



Nepal's Sustainable Development Goals

# Needs Assessment, Costing and Financing Strategy: An Update



GOVERNMENT OF NEPAL  
NATIONAL PLANNING COMMISSION  
SINGHADURBAR, KATHMANDU



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FEBRUARY 2025

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Published by  
Government of Nepal  
National Planning Commission  
Singha Durbar, Kathmandu Nepal  
Tel: +977-1-4211970  
[www.npc.gov.np](http://www.npc.gov.np)

Technical Support: UNDP Nepal.

Photo Credit: Government of Nepal, UNDP and ADB

Designed and Processed by  
Spandan Design Communication, Kupondole, Lalitpur

Printed in Nepal

February 2025



THE PRIME MINISTER

KATHMANDU  
NEPAL

# Foreword

Implementation of the 2030 Agenda for Sustainable Development has surpassed its halfway point since its adoption by the UNGA in 2015. During this period, Nepal has made notable efforts to maintain the momentum of achieving the targets across goals. Despite integrating the SDGs into the national plan and policies, and harnessing collaboration among the stakeholders from government, private sector, civil society, development partners, and households, the progress has been mixed. Nepal has achieved 41.7 percent progress by 2022, and the advancement is anticipated to cross 60 percent by 2030. The problems emanating from the shockwaves of the COVID-19 pandemic, global supply chain disruption and economic slowdown have hindered the smooth progress on attaining the SDGs. We are hopeful of achieving the goals more than the global average by propelling the pace.

Building on the foundation laid so far, the implementation of the sixteenth periodic plan will play a pivotal role in accelerating the implementation of the SDGs in Nepal. The Voluntary National Review of SDGs has further availed mileage for this strategy implementation. Nepal needs to make strides to advance some of the SDGs including to ensure decent job and social protection, transformation of food system, health and education, sustainable urbanization, gender equality and social mobilization, climate action and digital transformation.

Among various challenges to translate the policies into actions, SDGs financing has remained key concern for Nepal. This revised costing and financing strategy reinforces Nepal's dedication and commitment towards achieving the global goals. This will further facilitate translating the SDGs more realistically into actions and paves way for localization and accelerating the implementation of the goals at sub-national levels. Harmonization between the federal, provincial and local level governments as well as the private sector, non-government and cooperative sectors in executing the strategy to ensure effective resource mobilization toward the implementation of the goals is pertinent.

I commend the National Planning Commission for its tireless endeavor in preparing this strategy. I urge all the stakeholders for a dedicated effort in building a sustainable and prosperous future to achieve the national aspiration of "Prosperous Nepal, Happy Nepali" by achieving this developmental agenda by 2030. Finally, I call upon strong partnership among government, private sectors, civil society, development partners as well as households and individuals in executing the strategy.

Thank You.

**K.P. Sharma Oli**  
Prime minister and Chair of the High-Level  
SDGs Steering Committee  
Government of Nepal





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# Preface

**T**he Sustainable Development Goals (SDGs) represent a global commitment to a better and more sustainable future for all. However, progress towards these goals has been sluggish worldwide, with multiple challenges hindering advancement. The COVID-19 pandemic has exacerbated these challenges, causing significant setbacks and halting progress in many areas. As a result, numerous SDGs are now off-track or have regressed, underscoring the urgent need for accelerated efforts and substantial investment to get back on course.

In 2018, Nepal conducted a comprehensive SDGs needs assessment. However, the evolving global and national context now necessitates a revised assessment with updated costing and a robust financing strategy. This report has been meticulously prepared to reflect these new realities, drawing on the ongoing policies of the Government of Nepal and the perspective plans of various sectors to accelerate the implementation of the SDGs.

The revised costing covers the contributions of the government, the private sector, cooperatives, and households, providing a holistic view of the financial requirements. The report also presents multiple scenarios for future investment needs, offering a

comprehensive analysis of the resources necessary to achieve the SDGs. Based on this updated costing, the report outlines a strategic approach to financing the implementation of the SDGs. It articulates clear strategies to mobilize resources, ensuring that Nepal can meet its sustainable development commitments.

This strategy requires the active partnership of all relevant stakeholders. The collective efforts of government entities, the private sector, cooperatives, households, and international partners are crucial for the successful implementation of this strategy. I call upon all stakeholders to join hands and work collaboratively to realize the vision of sustainable development for Nepal. Together, we can overcome the challenges and accelerate progress towards achieving the SDGs, ensuring a prosperous and sustainable future for all.

The NPC is confident that this need assessment costing and financing strategy will serve as a robust foundation for accelerating implementation of the Sustainable Development Goals in the remaining period of implementation. We look forward to continued collaboration and partnership with all stakeholders as we strive to achieve our shared vision for sustainable development.

Thank you

**Shiva Raj Adhikari**  
Vice-Chairman  
National Planning Commission





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# Acknowledgements

**N**epal has made credible efforts to implement the Sustainable Development Goals (SDGs) through their alignment with periodic plans, sectoral strategies, and annual budgets of the government, and the SDGs have been at the forefront of policies and programmes of the private sector, cooperatives, and non-governmental organizations. This updated SDGs Need Assessment, Costing and Financing Strategy revisits the financing requirements and resource mobilization strategy which will remain instrumental in implementing the 2030 Agenda for Sustainable Development in Nepal.


















The National Planning Commission would like to thank the expert team, Dr. Yuba Raj Khatiwada, Prof. Dilli Ram Upreti and Ashutosh Mani Dixit, for preparing this report. The National Planning Commission extends its heartfelt gratitude to the United Nations Development Programme (UNDP) for their invaluable technical assistance in preparing this updated need assessment, costing and financing strategy. The Commission extends special appreciation to then Secretary Dr. Toya

Narayan Gyawali, Joint Secretaries Mr. Khomraj Koirala and Mr. Mahesh Bhattarai of the Economic Management Division, for their leadership and overall coordination of the report's preparation; Programme Directors Ms. Anita Paudel, for her active engagement and coordination throughout the report preparation; Mr. Yadu Nath Acharya, Dr. Chakra Pani Acharya for ensuring accuracy and soundness of the data used in the report; Planning Officers Ms. Kartika Yadav, Mr. Santosh Sharma, Mr. Suraj Aryal and Mr. Umesh Chandra Lamsal for their sincere and tireless efforts in organizing stakeholder consultation meetings, meticulously collecting data, thoroughly reviewing the report, and providing insightful suggestions and feedback.

The NPC also extends its deepest appreciation to all governmental and non-governmental organizations, development partners, and all stakeholders for their invaluable contributions to this strategy through active participation in consultation meetings, provision of critical data, and constructive feedback.

**Madhu Kumar Marasini**  
Secretary, National Planning Commission



<b>GOAL 1</b>		<b>End poverty in all its forms everywhere</b>
<b>GOAL 2</b>		<b>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b>
<b>GOAL 3</b>		<b>Ensure healthy lives and promote well-being for all at all ages</b>
<b>GOAL 4</b>		<b>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b>
<b>GOAL 5</b>		<b>Achieve gender equality and empower all women and girls</b>
<b>GOAL 6</b>		<b>Ensure availability and sustainable management of water and sanitation for all</b>
<b>GOAL 7</b>		<b>Ensure access to affordable, reliable, sustainable and modern energy for all</b>
<b>GOAL 8</b>		<b>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b>
<b>GOAL 9</b>		<b>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b>
<b>GOAL 10</b>		<b>Reduce inequality within and among countries</b>
<b>GOAL 11</b>		<b>Make cities and human settlements inclusive, safe, resilient and sustainable</b>
<b>GOAL 12</b>		<b>Ensure sustainable consumption and production patterns</b>
<b>GOAL 13</b>		<b>Take urgent action to combat climate change and its impacts</b>
<b>GOAL 14</b>		<b>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b>
<b>GOAL 15</b>		<b>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</b>
<b>GOAL 16</b>		<b>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</b>
<b>GOAL 17</b>		<b>Strengthen the means of implementation and revitalize the global partnership for sustainable development</b>



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# Acronyms

ADB	Asian Development Bank
ADS	Agriculture Development Strategy
CAAN	Civil Aviation Authority of Nepal
CFUG	Community Forestry User Group
CIT	Citizen Investment Trust
CSOs	Civil Society Organizations
CO <sub>2</sub>	Carbon Dioxide
DOI	Department of Industry
ECD	Early Childhood Development
ECED	Early Childhood Education and Development
EPF	Employees Provident Fund
FDI	Foreign Direct Investment
FECOFUN	Federation of Community Forestry Users Nepal
FY	Fiscal Year
GDP	Gross Domestic Product
GDI	Gender Development Index
GHG	Green House Gas
GNI	Gross National Income
GoN	Government of Nepal
GPI	Gender Parity Index
HDI	Human Development Index
ICT	Information and Communication Technology
ICOR	Incremental Capital Output Ratio
IGFT	Inter Governmental Fiscal Transfer
ILO	International Labour Organization
IMR	Infant Mortality Rate
IPT	Integrated Property Taxation
NGOs	Non-Government Organizations
INGOs	International Non-Government Organizations
Kwh	Kilowatt Hours
LAPA	Local Adaptation Plan of Action
LDCs	Least Developed Countries
LPG	Liquified Petroleum Gas
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
M&E	Monitoring and Evaluation
MoLMCPA	Ministry of Land Management, Cooperatives and Poverty Alleviation
MoEST	Ministry of Education, Science and Technology
MoF	Ministry of Finance
MoFAGA	Ministry of Federal Affairs and General Administration

MoFE	Ministry of Forest and Environment
MoHP	Ministry of Health and Population
MoPIT	Ministry of Physical Infrastructure and Transport
MoUD	Ministry of Urban Development
MTEF	Medium Term Expenditure Framework
MPI	Multidimensional Poverty Index
MW	Megawatt
NAS	National Account Statistics
NAPA	National Adaptation Programme of Action
NDHS	Nepal Demographic and Health Survey
NEA	Nepal Electricity Authority
NER	Net Enrolment Ratio
NFE	Non-Formal Education
NGO	Non-Government Organization
NHDR	Nepal Human Development Report
NHSS	National Health Sector Strategy
NMR	Neonatal Mortality Rate
NNRFC	National Natural Resources and Fiscal Commission
NPC	National Planning Commission
NRB	Nepal Rastra Bank
NRs	Nepali Rupees
NSO	National Statistics Office
NTC	Nepal Telecom
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OoP	Out of Pocket
OSR	Own Source Revenue
PETS	Public Expenditure Tracking Survey
PPP	Public Private Partnership
SAARC	South Asian Association for Regional Co-operation
SDGs	Sustainable Development Goals
SESP	School Education Sector Plan
SSF	Social Security Fund
TIA	Tribhuvan International Airport
TDF	Town Development Fund
U-5	Under-Five
UN	United Nations
UNDP	United Nations Development Programme
VGf	Viability Gap Funding
VNR	Voluntary National Review
VLR	Voluntary Local Review
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization



# Executive Summary

## I. Introduction

The global Sustainable Development Agenda, which has been implemented since 2016, carries a globally agreed common development framework for the planet, people and their prosperity, covering a wider range of rights-based development issues. Nepal started SDGs implementation in 2016, the first year of the 14th Three-Year Plan. The translation of the plans and policies to programmes and activities were done through the Medium-Term Expenditure Framework (MTEF), and annual budget. The subsequent 15th Plan and annual budgets have taken SDGs into due consideration while prioritizing and allocating resources.

SDGs operationalization requires a diagnostic of the necessary interventions, investment requirements, sources of financing, partnerships and institutions, which has to be done through the SDGs Needs Assessment. For this reason, an SDGs needs assessment was conducted during 2016-17, from which a financing strategy was drawn.

However, with the emergence of the pandemic and changing global and national economic outlook over time, it became necessary to revisit the assessment and chalk out a strategy for the rest of the period to 2030. This update is expected to guide SDGs acceleration, reinforce implementation, estimate the financing gap (if any), explore new avenues of SDGs financing, and set an accountability framework that allows taxpayers and donors to track investments made for the intended outputs and outcomes.

The primary objective of this report is to review the SDGs Need Assessment, Cost-

ing and Financing Strategy 2018, assess implementation so far, and revisit the needs assessment, mapping of financial resource requirements and their availability, draw a mechanism for additional resource mobilization, and reinforce implementation partnerships.

The scope of the report is to revisit the existing SDGs Needs Assessment, Costing and Financing Strategy 2018, review the latest SDGs needs assessment and costing works done at the sectoral levels and seek to align them with the respective SDGs, review key interventions necessary for SDGs implementation, from which to draw a financing strategy.

## 2. Review of progress in SDGs Implementation and Achievement

The progress in Goal 1 (end poverty) has remained very encouraging during the first seven years of SDGs implementation. The population living below \$1.9 declined to 15 percent in 2019 from a high of 36 percent in 2015, and the proportion of the population below the national poverty line fell to 20.27 percent in 2022 from 21.6 percent in 2015. Multidimensional poverty declined from 30.1 percent in 2015 to 17.4 percent in 2022.

Progress in Goal 2 (zero hunger) remained slow. The incidence of stunting, wasting and underweight of children under 5 years of age remained better than 2015 levels. However, minimal progress in reducing the incidence of anaemia among women of reproductive age as well as children under 5 years of age is achieved by 2022.

**The primary objective of this report is to review the SDGs Need Assessment, Costing and Financing Strategy 2018, assess implementation so far, and revisit the needs assessment, mapping of financial resource requirements and their availability, draw a mechanism for additional resource mobilization, and reinforce implementation partnerships.**

**The SDGs' mid-term progress assessment shows 41.7 percent progress in the targets of SDGs by 2022.**

In Goal 3 (healthy life and wellbeing), maternal mortality ratio reduced from 258 in 2015 to 151 per 100,000 live births in 2022. Under 5 child mortality dropped from 38 to 28 per 1,000 live births during 2015-19, but increased to 33 in 2022. The neo-natal death rate came down from 23 per 1,000 live births to 21 between 2015 and 2022. Institutional delivery with the help of a health worker increased from 55.2 percent to 79.4 percent of the total births during the period.

There was gradual progress in Goal 4 (quality education) with net primary school enrolment increasing from 96.6 percent in 2015 to 97.1 percent in 2022. Gross enrolment in secondary level marked a rise from 56.7 percent to 83.4 percent. Gender parity in secondary and higher education, and literacy has improved.

In Goal 5 (gender equality), gender empowerment measures showed improvement, and the gender inequality index improved marginally from 0.490 in 2015 to 0.452 in 2022.

In Goal 6 (water and sanitation) Basic water supply coverage increased significantly to 96.4 percent in 2022 from 87 percent in 2015 while safe water supply coverage went up to 25.81 percent from 15 percent during the same period. A significant improvement was observed in sanitation, with 95.5 percent of the population having basic sanitation facilities in 2022 compared to 82 percent in 2015.

Access to clean and affordable energy (Goal 7) improved during the first seven years of SDGs implementation. From 74.0 percent of population with access to electricity in 2015, the coverage went up to 95 percent in 2022. Per capita energy consumption increased markedly from 80 kwh in 2015 to 380 kwh in 2022.

In Goal 9 (industry, innovation, and infrastructure), road density increased from 0.55 km/sq.km to 0.63 km/sq.km in 2022 while progress in industrial sector lagged far behind.

COVID-19 severely affected the progress of several SDGs. Health services were heavily affected by the pandemic and progress in several SDGs indicators remained negative during 2019-22. Child and infant mortality increased while births attended by skilled health workers rose to just 80.5 percent of the reproductive aged women from 79.3 percent in 2019. The proportion of institutional deliveries went up marginally from 77.5 percent in 2019 to 79.0 percent in 2022.

Academic sessions in school for 2020 and 2021 were badly affected, as all educational institutions and training centres across the country were closed. Regular teaching – learning activities of all classes and levels – of about 8.7 million students in school and university were disrupted. Primary education completion rate dropped down to 77.1 percent in 2022 from 85.5 percent in 2019. Gender Parity Index (GPI) in secondary school enrolment also declined slightly.

Progress in water supply and sanitation continued, albeit with slower progress. However, progress in SDG 7 was encouraging with most indicators showing progress – access to electricity was up from 89.9 percent in 2019 to 95.0 percent in 2022 and per capita energy consumption was much higher, rising from 260 kwh in 2019 to 380 kwh in 2022.

COVID-19 had adverse impacts in economic growth and infrastructure also, as overall investment could not pick up in these areas and the government was preoccupied with the pandemic. GDP growth shrunk to negative 2.37 percent in 2021. However, prog-

ress continued in housing conditions. While there was marginal progress in climate action, encouraging progress was made in biodiversity conservation during this period.

The SDGs' mid-term progress assessment shows 41.7 percent progress in the targets of SDGs by 2022. Of the 238 indicators, 41 percent (98 indicators) exceeded their 2022 targets, while 35 percent (83 indicators) demonstrated advancement. Some 20 percent of the indicators (47 out of 238) regressed, and 3 percent (7 indicators) remained unchanged.

Review of SDGs costing by different agencies gives some indication as to how much Nepal should be investing in those areas. A comparison of several SDGs costing studies reveals a large variation in the estimates of the funding needs to achieve the 2030 Agenda and estimates from different studies range from about US\$250 to over US\$1,839 per capita annually – based on SDGs coverage, choices of methodology, sector, and data sources.

Having crossed the midway to the 2030 targets of SDGs, and the Sixteenth Plan (2024-29) in its initial implementation stage, there is a need to revisit the achievements made so far, and accelerate, reorient, re-prioritize or strengthen policies, actions and collaboration among stakeholders to achieve rapid, inclusive and sustainable development. The Sixteenth Plan shall give a final push to meet as many SDGs milestones as possible.

Nepal is graduating from LDC status in 2026, which will have a number of implications for the country's trade, aid, and investment environment. This will change Nepal's financial and economic landscape along with a changing SDGs financing ecosystem. Review of its likely implication and

drawing a new strategy for SDGs financing has been necessary to address this changing scenario along with LDC graduation in 2026.

The global ecosystem for mobilizing resources for the SDGs has now largely changed since the 2030 targets were set. Nepal's challenge amid slow economic growth and rising concern about domestic debt will be to mobilize additional domestic resources and bring in more external capital to meet the SDGs financing gap through strengthened global partnerships.

### 3. Methodology

The key SDGs sectors that were previously costed with targets set in the NPC 2017 and 2018 reports are revised and the investment requirement is re-estimated. Interventions necessary for achieving the goal of poverty, gender, inclusive growth, industry, housing, and governance which do not have sector strategy consistent with SDGs timelines are re-costed using information on unit costs and expected output.

SDGs targets are set only at a national level and investment requirements are divided between three tier governments, based on the current division of duties and responsibilities.

The costing tools are mostly the same as those used for the NPC 2018 report.

All kinds of public spending made on the SDGs through the budgetary system are defined as 'investments'. The word 'investment' implies spending required to achieve the targets, and the words are often used interchangeably. All the relevant SDGs recurrent, capital and financing forms of spending are encompassed in the costing and financing exercise.

**Having crossed the midway to the 2030 targets of SDGs, and the Sixteenth Plan (2024-29) in its initial implementation stage, there is a need to revisit the achievements made so far, and accelerate, reorient, re-prioritize or strengthen policies, actions and collaboration among stakeholders to achieve rapid, inclusive and sustainable development.**

Province and local level budget allocation patterns for SDGs investments are taken from the PETs and VLR reports provinces and local governments. In the absence of information on the SDGs specific allocation of domestic revenue and borrowing, it is assumed that such domestic resource is allocated proportionately to the subnational shares of spending allocated to the SDGs areas.

Consolidated Financial Statements as reported by FCGO are taken into account to avoid duplication in the counting of spending and revenue due to inter-governmental revenue sharing and fiscal transfers. The existing structure of Inter-Governmental Fiscal Transfer (IGFT) and revenue sharing among the three tiers of government has been assumed to remain the same until 2030 for estimating public SDGs investments and financing gaps at these levels.

SDGs financed by own source revenue (including revenue transfer) at the subnational levels are added to total SDGs investments to derive overall public sector SDGs investment to ensure that all available financing sources are considered in analysing SDGs financing.

As some of the SDGs targets cannot be costed, they are addressed through interventions in policies and institutions. Such policy and institutional needs are suggested at appropriate places in the report.

All investment requirements and financing gaps are estimated in Nepali Rupee and for international comparability, reporting, and advocating for additional external financial supports, investment and financing gaps are also converted to \$ using the exchange rate on 15 July 2023.

Projections for several macroeconomic variables are done through statistical tools such

as regression, trend analysis, incremental capital output ratio, elasticities, and other externally derived parameters.

The macroeconomic and SDGs investment requirements are estimated at the constant price of FY 2022/23. The implicit GDP deflator, which is estimated to grow by 6 percent per annum during the remaining years of SDGs period, is taken as a proxy for inflation.

While understanding the synergies and trade-offs between goals and targets is extremely important to multiply benefit and avoid wasting of resources, no empirical analysis could be done at this stage due to data, time, and periodicity issues. This study applies empirical evidence-based parameters to set targets, estimate cost, and draw financing requirement to address such synergy.

