	1488	2751
Karnali	0.902	0.510	0.566	0.566	68.4	65.7	12.6	13.9	4.3	5.0	1258	1854
Sudur Paschim	0.903	0.519	0.575	0.575	67.8	64.9	12.6	14.1	4.5	5.2	1437	2115

Source: NHRDR 2019

Table A 2.4 Gender Inequality Index (GII) for Nepal by Province and region

	GENDER INEQUALITY INDEX (GII)	MATERNAL MORTALITY RATIO (DEATHS PER 100,000 LIVE BIRTHS)	ADOLESCENT BIRTH RATE (BIRTHS PER 1,000 WOMEN AGES 15-19)	SHARE OF SEATS IN PARLIAMENT (% HELD BY WOMEN)	POPULATION WITH AT LEAST SECONDARY EDUCATION (% AGES 25 AND OLDER)		LABOUR FORCE PARTICIPATION RATE (% AGES 15 AND OLDER)	
					FEMALE	MALE	FEMALE	MALE
Nepal	0.479	239.0	61.0	33.5	11.7	23.3	67.0	71.6
Mountains	0.557	307.0	64.9	17.1	5.1	17.0	84.3	81.0
Hills	0.475	238.9	59.9	32.1	13.6	25.1	69.9	71.8
Tarai	0.476	233.8	61.9	38.3	10.8	22.6	61.4	70.2
Province 1	0.459	214.6	56.0	33.3	15.1	25.5	71.0	76.5
Province 2	0.503	233.3	72.5	39.4	6.7	20.3	59.9	72.7
Bagmati	0.457	231.1	42.9	28.6	18.0	28.3	58.1	67.4
Gandaki	0.460	199.4	59.9	32.6	12.9	24.3	71.4	70.4
Lumbini	0.474	242.6	65.2	39.6	9.5	20.1	70.0	72.1
Karnali	0.558	301.4	96.3	26.1	5.3	17.8	75.4	74.7
Sudur Paschim	0.522	283.2	63.1	28.1	5.3	19.7	77.5	69.6

Source: NHD/DR 2019

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## Annex 3

# Calculation of LDC Indicators

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### A. GNI per capita

GNI per capita is obtained from World Bank' Development Indicators calculated by Atlas Method. To reduce the impact of short-term fluctuation, it has been the practice of CDP to take an unweighted average of the latest three years per capita as its income measure. Following the CDP approach, we have used the average GNI per capita figure for 2016, 2017 and 2018.

### B. Human Assets Index (HAI)

HAI consists of five indicators: three on health and nutrition- percentage of population undernourished, under five mortality and maternal mortality, and two on education- gross secondary enrolment ratio and adult literacy ratio. The three indicators related to health and nutrition are assigned a weight of 1/6 each and two indicators are assigned a weight of 1/4 each in the overall HAI. Since HAI indicators are measured in different units, indicators values are first converted into index scores between 0 and 100 using max-min procedure. The maximum and minimum values are obtained from the methodology used by CDP. HAI score is the average of these index scores.



## Calculation of HAI

INDICATOR	LOWER BOUND	UPPER BOUND	DATA VALUE	MAX-MIN PROCEDURE	INDEX	WEIGHTAGE
Under-five mortality rate (per 1,000 live birth)	10	175	39.0	$100 \times (175 - 39.0) / (175 - 10)$		1/6
Maternal mortality ratio (per 100,000 live birth)	5	1200	239.0	$100 \times (1200 - 239.0) / (1200 - 5)$		1/6
Percentage of people undernourished	5	65	8.7	$100 \times (65 - 8.7) / (65 - 5)$		1/6
Gross secondary school enrolment ratio	5	100	60.6	$100 \times (X - 10) / (100 - 10)$		1/4
Adult literacy rate	25	100	58.0	$100 \times (X - 25) / (100 - 25)$		1/4