## 4. Update of Needs Assessment and Costing

This study attempts to address issues such as economic turmoil, pandemic, inequality, climate crisis, demographic transition, migration and urbanization, federalism implementation, LDC graduation, and gloomy global cooperation in the revision of SDGs costing and financing strategy. Interventions, targets and investment requirement are revised accordingly.

For Goal 1, poverty is estimated to fall to 6 percent (as per new definition of the poverty line) by 2030 at targeted economic growth of 6 percent and per capita income to reach Rs 382,000 (\$2,936 at FY 2022/23 exchange rate) in 2030. A major intervention in Goal 1 is social protection. The estimated investment requirement in intervention for poverty reduction averages at Rs343 billion per year during the period of 2024-30.

For Goal 2, major interventions identified in the ADS are costed with the additional provision of irrigation, fertilizer and agro technicians at local levels. The investment requirement for implementing the interventions averages at Rs 156.5 billion per annum at the price of FY2022/23.

Major interventions costed in Goal 3 include health infrastructure, health service facilities, work force, medical products and health finance, and these are updated here. The annual average investment requirement for the three tiers of government for implementation of health sector interventions to achieve Goal 3 is estimated at Rs264.3 billion for 2024-30.

Assessment of the investment requirement in education (Goal 4) is mostly based on the cost estimates made to achieve the SESP and SDGs targets in school education, investment required for university education, research and development investment, and extension of day meal programme. The annual average investment requirement in education is Rs297.7 billion from 2024-30.

Gender equality (Goal 5) targets have five major areas of intervention not identified elsewhere for costing. They include social upliftment of women, empowering local Judicial Committees (as the heads of such committees are mostly women), President's Programme for Upliftment of Women, and support to local bodies to mainstream gender in development planning and investment programmes. The annual average investment requirement for gender interventions amounts to Rs6.1 billion for 2024-30.

Water and Sanitation (Goal 6) related interventions aim to ensure availability and sustainable management of water and sanitation

through universal and equitable access to safe and affordable drinking water and adequate sanitation and hygiene for all. The average annual cost estimated for implementing water and sanitation interventions is Rs 181.7 billion including that being spent by subnational governments.

Goal 7, which intends to ensure access to affordable, reliable, sustainable and modern energy for all, is costed for power generation, transmission, distribution and improvement of access to energy. Target for electricity generation is 9995 MW in 2030 with 9245 MW for hydroelectricity and the rest with thermal, grid based solar and micro hydro. The energy sector investment requirement will be, on average, Rs359.2 billion during 2024-30.

Decent work and economic growth (Goal 8) focuses on inclusive growth, productive employment and a decent labour market situation. Major interventions to achieve the targets include promotion of jobs in labour-intensive sectors like agriculture, construction, manufacturing, and tourism. The annual average investment requirement is estimated at Rs86.3 billion during 2024-30.

Goal 9 (industry, innovation and infrastructure) intends to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. The main infrastructure to be costed include road networks, railways, and airports. This covers the total cost for the maintenance, upgrading and new construction of roads, railways, and airports. The annual average investment requirement for roads is estimated at Rs182.4 billion for 2024-30. The transport infrastructure cost including rail, airports and infrastructure investment of subnational governments averages Rs315.9 billion.

**The total investment required to achieve the Goals set for 2030 is Rs21,164.7 billion from 2024 to 2030, amounting to an annual average investment of Rs. 3,023.5 billion.**

Investment for manufacturing has been estimated on the basis of its share in GDP (8.6 percent in 2030) targeted for 2030 and ICOR of this sector. Investment in industry (mainly manufacturing) averages at Rs387.9 billion per year during 2024-30 while the annual average investment in innovation and ICT during the same period is estimated at Rs 24 billion per annum.

Interventions costed in sustainable cities and communities (Goal 11) include upgrading urban roads along with pavements, constructing bus parks, smart cities, storm drainage, landfill sites, safe houses, and public buildings, and conserving cultural heritage. Interventions costed under SDG 11 elsewhere (water, electricity, sanitation, and environment) are excluded from the costing of SDG 11. The average investment requirement estimated for meeting the targets of sustainable cities and communities is Rs 222.9 billion a year between 2024 and 2030.

Goal 13 intends to take urgent actions to combat climate change and its impacts. The National Adaption Plan (NAP) 2021-2050 sets out a framework to integrate adaptation across sectors and levels of government in the short-term (to 2025), medium-term (to 2030), and long-term (to 2050). The annual average investment requirement for climate change adaptation and mitigation is estimated at Rs29.4 billion from 2024 to 2030. The largest share, i.e. more than 50 percent, would be required for climate proofing of infrastructure projects.

Goal 15 (life on land) is set to protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss. The targets include the conservation of forests, wildlife, biodiversity and integration of ecosystem and biodiversity

values into national and local planning. The annual average investment in Goal 15 is estimated at Rs50.6 billion during 2024-30.

Major interventions costed for Goal 16 (peace, justice and strong institutions) include access to justice (reflected in spending under law and justice), perceptions of corruption (reflected under anti-corruption), direct deaths from violent conflicts and displacements (reflected in spending for peace and security, which includes police), higher voter turnout (reflected in spending for electoral awareness), and quality of public administration (reflected in improvements in service delivery). The investment requirement for SDG 16 interventions is Rs294.6 billion per annum during 2024-30. Most of the investment (63.4 percent) goes for peace and security, which includes spending on policing), while service delivery (administrative) expenses of subnational governments financed through OSR accounts for nearly one-fourth of the investment requirement.

The total investment required to achieve the Goals set for 2030 is Rs21,164.7 billion from 2024 to 2030, amounting to an annual average investment of Rs3,023.5 billion. In US dollar terms, the total investment required to achieve the defined targets for the 2024-30 period is estimated at US\$163 billion. On an annual basis, the average investment requirement is US\$23 billion for 2024-30.

Estimated per capita SDGs investment requirement is US\$755 on average during 2024-30. The largest chunk (24.1 percent) of this investment requirement goes to industry, innovation and infrastructure, followed by energy (11.9 percent) and poverty reduction (11.4 percent). Large investment in social protection has resulted in a higher share of poverty in the total investment requirement.

Education and health account for 9.8 percent and 8.7 percent respectively of the investment requirement. In education and health, per capita investment is US\$74.2 and US\$65.8 on average during 2024-30. The investment share of sustainable cities and communities is 7.4 percent each. The subnational governments are expected to invest 11.0 percent of the investment requirement from their own-source revenue.

The average SDGs investment requirement will reach 44.9 percent of GDP in 2030. This investment requirement is about 3 percentage points lower than previously estimated (NPC, 2018). This amount is obviously still high, but is achievable with mobilization of larger financing sources in productive areas thus improving the efficiency of investment.

## 5. SDGs financing strategy

The financing strategy is drawn for the public, private, cooperatives (including non-government and communities) and household levels. Public sector financing is disaggregated into federal, provincial and local levels. To derive the financing gap, their shares in investment requirements and resources available for those sectors are estimated.

The public sector plays a major role in achieving SDGs related to shelter, food, education, health care, social protection, environment and climate change while also upholding fundamental rights of the citizens and thus promoting good governance. The public sector is estimated to contribute 57.5 percent of the SDGs investment requirement. Revenue and domestic borrowing will comprise nearly 75.4 percent of the public investment requirement on average during 2024-30, provided that revenue grows at 7 percent in real terms and net domestic borrowing remains at 2 percent of GDP.

Revenue available for SDGs investments is estimated at 70 percent while all domestic borrowing is taken for allocation in SDGs areas. The current trend of ODA with a 10 percent increase per year would cover 17.8 percent of the investment requirement, leaving a financing gap of 8.2 percent of the investment requirement to be addressed through additional efforts to mobilize domestic as well as external finance.

If revenue elasticity remains only unitary, implying revenue growth on par with GDP growth in real terms, then the financing gap would rise to 11.5 percent of investment requirement and 2.4 percent of GDP.

A breakdown of the public financing gap between SDGs areas shows the public sector financing gap to be highest for investments in infrastructure, water and sanitation, transport, industrial and urban infrastructure, education and health. The energy sector has no financing gap as most investment here will be financed by the private sector

The public sector investment requirement is the sum of federal, provincial and local government investments with their respective shares of 70 percent, 9 percent, and 21 percent. Their respective contributions to the public investment requirement in the SDGs have been discussed on the basis of their current share in public sector finance.

The projection of revenue is based on the assumption of 6 percent growth in real GDP and a buoyancy of revenue to GDP at 1.15 for 2024-30. This implies a real growth of revenue at 7 percent until 2030. While gross domestic borrowing (for the three tiers of government) is set at less than 5 percent of GDP, net domestic borrowing is set at 2 percent of GDP.

**The public sector plays a major role in achieving SDGs related to shelter, food, education, health care, social protection, environment and climate change while also upholding fundamental rights of the citizens and thus promoting good governance.**

Domestic financing source for public investment in SDGs is the sum of revenue and domestic borrowing. About 70 percent of these sources are estimated to be spent on SDGs implementation. This is to adjust for the growing debt service requirement in the coming years. Similarly, 90 percent of the ODA inflow is considered to be available for financing the SDGs. Currently, three-quarters of revenue goes to SDGs areas, but growing debt servicing and other administrative and security expenses unrelated to SDGs will reduce the proportion of revenue available to finance the SDGs.

Federal government is responsible for the implementation of most SDGs with concurrent responsibility also with the provincial and local governments. Assuming that, the present laws and mechanisms of fiscal transfer do not change over the 2024 to 2030 period, the share of federal government in SDGs investment has been worked out at 70 percent of the public investment requirement.

On the revenue front, it is estimated that 76 percent of the revenue will be available for SDGs financing. The share of federal government on domestic borrowing is set proportional to investment share while the share in ODA is estimated at 87.1 percent – as most of the ODA is retained at the federal level.

The SDGs financing requirement at the federal level is estimated at Rs1,218 billion on average during 2024-30 and available financial resources for investment including ODA (Rs198 billion) will be Rs1,083 billion, leaving an unfunded gap of Rs134 billion, on average, during 2024-30. The federal financing gap after adding up ODA stands at 11 percent of the investment requirement.

The provinces' share in SDGs investment has been estimated at 9 percent of the pub-

lic investment requirement. On revenue front, it is estimated to be 6.8 percent of the revenue available for SDGs financing. On domestic borrowing, the provinces' share is estimated at 9 percent while in ODA, it is estimated at 3.6 percent.

Based on the investment sharing formula, the SDGs financing requirement at the provincial level is estimated at Rs156.6 billion on average during 2024-30. The financing gap after adjusting for available revenue and borrowing (through federal government) is Rs6.5 billion, on average, during the period.

The share of local level in total SDGs investment requirement is estimated at 21 percent while the revenue share is estimated at 16.9 percent. The domestic borrowing share is set at 21 percent of total borrowing and the share in ODA is estimated at 9.3 percent.

Based on investment, revenue, borrowing and ODA sharing, the investment requirement at the local level is estimated at Rs365 billion on average during 2024-30 and available financing sources amount to Rs315 billion, leaving a financing gap of Rs50 billion on average. If sharing of revenue and borrowing from the federal government to province and local levels remains lower, then subnational governments will also face a larger financing gap.

The private sector holds more than three-quarters of the gross capital formation in the country and is thus crucial to achieve several SDGs through innovative investment in industries and commercial infrastructure, energy, tourism, agriculture, services and more. Being equipped with the knowledge, technology and financial resources necessary for investing in key physical and industrial infrastructure development, this sector can contribute to

**A breakdown of the public financing gap between SDGs areas shows the public sector financing gap to be highest for investments in infrastructure, water and sanitation, transport, industrial and urban infrastructure, education and health.**

sustainable development in various ways, including through investment.

Based on the estimated share of private sector in total SDGs investment requirement, this sector is expected to contribute 34.3 percent of the SDGs investment requirement for 2024-30. The estimated investment requirement is Rs1,038.5 billion on average during 2024-30 and available resources is estimated at Rs709 billion, which leaves a financing gap of Rs329 billion, on average.

Private sector financing sources are private equity, bank borrowing and FDI. Equity financing is set at 2 percent of GDP while bank borrowing available for SDGs is estimated to grow by 7 percent in real terms, and FDI to grow by 10 percent. Filling in the gap requires either reallocating more bank credit – higher than 75 percent, of total credit to SDGs areas – or bringing in more FDI.

Cooperatives are instrumental in promoting agriculture and small business, and empowering women by organizing them, linking them in gainful economic activities, and bringing them to leadership. NGOs/INGOs working in the country are supporting the achievement of SDGs through their engagement in social mobilization, capacity development, and creation of small infrastructure and supporting community organizations to build social capital. Community organizations such as forest user groups and households are also contributing to several SDGs through investments from their own sources.

The annual average financing available for the cooperative, community and NGO sector is estimated at Rs126.3 billion for 2024-30. On average, the annual availability of financing resources for the household sector is estimated at Rs118.9 billion. The

combined finance available to this sector throughout 2024-30 is Rs245.3 billion. This amounts to 8.1 percent of the total investment requirement. This sector is not expected to have a financing gap because they would invest using the resources available for them.

An analysis of the SDGs investment requirement and different sources of SDGs financing shows a large financing gap of Rs755 billion on average during 2024-30. This amounts to 11.1 percent of GDP on average for the period. The annual average financing gap in the public sector is as high as Rs426 billion, while the gap for the private sector is Rs329 billion. This gap arises after adding the contribution of NGOs, cooperatives, communities and household sectors in the SDGs and an estimation of 10 percent growth in ODA and FDI each. So, meeting the 2030 targets calls for higher development cooperation from the external partners committed to supporting SDGs achievement.

A scenario with a higher economic growth of 7 percent and revenue growth of 8.0 percent is developed to compare the financing gap in different growth scenarios. In the higher growth scenario, the annual, average SDGs financing gap during 2024-30 would come down to Rs725 billion with public financing gap at Rs 382 billion. In terms of GDP, the financing gap would remain at 10.3 percent on average compared with 11.1 percent of GDP in the GDP growth scenario.

Conversely, a lower GDP growth might result in a higher financing gap, implying a lower efficiency situation (increased ICOR) in overall investment. A lower economic growth of 5 percent and revenue growth of 6 percent developed to compare the financing gap at a lower growth scenario shows

**An analysis of the SDGs investment requirement and different sources of SDGs financing shows a large financing gap of Rs755 billion on average during 2024-30.**

**Creating fiscal space for SDGs includes prioritization of public spending and allocating a higher budget to the SDGs areas.**

the gap rising to Rs468 billion on average during 2024-30, Rs42.3 billion higher than that in the reference growth scenario. In terms of GDP, the financing gap would go up to 11.9 percent on average compared with 11.1 percent of GDP in the reference GDP growth scenario and 10.3 percent in the high growth scenario. As some targets and financing sources are linked to GDP, this growth scenario will miss their achievement – particularly industry (manufacturing), social protection and governance.

Mobilization of higher revenue, the primary strategy for meeting the investment requirement, has to serve critical objectives of ensuring equity through a progressive taxation system, incentivizing private and other non-government sectors to allocate their investments and resources towards SDGs, and safeguarding the poorest people from taxation.

Creating fiscal space for SDGs includes prioritization of public spending and allocating a higher budget to the SDGs areas, restructuring public enterprises and creating space for public private partnership in the implementation of large infrastructure projects, restructuring domestic debt and taking initiatives for external bilateral debt relief, and soliciting the global community for more ODA to meet the financing gap.

Provinces' fiscal sustainability has been a challenge from both the spending and revenue sides, as higher recurrent expenditure to run the new administrative set up is putting pressure for more resources. Limited scope for mobilizing additional revenue is compelling provinces to depend more on fiscal transfers from the federal government.

In the current fiscal structure, provinces have to make additional efforts to collect more revenue in the areas of concurrent au-

thority, to induce and compel local governments to share the revenue collected under concurrent authority, to make a survey of revenue potentials in the areas of sole authority, and to collaborate with federal government in better revenue sharing of natural resources.

There are several areas where provincial governments can collaborate with the private sector. These include industrial infrastructure, commercial physical infrastructure such as industrial corridor, transport management, urban housing, commercial agriculture, university education, tertiary health care, social protection, environment and climate change.

The source of revenue for most local governments are IGFT, incomes derived from local taxation, and royalties and service charges. The local governments need to review their revenue management system, regularly revise tax and non-tax revenue rates to make them commensurate with changing price and consumption patterns, undertake surveys of the tax base, and introduce and frame out cost recovery policy of infrastructure systems operated by the municipality.

The IGFT should facilitate legitimate grants for implementing SDGs by introducing a combination of unconditional and conditional grants. The introduction of a new window for Special SDGs Investment Grants may also be necessary. Fiscal equalization grants to the subnational level could partly be made conditional on alignment with the SDGs. Setting consistent SDGs criteria for approving complementary and special grants to provinces will be instrumental in minimizing the financing gap at subnational levels.

Fund mobilization from capital markets, like public issue of the shares of commer-

cially viable infrastructure projects, consortium financing, and bond issues on project specific needs are among the means of financing for SDGs. Taking into account the huge infrastructure financing gap and the prospect for commercially viable infrastructure projects at the municipal level, it is necessary to strengthen their borrowing and project implementation capacity. The enhanced role of TDF as a financing institution would be necessary to make borrowing available and affordable for local government at the urban municipal level.

Public private partnerships (PPP) for the development of essential public infrastructure and services is crucial as well as effective in providing momentum to meeting investment gap for key SDGs at the local level while making public services effective by ensuring optimal use of managerial skills, innovative technology, appropriate human resources and capital available with the private sector. The experience of Public Community Participation (PCP) in local development can be replicated in local projects.

Local infrastructure financing can take place through instruments such as value capture, viability gap funding, land-pooling, and BOT modality. When local government cannot meet all the infrastructure financing requirements for the SDGs, the private sector has to be brought into the development process. Land pooling through the implementation of land banks, and special purpose institution managing land for advanced agriculture and collecting revenue from the business will also add to local resources.

Widening fiscal spaces will require greater global cooperation along with higher domestic efforts. Both the quantity and quality of ODA needs to improve substantially

to meet the financing gap, as some of the aid is going to non-SDGs areas. New ODA for the SDGs must be much better targeted than currently. More grants are expected to address climate finance-related policies, legal instruments and institutional mechanisms to promote low carbon pathways and climate-resilient development.

Utilization of aid is equally important in bridging the SDGs financing gap. During the period between 2015 and 2022, aid disbursement stood on average at 40 percent of the commitment. The underlying causes behind low aid absorption has to be corrected while looking for higher aid commitment. Besides, as aid effectiveness has always been an issue in Nepal's development process, result-based aid management is as important as improvement in the utilization rate.

Nepal's LDC graduation will have some impact on market access for trade and investment in goods and services mainly through changes in tariff and subsidy regimes, rules of origin, and intellectual property rights. As the impact of graduation on development cooperation is likely to remain marginal, larger FDI flows with an improved foreign investment environment can compensate for the loss of ODA inflow.

## 6. Strengthening implementation partnership

Several initiatives have been taken by the government and the private sector to forge partnership in implementing the 2030 agenda. The existing institutional mechanism will have to be more proactive to bring the three tiers of governments and private sector on board, milestones for key targets; and

**Public private partnerships (PPP) for the development of essential public infrastructure and services is crucial as well as effective in providing momentum to meeting investment gap for key SDGs.**

indicators of SDGs for this sector will have to be set through collaborative initiatives. Specifically, SDGs indicator-wise roles and responsibility of the private sector (and other actors) will have to be defined through an action plan developed for the remaining period of 2030 agenda with strong joint monitoring mechanisms at place.

Participation of other actors like civil society groups, cooperatives, NGOs, media and community groups has been considered critical for localization of SDGs goals and targets at the national, provincial and local levels, for their implementation, monitoring and evaluation, and to provide feedback to planning and budgeting entities. To strengthen partnerships in SDGs implementation, a timebound road map with defined tangible or measurable outputs for each stakeholder has to be worked out for accelerated interventions in sustainable development activities.

Partnership with the UN system has already led to tangible results in the formulation of SDGs-based periodic plans, to inspire responsible business practices and to carry on SDGs-oriented investments. Business ventures are being adapted to climate change and geared for innovative and cost-effective technologies. UNDAF has been a platform on which diversified expertise and resources of UN agencies are integrated for the delivery of coherent development programmes. The UNSDCF could be instrumental in accelerating SDGs that create synergy for the achievement of many more SDGs.

The World Bank and ADB, the two largest multilateral financial institutions, are partnering with the government in mobilizing funds for SDGs implementation. The partnership becomes stronger only when government plans, programmes and budgets are credible,

fiscal prudence is maintained, public spending is result-oriented, and implementation capacity of aided projects is enhanced.

Bilateral development partners have also committed to support Nepal in sustainable development. However, their agenda and priorities do not necessarily match those of the government. The partnership will strengthen when bilateral aid flows through the country system is utilized as per national priorities.

The role of INGOs is significant in promoting the CSOs' initiatives, as they mobilize about 10-15 percent of ODA annually. While INGOs face policy, operational, procedural, and administrative challenges, the government will have to create a conducive civic society space. Joint efforts have to be made by the government, development partners, INGOs, and NGOs to mitigate the impacts of climate change and natural disasters, reduce poverty, and achieve sustainable development.