## C. Economic Vulnerability Index (EVI)

EVI is composed of eight indicators group into two groups- exposure index and shock index, with equal weight of 1/2. The exposure sub-index, location sub-index, economic structure sub-index and environment sub index with equal weight of 1/8. The exposure sub-index is represented by size of population; location sub-index by remoteness calculated by

the weighed distance to major export markets, environment sub-index captured by the share of population in low elevated coastal region and economic structure sub-index incapsulated by merchandize export concentration and share of agriculture, hunting, forestry and fishing. The shock index is divided by two sub-indices, trade shock sub-index and natural shock sub-index with equal weight of 1/4. The trade shock sub-index is measured by instability of exports of goods and services and natural shock sub-index by victims of natural disasters and instability of agriculture production.

## Calculation of EVI

INDICATOR	LOWER BOUND	UPPER BOUND	DATA VALUE	MAX-MIN PROCEDURE	INDEX	WEIGHTAGE
Population (bounds and data values in thousand)	150	100,000	29,186	$100 \times (\ln 100,000 - \ln 29,186) / (\ln 100,000 - \ln 150)$	18.93	1/8
Remoteness (location index)	10	90	52.18	$100 \times (52.18 - 10) / (90 - 10)$	52.72	1/8
Merchandise export concentration (Herfindhal-Hirschman index)	0.1	0.95	0.14	$100 \times (0.14 - 0.1) / (0.95 - 0.1)$	4.94	1/16
Share of agriculture, forestry and fishing in GDP (percentage of GDP)	1	60	30.49	$100 \times (30.49 - 1) / (60 - 1)$	49.98	1/16
Share of population in low elevated coastal zones (percentage of population)	0	35	0	$100 \times (0 - 0) / (35 - 0)$	0	1/8
Instability of exports of goods and services (index)	5	35	11.13	$100 \times (11.13 - 5) / (35 - 5)$	20.43	1/4
Victims of natural disasters (percentage of population)	0.005	10	1.65	$100 \times (\ln 1.65 - \ln 0.005) / (\ln 10 - \ln 0.005)$	76.35	1/8
Instability of agriculture production (index)	1.5	20	3.31	$100 \times (3.31 - 1.5) / (20 - 1.5)$	9.78	1/8

Annex 4

# Values of LDC Indicators at Province Level- Adapted Methodology

PROVINCE	INCOME US\$	HUMAN ASSETS INDEX (HAI)	ECONOMIC VULNERABILITY INDEX (EVI)*
Province 1	661	65.3	32.0
Province 2	461	50.0	31.6
Bagmati	1448	74.0	36.8
Gandak	736	75.0	35.2
Lumbini	576	62.4	31.9
Karnali	428	58.0	33.6
Sudurpaschim	489	58.4	29.1

\* The EVI has been improvised to broaden the scope of the index and also capture the vulnerabilities in the context of Nepal. To capture the exposure to the exogenous shocks, exposure sub-index is calculated based on CDP methodology with population size, remoteness measured by the proportion of population with access to road with 30 minutes-walk and share of agriculture in GDP with equal weight of three parameters. Share of population in low elevated zones, merchandize export concentration and instability of exports of goods and services are excluded because of irrelevance of the indicator and data unavailability. Similarly, shocks sub index is calculated by the measure of instability in agriculture production and the proportion of people affected by natural disaster with equal weightage to capture economic and natural vulnerability respectively at the province level.

## Annex 5

# Values of LDC Indicators at Province Level- CDP Methodology

PROVINCE	INCOME US\$	HUMAN ASSETS INDEX (HAI)	ECONOMIC VULNERABILITY INDEX (EVI)*
Province 1	661	65.3	33.9
Province 2	461	50.0	34.0
Bagmati	1448	74.0	30.5
Gandak	736	75.0	34.4
Lumbini	576	62.4	35.0
Karnali	428	58.0	39.6
Sudurpaschim	489	58.4	33.2

\*EVI is calculated based on the methodology adopted by CDP. However, share of population in low elevated zones, merchandize export concentration and instability of exports of goods and services are excluded.