## 7. Policies and priorities

Sound macroeconomic policies are crucial for promoting sustainable growth while maintaining stability, addressing poverty, inequality, ensuring trade competitiveness, and promoting investment climate, among others. While sector policies and strategies are equally important, policies related to the government, market, civil society, and development partnership are decisive in narrowing the gap between targets and progress so far.

In recent years, the global economy has not been seen as conducive for bringing SDGs progress on track. Persistent slowdown in global growth, weaker trade and investment flows, reversal of protectionism in

**The existing institutional mechanism will have to be more proactive to bring the three tiers of governments and private sector on board, milestones for key targets; and indicators of SDGs for this sector will have to be set through collaborative initiatives.**

several countries, on-going wars including on trade and technology, climate crisis posing huge adaptation and mitigation cost, and the protracted adverse effects of COVID-19 are worrisome barriers for meaningful global cooperation.

Addressing the SDGs challenges calls for a broad, coherent and integrated macroeconomic policy framework with (i) renewed focus on the real economy, climate change and environment; (ii) built-in rebalancing of growth and distribution, and (iii) re-orientation of international development policy towards fair and equitable access to trade, investment, technology, and financial resources and opportunities for all.

An overview of SDGs progress related to macro and sectoral policy paradigm indicates that an immediate restructuring of macroeconomic and sectoral policies is needed to minimize the risk of undershooting 2030 targets. The following are some of the critical steps to advance macro-economic policies for sustainable development.

First, macro policies have to facilitate growth and redistribution to take place concurrently. Redistribution is often taken as the most effective way to reduce poverty and achieve sustainable development. However, redistribution cannot be sustained if growth is low and fiscal space is limited. Thus, while macro policies will have to support high economic growth, they also have to encompass built-in-distribution and inclusion in the growth process.

Second, the government has to review the weakness in the existing monetary and financial system, which is decoupled from the economic growth process, and reintroduce the schemes as soon as possible to link financial resources to promote output and factor productivity.

Third, debt burden and a rising risk of defaults in cooperatives and micro-finance credit is putting a break on the aggressive expansion of an inclusive finance agenda. Restructuring existing policy and regulatory regimes, taking legal action against wilful defaults and such provocations, re-orienting financial institutions for productive investment, adopting green banking practices, and promoting deeper financial inclusion (including in insurance and payment services) would be necessary to meet several of the SDGs.

Fourth, an audit of macroeconomic policies shows their gender bias and poverty neutrality. The government has to regularly audit existing macro and sectoral public policies from poverty, gender, inequality and exclusion perspectives and reorient them to pro-poor and pro-gender growth.

Fifth, a review of existing fiscal, financial, monetary, credit, and foreign exchange policies is necessary to make them more consistent with the broader objectives of the SDGs, such as inclusive growth, access to productive resources, sustainable production and consumption and good governance for effective service delivery.

Sixth, as credible external sector policies are critical for attracting foreign investment, the government has to reform foreign exchange and exchange rate policies to make them agreeable to investors. Foreign private equity, venture capital and foreign exchange hedging mechanisms are necessary to attract more FDI in SDGs areas.

Seventh, existing trade and investment policies have to be revisited, particularly from the lens of revenue base erosion, sustainable consumption and production. Nepal's integration into global and regional trading regimes has substantially eroded the rev-

**Addressing the SDGs challenges calls for a broad, coherent and integrated macroeconomic policy framework.**

enue base while not creating opportunity for new tax areas. The government should work with the global community towards making the international trade and investment regimes work for the SDGs particularly in sustaining external sector stability, reducing inequality, and pushing forward climate actions.

Eighth, sector policies have to be linked with the macroeconomic policy framework to seek coherence between them and to move towards a socialism-oriented economy that is based on the agenda of sustainable development. This requires better understanding of policy interactions among sectors like economic, social, physical and industrial infrastructure, investment and trade to accelerate progress towards the SDGs.

Ninth, having faced shocks several times in the past, Nepal has to foster resilience to global economic shocks and develop macroeconomic policies to insulate the economy from trans-boundary impacts such as trade blockades, trade regime or exchange rate regime changes. This requires diversification of risks associated with over concentration of trade, finance, investment and employment opportunities.

Tenth, it is important to avoid a silos approach and follow a whole-of-society approach in policy formulation to ensure that they are not biased against the poor, women, and weaker social groups, and the environment they live in. This means fostering an understanding that such policies do not remain blind in terms of their poverty, gender, environment, and other social impacts.

Eleventh, for inclusive growth process, while macroeconomic policies will have to be pro-poor, labour-intensive sectors will have to be promoted by state interventions

that may not be compatible with the norms of a free market economy.

Twelfth, the domestic financial market condition, taxation system, and trade and foreign exchange regulations will be critical for promoting domestic as well as foreign direct investment. These are essential in harnessing infrastructure that drives the growth process. A stable macroeconomic condition with credible and predictable fiscal as well as financial policies would be necessary to bring in more FDI to meet the huge financing gap foreseen in SDGs implementation.

Although Nepal is not a highly indebted country yet, its public debt servicing amounts to a significant portion of the domestic revenue. This implies that larger ODA flow to LDC shall continue to be in the form of grants, conditioned to investing in programmes under SDGs consistent fiscal framework even after graduation from LDC status.

Global aid commitment should be reenergized to accelerate SDGs implementation while recovering the progress lagged behind from COVID-19. Bilateral and multilateral aid agencies will have to scale-up their resources to fund the SDGs financing gap. Aid will have to be linked to national priorities within SDGs, particularly in those SDGs accelerators that create synergy for the achievement of several other goals.

As one of the countries most vulnerable to climate change, Nepal is facing huge impediments to the achievement of several goals such as poverty, agriculture, health, water and energy. Climate change adaptation and mitigation measures being very expensive, and country financing capacity being limited, aid in grant for climate action has to be mobilized significantly in the coming years.

**Global aid commitment should be reenergized to accelerate SDGs implementation while recovering the progress lagged behind from COVID-19.**



Setting priorities in goals and targets is being perceived as even more imperative for the next seven years when some of the goals have seriously lagged behind. Resource allocation implementations have to be reprioritized in those areas. Reprioritization has to be reflected in development policies, strategies, perspective plans, periodic plans, annual budgets and implementation modality of the government and other actors at all levels.

Nepal's graduation from LDC status to developing country status by 2026 and to

move further to a middle-income country by 2030 will have implications for aid, trade and investment. But graduation should create greater confidence for foreign investment - risk premium on commercial lending might come down making credit available at lower interest rates. A post-graduation development strategy commensurate with the challenged SDGs outcomes has to be revisited and actions undertaken to ensure that the country does not fall back into least developed status.



## Chapter I

# Introduction

## 1.1 Background

The global Sustainable Development Agenda, having been implemented since 2016, is structured in three dimensions – economic, social and environmental. They are envisioned to evolve concomitantly centred on inclusivity, peace and prosperity. The SDGs, which encompass 17 goals with 169 targets covering a broad range of sustainable development issues for 2016-30, have been recognized as the globally-agreed common development framework for the planet, the people and their prosperity, covering a wider range of rights-based development issues. The SDGs and their targets, as agreed in the UN General Assembly in September 2015, had more than 230 indicators for measuring and tracking development outcomes. Localizing the targets and indicators in the national context, Nepal initially worked out 479 indicators. These were later revised to 301 indicators to reflect her geographical, social, and economic diversity so that the 2030 agenda of leaving no one behind could be achieved.

The SDGs, being comprehensive, ambitious and challenging, their achievement by 2030 requires effective policies and planning, huge resources for their implementation, and capacity to deliver results.

Besides, as SDGs are interwoven, achievement of one goal has synergy or trade-off implications for the achievement of several other goals. Such a reinforcing nature of the goals makes them indivisible and requires concurrent implementation with prioritization on those that create synergy for the achievement of several other goals. This calls for a well-designed planning and implementation strategy which identifies the right kind of interventions, their investment requirement, sources of financing, and partnership mechanisms.

Nepal started SDGs implementation in 2016, the first year of the 14th Three Year Plan. The translation of the plans and policies to programmes and activities were done through the medium-term expenditure framework (MTEF), and annual budgets. The subsequent 15th Plan and annual budgets have duly taken SDGs into consideration while prioritizing and allocating resources. In order to coordinate SDGs implementation across various sectors, the government made several apex level and sectoral institutional arrangements.<sup>1</sup> The SDGs National (Preliminary) Report and updated version of the report in the form of an SDGs Baseline Report were prepared and published in 2016-17. Nepal also pre-

**The SDGs, which encompass 17 goals with 169 targets covering a broad range of sustainable development issues.**

<sup>1</sup> This included constitution of SDGs Steering Committee under the chairmanship of the Prime Minister with key Ministers, VC and Officials of NPC, and representatives of private sector, NGOs, Cooperatives and Communities as its members. A SDGs Working Committee was constituted under Vice Chairman of the NPC to coordinate SDGs implementation at the national as well as subnational levels. Thematic working groups were formed under the convenorship of members of the NPC with secretaries of the relevant ministries and other concerned agencies as members of the groups.

**As the SDGs encompass a diverse set of targets, outputs and activities, they have to be implemented by various stakeholders, at different levels, and be financed through multiple sources such as the government, non-government, private and household sectors.**

sented the Voluntary National Review (VNR) of progress made in the SDGs in 2017, 2020, and 2024. These review reports flagged on the enabling environment, institutional mechanism, and a system to generate evidence of periodic achievements, progress, and challenges ahead for achieving the SDGs.

The SDGs came into operation at a time when the country was passing through a state restructuring process. The unitary system of government was replaced by a federal system, which meant devolution of state power, resources and responsibility to the provincial and local governments. Several service delivery tasks related to the SDGs were entrusted to subnational government. Meanwhile, the spread of COVID-19 with loss of life and livelihood, along with weakening of the state capacity for SDGs implementation, created serious risks for the timely achievements of the 2030 targets. Having almost crossed half-way to the 2030 milestone, the period left for action has to finetune, accelerate, and reinforce the SDGs' implementation strategy to meet the gaps created by the pandemic and ensure that progress is on track.

The state restructuring process since the SDGs have been in operation has not only devolved several SDG-related development and service delivery responsibilities to the provincial and local governments, but also shared resources and institutions. Several aspects of poverty reduction, agriculture development and food security, social services such as primary health care, basic and secondary education, and water and sanitation, small infrastructures such as in energy, transport, and urban development and environment have been devolved to the subnational level. Accordingly, provincial and local governments have started localization of SDGs at their

levels. While provinces have made plans and policies to internalize SDGs into their development strategy, some local governments have also internalized SDGs in planning and programming and have been able to undertake voluntary reviews of SDGs progress. The national SDGs strategy provided guidance for provincial and local governments to work out their respective SDGs implementation strategies.

As the SDGs encompass a diverse set of targets, outputs and activities, they have to be implemented by various stakeholders, at different levels, and be financed through multiple sources such as the government, non-government, private and household sectors. The government has to finance SDGs related to the public sector through the mobilization of revenue and public borrowings. Private sector-related SDGs, such as industrial, physical and urban infrastructure, financial and business services, have to be financed by mobilizing equity and debt from the domestic market as well as through FDI. Households with higher levels of income finance some of the spending in the form of out-of-pocket expenses. NGOs, cooperatives and community sectors finance some SDGs through resource mobilization at the community level.

Partnership is taken as a pillar for realizing SDGs, from policymaking and implementation to sharing the financing need. Despite institutional arrangements put in place to strengthen partnership, it has remained less than satisfactory for a number of reasons. First, partnership among the three tiers of the government for SDG-oriented programme implementation is weak and implementation efforts are made on standalone bases. Second, the private sector is playing a limited role in furthering SDGs either because it is not trusted for



some activities, or because it has not developed a larger sense of responsibility. Third, the contribution of non-government sectors is satisfactory, but their level of interventions and scope of work is very limited. Fourth, the household sector financing of SDGs has to be incentivized through progressive tax and subsidy system which is just evolving. All the above issues point to the need for revising the SDGs financing strategy. That would help the government to align the sustainable development agenda into the planning process, assess the financial, human, and other resource needs for their implementation, develop a financing strategy as per the SDGs financing need, and forge partnerships with non-government and private sector agencies to work together.

Operationalization of the SDGs requires a diagnostic of necessary interventions, investment requirements, sources of financing, partnerships and institutions, for which an SDGs Needs Assessment is required. A needs assessment was conducted during 2016-17, from which a financing strategy was created. However, the pandemic and a changing global and national economic outlook over the years has made it necessary to revisit them and chalk out a strategy for the remaining period until 2030. This update is expected to guide SDGs acceleration, reinforce implementation, explore new avenues of SDGs financing, estimate the financing gap (if any), and set an accountability framework that allows taxpayers and donors to track investments made for the intended outputs and outcomes.

**The primary objective of this study report is to review the SDGs Needs Assessment, Costing and Financing Strategy 2018, assess implementation to date, revisit the needs assessment, map the financial resources requirement and their availability, draw a mechanism for additional resource mobilization, and reinforce implementation partnership.**

## 1.2 Objectives

The primary objective of this study report is to review the SDGs Needs Assessment, Costing and Financing Strategy 2018, assess implementation to date, revisit the needs assessment, map the financial resources requirement and their availability, draw a mechanism for additional resource mobilization, and reinforce implementation partnership.

The main objectives of this assignment are to:

- Assess the unit cost for each SDGs intervention, ensuring accurate and efficient allocation of resources.
- Conduct a financial assessment under various scenarios to strategize the financing of SDGs interventions.
- Evaluate the SDGs investment across all three layers of federal Nepal; and
- Prepare an updated SDGs financing strategy based on revised cost estimates.

## 1.3 Scope and Limitations

### 1.3.1 Scope

This report intends to revisit the existing SDGs Needs Assessment, Costing and Financing Strategy 2018, review the latest SDGs needs assessment and costing works done at the sectoral levels and seek to align them with the respective SDGs, review key interventions necessary for SDGs implementation, review the localization of SDGs at the subnational levels, update the detailed 2017 costing of those interventions, re-estimate investment required for implementing the interventions, create a financing strategy for both the public and private sectors in the changed context, and generate a macroeconomic scenario consistent with the SDGs targets, interventions and financing strategy.

Major specific scopes of this study are to:

- Develop/revise the methodology to estimate the cost required to achieve 2030 targets;
- Estimate the SDGs costing with scenario analysis;
- Suggest revisions to the programmes, institutions and strategy to support the SDGs implementation based on changes in government policy;
- Identify areas for formulating investment-friendly laws/policies and their institutionalization;
- Identify interventions (programmes and activities) required to address the investment gap from different sectors on SDGs implementation;
- Estimate the expenditure made by all the stakeholders in SDGs (public, private, household, and other non-governmental entities) to date; and
- Revise the report for the federal context by estimating the investment requirement by all tiers of government.

### 1.3.2 Limitations

This review report is based on some administrative, and mostly secondary, sources of information for costing of interventions. Consultations are limited to federal level ministries and agencies. Only apex bodies of non-government development actors are consulted due to limited time and resources. Projections for investment requirements in different sectors are made on a linear basis and thus do not capture the dynamic linkages between interventions. Proximate costing is done for some interventions of qualitative nature (mainly in poverty, gender, and governance) in the absence of proper data and methodology for directly costing them. The feedback of SDGs investment to economic growth,



employment, and poverty is based on parameters like ICOR, employment elasticity and poverty elasticity of GDP growth. In the absence of data for several indicators, investment needs and financing gap estimates are largely indicative. Nonetheless, they can provide guidance for policy and financing priorities for SDGs acceleration.

#### **1.4. Organization of the Report**

The report is organized in seven chapters. The second chapter reviews the operationalization of SDGs in the three tiers of government, implementation status, progress to date and challenges towards

the achievements. The third chapter covers the revised methodology opted for needs assessment, costing and financing of the SDGs. It also reviews the latest sector strategies of the government and analyses the costing approaches and results drawn. The fourth chapter updates the SDGs' needs and interventions, and re-estimates the investment requirements by major SDGs areas. The fifth chapter draws on the SDGs' financing gap and derives the financing strategy based on the latest economic scenario. The sixth chapter analyses the implementation strategy focusing on the effectiveness of partnership between stakeholders. The seventh chapter delves into the policies and priorities for SDGs implementation.



## Chapter 2

# Review of Progress in SDGs Implementation and Achievement

## 2.1 Institutionalization of SDGs within the Development Framework

Nepal was one of the countries that took an early initiative to mainstream SDGs into national planning and budgeting processes. The objectives of 14th Plan (2015-18) and 15th Plan (2018-23), their strategies and programmes have been made consistent with the SDGs. Major developmental sector strategies were also aligned to the SDGs.<sup>2</sup> Medium Term Expenditure Frameworks (MTEFs) were designed to align periodic plans with annual budgets. Institutionalization of SDGs implementation and capacity building were introduced in all the three tiers of government. SDGs indicators at provincial and local levels were also developed. Provinces prepared SDGs baseline reports and made attempts to align their plans and budgets to SDGs as per the role entrusted to them. And local governments were apprised of SDGs strategy and capacity developed to prepare plans and budgets accordingly. They also prepared MTEF reports based on the SDGs plans in order to align SDGs into annual programmes.

The National Statistics Office (NSO) is a nodal agency to collect, disseminate and monitor SDGs indicators. Development of National Data Profile System under NSO has taken place with production of SDGs indicators

at provincial and local levels to assist policy decisions. Efforts are made to make disaggregation of census and geospatial data for subnational governments available, while an online portal on the NPC website has been made for open public access. Budget and annual programme coding by SDGs categories to track SDGs spending and monitoring started from 2016. And intra-government management information system was put in place for data sharing purposes.

## 2.2 Progress during the Pre-COVID-19 Period

Progress in the SDGs was very encouraging during the first four years of their implementation. Annual growth rate of real GDP per capita remained above 5.6 percent between 2016 and 2019. Progress in reducing poverty was encouraging with 15 percent of the population living below \$1.9 in 2019 from as high as 36 percent in 2015 and per capita gross national disposable income (GNDI) reaching \$1,097 in 2019 from \$766 in 2015. Similarly, the multidimensional poverty index dropped from 30.1 percent in 2015 to 28.6 percent in 2019 and the proportion of the population below the national poverty line (as per NLSS 2011 definition) fell to 16.7 percent in 2019 from 21.6 percent in 2015.<sup>3</sup> The population covered by a social protection system more than doubled from

**Nepal was one of the countries that took an early initiative to mainstream SDGs into national planning and budgeting processes.**

<sup>2</sup> UNDP (2021), SDGs Progress Assessment Report, UNDP, Kathmandu, February, 2021

<sup>3</sup> NPC (2024), Voluntary National Review of SDGs

8.1 percent of population to 17 percent between 2015 and 2019.<sup>4</sup>

Progress in hunger was rather slow even before COVID-19. Per capita food grain production increased from 320 kg in 2015 to 376 kg in 2019. The food security index improved to 46.0 in 2019 from 42.8 in 2015. During 2015-19, the incidence of malnutrition improved from 11 percent to 10.3 percent.<sup>5</sup> The incidence of stunting, wasting, and underweight children under 5 remained better than 2015 levels. However, incidence of anaemia among women of reproductive age as well as children under 5 years of age deteriorated during this period.<sup>6</sup> The malnutrition situation did not seem to have made much progress even before the pandemic – as the Nepal Demographic Health Survey, 2022 also reveals.

In health, maternal mortality ratio reduced from 258 per 100,000 live births in 2015 to 182 in 2019. Under 5 child mortality dropped from 38 per 1,000 live births to 28 during 2015-19 and the neonatal death rate came down from 23 per 1,000 live births to 16 during this period. Progress on the proportion of births attended by skilled health personnel was satisfactory. The incidence of tuberculosis, malaria, kala-azar, dengue, and trachoma remained high despite some improvements. Institutional delivery with the help of health worker increased from 55.2 percent to 77.5 percent of births during this period.

There was gradual progress in net primary school enrolments from 96.6 percent in 2015 to 97.2 percent in 2019, while gross enrolment at the secondary level rose from

56.7 percent to 71.6 percent. Gender parity at secondary and higher education, school completion rate, and literacy improved.

While gender empowerment measures showed improvement, the gender inequality index improved marginally from 0.49 in 2015 to 0.476 in 2019. Inequality in wages continued. There was little progress on violence against women and children. There was an improvement in women's participation in private sector decision-making, women entrepreneurs and in ownership of property.

Basic water supply coverage increased marginally to 88 percent in 2019 from 87 percent in 2015, while safe water supply coverage went up to 25 percent from 15 percent during the same period.<sup>7</sup> A significant improvement was observed in sanitation, with 89.9 percent of the population having basic sanitation facilities in 2019 compared to 82 percent in 2015.

Access to clean and affordable energy coverage improved during the first four years of SDG. From 74.0 percent of population with access to electricity in 2015, coverage went up to 89.9 percent in 2019.<sup>8</sup> Per capita energy consumption increased markedly from 80 kwh in 2015 to 260 kwh in 2019. Installed hydro-electric capacity reached 1,250 MW in 2019 from 782 MW in 2015, indicating a continuous progress in the right direction.