Annex 6

# Development Cooperation: Donor-wise Disbursement

DONOR GROUP	ACTUAL DISBURSEMENT (US\$ MILLION)							
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
World Bank Group	269.605	231.404	276.770	188.122	243.692	245.968	533.515	477.880
Asian Development Bank	193.400	101.204	155.553	147.894	217.685	253.898	291.693	271.484
United Kingdom	84.240	89.989	151.135	168.073	89.478	128.313	123.870	129.328
USAID	22.487	67.196	45.360	132.370	118.933	134.056	117.831	77.545
European Union	43.974	28.066	51.618	31.378	29.4888	83.885	116.178	16.758
Japan	44.090	65.759	40.592	39.867	45.913	77.652	106.270	106.638
UN Country Team	108.169	68.661	26.684	44.236	113.576	120.729	65.662	71.660
China	28.344	34.120	41.381	37.948	35.364	41.244	58.727	157.635
India	50.620	63.813	47.796	22.227	35.767	59.259	56.762	82.172
Germany	38.830	23.743	26.458	9.697	6.646	25.058	28.902	36.115
Switzerland	33.417	41.767	33.853	32.467	36.981	34.941	26.412	25.791
Norway	41.686	32.823	24.467	30.797	35.535	20.318	23.984	20.548
Australia	22.729	16.064	30.237	28.112	21.233	18.559	20.884	15.000

Continued: Annex 6: Development Cooperation...

**Continued: Annex 6: Development Cooperation...**

DONOR GROUP	ACTUAL DISBURSEMENT (US\$ MILLION)							
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Finland	13.242	6.470	19.419	16.282	6.604	9.968	12.779	4.942
Global Fund to Fight AIDS, TB and Malaria (GFATM)	15.094	28.241	11.287	22.059	9.106	1.720	11.867	1.724
Korea	4.715	14.247	8.754	16.683	11.451	7.638	6.874	7.652
KFAED	-	-	0.103	0.095	0.541	0.649	3.274	2.652
GAVI	-	0.798	1.928	9.242	2.187	0.244	1.173	0.022
Saudi Fund	-	0.798	1.012	0.900	1.035	2.382	0.331	0.568
SDF	-	-	0.092	0.963	0.223	0.143	0.068	0.150
Canada	0.546	-	-	-	-	-	-	-
Denmark	29.099	30.549	31.368	21.953	2.700	4.560	-	0.100
Netherland	0.858	1.015	-	1.138	0.683	-	-	1.478
Nordic Development Fund (NDF)	-	-	-	1.138	0.683	-	-	0.498
OFID	-	13.214	6.370	15.124	-	11.377	-	11.583
Others	0.142	-	4.042	1.913	9.226	11.559	15.818	2.701
<b>Total</b>	<b>1045.297</b>	<b>959.951</b>	<b>1036.684</b>	<b>1020.755</b>	<b>1074.060</b>	<b>1394.600</b>	<b>1622.780</b>	<b>1522.635</b>

Source: Ministry of Finance





Profound changes and reforms are underway in multiple fronts in Nepal in the aftermath of 2015 Constitution in the country. The first elected federal Government formed after the new Constitution has set *Prosperous Nepal and Happy Nepali* as its long-term vision. It has committed to Nepal graduating from the LDC category by 2024 and achieving the SDGs before 2030.

The present human development report is the first in the changed political landscape. Apart from examining the status of human development, women empowerment and graduation criteria at both the national and provincial levels, it explores a transitional strategy to graduation after assessing its implications on both domestic and international fronts. It then articulates pathways to productive transformation as a way forward to be critical for sustainable graduation, human development and prosperity. It also envisages some critical strategies that could be appropriate for mitigating the COVID-19 crisis and building a resilient future based on quick impact assessment. The report highlights on the need of breaking structural impediments and vulnerabilities of different forms at federal and provincial levels for advancing toward the road to prosperity in which no one is left behind. The report equally emphasizes on the indispensability of overhauling economic policies and bringing drastic reforms in institutional and governance fronts for a result oriented and better outcome based responsive system.