Progress in SDG 8, such as real GDP growth rate, per capita GDP growth and growth rate of GDP per employed person, remained encouraging. For SDG 9, road den-

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> *op cit.* footnote 2

<sup>8</sup> *op cit.* footnote 2

sity went up from 0.55 km/sq.km to 0.63 km/sq.km in 2019 while progress in the industrial sector lagged far behind. Income and consumption inequality both declined during this period while Palma Index did not improve.

Housing conditions as encompassed as indicators in SDG 11 improved significantly during 2016-19 also because of introduction of safe housing scheme and reconstruction of earthquake-damaged houses while indicators of pollution deteriorated. Progress in SDG 12 and 13 also remained less than satisfactory. While progress in SDGs 15 and 16 remained satisfactory, that for SDG 17 was less than satisfactory.

### 2.3 COVID-19 Impact on Progress towards SDGs

From 2015 to 2019, the world made some, albeit slow, progress on the SDGs. But with the outbreak of the pandemic and other simultaneous crises, SDGs progress almost stalled globally. The COVID-19 pandemic, which started at the end of 2019, very swiftly spread all around the world infecting millions of people and causing a serious health crisis of the 21st century. To combat the contagion, many countries opted for lockdown, which delimited mobility and transport thereby taking the global economy into the greatest recession in world economic history after the great depression of 1930.

Global progress reports reveal that until the midpoint of the 2030 Agenda, all of the SDGs were seriously off track.<sup>9</sup> Very limited progress is observed in the environ-

mental and biodiversity goals, responsible consumption and production, climate action, and life on land. COVID-19 and other disruptions aggravated fiscal-space issues in low-income and lower-middle income countries, leading to a reversal in progress on several goals and indicators.<sup>10</sup> Domestic and also external shocks derailed progress in several SDGs – mainly poverty, health, education, industry and growth.

The pandemic set back GDP growth due in large part to the Nepalese economy being directly linked with the global economy since the 1990s, along with the wave of economic liberalization and globalization. As the first case of the COVID-19 in Nepal was reported on 23 January 2020 and the government adopted the COVID-19 prevention measures from the next month. These measures included planning, prevention and preparation as a response to the disease, intermittent nationwide lockdown from March 2020, curfews, closure of non-food retail businesses, restriction on public transportation including air, social distancing and provisions for mandatory mask-wearing and implementation of health sector emergency responses. This halted the mobility of people, except for emergencies such as seeking medical attention or purchase of essential foodstuffs. All non-emergency services in health and utilities were withheld. In 2020, more than 2.5 million COVID-19 confirmed cases and more than 2,000 deaths were reported.

The impact of the COVID-19 pandemic on Nepal's social economy was observed on several fronts.<sup>11</sup> First, the country depended heavily on tourism, trade, and foreign employment, and the consequences that

**Global progress reports reveal that until the midpoint of the 2030 Agenda, all of the SDGs were seriously off track.**

<sup>9</sup> Jeffrey D. Sachs, et al, Sustainable Development Report 2023, Implementing the SDGs Stimulus, amazonaws.com/sustainable-development-report-2023.pdf

<sup>10</sup> ibid

<sup>11</sup> United Nations Development Programme, Rapid Assessment of Socio-Economic Impact of COVID-19 in Nepal, undp.org, July 2020.

propagated through the services and industrial landscape. Second, it demonstrated the weakness of the health infrastructure and health services when the spread of the pandemic overwhelmed a grossly inadequate health infrastructure even when antivirals or vaccine became available. Third, Nepal's substantial geo-economic reliance on India and China, and the nature of contagion in those countries caused coping risk and failure of supply chains for basic items. And fourth, the pandemic disrupted supply chains, shut or threatened the survival of small and informal enterprises, and made people highly vulnerable to falling back into poverty through widespread loss of income and jobs.<sup>12</sup> As industrial and construction activities slowed down, labour markets remained under heavy pressure with more people looking for employment amid reduced job creation.

Due to contraction in overall economic activities, GDP showed negative growth (-2.37 percent) in FY 2019/20 for the first time in the last two decades, a more severe contraction than during the 2014/15 earthquake. Comparatively, service sectors including transportation, tourism, hotels and restaurants, wholesale and retail trade were severely affected. Contraction in GDP and imports caused revenue collection to drop by 7.0 percent in FY 2019/20, resulting in lower spending capacity for SDGs while a decline in capital expenditure squeezed the progress of several SDGs. Due to the COVID-19 pandemic, projects and the programmes were delayed with less than half of the budgeted federal capital expenditure being spent. The overall impact on SDG 1 was a sharp deceleration in the annual average poverty reduction rate at 0.5 of a percentage point during 2019-22 compared

with a decline in the annual average by 1.0 percentage point during 2015-19.

In agriculture, the lockdowns and halt of transport systems created difficulties in the supply of agricultural inputs like fertilizers, seeds, pesticides and agricultural implements and affected the price chain by increasing the prices of agricultural produce such as food grains, fresh vegetables and fruits.<sup>13</sup> The supply of inputs, including feeds, medicines and vaccines required for livestock and fisheries, was also affected. While there was modest progress in most indicators of SDG2 during 2019-22, the proportion of the moderately and severely food insecure population increased from 7.8 percent in 2019 to 12.5 percent in 2022.<sup>14</sup>

In health, about 12,000 people lost their lives, one million people were infected and high infections of COVID-19 put pressure on Nepal's health system. With the Health service heavily affected by the pandemic, progress in several SDG3 indicators remained negative during 2019-22. Child and infant mortality increased while births attended by skilled health workers improved to just 80.5 percent of reproductive aged women from 79.3 percent in 2019 while the proportion of institutional deliveries rose marginally from 77.5 percent in 2019 to 79.0 percent in 2022.<sup>15</sup>

For SDG4, the 2020 academic session was badly affected by the pandemic. All educational institutions and training centres across the country were closed. Regular teaching, with the learning activities of all classes and levels disrupted for about 8.7 million students from school to university levels.<sup>16</sup> The conduct, evaluation and publication of exam results of various classes and levels includ-

<sup>12</sup> Ibid

<sup>13</sup> Ibid

<sup>14</sup> Op. cit. NPC (2023)

<sup>15</sup> Op. cit. NPC (2023)

<sup>16</sup> Economic Survey, Ministry of Finance, 2021

ing school level, local levels and national level were not accomplished on time. With the second wave of the pandemic, examination programmes from school level to university level of the 2021 academic session were also affected. As a result, several indicators of SDG 4 progress remained negative during this period. Progress in gender empowerment also stalled.

Progress in water supply and sanitation continued to show progress, albeit slower. However, progress in SDG7 was encouraging with most indicators marking a progress – access to electricity up from 89.9 percent in 2019 to 95.0 percent in 2022 and per capita energy consumption much higher from 260 kwh in 2019 to 380 kwh in 2022.

COVID-19 had adverse impacts on infrastructure, as overall investment could not pick up in these areas and the government was preoccupied with coping with the pandemic. Road density could not increase during 2019-22 while the share of manufacturing in GDP declined. There was, however, continued progress in housing conditions with 54 percent of urban households living in safe houses in 2022 compared with 40 percent in 2019. While there was marginal progress on climate action, encouraging progress was made in biodiversity conservation during this period. Progress in governance and partnership showed a mixed trend during this period, being affected by the protracted pandemic from 2020 to 2021.

The UNCTAD Trade Development Report<sup>17</sup> mentions international trade and its related power asymmetries as having contributed to further worsening global labour income

share after the COVID-19 shock. Capital flows to developing countries declined and cross-border financial transactions involving developing countries experienced significant shocks. That also flagged the rise in debt stress and related development setbacks in developing countries, directly attributed to inherent structural weaknesses in the international financial system. Access to reliable sources of external development finance in the required quantity, cost and maturity, for low-income countries to meet their development needs remains challenging. This kind of situation poses a risk in achieving SDG 17 targets. Particularly, insufficient official development assistance, relative decline in official concessional financing, and an inadequate global financial safety net are taken as warnings about mobilizing necessary global resources for financing the SDGs.

The Nepal Voluntary National Review of SDGs report shows progress of 58.6 percent in the targets until 2022. Of the 238 indicators, 41 percent (98 indicators) exceeded their 2022 targets, while 35 percent (83 indicators) demonstrated advancement in the 1 percent to 99 percent range. This means that 76 percent of the indicators as a whole indicate favourable progress. Progress of 3 percent (seven) indicators remained unchanged, and 20 percent of the indicators (47 out of 238) regressed. Ensuring progress in these areas requires additional efforts during the remaining period of SDGs. Given the current trend of progress, it is likely that only 60.5 percent of the targets will be met by 2030. Those most off-track are zero hunger, decent work, industry and infrastructure, and inequality (Table 2.1).

**Given the current trend of progress, it is likely that only 60.5 percent of the targets will be met by 2030. Those most off-track are zero hunger, decent work, industry and infrastructure, and inequality.**

<sup>17</sup> [https://unctad.org/system/files/official-document/tdr2023ch2\\_en.pdf](https://unctad.org/system/files/official-document/tdr2023ch2_en.pdf)

**Table 2.1: Status of SDGs Progress Until 2022**

Goal No.	Sustainable Development Goals	2022 Progress towards targets (%)		Anticipated progress for 2030 (%)
		2022	2030	
1	No Poverty	78.1	54.1	78.6
2	Zero Hunger	68.3	44.9	71.5
3	Good Health and Well-being	48.7	41.5	56.8
4	Quality Education	66.1	43.9	71.1
5	Gender Equality	57.9	38.0	58.1
6	Clean Water and Sanitation	63.5	36.3	57.8
7	Affordable and Clean Energy	63.5	39.5	70.1
8	Decent Work and Economic Growth	31.5	19.7	34.7
9	Industry, Innovation, and Infrastructure	41.0	30.4	42.0
10	Reduced Inequalities	72.5	44.8	72.3
11	Sustainable Cities and Communities	97.2	76.1	89.0
12	Responsible Consumption and Production	38.6	29.5	43.1
13	Climate Action	55.3	43.4	53.9
15	Life on Land	69.3	59.9	67.5
16	Peace, Justice, and Strong Institutions	57.4	35.8	55.1
17	Partnerships for the Goals	34.9	22.3	37.7
	<b>Overall progress of SDGs</b>	<b>58.6</b>	<b>41.7</b>	<b>60.5</b>

Source: NPC (2024), Nepal National voluntary Review of Sustainable Development Goals

## 2.4 Overview of SDGs Implementation at the Province Level

The Public Expenditure Tracking Survey<sup>18</sup> (PETs) 2023, provides a comprehensive analysis of budget allocations, resource utilization, and the impact of public expenditure at the province level. The survey reveals diverse province-wise socioeconomic and infrastructure situations in terms of GDPs, HDIs, MPIs, resource availability, connectivity, access to quality education and health services, and capacities for revenue generation and budget implementation capacity, flagging differentiated priorities to be set for the SDGs. The survey highlights a misalignment between provincial priorities in their periodic plans and the actual allocation of resources in the Medium-Term Expenditure Framework (MTEF)

and annual budgets. This misalignment has led to inefficiencies in resource allocation.

Similar to the Federal Government, which began SDG-based coding of budget expenditure to track its allocation in FY2016/17, Provinces also started SDG-based budget coding from FY 2018/19. But it is still imperfect, and a significant portion of the budget remain uncoded, which impedes proper tracking of public expenditure in SDGs.

Periodic plans of all provinces have given high priority to the implementation of SDGs in line with national/provincial commitments, but have not made a breakdown of targets and indicators for the SDGs in the planning document. Besides, about one-fourth of the budget remains uncoded, making it hard to track expenditure. Of the coded ones, most allocation is concentrat-

<sup>18</sup> UNDP (2023), Public Expenditure Tracking Survey, Kathmandu

ed on specific SDGs, particularly in SDG 9, SDG 4, SDG 11 and SDG 16 (Table 2.2). The highest percentage of budget allocation (average 13.2 percent) was found in SDG 9 in all provinces. Some critical SDGs, such as gender equality and water supply, have received lesser allocation. This indicated that the reallocation of the budget is necessary to achieve all the SDGs in a balanced way.

Recoding of provincial budgets under the PETS Study shows only 2 percent of the spending remains uncoded, indicating that most of the province budget can be allocated as per the SDGs. This has implications for subsequent analysis of SDGs investment requirement and financing at the provincial level. There is a huge difference between provincial government SDGs coding and PETS study coding of budget lines. For instance, provincial coding shows only 13 percent of the budget in infrastructure whereas the PETS study shows the allocation at nearly double (25.7 percent). Similar is the case with some other goals such as poverty, hun-

ger, and good governance. However, budget coding of education in the PETS study is almost half of the province governments' coding. As the standard deviation shows, there is large variation in the budget allocation pattern across provinces; it is as high as 5.6 percentage points for good governance and 4.7 percentage points for infrastructure (Table 2.2). Overall, the PETS report offers valuable insights into the efficiency and effectiveness of public expenditure concerning SDGs achievement in Nepal's provinces, highlighting areas for improvement in resource allocation and utilization.

## 2.5 Overview of SDGs Implementation at the Local Level

Efforts are being made at local levels to align the SDGs in the plans and programmes and allocate resources towards their implementation following the guidelines, standards and frameworks issued by the federal gov-

**Table 2.2: Budget Allocation of Provinces by SDGs (%)**

SDGs	Coding of Provinces			PETS Team Coding	
	2021/22	2022/23	Average	Average	SD
Not Coded	20.99	26.9	23.94	2.08	1.23
End Poverty	7.07	9.51	8.29	13.96	2.4
Zero Hunger	4.32	4.47	4.39	7.27	1.12
Healthy Life	7.69	5.9	6.79	7.24	2.81
Education and Social Development	11.03	10.92	10.98	4.98	1.53
Clean Water and Sanitation	2.29	1.52	1.91	2.51	1.41
Industry and Infrastructure	14.07	12.17	13.12	25.74	4.71
Life on land	0.75	0.65	0.7	4.47	1.68
Good Governance, Inclusive Society	7.44	7.48	7.46	12.61	5.64
Partnership for Sustainable Development	0.43	0.33	0.38	8.04	3.39
Sub Total	55.09	52.95	54.02	88.9	-
Other Goals (incl. un-coded)	44.9	47.1	46.0	11.1	3.73
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>-</b>

Source: PETS Report and calculation of the research team

Note: SD is standard deviation of budget allocations of provinces reflected in their coding.

ernment. In this regard, the local level has established good practice by developing the appropriate legal documents and financial projections to operate programmes in its periodic and yearly programmes to meet the SDGs. In this respect, SDGs: Localization Resource Book, 2077 and local level planning directives, 2078 have been issued. Local governments have aimed to adopt the same methods and procedures for the effective internalization of sustainable development goals. The expected achievements of most development and service sectors included in the local level plan will be periodically updated according to the SDGs indicators. To internalize the SDGs, the laws, acts and procedures formulated at the local level has been of great help.

The Voluntary Local Review (VLR) of SDGs progress done by 14 local govern-

ments shows more than two-thirds of the total budget allocation during FY 2017/18 -2019/20 made in Goals 4, 9 and 16 (Table 2.3). While about 13 percent of total budget was allocated to SDG 11, allocation on zero hunger was as low as 3 percent. Some SDGs – such as Goal 7, 10, and 13, mostly falling under federal budget – allocation in these areas was modest. The VLR reports also flagged the wide variation in allocation patterns. For example, while average allocation in quality education was 20.4 percent of the budget,<sup>19</sup> the standard deviation was as high as 12.3 percentage points. In sustainable cities, while average allocation was 12.82 percent, the standard deviation in allocation stood as high as 6.11 percentage points. This simply shows a wide variation in the allocation priorities among local levels.

**Table 2.3: Budget Allocation Pattern at Local Levels by SDGs (3-Yr average)**

SDGs	Average (%)	Standard Deviation
End Poverty	0.25	0.29
Zero Hunger	3.08	1.33
Good health and well-being	6.51	3.40
Quality Education	20.37	12.27
Gender Equality	1.22	0.64
Clean water and Sanitation	2.15	2.80
Affordable and clean energy	0.43	0.43
Decent work and Economic growth	4.15	2.13
Industry, innovation and Infrastructure	23.05	6.90
Reduced Inequality	0.00	0.00
Sustainable cities and communities	12.82	6.11
Responsible Consumption and Production	0.40	0.41
Climate Action	0.62	0.60
Life on Land	0.39	0.56
Peace, Justice and strong institutions	24.53	11.51
Partnership for the Goal	0.00	0.00
<b>Total</b>	<b>100.00</b>	<b>0.00</b>

Source: Research team compilation from the 14 VLR reports (UNDP, 2023).

<sup>19</sup> This high allocation reflects the conditional budget transfers in school education as conditional grant from the federal government.

## 2.6 Review of Global SDGs Costing Exercise, Synergies and Trade-off

### 2.6.1 Synergy and Trade-off in SDGs

Understanding the synergies and trade-offs between sustainable development goals and targets is extremely important for minimizing trade-offs and maximizing synergies, avoid wasting resources, and ensuring equitable partnerships and ultimately, equitable development.<sup>20</sup> With 17 globally defined goals, 169 targets, and 234 indicators to monitor and track progress in SDGs, policymakers often lose sight of the synergies and trade-offs between SDGs and their targets. Recently, various approaches have been developed to identify and quantify these synergies and trade-offs. Researchers have often chosen some targets to simplify this complex task, and drawn synergies and trade-offs through time series analysis with statistical tools such as correlation and regression. Some studies have analysed the core of the synergy approach in a three-step process of collaborative analysis<sup>21</sup>– customization, scoring interaction and analysis looking beyond direct relations.<sup>22</sup>

Synergies and trade-offs among the Goals within specific locations have been widely studied. However, there is little understanding of SDGs synergies and trade-offs across spatial/administrative boundaries although the world is increasingly interconnected, and the UN aims to achieve the Goals everywhere by 2030.<sup>23</sup>

A number of empirical studies have estimated the synergies and trade-offs between selected SDGs targets. Research<sup>24</sup> finds agro-food systems' links and interactions with society, health systems, ecology and climate systems, economic and governance systems and science and innovation systems that generate synergies, externalities and trade-offs that extend beyond the system. The study highlights the clear need to quantify synergies, externalities and trade-offs and to measure distributional effects emerging from normal operations and policy interventions. This evidence can support policy prioritization in ways that will strengthen positive links, minimize negative externalities and trade-offs, and promote inclusive food systems by reducing inequalities.<sup>25</sup>

It is also observed<sup>26</sup> that eradicating hunger and malnutrition will affect land, water, energy, biodiversity and climate, as food production generates greenhouse gas emissions. Promoting healthy diets will reduce overweight and obesity rates, which in turn will reduce food-related non communicable diseases and health expenses. It is also believed that such interaction among targets have distributional effects. Eliminating hunger and malnutrition, promoting healthy diets and reducing poverty will need to happen while addressing distributional challenges in terms of lack of productive assets and wealth, and income inequality for families and individuals.

<sup>20</sup> A trade-off among SDGs is a condition when an action to achieve one goal or target makes it more difficult to achieve one or more other goal or targets while synergy among SDGs is a condition when an action to achieve one goal helps achieve one or more other goals or targets.

<sup>21</sup> Weiltz, N. Carlsen, H. and Trimmer, C (2019), SDGs Synergies: an approach for coherent 2030 Agenda implementation. Stockholm Environment Institute.

<sup>22</sup> Customization is narrowing the scope of the analysis and choose a subset of targets to focus on. Scoring interactions is developing cross-impact matrix of selected targets and each interaction given a score against a guiding question. Analysis and looking beyond direct interactions is observing all the interactions beyond the direct interactions and identify patterns, clusters of interacting targets and other network effects.

<sup>23</sup> Zhiqiang Zhao, et al., Synergies and tradeoffs among Sustainable Development Goals across boundaries in a metacoupled world - ScienceDirect. Science of The Total Environment, Volume 751, January, 2021, <https://www.sciencedirect.com/science/article/abs/pii/>

<sup>24</sup> Maximo Torero, "Understanding Trade-offs and synergies SDGs 1, 2, 8, 17 and others, Food and Agriculture Organization of the United Nations May 2021

<sup>25</sup> *ibid*

<sup>26</sup> *op cit.* footnote 24

Some studies<sup>27</sup> have observed Goal 4 as a foundational goal having an enabler role for the realization of most of the other sustainable development goals. Particularly, Goals 3, 8, 12, 13, 14, 16 and 17 are found to have targets that are directly related to Goal 4 while the other nine Goals are considered to be indirectly related to Goal 4. Education and training is also found to have positively influences on poverty (Goal 1), zero hunger (Goal 2), gender equality (Goal 5), decent jobs and economic growth (Goal 8). Thus Goal 4 is taken as a foundational SDGs due to its influence on the achievement of most of the other SDGs.

One more qualitative and quantitative assessment<sup>28</sup> of target interactions of Goals 1, 2, 6, and 7 was done for 1990–2012 for some South-Eastern and Sub-Saharan African countries by means of network analysis techniques, correlation of indicator values, and advanced sustainability analysis. The study demonstrates sustainability analyses in terms of synergy between the SDGs in six developing countries, including Nepal, using advanced sustainability analysis. The analysis has shown strong synergy between various SDGs targets, but differing from country to country and over time. Higher synergy values were evident where countries' policies recognized the importance of linkages between cross-sectoral targets. Based on the emphasis given by individual countries on specific targets, and the level of previous achievements, the synergy might also differ over time.

Another study<sup>29</sup> developed a regression model to assess the influence that selected

targets have had on a less evolved target (proportion of youth not in education, employment or training). The study revealed SDG 4 (quality education), SDG 5 (gender equality) and SDG 7 (affordable and clean energy) as the ones that contain the largest number of positive interactions with other SDGs.

Pradhan, et al (2017)<sup>30</sup>, analysing synergies and trade-offs based on correlations of indicator values for all SDGs in 227 countries, have found synergies outweighing trade-offs in general and more synergies than trade-offs within SDG 6. Empirical evidence shows a robust connection between greater gender equality and improvements across key economic outcomes, including growth, productivity, and competitiveness. Vital for upholding the rights and dignity of all women and girls, gender equality is also a multiplier and accelerator of human progress, economic growth and development. Financing for SDGs should consider gender perspectives specifically, because if it does not, it risks reinforcing existing gender biases, or lead to otherwise unexpected outcomes. Gender equality and the empowerment of women and girls is recognized under the 2030 Agenda not only as a standalone goal but also as a prerequisite for addressing the world's most pressing concerns, including poverty, inequality and climate change, and for greater peace and prosperity.

One study (UNCTAD, 2023) finds some SDGs indicators overlapping pathways, even removing them, to leave higher costs for individual pathways. This underscores

<sup>27</sup> UN (2022), SDGs Sustainable Development Goal 4 and Interlinkages with Others, Expert Group Meeting in preparation for HLPF 2022: Building back better from the coronavirus disease (COVID-19) while advancing the full implementation of the 2030 Agenda for Sustainable Development, <https://sdgs.un.org/sites/default/files>

<sup>28</sup> Brijesh Mainali et al, Evaluating Synergies and Trade-Offs among Sustainable Development Goals (SDGs): Explorative Analyses of Development Paths in South Asia and Sub-Saharan Africa, <https://www.mdpi.com/2071-1050/10/3/815>

<sup>29</sup> Carlos de Miguel Ramos and Rafael Laurenti, Synergies and Trade-offs among Sustainable Development Goals: The Case of Spain, Sustainability, MPDI, 2020, <https://www.diva-portal.org/smash/get/diva2.pdf>

<sup>30</sup> Pradhan, Prajal, A Systematic Study of Sustainable Development Goal (SDG) Interactions, Earth's Future <https://agupubs.onlinelibrary.wiley.com/doi/10.1002/2017EF000632>

the importance of leveraging synergies between the SDGs and the transition pathways. It also illustrates that money spent with a gender focus yields better results. The study highlights optimization of spending – more with less and sooner. Higher government spending is generally assumed to be associated with better outcomes in achieving SDGs. However, this relationship is not consistent across all countries. This highlights the importance of considering factors beyond spending, such as governance and policy implementation.

The UNCTAD study also identifies that understanding synergies, along with investing in individual targets, is key to SDGs achievement. The analysis shows strong interconnections between government spending across sectors and SDGs. This underscores the critical need for an integrated, holistic approach to financing the SDGs. Spending on education is particularly effective in fostering achievement of outcomes across all SDGs. Similarly, spending on ‘information technology’ and ‘health’ can substantially enhance ‘education’ outcomes, creating mutual benefits. The highest synergy coefficient of 7.5 is found for ‘health’ and ‘education’ spending.<sup>31</sup> This suggests that the combined output of the education and health sectors has a significantly stronger impact on the SDGs than the sum of their individual outputs.

Systematic strategies that consider spillover effects and trade-offs can multiply effectiveness. The analysis finds positive synergies between spending on ‘environment’ with that on ‘agriculture’, ‘housing’ and ‘transportation’, illustrating the cross-cutting synergies of an environmental focus for the achievement of many SDGs. Yet, a

trade-off is observed for spending on ‘fuels and mining’ and ‘environment’, primarily due to the environmental degradation caused by fossil fuels. Understanding these synergies is essential for strategic public spending decisions, to optimize positive impacts and minimize trade-offs.

### 2.6.2 Review of SDGs Costings

Reviews of SDGs costing by different agencies gives some indication of how much Nepal should be investing in those areas. A comparison of several SDGs costing studies reveals a large variation in the estimates of the funding needs to achieve the 2030 Agenda and estimates from different studies ranging from about \$250 to over \$1,839 per capita annually – based on SDGs coverage, choices of methodology, sector, and data sources. The financing needs depend on the time left to pursue the SDGs and the current distance from them. The closer we get to 2030, the higher the annual cost to bridge the gap.

UN agencies have done several studies to estimate the costs related to SDGs. Many of them are on selective basis and based on macro data. Very limited studies have gone through individual costing of all indicators and their sub-indicators. WHO (2017) estimated the cost of reaching global health targets by 2030 using ambitious and progressive scenarios<sup>32</sup> for 67 low and middle income countries, accounting for 75 percent of the world population. The ‘ambitious scenario’ requires average health spending per person at \$58 and total health expenditure at 7.5 percent of GDP by 2030, while a ‘progress scenario’ would require average per person health spending at \$41 and total health expenditure at 6.5 percent of GDP by 2030.<sup>33</sup>

<sup>31</sup> A synergy coefficient of 7.5 implies that a unit increase in combined spending on ‘health’ and ‘education’ is associated with a 7.5-fold improvement in achieving the SDGs.

<sup>32</sup> The ‘ambitious’ scenario means that investments are sufficient for countries to attain the health targets in the SDGs by 2030, and the ‘progress scenario’ means that countries get two thirds or more of the way to the targets.

<sup>33</sup> WHO (2017), Cost of Reaching Global Health Targets by 2030, <https://www.who.int/news/item/17-07-2017>

**COVID-19 squeezed the GDP growth rate, deteriorated trade, investment and aid environment, disrupted smooth implementation of several sustainable development interventions and thus derailed the path to achieving SDGs targets by 2030.**

UNCTAD (2023)<sup>34</sup> estimates the cost of 20 indicators critical to the advancement of Goals 1, 2, 3, 4, and 5, the pathways related to pursuing wellbeing, access to essential services, equality and human rights. This study considers the costs of achieving the targets for access to basic services, investment in rural infrastructure and agriculture, education completion and proficiency in reading and mathematics, and reducing child mortality, fighting tuberculosis and ensuring access to vaccines. The cost estimates also consider the requirements of achieving gender equality in parliaments and local government, and in time use on unpaid domestic and care work. The cost for achieving these indicators for 2023 to 2030 is estimated at an annual average of \$1,194 (13.7 percent of GDP) in the 21 developing economies covered.

The LDC Report 2021 estimates Nepal's investment requirement in some SDGs indicators. The report says that Nepal's investment requirement (average investment values for 2021–2030 as a percentage of 2021 GDP) for 7 percent annual GDP growth amounts to \$13.7 billion, and the investment requirement is 36 percent of GDP. Ending extreme poverty requires \$9.8 billion, and expected average GDP growth is 12 percent. Doubling manufacture output share to GDP requires \$121.2 billion. Health investment requirement amounts to \$2 billion, which is 8 percent of GDP. Education (Target 4.1) investment needs \$3.5 billion, or 11 percent of GDP. And social protection spending amounts to \$0.5 billion, or 4 percent of GDP. The biodiversity (SDG 15.1) investment requirement is, however, low at \$0.1 billion.

The global investment requirement is only an indicative number, and the country-spe-

cific actual requirement varies because of the different initial condition of development, country-specific SDGs targets and different unit costs of targeted output. So country-specific SDGs costing and estimation of investment requirement is necessary.

## **2.7 SDGs implementation issues and challenges**

COVID-19 squeezed the GDP growth rate, deteriorated trade, investment and aid environment, disrupted smooth implementation of several sustainable development interventions and thus derailed the path to achieving SDGs targets by 2030. The pandemic also compelled SDGs priorities to be redefined, with a lot of efforts to be made to protect life, relief and rehabilitation. Weak production capacity, deteriorating external sector and disruption in the supply chain created economic slowdown and squeezed the scope of resources for investment.

The Voluntary National Review (NPC, 2024) indicates that Nepal has attained an average of 58.6 percent progress towards the 2022 targets. This suggests that nearly many of the targets are of-track until 2022 despite satisfactory progress in some social and economic indicators. Based on past trends, not even two-thirds of the targets are likely to be achieved, underscoring the urgency of accelerating actions to meet the achievement gap.

When the SDGs' costing and financing study was done in 2017, fiscal federalism was still evolving. With a sizable number of revenue sources, fiscal transfers and SDG-related expenditures devolved to the provincial and local governments, a revi-

<sup>34</sup> UNCTAD (2023), 'unlocking transition pathways: a global perspective to SDGs costing with synergistic approaches', <https://sdgpulse.unctad.org/sdg-costing/>

sion has to be made considering the SDGs spending of subnational governments and resources mobilized by them.

While ownership of SDGs at a political level was built through a series of orientations on SDG-based planning to elected parliamentary representatives., At the local level, some baseline surveys are carried out and voluntary local review reports on SDGs are prepared by 14 municipalities. The reviews highlighted several areas where improvements had to be made to mainstream SDGs into planning and programming process. It is important that such feedback be considered for expediting SDGs localization for the remaining period of SDGs implementation. Besides, as the provincial and local governments are also working on new periodic plans with a focus on the SDGs, this has to be taken as an opportunity to revisit the progress, assess the weaknesses, and accelerate the key SDGs areas that could create synergies for the achievement of other goals.

The 15th Plan (2018-23) formulated with a long-term vision of Prosperous Nepal: Happy Nepali aimed to prepare the foundation for achieving the national aspiration by increasing people's income, building quality human capital and minimizing economic risk. The plan also aimed to enhance inclusive growth and advancement in structural and socio-economic transformation in existing social values and norms being completely oriented towards the SDGs. The plan aimed to achieve 9.6 percent growth on average, while the actual achievement during 2018-22 was only 2.4 percent. Even if the fifth-year growth rate becomes 5 percent, then five-year average growth would still be less than 3 percent. This has implica-

tions for the pathway to reducing poverty, increasing employment, mobilizing financial resources, and pushing up investment.

The plan's Mid-Term Review (MTR) shows overall progress made in its implementation less than satisfactory, despite some areas showing satisfactory progress. The MTR shows the targeted growth rate in all the three sectors – mainly agriculture, manufacturing and services – unachieved.<sup>35</sup> However, per-capita income reached \$1,381 in 2021/22, exceeding the target of \$1,337 for that year. There were also commendable improvements in some socio-economic indicators such as life expectancy at birth, under-five mortality, fertility rate, net enrolment rate in basic education (1-8), access to electricity and internet services, and HDI. The MTR recommends that the government concentrates on reducing poverty, enhancing gender equality, improving education and health, environmental sustainability, mitigating and adapting to climate change, sustainable urban development, inclusive and peaceful societies, and international collaboration for sustainable development.

Having almost crossed the SDG's 2030 midway point, and the 16th Plan (2024-29) being implemented from July 2024, needs to accelerate, reorient, re-prioritize or strengthen policies, actions and collaboration among stakeholders to achieve rapid, inclusive and sustainable development. The plan needs to give a final push to meet as many milestones as possible.

The 16th Plan has included several strategies for structural transformation and achievement of SDGs, as a last planned effort to operationalize the SDGs and put progress on track. They are: strengthening of the overall

**The 16th Plan has included several strategies for structural transformation and achievement of SDGs, as a last planned effort to operationalize the SDGs and put progress on track.**

<sup>35</sup> Agriculture, manufacturing and services sectors expected to grow by 5.4 percent, 15.0 percent and 9.4 percent grew by 2.5 percent, 3.5 percent and 1.8 percent respectively.

**The key challenges to keep the SDGs on track are continued low growth rate, low productivity, particularly in agriculture leading to food insecurity, lack of adequate jobs creation, among others.**

economic base, production and productivity enhancement, creation of decent work, productive and inclusive employment opportunities, human resource management, human capital formation and best manpower planning, quality, equitable, and life-skill oriented education, quality and accessible health system. Quality infrastructure and managed urbanization, social empowerment, inclusion, and social security, control of illicit and illegal financial transactions, increasing allocation efficiency and capital spending capacity, conservation of environment and biological diversity, disaster management, and sustainable development, promotion of good governance and effective public service delivery.

The plan is conceptualized as a strategic roadmap to build on previous successes and move the country toward SDGs realization. The strategy is based on an acknowledgement of the need for a new development paradigm that stresses good governance, social justice, and prosperity. The importance of fulfilling the SDGs, which have been recognized as a global framework for tackling critical concerns, highlights Nepal's commitment to meeting these objectives. Furthermore, the federal democratic republican governance structure provides an opportunity to decentralize decision-making and empower local communities.

Nepal is graduating from LDC status in by 2026 which will have many implications for the country's trade, aid, and investment environment. This will change the country's financial and economic landscape along

with changing the SDGs financing ecosystem. Review of its likely implication and developing a new strategy for SDGs financing has been necessary to address the changing scenario along with LDC graduation in 2026.

The global ecosystem for mobilizing resources for implementing SDGs have now largely changed from the time of setting the 2030 targets. Global GDP is projected to grow by less than 3 percent in 2023 and 2024 compared to 3.3 percent in 2016. Having peaked close to double digits, inflation has slightly moderated but core inflation has remained stubborn.<sup>36</sup> The debt burden has increased, trade and investment have declined and aid flow has remained discouraging. This has signalled a weaker global cooperation scenario at a time when most SDGs have been off-track from the 2030 target. Nepal's challenge amid slow economic growth and rising concerns for domestic debt would be to make additional efforts not only to mobilize public resources but also to strengthen partnership to meet the SDGs financing gap.

Overall, the key challenges to keep the SDGs on track are continued low growth rate, low productivity, particularly in agriculture leading to food insecurity, lack of adequate jobs creation and large outflow of labour as migrant workers, education yet to enhance productivity through knowledge, skill, innovation and technology, lack of health infrastructure and human resources for effective service delivery, migration to urban areas putting pressure to facilities, low quality physical infrastructure and

<sup>36</sup> World Economic Forum, June 2023, <https://www.weforum.org/agenda/2023/06/global-economy-oecd-recovery-gdp/>



huge resource gap in financing and implementing SDG-related programmes. These challenges are multiplied by political instability, lack of coherence among the three tiers of government, weak governance

throughout the spectrum of the economy and society, capacity constraints to mobilize resources and execute programmes, plus a low aid commitment and absorption capacity environment.



## Chapter 3

# Methodology of SDGs Costing and Financing Strategy

This chapter reviews the SDGs targets for 2030, the methodology used for assessing needs and costing, unit costs of the outputs, and total investment requirements based on progress made until 2023. As SDGs Reports (NPC, 2017 and 2018) make a detailed analysis of the 2030 SDGs targets, their indicators and expected output by each indicator, this chapter updates and re-identifies the key interventions and works on new estimates of the resources required for meeting the goals by 2030. The methodology applied for the review and update of SDGs Needs Assessment, Costing and Financing Strategy is similar to that applied for the previous Report (NPC, 2018).

## 3.1 Update of SDGs Targets and Indicators and their Costing

Nepal's progress on the SDGs by 2022 indicates which of the 2030 targets have to be kept intact and which of them should be revised. Based on progress to date, targets for 2030 are only slightly revised for some of the goals – namely 1, 2, 4, 6, 7, 11, and 15 – which have met more than 60 percent of the target set for 2030, for the reason that they could still be better achieved with some ad-

ditional efforts and accelerated actions. Targets for 2030 are substantially revised for some goals – namely 3, 5, 8 and 9 – whose progress to date is below 60 percent, as they are less likely to be fully achieved by 2030. Substantial revision is made in the targets for other goals – namely 8, 9, 10, 12, and 17, which are less likely to achieve even 50 percent of the 2030 targets.

**Goal 1 (end poverty):** Extreme poverty was targeted at less than 5 percent, poverty gap at 2.8 percent, and per capita income to \$2,500 in 2030. The MPI was targeted at less than 10 percent in 2030 from 30.1 percent in 2015. The revised targets for 6 percent GDP growth, GDP deflator based at 6.0 percent and an exchange rate at Rs.130 per \$ (FY2022/23 rate) are: reduction in absolute poverty to less than 5.0 percent (at 2 percentage points a year), MPI at 10.0 percent, per capita income at \$2,958, and for a higher (7 percent) GDP growth, the per capita income will reach at \$3,374. The population living below poverty line (as per the definition of NLSS 2023) is set at 6 percent, a reduction of almost 2 percentage points a year with a 6 percent GDP growth.<sup>37</sup>

Costs are calculated for social protection based on current coverage (cash transfers, subsidies, supports, and social assistance)

<sup>37</sup> Poverty declined from 25.2 per cent of the population in 2011 to 3.6 percent in 2023 (in a 12 years' time, as per the definition of absolute poverty in NLSS 2011). This shows a decline of 1.8 percentage points per year with a GDP growth of 4.4 percent on average during the period. Based on that trend, it is expected that poverty would decline from 20.3 per cent of the population (as per poverty definition of NLSS 2021) by at least 2 percentage points during 2024-30 for a 6 percent GDP growth. Thus, the target for population below poverty line by 2030 is set at 6 percent.

with target coverage of 60 percent of the population in 2030. As the fiscal system is under heavy pressure, social protection schemes have to be means-tested to ensure that social protection benefits are going to the people who really need them. Per annum growth rates of investments applied for some programmes, such as food for work, pro poor budget, and food subsidy. Prime Minister's Employment Programme is added as a new intervention with a target of 100,000 jobs for 100 days in 2024, reaching 200,000 per year by 2030.

**Goal 2 (end hunger):** Targets included reductions in the prevalence of undernourishment to 3 percent and prevalence of under-five underweight children to 9 percent in 2030. The revised targets are: reduction in the prevalence of undernourishment to 5 percent and prevalence of under-five underweight children to 12 percent in 2030. Other targets such as reducing the percentage of households with inadequate food consumption, prevalence of anaemia among women of reproductive age and of children under 5 years of age are revised down to 3 percent, 10 percent and 15 percent respectively. Round the year irrigation facility has been revised down from the target of 80 percent of arable land to 60 percent. The per capita food grain production target for 2030 has been substantially revised down to 450 kg from the previous estimate of 550 kg, given the shift in production patterns taking place from agriculture to other economic activity.

Costs related to agriculture and food security is estimated on the basis of ADS, which has costed interventions up to 2035. Some interventions such as subsidies on agricultural loan, agro-insurance premium, and chemical (including organic) fertilizer has been revised up to achieve the per capita food availability target.

**Goal 3 (healthy lives):** Targets on the reduction of MMR, preventable deaths of new-born and children, mortality rates of new-born and under-five children are revised based on the progress until 2022. Revised targets for 2030 are: reduction of MMR to 110 per 100,000 live births, and new-born and under-five mortality rates to 15 and 25 per thousand live births respectively. Several other health targets including the prevalence of HIV, TB, Malaria and other Tropical Diseases and water-borne diseases and reducing NCDs are kept unchanged. Health care expenditure targeted to at least 7 percent of the GDP has been revised to 5 percent.

The Nepal Health Sector Strategic Plan (NHSSP, 2023) covers most SDG3 related health system interventions such as health facilities, human resources, and infrastructure, health care service such as access, private sector governance, supply, health financing system, others social health issues including protection mechanism, behaviour, preparedness, and public health emergencies like COVID-19, the same interventions are adopted in the costing. As the NHSSP derives the health cost in per capita terms, the same is converted into total health spending – considering the population to be served by the health system.

**Goal 4 (quality education):** Targets for 2030 are slightly revised as net primary enrolment and completion of primary education at 99 percent and gross enrolment in secondary education at 90 percent. As restructuring of the education system up to grade 12 has added risk of achieving the target, it has been significantly revised downwards. Other targets remain mostly unchanged as most of them are on track. Costing of school education is based on the School Education Sector Plan (SESP, 2022). Added to this are the costs of university education, research

and development, youth and sports, and cultural development to estimate the total SDG4 investment requirement.

**Goal 5 (gender equality):** Based on progress so far, the gender targets for 2030 are revised down. The revised targets are: gender inequality index at 0.25, gender empowerment index at 0.67 and women's ownership of property at 30 percent of total ownership. Other targets are kept largely unchanged. Interventions are broadly the same as current programmes, such as Women Development Programme, Rastapati Women Development Programme, Women Welfare Programmes, and safeguarding women against violence. Two interventions – human resources for gender mainstreaming of development plans and budgets, and capacity development of deputy chiefs in local levels for ensuring their effectiveness as chair of the local judicial committees – are added, as most elected deputy chiefs are women.

**Goal 6 (water and sanitation):** As most targets for 2030 are on track, no revision is made for most of them except for safely-managed water supply target which has been reduced to 50 percent. The major targets are to supply piped water to 90 percent of households, and increase basic water supply and sanitation coverage to almost all households by 2030. The Nepal Water Supply, Sanitation and Hygiene Sector Development Plan 2016-30 is updated with a new base and only two major components of the costed plan (water supply and sanitation) are included in the present costing. As several other interventions costed in the plan (such as WASH at school and public places) can be covered by costing of other targets (Goals 4, 11, etc.), they are not included in this estimation of investment requirement.

**Goal 7 (energy for all):** The 2030 targets such as access by 99 percent of population to electricity, reduction to 30 percent of households who resort to solid fuel as their primary source for cooking; and limiting the use of LPG to less than 40 percent of households are kept the same. But the target of generating at least 15,000 MW of electricity, increase per capita electricity to 1,500 kwh and share of renewable energy in total energy consumption to 50 percent are revised down to 9,995 MW, 750 kwh, and 30 percent respectively.

**Goal 8 (decent work and economic growth):** Given past trends, changed global context, and domestic growth impediments, the reference GDP growth is targeted at 6 percent. As an alternative scenario, the worse-case growth scenario is 5 percent, and a higher growth scenario is 7 percent. The annual growth rate of real GDP per employed person targeted at 10 percent has been revised down to 7.5 percent. The target for tourist arrivals set at 3 million per year has been reduced to 2 million as this industry has yet to fully recover from the COVID-19. The proportion of the adult population having bank accounts has been revised down from 99 percent to 90 percent. The Strategic Action Plan for Visit Nepal Decade 2023-33 is taken as a guide to calculate the financing requirement for tourism. Policies related to the labour market or inclusive growth are not directly costed, despite some of them having possible financial implications.

**Goal 9 (industry, innovation, and infrastructure):** The previous target to increase road density to 1.5 km/sq.km is revised to 1.2 km/sq.km. More investment is allocated to upgrade existing roads rather than constructing new roads, and also because progress on road density is on track. The targets for connecting all districts and palika head-

quarters with road appears feasible; hence no revision is made. The railway expansion target has been substantially revised down from 1,250 km to 320 km, as there has not been much progress so far. Road and railway construction costs are updated as per the information shared by respective agencies. Cost related to civil aviation infrastructure are estimated based on the investment programmes of Civil Aviation Authority of Nepal (CAAN) implemented for up-gradation of TIA and other regional airports.

On industrial infrastructure, the share of manufacturing value added to GDP is revised down from the target of 15 percent to 8.6 percent, as the outlook for both the import substitution and export industries has not been strong enough. Manufacturing sector costs are derived as the product of its value added and ICOR estimated at 6.4.<sup>38</sup> Investment in research and development is set at 5 percent of manufacturing GDP.

**Goal 10 (reduce inequality):** As no new data are available on the state of in-country inequality, no revisions are made in the 2030 targets set earlier. As synergy of the interventions made in almost all the other SDGs have direct or indirect effect on inequality, an improvement in the state of inequality is expected. This can only be revised with NLSS 2022 results.

**Goal 11 (sustainable cities and communities):** The target to reduce the proportion of household units roofed with thatched/straw to 5 percent has already been met. So the revised target is set at 2 percent. The proportion of households living in safe houses has been revised up to 75 percent from the 60 percent targeted previously. Other targets, being mostly on track, have

been kept unchanged. Individual housing reconstruction after the 2015 earthquake is almost over, so only 60,000 houses damaged by the earthquake are included in the revised target. Repairing and reconstructing work of all cultural heritages destroyed by earthquake are supposed to be complete by 2025.

Urban infrastructure costing is done for urban roads and pavements, smart and satellite cities, disaster prevention and management, safe housing (under Janata Housing, Safe Housing, Housing for Dalits and marginalized communities, disaster-related (earthquake, landslide, and flood, fire and hurricane), and public places such as parks and open spaces. Private housing construction for business is not costed as before.

**Goal 12 (sustainable consumption and production):** Targets for 2030 include achieving the sustainable management and efficient use of natural resources, national action plans or sustainable consumption and production mainstreamed as a priority or a target into national policies. The target for land to be available for cereal production, which was set at 75 percent of all cultivated land, has been kept unchanged. Consumption of wood per capita is revised up to 0.25m<sup>3</sup> per year compared to 0.05m<sup>3</sup> targeted previously. Targets for use of plastic per capita, post-harvest loss of food, limiting use of water and fossil fuel consumption are kept the same as before. As some targets are expected to be achieved through synergy of several other goals (2, 6, 7, 9, 13, and 15), and as policies have to address some targets, such as reducing the use of plastics, fossil fuel, and chemicals, so direct costing is not done for them.

<sup>38</sup> ICOR is revised up considering the rising cost, growing automation and sophistication in manufacturing production and trend of assembling type of industries coming in operation.

**Goal 13 (climate action):** Targets for 2030, which included reduction of green-house gas emission from transport and industry to 6 percent each, are kept unchanged while local adaptation plan preparation (the number of local levels) target is revised up from 120 to 300. The interventions related to building reliance and adaptive capacity, reducing emissions through mitigation, strengthening climate data, monitoring and evaluation, climate proofing are costed with reference to National Adaptation Programme of Action (NAPA) and Local Adaptation Plans for Action (LAPA), and Nationally Determined Contributions (NDC), global commitment, and past allocations made in these areas.

**Goal 15 (life on land):** Targets on forest density, plant (floral) and animal species under conservation plans and conservation of rivulets and river banks through bioengineering have been revised down. Targets on the proportion of mountain ecosystems covered by the protected areas, biodiversity hot spot/corridor (forest conservation area), and the proportion of dense forest area under community-based management remain unchanged. The target outputs are costed with reference to data derived from the Forestry Sector Strategy 2016-25. Extrapolation of the financing need is done at the new base of FY 2022/23.

**Goal 16 (peaceful and inclusive societies):** The 2030 targets on ending death from violent conflict, improving transparency and accountability, justice for all, and voter turnout remain unchanged, as these targets are likely to be achieved with some enforcement and incentive mechanisms. The targets for actual government expenditures as a proportion of that allocated in the budget has been revised down from 95 percent to 85 percent, as the recent past trend has

shown. The target of 100 percent birth registration has been revised down to 95 percent. Costings are related to interventions such as strengthening of law enforcement agencies. Required financing is a mark-up of the budget allocation made in previous years taking into account the revised targets. Infrastructure for service delivery at local levels and human resource capacity development cost for subnational governments is added in the costing exercise.

**Goal 17 (strengthening implementation and revitalizing partnership):** Targets for revenue collection for 2030 set at 30 percent of GDP has been revised down to 26 percent for 6 percent GDP growth. This includes revenue mobilized by the three tiers of government, which accounted for nearly 23 percent of GDP in 2022. Domestic expenditure financed by domestic revenue is targeted to stay at 52 percent only if two-thirds of the SDGs investment is to be met through public sector. Debt service as a proportion of exports of goods and services targeted to reach 15 percent are kept unchanged. But foreign direct investment (inward stock) is targeted to increase to 20 percent of GDP in 2030 from less than 3 percent in 2015. This is very unlikely to be achieved; thus the revised target is 7.0 percent only.

The revised targets are based on the current trend and progress so far. Some revised targets do not have financial implications, as they depend on the efficiency of investment (such as in education and health) while others such as in infrastructure (road, rail, hydropower) make differences in financing requirement. Thus the investment requirement estimated in this work will not be directly comparable with the previous report. The list of revised SDGs targets for 2030 is given in the Annex.

Outstanding debt to GDP ratio is maintained at almost the same level as in 2023 in the referred growth rate of GDP at 6 percent, revenue growth at 7 percent, net domestic borrowing at 2 percent of GDP and growth of external borrowing at 10 percent. Projections of resource mobilization, such as public revenue, ODA, FDI, private investment, HH contribution, and others are derived through a macro-economic analysis of key indicators like GDP growth, saving and investment, inflation, global economic scenario, and aid environment. In summary, the following framework is followed for costing exercise.

- (i) The key SDGs sectors that were costed earlier with targets set in the previous reports (NPC, 2017, 2018) are revised and the investment requirement is re-estimated. Interventions necessary for achieving the goals of poverty, gender, inclusive growth, industry, housing, and governance, which do not have sector strategy consistent with SDGs timelines, are re-costed with Excel Sheets using information on unit costs and expected output. The SDGs costing tools are mostly the same as those used for the previous report (NPC, 2018).
- (ii) SDGs targets are set only at a national level and investment requirements are divided among the three tier governments, based on the current division of duties and responsibilities. The existing structure of Inter-Governmental Fiscal Transfer (IGFT) and revenue sharing among the three tiers of the government has been assumed to remain the same through to 2030 for estimating SDGs investments and their financing at provincial and local levels along with the federal level.
- (iii) As achievement of the SDGs requires public investment in both the recurrent and capital forms along with fiscal transfers to the subnational level – defined as ‘financing’ in usual budget nomenclature – all kinds of public spending made on SDGs through budgetary systems is defined as ‘investment’. For the present purpose, the word ‘investment’ implies spending required for achieving the targets. All the SDGs relevant recurrent, capital and financing forms of spending are encompassed in the costing and financing exercise.
- (iv) The SDGs and non-SDGs spending of the public and private sectors are added to estimate the total annual investment or spending of these sectors. Spending of NGOs and cooperatives is all considered as SDGs investments.
- (v) Provincial and local level budget allocation patterns for SDGs investments are taken from the PETs and VLR reports of the UNDP. An average of budget allocation of the previous three years (2018-21) is taken as the basis for projecting provincial and local SDGs allocations for the next seven years.
- (vi) As there is no specific information on SDGs targets at the subnational levels, these targets are set at the national level and only investment requirement and financing is disaggregated into three tiers of the government. In the absence of information on SDG-specific allocation of domestic revenue, it is assumed that such revenue is allocated proportionately to the shares of spending allocated to the SDGs areas.
- (vii) To avoid duplication in the counting of spending and revenue due to inter-gov-

ernmental revenue sharing and fiscal transfers, net revenue and expenditure numbers in consolidated financial statements as reported by FCCGO are taken into account. The SDGs coding done by the federal and provincial governments are revised to make them more representative of the actual allocation and to cover as many as allocations under SDGs coding. This has been necessary to address the nearly one-third of the budget allocation remaining uncoded in the current government budget and annual programme.

- (viii) Own-Source-Revenue (OSR) of the subnational governments is distributed among SDGs proportionate to the budget allocation pattern of these governments. Allocation of OSR revenue to SDGs is based on PETS and VLR based budget allocation pattern.
- (ix) SDGs financed by OSR at the subnational levels are added to total SDGs investment to derive overall public sector SDGs investment to ensure that all available financing sources are considered while analysing SDGs financing.
- (x) SDGs spending made by subnational governments through IGFT from the federal government are clubbed together in the public financing requirement. Possible duplication in accounting is avoided with only the net revenue (after adjusting revenue sharing) and net expenditure (after adjusting fiscal transfers) being considered for the disaggregated revenue and expenditure among the three tiers of government.
- (xi) External borrowing is considered as a source of financing for federal government only. Aid financing to subnational spending is considered to go to the

subnational governments through conditional and other grants.

- (xii) Large domestic debt servicing liability being already observed, net domestic borrowing as a source of public sector financing of SDGs is targeted at 2 percent of GDP per year. An alternative scenario with gross domestic borrowing at 5 percent of GDP is also worked out. No additional provision is made for public borrowing at subnational levels and the borrowing made by the federal government to be distributed through IGFT.
- (xiii) SDGs financing gaps at the subnational levels are set to be met through revenue and fiscal transfer mechanisms from the federal government – particularly for the provinces, as their own sources revenue is insignificant of financing the SDGs.
- (xiv) Per capita GDP in US Dollar is projected at current prices, with the 2023 exchange rate. The exchange rate applied for estimating the investment requirement in US Dollar is the average rate of Rs130 to USD 1 in FY 2022/23.
- (xv) Some of the SDGs targets cannot be costed. They mostly belong to reducing inequality, sustainable consumption, inclusive growth, etc. They are addressed through interventions in policies and institutions. Such policy and institutional needs are suggested in appropriate places in the report.

### 3.2 Review and Update of Costing Methods

This report follows a bottom-up approach of identifying interventions, compiling cost per unit of targeted output for the interven-

tions, and estimating total cost. Most recent cost estimates for health, education, water and sanitation, and energy are considered for costing update. Data from the Population Census 2021 is used to make projection of the population for 2024-30 and to estimate the coverage of intervention results. Intervention-based tools which are often designed in the form of spreadsheets are comparatively transparent and easy to use. This report considers the same statistical analysis tool for costing, estimating investment requirement, and drawing macroeconomic framework consistent with the SDGs investment. For some macro projections, externally-estimated parameters, such as elasticity and ICOR, are applied.

### 3.3 Estimation of SDGs Financing Requirement

The progress made in SDGs so far, changing cost structure, evolving new development financing mechanisms, and adjusting for the impact of COVID-19 requires that output targets set in 2015, cost estimates and financing requirement have to be updated. Simple excel sheets are used for deriving cost, investment requirement, and financing gaps for interventions. The previously estimated costs for some sectors at different years of prices are rebased at the prices of FY2022/23.

As discussed above, not all the targets and indicators of the SDGs can be, or have to be, costed. If we cost them all, there would be a lot of duplication of estimates of investment requirement and this will reduce the credibility of the appraisal. For instance, ending poverty calls for interventions in several other goals, and only those interventions that directly address absolute poverty and are not included elsewhere need to be costed. They could be social protection or access

to finance or targeted income and employment generation programmes. The same applies to other crosscutting issues, such as inclusion, inequality, gender, environment, and governance.

Further, some goals and some targets under all the goals do not need to be costed; they have to be addressed through policies. Goal 8 on inclusive growth and decent work, Goal 10 on reducing inequality and Goal 12 on sustainable consumption, and even Goal 16 where several governance-related indicators are mostly achieved through policy interventions, and they are addressed through proper policies and institutions. If there is any cost implication of such policies and institutions, they are considered during the costing exercise.

### 3.4 SDGs Financing at Subnational Levels

SDGs financing gaps at provincial and local levels would be fractions of the total financing gap at the national level. To disaggregate the financing gap between the three tier governments, several steps are taken. First, public investment requirement among the three tier governments is distributed on the basis of current spending structures (federal 70.0 percent, province 9.0 percent and local 21.0 percent). Third, financial resources available to subnational governments from fiscal transfer (federal 73.0 percent, province 7.0 percent and local 20.0 percent) is derived from total revenue available for the government, estimated growth of such revenue, legal provision of revenue transfer from federal to subnational governments, and own source revenue of the subnational governments. Fourth, domestic borrowing at the subnational level for bridging the financing gap is set as a fraction of nationally set limit. Fifth, local government borrowing

from outside the treasury, such as TDF and financial institutions, is considered on the basis of lending capacity of the TDF and financial institutions and borrowing capacity of the local governments. And sixth, no direct external borrowing is set for subnational governments, and aid to be transferred through conditional grants.

### 3.5 Clustering SDGs Investment Requirement

As almost all the ministries have some association with the SDGs, clustering of SDGs is done to accommodate related ministries within the SDGs clusters as follows:

Ending poverty (Goal 1): This cluster includes targeted pro-poor programmes, social protection schemes, microfinance, labour, tourism, commerce and supplies, and disaster risk reduction.

Zero hunger (Goal 2): This cluster includes agriculture, livestock, land reform and management, irrigation and river control.

Good health and wellbeing (Goal 3): This cluster includes health, nutrition, population and wellbeing.

Quality education (Goal 4): This cluster includes education, skill, youth, culture and sports.

Gender equality (Goal 5): This cluster includes gender matters not included in other goals.

Water and sanitation (Goal 6): This cluster covers water and sanitation excluding what is costed in other goals.

Clean energy (Goal 7): This cluster includes hydroelectricity, solar, micro-hydro, and other alternate energy supply, energy efficiency and access to clean energy. Petroleum and firewood are not costed.

Decent work and economic growth (Goal 8): This cluster includes labour, tourism and some other interventions related to inclusive economic growth.

Industry, innovation and infrastructure (Goal 9): This cluster includes physical infrastructure such as transport (road, rail, and air). Industrial infrastructure, innovation and ICT are costed separately and have been clubbed into physical and industrial infrastructure.

Sustainable cities and communities (Goal 11): This cluster includes urban infrastructure not costed in other goals, housing, and disaster management.

Climate action (Goal 13): This cluster includes actions related to climate change that are not costed elsewhere.

Life on land (Goal 15): This cluster includes forestry, biodiversity, and environment.

Peace, justice and strong institutions (Goal 16): This cluster includes governance, civic security, peace and justice, monitoring, evaluation and statistics. Constitutional bodies related to this goal and all administrative set up for service delivery are included in this cluster.

Goals 10 and 12 are not costed as interventions and their costing under other goals would broadly cover the targets under these goals. Goal 14 is not costed for the obvious reason of not having meaningful life below water.

### 3.6 Estimation of SDGs Financing Gaps

GDP growth, critical for analysing SDGs financing gap, is projected to grow by 6 percent as the reference rate. This is taken as a base for estimating domestic savings, public sector revenue, and household income, which are important in assessing the availability of financial resources for SDGs financing.

Revenue available for public sector investment requirement is the net revenue after deduction of its allocation for defence, debt servicing, and some administrative expenses not directly serving SDGs.

Financing available for the SDGs' investment is the sum of potential investment of public, private, cooperative and non-government, and household sectors in SDGs areas. Financing available through operations of public enterprises such as NEA, CAAN or NTC, which do not depend on budget allocations are captured through household spending in the services provided by these entities. Finance to be available through most public institutions such as EPF, CIT, SSF, and off-treasury revenue of the PEs is not counted as it is reflected in bank deposits, which feed into private sector investment requirement.

The financing gap in the public sector is derived as a difference between total resources available to SDGs areas from revenue, aid and borrowing and total investment requirement for the same in the public sector. About 72 percent<sup>39</sup> of the public spending (including recurrent, capital and financing expenditure) is estimated to go on SDGs.

The financing gap for the federal government is derived as a difference between total resources available (revenue adjusted for transfers to subnational governments, external aid and domestic borrowing) for SDGs and federal government investment requirement for them.

SDGs financing gap at the subnational levels is estimated as a difference between their investment requirements as per the existing structure, authority and responsibility and financial resources available through intergovernmental fiscal transfer and own-source-revenue. The sum of federal, provincial and local level SDGs financing gaps is the total public sector financing gap to be addressed through new policies and added efforts.

The SDGs' financing gap in the private sector is the difference between total available finance (private savings or equity capital, bank borrowings, and FDI) and SDGs' investment requirement in the private sector as calculated in the macro framework in order to achieve the targeted sectoral growths. Not all the financial resources available in the public or private sector goes on SDGs financing. Against only about two-thirds (64 percent) of the bank credit to private sector spending through bank financing currently going to the SDGs is estimated to reach 75 percent of SDGs areas.<sup>40</sup>

The SDGs financing gap in the non-government sectors (cooperatives and community organizations included) is the difference between total resources available (savings, aid, bank borrowings, etc.) and expected SDGs investment of these sectors. The expected investment in SDGs is derived from the fi-

<sup>39</sup> The rest 28 percent goes on debt service, defense, and some other expenditure not directly linked to SDGs. Most of the spending of provinces and local governments is treated as SDGs investment.

<sup>40</sup> Estimation of average purpose-wise loan classification of commercial and development banks from 2015 to 2023 shows about 64 percent of bank financing related to SDGs areas.

nancial and institutional capacity of these sectors to contribute to required investment. The non-government sectors being expected to invest whatever resources they can mobilize, no financing gap is assumed in these sectors. NGO, cooperative and community sectors are supposed to invest certain fraction of the investment requirement based on their current financial strength and likely available resources. They are supposed to have no financing gap.

Financing sources available for the household sector is estimated based on some financing criteria developed for the low income (poor), middle-income and high-income groups of households having different capacities to afford the out-of-pocket expenses.<sup>41</sup> The poor group (11 percent) is exempted from several SDGs goods and services.<sup>42</sup> The middle income group (60 percent) is assumed to partially contribute to some of the SDGs goods and services while the high income group (29 percent) is assumed to contribute most of the recurrent spending on the SDGs goods and services along with a small portion of the specific capital spending at least to cover the capital depreciation cost. Households are also supposed to invest a certain fraction of the investment requirement in SDGs areas, based on financial strength (savings) and not to incur any debt for the same. So, this sector is supposed to have no financing gap.

Public, private, cooperative and NGO, and household sectors are assumed to contribute 57.54 percent, 34.35 percent, 4.2 percent and 3.9 percent of the required SDGs invest-

ment respectively. This proportion is estimated through an analysis of investment area, resource availability, and their ability to contribute to financing requirement.

Financing available for the public sector is estimated with consolidated revenue to reach 26.1 percent of GDP by 2030 and 70 percent of the revenue to be available for SDGs financing.<sup>43</sup> The rest is to be spent in non-SDGs areas such as defence and debt service and some constitutional and administrative bodies having no direct impact on the achievement of the SDGs. Net domestic borrowing for the public sector is projected to remain at 2 percent of GDP while ODA is projected to grow by 10 percent per annum with a grant element remaining of only 5 percent by 2030.<sup>44</sup> This takes into account the compensation of grant loss due to LDC graduation by a higher grant that could be mobilized for climate justice following the implementation of loss and damage fund.

Financing sources available for the private sector is anticipated to comprise of private equity (at 2.0 percent of GDP), bank credit (real growth at 8 percent from the current level), with FDI to grow by 10 percent per annum on average.

All investment requirements and financing gaps are estimated in Nepalese Rupees to ensure the relevance and applicability of the exercise to the national context. For international comparability, reporting, and advocating for additional external financial support, investment and financing gaps are also be converted to the US dollar using the exchange rate on 15 July 2023.

<sup>41</sup> The households having income up to twice the poverty level income are defined under middle income and the rest as high-income group. Data from NLSS 2022-23 is taken to arrive this classification.

<sup>42</sup> One percent of the investment requirement each for Water and Sanitation, Energy, Transport-Industry-ICT, and Urban Infrastructure is expected from the poor households while for some other services it goes up to 5 percent.

<sup>43</sup> In FY 2022/23, debt servicing and defense spending was 25 percent of consolidated revenue.

<sup>44</sup> ODA in loan is estimated to increase by 10 percent only to ensure that debt to GDP ratio remains sustainable through to 2030 and beyond.

### 3.7 Macroeconomic Projections related to the SDGs

Several macroeconomic variables are projected to estimate the SDGs financing gap. They include projection of the nominal and real GDP, consumption, saving, investment, export and import of goods services and capital including FDI until 2030. Macro data from economic survey (MOF, 2023) and Economic Bulletin (NRB, 2023) are used for projections of key variables. A simple regression method is used for the macroeconomic projections. All the data used for analysis are based at the constant price of FY 2022/23.

Several macroeconomic variables, such as per capita income, growth of agriculture, shares of agriculture, manufacturing and tourism in GDP, revenue to GDP ratio and the like, are projected with GDP as a base for the analysis. For the reference scenario, GDP growth is projected to be 6 percent while for the higher growth scenario, it is projected at 7 percent. A worse-case scenario for GDP growth is set at 5 percent. GDP elasticity of poverty estimated at 0.25 is taken for estimating poverty outcome with given GDP growth rate while GDP elasticity of employment estimated at 0.42 is taken for projecting employment rate for the target years.<sup>45</sup> An employment scenario is generated with higher elasticity of 0.5 to assess the optimal situation.

The macroeconomic and SDGs investment requirements are estimated at the constant price of FY 2022/23. The implicit GDP deflator, which is estimated to grow by 6 percent per annum during the remaining years

of SDGs period, is taken as a proxy for inflation. For estimating financing sources other than revenue, a trend analysis is followed. While domestic revenue and borrowing is assumed to cover 75 percent of the public SDGs spending, ODA is projected to grow by 10 percent per annum and finance almost 25 percent of the spending. For debt sustainability analysis, 95 percent of ODA is supposed to be loan and the rest to be grant by 2030.

### 3.8 Addressing synergy and trade off in SDGs targets and indicators

While understanding the synergies and trade-offs between goals and targets is extremely important to (i) minimize trade-offs and maximize synergies; (ii) avoid wasting resources; and (iii) ensure equitable partnerships, it is a complex task to empirically estimate these. As discussed in Chapter 2, different approaches are being developed to identify and quantify these synergies and trade-offs. Most of these approaches address the national scale, but synergies and trade-offs are also relevant at the global and subnational scales where there has been less research.<sup>46</sup>

There are very few studies done so far in Nepal on the synergy and trade-off between SDGs targets and indicators. Such an analysis requires comprehensive data covering a reasonably long period of time. It is not possible for this study to capture all such effects in a limited time and with limited resources. This report would then apply the empirical

<sup>45</sup> In the last 20 years, real GDP grew by 4.2 percent per annum while poverty came down by 1 percentage point per annum resulting in poverty elasticity of 0.25. The growth elasticity of employment is estimated at 0.42 is taken from secondary source (ILO 2014).

<sup>46</sup> Springer Link (2022), Synergies and trade-offs between the SDGs and targets: innovative approaches and new perspectives.



evidence-based parameters to set targets, estimate cost and draw financing requirement to address such synergy as an alternative scenario for developing a financing strategy plus deriving the financing gap.

### 3.9 Data sources and other information collection

Our desk study of the relevant literature covers reviews of (i) laws and policies regarding government national priorities, policies and programmes impacting SDGs implementation; (ii) midterm progress of SDGs and the 15th Plan; (iii) study reports of provincial and local level planning and strategies; (iv) FCGO report on Consolidated Financial Statements for FY 2021 /22; (v) Concept Paper of 16th Plan; (vi) sector strategies of the federal government; (vii) reports of UN and other international organizations; (viii) statistical reports of

NSO; and (ix) reports on global and domestic economic issues and trends. The study uses and analyses secondary data related to households, government, private and non-government sector spending, investment, government priorities, budget priorities, and development trajectory over time and other related information.

Revision of SDGs targets, indicators, and unit cost for each expected output as mentioned in SDGs indicators was done through a consultative process with the relevant agencies. Consultative meetings were held with NPC, NSO, sector ministry officials, umbrella organizations of the private sector, and other relevant agencies for the collection of administrative data. Administrative data were collected through discussions with the respective agencies, and secondary data were sourced from published sector strategies, review reports, government database, and international databases.



## Chapter 4

# Update of SDGs Needs Assessment and Costing

**T**his chapter revisits the 2030 SDGs targets and indicators to make them more realistic to achieve; assesses the investment requirement; and appraises the financing gap in order to draw a financing and implementing strategy to meet the gap. The national and global political, economic and social outlooks have substantially changed since the costing work of 2017. Particularly, COVID-19, sluggish domestic economy in the recent years, high fuel and food prices, financial crisis in the advanced economies, war in Ukraine and the Middle East, and deteriorating trade, investment and aid environments have made redundant several of the assumptions and trends observed during those years. Meanwhile, Nepal's graduation from LDC status in the coming years will have numerous implications for the country's trade, aid, and investment environments along with a change in the country's financial and economic growth landscape. Additionally, with many SDG-related interventions, nearly one-fourth of the revenue sources and expenditures, being shared with the provincial and local governments, this chapter attempts to address these issues through a revision in the SDGs financing strategy.

## 4.1 Key Issues and Interventions Considered in Needs Assessment

### 4.1.1 Key issues to be addressed

Recent episodes of economic turmoil and pandemic have differential impacts on different income and social groups creating a challenge to 'leave no one behind', and suggesting a requirement for new interventions to be introduced to address the most affected people. Ending absolute poverty by 2030 and making all kinds of poverty at least half of the 2015 level calls for a 2 percentage point reduction in the existing poverty rate every year. Given the past track record, that would be hard to achieve<sup>47</sup>. Besides, increasing the share of the bottom 20 percent in national income and consumption requires more than average growth of that income group, which again is contingent upon restructuring of the production and income generation process in favour of the working class. This is also the case for social services like education, health, and gender empowerment. In the update of SDGs needs assessment, interventions for addressing such problems have to be made

**Recent episodes of economic turmoil and pandemic have differential impacts on different income and social groups creating a challenge to 'leave no one behind', and suggesting a requirement for new interventions to be introduced to address the most affected people.**

<sup>47</sup> Further, as incidence of poverty is much higher for some social and spatial groups than the national average, additional efforts would be needed to bring them out of poverty within the given time frame.

through collaboration between the federal, provincial and local levels.

The census of 2021 shows a large **demographic transition** occurring in this decade with youth bulge and the largest ever proportion of working age population. This presents a lot of opportunities as well as development challenges. The youth and working age population comprising nearly two-thirds of the total population provides an opportunity for higher labour supply while creation of sufficient jobs particularly for the educated youth becomes a big challenge. The production relations becoming transformative with the introduction of new technology, jobs creation for the mass labour force is an even greater challenge. Some public works programmes have to be emphasized to make basic jobs available to the labour force.

Despite being a usual phenomenon in developing countries, **migration and urbanization** have built pressure on utility services, housing and physical infrastructure in the cities. The current urban population, reaching two-thirds of the total population as per the census 2021, requires a revision in the SDG 11 needs assessment. Besides, the utilities that provincial and local governments have to deliver according to demographic transition, migration, and rapidly growing urbanization, and physical infrastructure and have to be updated accordingly.

Progress in poverty reduction and promotion of equal citizenry is suppressed by rising **inequality**. Containing inequality through market-based policy instruments have not been sufficient to reduce inequality in a meaningful way. Between 2016 and 2023, progressive taxation, targeted subsidy programmes and social protection schemes have been introduced; but by and large the

existing market-based resource allocation and opportunity creation are failing to reduce inequality. Unless additional pro-poor growth policies and interventions along with strong distributive measures are put in place, it will be almost impossible to increase the income share of bottom 40 percent of the population from 12 percent in 2015 to 18 percent in 2030. As there is no single most effective intervention to address inequality and to cost it, several policies – ranging from macro to sectoral – are suggested to address the challenge and to maximize the impact of economic growth in poverty reduction.

Growing **risks and vulnerability due to climate change** are being observed in the daily lives and livelihoods of people. While the country is prone to shocks and disasters by its very topography, geographical location and habitat, disasters like major earthquakes, floods, landslides, avalanches, fires, and outbreaks of disease are often occurring, undermining progress in SDGs. Sustaining progress to date demands disaster risk reduction interventions to be properly identified, costed and effectively implemented. So, the SDGs strategy has to take up necessary actions to minimize risk, build resilience, and enhance coping capacities.

Full implementation of **federalism** has a serious implication for planning and budgeting of SDGs within the three tiers of government. With second time elected representatives for five years at the provincial assembly and local level and delegation of administrative, service delivery, taxation and development activities, a significant proportion of state functions, functionalities and finance for SDGs are now faced with addressing those implications. Thus, assessing the investment requirement at each level and developing financing strategies at provincial and local government

levels is strategically important. This has been duly taken care of through the assessment of financing need and resource gaps at a subnational level as well. It is equally important to strengthen the political set-up at those levels to handle the development agenda in an effective manner. Thus, it has been essential to work out financing strategies at subnational levels and to identify capacity development interventions.

Nepal's **graduation from LDC** status from 2026 will have some implications for the country's international trade, aid and investment regimes. While bilateral ODA and trade concessions will shrink as a consequence of the graduation, the investment environment may improve due to likely better business and risk environments. These effects have been duly incorporated in the financing gap analysis and subsequent external financing strategy.

The euphoria of **global cooperation on the 2030 agenda** has now almost dissipated, creating a greater risk of subdued cooperation on SDGs. The current economic slowdown in advanced economies does not suggest a brighter scope for accelerating such cooperation. As the following sections show, absence of such support will leave Nepal also with a serious SDGs financing gap. The changing priority of the global community towards climate action (often at the cost of other development cooperation), emerging trade war scenarios, political power games, fiscal burdens created by war, and an ongoing threat of pandemics of some kind have to be considered while projecting global financing support for the SDGs. This has been taken into account while making an assessment of financing strategy.

The previous SDGs Report (NPC, 2018) revealed **serious data challenges** pertaining to disaggregation (by sex, age, ethnicity, disability and geographical location, administrative units of the state, and income or wealth), standardization (definition, unit of measurement, method of computation, and open source) and frequency of availability along with missing data for several indicators. There are 301 indicators to monitor the 169 targets,<sup>48</sup> but data for only 238 indicators were available for midterm progress evaluation. There is still a big gap in data used for SDGs monitoring. This flags the data gaps and suggests institutional reforms to be made and to strengthen data-sharing in the federal set-up.

#### 4.1.2 Major interventions for each goal

The SDGs Report (NPC, 2018) hints at the essential interventions to be made in order to meet the SDGs as reflected in the indicators of their achievement. The key interventions for achieving the goals in this section are mostly the same with the indicators specified for each goal in the previous report. Some new interventions are added to address the current issues and challenges as mentioned in the previous sections.

Major interventions to **end poverty** include income generation programmes, interest and insurance premium subsidy, food for work, SME capital grant, targeted local infrastructure programmes, public food subsidy for the poor, and prevention from disaster. Another major intervention is social protection, which covers social insurance, social assistance, and labour market interventions. The Prime Minister's Employment Programme is costed separately. The

**Major interventions to end poverty include income generation programmes, interest and insurance premium subsidy, food for work, SME capital grant, targeted local infrastructure programmes, public food subsidy for the poor, and prevention from disaster.**

<sup>48</sup> The NPC has reduced the number of indicators to 301 in 2023 from as many as 479 identified in the SDGs Strategy (NPC, 2018).

**Interventions and investment requirement related to quality education are broadly based on the School Education Sector Plan<sup>51</sup> and cover programmes of school education and vocational training programme.**

interventions related to reducing the poverty gap, increasing per capita income and the share of lowest quintile in national income are addressed through appropriate policies.

The interventions for **zero hunger** include food security, food-based nutrition, adequate agricultural production through access to agriculture arable land, expansion of irrigation, fertilizer, credit and technology and change of food habits and fair public food distribution system. In addition, expansion of the rural roads network, promotion of sustainable farming, agro-forestry, good veterinary animal husbandry practices, expansion of rural electrification and renewable energies, promotion of competitive agricultural value chains with special focus to the benefit of smallholder farmers, investment on food safety and quality, market infrastructure development have been considered as other areas of intervention. Some interventions related to human resources and monitoring are added considering capacity constraints at the subnational level. Major adjustments in ADS-driven financing needs are made to cover the input costs - mainly fertilizer usage, for higher productivity and food sufficiency.

Interventions related to **good health and wellbeing** are mostly those identified in National Health Policy, 2019<sup>49</sup> and Health Sector Strategic Plan 2022-27<sup>50</sup> covering (i) health system strengthening; (ii) health care services; and (iii) other areas such as health emergency, alternative health care, and healthy behaviour. The Strategic Plan adopts the guiding principles of the National Health Policy aimed at universal access and social protection in health, aligned and coordinated health systems, multi-sectoral

collaboration and health in all policies, targeted approach to reach marginalized and vulnerable population, public investments and governance, and professionalism and ethical practices. Strategic objectives of the plan are to enhance efficiency and responsiveness of health systems, address wider determinants of health, promote sustainable financing and social protection in health, promote equitable access to quality health services, manage population and migration.

Interventions and investment requirement related to **quality education** are broadly based on the School Education Sector Plan<sup>51</sup> and cover programmes of school education (including early childhood education development/ pre-primary education and non-formal education), and vocational training programme. Literacy and lifelong learning, teacher professional development and management program, disaster risk reduction and school safety programme and improvement on governance and management programme are some of other programmes in the education. Other interventions include improved teaching and management, improved teacher professional development, school facilities resilient to different kinds of disasters, and youth programmes (including entrepreneurship development, loans for technical and professional education, financing for self-employment enterprises, and sports for mental and physical fitness. The university education investment requirement considers costs for science, technology, art, culture, and research, which may not attract the private sector. Investments required for youth and sports and promotion of culture are added to the education goal.

<sup>49</sup> MoHP (2019), Nepal Health Sector Policy, Ministry of Health and Population, Government of Nepal.

<sup>50</sup> MOHP (2023), Nepal Health Sector Strategic Plan 2023-2030, Ministry of Health and Population, Government of Nepal.

<sup>51</sup> MoEST (2022), School Education Sector Plan, 2022/23- 2031/32, Government of Nepal.

Interventions related to **gender equality** include social upliftment of women, President's Women Upliftment Programme, welfare programmes such as social security, and social assistance for vulnerable women and children. Gender interventions to be mainstreamed in other goals are specified in respective sectors.

Interventions for **universal access to water and sanitation** are broadly the same as those included in the Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016) and its update, National WASH policy (2023) and Water Supply and Sanitation Act (2022). The interventions cover enhancing access and utilization, ensuing functionality and sustainability of services, ecosystem/water augmentation and production, governance institutional setup, improving sanitation system and infrastructure. Overlapping issues related to water supply and sanitation are addressed in the respective goals.

Interventions for access to **affordable and clean energy** are hydropower generation, promotion of solar, wind, and micro-hydro energy, extension and upgrading the transmission and distribution system, and generation of renewable energy at the local level also through installation of biogas plants. Another major intervention is promotion of energy efficiency and per capita renewable energy availability.

Interventions for achieving **decent work and inclusive growth** are enhancement of labour-intensive sectors such as agriculture, construction and tourism, and social security for workers. Under labour market, the interventions are related to eliminating child labour, ensuring safety at the workplace, creation of labour-friendly laws, and enforcement of labour policies. Under tourism, the major interventions include

construction of hotel rooms, development of tourism products and small tourism infrastructure, and market promotion

**Industry, innovation and infrastructure**-related interventions include construction of new strategic roads, upgrading existing roads, construction of bridges, upgrading international and domestic airports, and construction of railway lines under transport infrastructure. Development of industrial and ICT infrastructure, promotion of industrial innovation and capital required for manufacturing industry (based on its capital intensity) are considered in industrial sector costing.

Interventions identified for **sustainable cities and communities** include construction and upgrading urban roads, storm drainage, and sewerage construction, landfill sites, bus parks, and other urban infrastructure. This cluster also includes housing for the poor, reconstruction of houses damaged by earthquakes, reconstruction of cultural heritage and archaeological sites, and interventions for disaster preparedness.

Interventions identified for **climate action** include building resilience and adaptive capacity, reducing emissions through mitigation, strengthening climate data, climate proofing technology for infrastructure projects, and monitoring and evaluation.

Interventions identified for **life on land** are conservation of national forests and biodiversity conservation, wildlife conservation, herbal development, sustainable forest management and enhancing rural livelihood, training research and development, promotion of community forestry, and monitoring and evaluation.

Interventions related to **peace, justice, and strong institutions** are manifold. The in-

**Industry, innovation and infrastructure related interventions include construction of new strategic roads, upgrading existing roads, construction of bridges, upgrading international and domestic airports, and construction of railway lines under transport infrastructure.**

**Social protection is major component of Goal 1 and includes social security, income protection and safeguarding against disasters, shocks and pandemic.**

Interventions are related to access to justice, internal security, service delivery, strengthening legal institutions and anticorruption bodies. Interventions related to effective service delivery include capacity development and public accountability.

Interventions related to **data** for SDGs requirements include (i) production of statistics in quantity and quality that meet the needs of all levels of government for evidence-based policy measures, and the needs of the wider users in the national and international communities; (ii) formulation and implementation of policies, practices and capacities to support statistical operations and development; and (iii) implementation of statistical operations in a cost-effective manner to produce accurate, relevant and timely statistics for development requirements, including for SDGs monitoring.

Some SDGs like reduction of inequality (Goal 10), sustainable consumption and production (Goal 12), and partnership for the Goals (Goal 17) are addressed through policies discussed in the next Chapter V.

## 4.2 Costing of the SDGs based on Targets and Indicators

### 4.2.1 End Poverty

Ending Poverty by 2030 is not achievable at the current pace. As the average economic growth during the last decade has remained around 4.0 percent and poverty has come down by one percentage point or so

each year, the reference scenario of economic growth at 6 percent implies that the poverty rate (as per national definition) will remain at around 6 percent in 2030 from 20.3 percent in 2023.<sup>52</sup> However, much more will depend on shifts in the structure of the economy, synergies and trade-offs among SDGs interventions, labour market condition, access to productive resources such as land, capital and technology, access to social services, and social protection. However, if GDP growth is lower at 5 percent only, then the poverty level would remain at more than 7 percent in 2030.

The per capita income in 2030, with reference GDP growth rate at 6 percent and inflation at 6.0 percent, would reach Rs384,000 (\$2,958 at FY 2022/23 exchange rate) in 2030. At a higher growth scenario of 7 percent on average, the per capita income will reach Rs408,000 (\$3,136 at the FY 2022/23 exchange rate).

Social protection is major component of Goal 1 and includes social security, income protection and safeguarding against disasters, shocks and pandemic. The costs so calculated belong to universal old-age and disability pensions, child grants, birth grants to be paid to all women who deliver in health facilities, scaling up free health care services and basic education scholarships and financing of public works programmes. For fiscal sustainability, social protection expenditure is targeted to grow at par with the real GDP growth. So, social protection spending is set to remain at 4.4 percent of GDP, the same as in 2023. As a proportion of revenue, it will remain at around 18 percent in 2030.

<sup>52</sup> Population below poverty line as shown in NLSS 2023 is not comparable with that of NLSS 2011 due to definitional changes of poverty line consumption (see NSO, 2023).

**Table 4.1: Interventions and Investment Requirement for SDG1 (Rs billion)**

Interventions	2023	2030	Total 2024-30	Annual Avg 2024-30
Social Protection	238.8	359.2	2125.1	303.6
Pro-poor programme	26.5	49.6	277.9	39.7
PM Employment programme	7.5	30.6	144.9	20.7
Interest subsidy	15.0	15.0	105.0	15.0
Insurance subsidy	3.0	3.0	21.0	3.0
Support to deprivation ID card holders	1.0	1.0	7.0	1.0
Province Programme (OSR)	0.6	1.0	5.7	0.8
Local Level Programme (OSR)	0.7	1.1	6.2	0.9
<b>Total Investment</b>	<b>266.6</b>	<b>410.9</b>	<b>2414.9</b>	<b>344.99</b>

Source: Estimation of the research team.

Note: Investment at province and local level is estimated on the basis of current budget allocation financed from own source revenue. Other subnational programmes funded through federal budget and transferred to subnational governments are costed at the federal level. This norm applies to all the subsequent goals costed for investment requirements.

The estimated investment requirement for poverty intervention averages at Rs345 billion per year between 2024 and 2030 (Table 4.1). The largest intervention in poverty is social protection, covering 88.0 percent of the Goal 1 direct cost. Programmes of subnational governments financed by their own source revenue (OSR) would be less than 2 percent of investment requirements based on the current trend.

#### 4.2.2 Zero Hunger

SDG2, which aims ending hunger, achieve food security and improve nutrition and promote sustainable agriculture, is broadly covered in the Agriculture Development Strategy (ADS). The major interventions identified in the ADS and costed accordingly are updated with the additional provision for irrigation, fertilizer and technicians (JT/JTA) at local levels along with adding the ongoing investment programmes of the provinces and local levels financed from OSR. The 2023 costs are scaled up by 10 percent, more than the growth of GDP, to prioritize SDG2 and then to meet the targets by 2030 (Table 4.2).

The investment requirement for implementing the interventions averages at Rs158.1 billion at the 2023 price. This is significantly higher than the current budget allocation in agriculture. Although some of the costing in agriculture overlaps with costing done in other sectors, the overlapping amount is very small (e.g. Rs6 billion in electrification and rural roads). Besides, subnational investments are solely from OSR and thus do not overlap with investments made through conditional grants. The interventions demanding the largest investment requirement are fertilizers (19 percent), irrigation (11 percent) and value chain agriculture (8 percent) and promotion of competitive agriculture value chains.

#### 4.2.3 Good Health and Well-being

SDG3, which aims to ensure healthy lives and promote wellbeing for all at all ages, is broadly captured in the Nepal Health Sector Strategic Plan (NHSSP, 2023). The NHSSP has costed almost all the interventions related to the SDGs. The major interventions costed include health infrastructure, health

**The estimated investment requirement for poverty intervention averages at Rs345 billion per year between 2024 and 2030.**

**Table 4.2: Interventions and Investment Requirement for SDG2 (Rs billion)**

Interventions/ Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Food, nutrition security and rights to food	5.73	10.59	59.23	8.46
Agricultural education system	0.57	1.06	5.93	0.85
Expansion and improvement in irrigation	11.35	33.50	203.55	29.08
Fertilizer supply distribution system	40.00	56.28	341.96	48.85
Rural roads network	2.39	4.42	24.72	3.53
Small and medium agro-enterprises	3.74	6.91	38.62	5.52
Decentralized extension system for farmers and agro-enterprises	8.29	15.33	85.71	12.24
Decentralized research and support for farmers and agro-enterprises (incl. JT/JTA)	1.93	3.76	20.14	2.88
Rural electrification and renewable energy	1.37	2.53	14.13	2.02
Market infrastructure	0.87	2.58	14.41	2.06
Competitive agricultural value chains for VA benefits to farmers and agro-enterprises	0.87	25.77	144.10	20.59
Enhanced food safety and quality	0.87	2.06	11.49	1.64
Other programmes	3.35	6.53	34.96	4.99
Province Programme (OSR)	4.02	6.89	38.76	5.53
Local Level Programme (OSR)	7.12	12.20	68.63	9.80
<b>Total</b>	<b>92.48</b>	<b>190.41</b>	<b>1106.37</b>	<b>158.05</b>

Source: ADS and estimation of the research team.

service facilities, work force, medical products, and health finance (Table 4.3).

The annual average investment requirement for the three tier governments for the implementation of health sector interventions to achieve Goal 3 is estimated at Rs 264.3 billion for 2024-30 and 4.4 percent of

GDP in 2030 from 3.0 in 2023. The largest component of health sector investment requirement is in the health workforce, which is currently very low. This is followed by health service delivery and health infrastructure. Subnational government can invest about 9.8 percent of the spending requirement through OSR.

**Table 4.3: Interventions and Investment Requirement for SDG3 (Rs billion)**

Intervention/Year	2023	2030	Total 2024-30	Annual Avg (2024-2030)
Health Infrastructure	18.71	41.68	216.98	31.00
Health Service delivery	43.18	96.19	500.73	71.53
Health Workforce	50.38	112.22	584.19	83.46
Medical Products	14.39	32.06	166.91	23.84
Health Finance	7.20	16.03	83.46	11.92
Leadership and Governance	5.76	12.83	66.76	9.54
Information Management	4.32	9.62	50.07	7.15
Province Programme (OSR)	1.43	2.44	13.74	1.96
Local Level Programme (OSR)	17.34	29.72	167.12	23.87
<b>Total</b>	<b>162.71</b>	<b>352.81</b>	<b>1849.97</b>	<b>264.28</b>

Source: NHSSP (2023) and estimation of the research team.

#### 4.2.4 Quality Education

SDG 4, which intends to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, is mostly captured in the School Education Sector Plan (SESP). The SESP has envisaged equality and inclusion, quality and relevance, non-formal education and alternative pathways for continued learning, education in emergency and crisis situations, and governance, management and coordination.

The investment requirement in the education sector is mostly based on the cost estimates made to achieve the SESP and SDGs targets in school education, investment required for university education, research and development investment, and extension of day meal programme. The investment to be made by provinces and local governments are added to arrive at the total education investment requirement.

Total investment requirement in education is Rs297.7 billion on average. This amounts

to 4.5 percent of GDP in 2030. Based on the SESP and re-estimation of the costing for additional sectors under education cluster, the annual average investment requirement for basic education (including ECED/PPE and NFE) is Rs102.9 billion for 2024-30 (Table 4.4). This is followed by secondary school education averaging Rs48.3 billion. Interventions for youth and sports, also included in this cluster, require Rs4.7 billion on average during the same period. Added to this is the higher education investment costing nearly annual Rs33 billion on average. Subnational governments' investment under OSR is estimated at Rs76.44 billion.

#### 4.2.5 Gender Equality

Gender targets have five major areas of intervention not identified elsewhere for costing. They include social upliftment of women, empowering local judicial committees (as heads of such committees are mostly women), the President's Programme for Upliftment of Women, and support to local bodies to mainstream gender in development planning and investment

**Table 4.4: Interventions and Investment Requirement for SDG4 (Rs billion)**

Interventions/Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Basic education incl. ECED and NFE	84.14	123.63	720.33	102.90
Secondary Education Incl. TVE	39.49	58.03	338.11	48.30
Literacy and Lifelong Learning	1.72	2.52	14.70	2.10
Teacher professional development and management	6.53	9.59	55.86	7.98
Disaster risk reduction and school safety	10.34	15.12	88.45	12.64
Governance and Management	0.76	1.12	6.50	0.93
Youth and Sports	3.83	5.63	32.83	4.69
Higher Education	20.60	43.05	230.54	32.93
Others including day meal, grants	4.31	6.34	36.91	5.27
Research and Development	2.86	4.20	24.48	3.50
Province Programme (OSR)	2.08	3.57	20.10	2.87
Local Level Programme (OSR)	53.44	91.58	514.97	73.57
<b>Total</b>	<b>230.1</b>	<b>364.38</b>	<b>2083.78</b>	<b>297.68</b>

Source: SESP (2023) and estimation of the research team

**Table 4.5: Interventions and Investment Requirement for SDG5 (Rs billion)**

Interventions (in million Rs)	2023	2030	Total 2024-30	Annual Avg (2024-30)
WDP (Ministry administration and WUP)	0.63	1.29	6.89	0.98
Social Upliftment of Women	0.28	0.86	4.15	0.59
Rastropati Women Upliftment	0.21	0.64	3.06	0.44
Violence Against Women	0.05	0.35	1.30	0.19
Empowering Local Judicial Committee	0.02	0.61	2.07	0.30
Supporting Local Bodies for WUP	0.02	0.29	1.13	0.16
Province Programme (OSR)	0.10	0.17	0.95	0.01
Local Level Programme (OSR)	2.38	0.41	22.9	3.27
<b>Total</b>	<b>3.68</b>	<b>8.29</b>	<b>42.5</b>	<b>6.06</b>

Source: Budget of FY 2023/24 and estimation of the research team

Note: WD is Women Development Programme and WUP is Women Upliftment programme

programmes. Many of these programmes already in implementation require substantial up-scaling and reorientation towards core SDGs areas and are costed accordingly.

The annual average investment requirement for gender interventions amounts to Rs6.1 billion for 2024-30. The largest component is estimated to be invested by local governments through their OSR (Table 4.5). Most investment goes on interventions related to women's development programme upliftment including the Social and Rastropati Mahila Utthan Programme.

#### 4.2.6 Water and Sanitation

Water and Sanitation-related interventions aim to ensure availability and sustainable management of water and sanitation for

all through universal and equitable access to safe and affordable drinking water and adequate sanitation and hygiene for all. The Water Supply, Sanitation and Hygiene Sector Development Plan (2016-30) covers all the SDG6-related targets. The cost estimated for water supply, sanitation, hygiene and several other areas duplicates with costing done in energy (SDG7), safe cities (SDG11), forest and environment (SDG15), and governance (SDG16). Hence, to avoid duplication in costing, investment requirements estimated in the WASH Plan (2016-30) (other than water and sanitation) are not included in this cost estimate (Table 4.6).

The average annual cost estimated for implementing water and sanitation interventions is Rs181.7 billion including that spent

**Table 4.6: Interventions and Investment Requirement for SDG6 (Rs billion)**

Intervention/ Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
<b>Water</b>	93.25	99.43	677.25	96.75
<b>Sanitation</b>	75.25	80.24	546.52	78.08
<b>Province Programme (OSR)</b>	1.43	2.46	13.82	1.97
<b>Local Level Programme (OSR)</b>	3.56	6.10	34.31	4.90
<b>Total</b>	<b>173.50</b>	<b>188.22</b>	<b>1271.91</b>	<b>181.70</b>

Source: WASH (2016-30) and estimation of the research team

by subnational governments. The largest chunk (53.2 percent) of the investment requirement goes on water supply funded by the federal budget. The subnational governments cover less than 4 percent of the average investment requirement in water and sanitation.

As the WASH costing of water and sanitation is much higher than is considered here, a further refinement has to be done in future costing exercises. And while the previous costing work had front-loaded investment in water and sanitation to achieve critical outcomes by the year Nepal intends to graduate from LDC status, this costing exercise applies the same growth of investment requirement throughout 2024-30.

#### 4.2.7 Clean Energy

SDG7, which intends to ensure access to affordable, reliable, sustainable and modern energy for all, used to be partly costed through various sector plans such as Sustainable Energy for All (SE4ALL, NPC 2013). In this work, the national needs for energy services have been assessed based on the national requirement, power generation capacities, and potential for hydroelectricity to drive the growth and development process of the country. Accordingly, the targets for electricity generation is 9,995 MW in 2030 with 9,245 MW for hydroelectricity, and the rest with thermal, grid-based solar and micro-hydro (Table 4.7a).

The hydropower generation cost is estimated at Rs200 million per MW while costs for solar and micro-hydro have been estimated at Rs80 million and Rs250 million respectively. Transmission and distribution costs are estimated as per the information provided by NEA. Operation and Maintenance (O&M) cost of the power plants has been assumed to be about 4 percent of the total investment on energy sector (Table 4.7b).

Based on the unit costs and targets set for 2030, the energy sector investment requirement would be, on average, Rs359.2 billion during 2024-30. The largest component in energy is power generation, which contains more than half of the energy sector investment. There is very little investment expected from the subnational governments from their own sources, given their current investment. The ambitious target of generating hydropower (installed capacity) at 9,995 MW by 2030 obviously requires huge investment from the private sector, mostly coming through FDI and external borrowing.

#### 4.2.8 Decent work and economic growth

Goal 8 focuses on inclusive growth, productive employment and decent labour market situation. Major interventions to achieve the targets include creation of jobs in labour intensive sectors like agriculture, construction, manufacturing, and tourism. Other indicators are small and medium

**The energy sector investment requirement would be, on average, Rs359.2 billion during 2024-30.**

**Table 4.7a: Electricity Production, Transmission and Distribution Targets**

Indicators	2024	2025	2026	2027	2028	2029	2030
Hydroelectricity generation (MW)	3900	4442	5464	6333	7071	8315	9245
Solar, thermal, wind, micro-hydro (MW)	287	364	441	518	597	674	750
Transmission Line above 66 KV (KM)	6202	6921	7425	8628	9113	9356	10966
Distribution Line (MVA)	2500	4400	5100	5800	6322	6800	-
Per Capita Electricity Consumption (kwh)	395	451	525	595	700	815	935

Source: Nepal Electricity Authority.

**Table 4.7b: Interventions and Investment Requirement for SDG7 (Rs billion)**

Interventions /Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Generation	133.30	200.00	1269.00	181.23
Transmission	47.98	65.23	400.15	57.16
Distribution	51.00	34.00	230.46	32.92
Micro Hydro Development	20.50	25.00	163.75	23.39
Solar, Thermal and Wind power	7.50	7.40	52.00	7.43
Biogas and Renewable Energy	1.766	2.84	16.36	2.34
Operation and Maintenance	12.21	19.27	125.73	17.96
Energy Efficiency	13.97	47.67	244.91	34.99
Province Programme (OSR)	0.135	0.23	1.30	0.19
Local Level Programme (OSR)	1.093	1.87	10.53	1.50
<b>Total</b>	<b>289.465</b>	<b>403.52</b>	<b>2514.19</b>	<b>359.17</b>

Source: Nepal Electricity Authority and estimation of the study team

enterprises and access of small business to financial services. Skill development, employment information, elimination of child labour, protecting from workplace injuries, enforcement of labour laws are other interventions. Under tourism, the interventions include construction of hotel rooms, and development of tourism products and marketing activities. Airports and large infrastructures are costed in Goal 9.

Economic growth becomes high and inclusive through several interventions made mainly in Goals 2, 3, 4, 7, 9, and 11. So the investment requirement for overall growth

is what is derived through costing plus some others that are not costed. To avoid duplication in costing, only those interventions not costed anywhere else are costed in this goal. This includes tourism and labour market interventions in order to make growth inclusive and equitable.

The annual average investment requirement for Goal 8 during 2024-30 is Rs 86.3 billion, of which the largest component is construction of hotel rooms to accommodate at least 2 million tourists a year (Table 4.8). About 16 percent of the investment requirement is expected to come from OSR-based

**Table 4.8: Interventions and Investment Requirement for SDG8 (Rs billion)**

Intervention/Year	2023	2030	Total 2024-30	AnnualAvg (2024-30)
Tourism Infrastructure	8.50	13.649	78.71	11.24
Tourism Development and Promotion	1.50	2.111	12.82	1.83
Labour (skill development, employment information, labour, workplace safety)	1.81	2.902	16.73	2.39
Investment required for Hotel Rooms	64.29	56.791	397.54	56.79
Province Programme (OSR)	0.72	1.238	6.96	1.00
Local Level Programme (OSR)	9.48	16.242	91.33	13.05
<b>Total</b>	<b>86.29</b>	<b>92.933</b>	<b>604.09</b>	<b>86.30</b>

Source: Estimation of the research team based on tourism plans and existing labour market interventions.

financing by the subnational governments. As some of the labour market interventions are captured by social protection in Goal 1, the investment requirement costed here is not very significant.

#### 4.2.9 Industry, innovation and infrastructure

Goal 9 intends to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Transportation is the key infrastructure under this goal. The main transport infrastructure to be costed include road networks, railways, and airports. This covers total cost for the maintenance, upgrading and new construction of roads, railways, and airports. As shown in Table 4.9a, road density is projected to reach 1.2 km /sq.km in 2030 while the number of international airports is considered to be the same. Considering the progress and government target for the next couple of years through MTEF, the target for railway line construction has been limited to 320 km.

The total physical infrastructure cost is estimated as the sum of three components (i) number of new roads to be built per year and cost per km of two-lane road and bridge corresponding to road construction; (ii) routine and periodic operation

and maintenance requirement and unit cost of per km of road maintenance; and (iii) unit cost of road safety measures. The Excel-based needs assessment tool developed by the UN has been used to assess the cost estimate of the desired length of road network and density targeted by 2030. The needs assessment tool evaluates all interventions in roads – new construction, regular and periodic maintenance, upgrading from earthen to gravel and from gravel to sealed road. The quality of roads is roughly classified into three tiers: Good, Fair and Poor; and they are classified in three categories – Sealed, Gravel and Earthen. An average of the construction cost requirement for the plains and the hills is considered for deriving overall investment requirement in roads.

The estimated annual average investment requirement estimated for roads is Rs182.4 billion for 2024-30. The annual average cost of railways is Rs 43.2 billion, as the target for railways has been reduced to almost one-quarter of the original target. The annual average cost for airport construction is, on average, Rs 12.0 billion per year until 2030. The transport infrastructure cost including from subnational governments during 2024-30 averages Rs 315.9 billion (Table 4.9b).

**The estimated annual average investment requirement estimated for roads is Rs182.4 billion for 2024-30.**

**Table 4.9a: Targets for Transport and Manufacturing Sector Interventions**

Indicators	2024	2025	2026	2027	2028	2029	2030
Road density <sup>53</sup>	0.90	0.95	1.00	1.05	1.10	1.15	1.20
Int'l airports (number)	3	3	3	3	3	3	3
Railways (km)	80	110	140	180	240	280	320

Source: MoPIT, MoCTCA, and estimation of the research team.

<sup>53</sup> Road length (km) as a percentage of total land area is adjusted for protected area which is about 23 percent of total area). The road length includes road constructed by MoPIT, MoUD, and subnational governments.

**Table 4.9b: Investment Requirement for Transport Infrastructure (Rs billion)**

Intervention/Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Roads and Bridges	142.56	187.09	1276.54	182.36
Cost of Railways	12.00	63.84	302.40	43.20
Air transport	9.85	13.86	84.21	12.03
Province Programme (OSR)	6.87	11.77	66.19	9.46
Local Level Programme (OSR)	50.00	85.69	481.80	68.83
<b>Total</b>	<b>221.29</b>	<b>362.25</b>	<b>2211.15</b>	<b>315.88</b>

Source: DOR information and estimation of the research team

### Industry and innovation

The investment requirement for manufacturing has been calculated on the basis of its share in GDP targeted for 2030 and ICOR of this sector. The new target for the share of manufacturing in GDP is 8.6 percent in 2030, revised down from 15 percent. Investment requirement for manufacturing has been estimated as a product of value added in manufacturing derived from the share of manufacturing to gross value added (GDP) and incremental capital output ratio estimated at 6.4 (Table 4.10). The investment requirement in innovation and ICT is assumed to be about 5 percent of the value added in manufacturing. This proportion of investment in innovation is taken as necessary for enhancing productively and efficiently of industrial sector.

Investment in industry (mainly manufacturing) averages Rs 387.9 billion per year during

2024-30 while annual average investment in innovation and ICT during the same period is estimated at Rs 24 billion per annum. As there is no information on subnational investment in manufacturing, their investment is not costed. The annual average investment in industry and innovation is estimated at Rs 411.9 billion between 2024 and 2030.

### 4.2.10 Sustainable cities and communities

Goal 11 intends to make cities and human settlements inclusive, safe, resilient, and sustainable. The population census of 2021 flagged the migratory pattern of people from rural to semi-urban and urban areas demanding more utility and housing services. The interventions in safe cities and housing are specified accordingly. They include upgrading urban roads including pavements, constructing bus parks, smart cities, storm drainage, landfill sites, safe

**Table 4.10: Investment Requirement for Manufacturing Sector (Rs billion)**

Details	2023	2030	Total 2024-30	Annual Avg. (2024-30)
Manufacturing VA share as % of GDP	5.0	8.6	-	6.9
Manufacturing Capital Output Ratio	6.4	6.4	6.4	6.4
Manufacturing Value Added	269.07	693.37	3354.60	479.23
Incremental Manufacturing VA	30.40	87.70	424.37	60.61
Investment required on Manufacturing	194.59	561.29	2715.56	387.94
Innovation and ICT (5% of MF VA)	13.45	34.67	167.73	23.96
<b>Total</b>	<b>208.04</b>	<b>595.96</b>	<b>2883.30</b>	<b>411.90</b>

Source: Estimation of the research team

houses, and public buildings, and conserving cultural heritage. As major reconstruction work related to 2015 earthquake has been completed, only costs related to recent earthquake damage has been considered. Besides, as several interventions costed under SDG 11 are now costed elsewhere (water, electricity, sanitation, and environment), they are excluded from the costing.

The annual average investment requirement for new urban roads and upgrading existing roads (including pavements) and drainage is estimated at Rs 30.6 billion during 2024-30 (Table 4.11). The annual average cost for safe and decent housing is estimated at Rs 10.0 billion, based on the target of replacing all thatched roof houses with corrugated sheets, re-building houses damaged by disaster and constructing new houses under Janata housing scheme. The annual cost for the construction of public buildings such as palika offices, province capitals and other government offices is estimated at Rs 37.5 billion on average. The subnational governments are also estimated to invest some amount from their OSR – amounting to Rs 42.5 billion per annum, on

average. Overall, the average investment requirement estimated for meeting the targets of sustainable cities and communities is Rs 222.9 billion per year during 2024-30. Most of the investment is planned to be allocated to upgrading urban roads, including drainage, urban construction works of subnational governments, and public buildings.

#### 4.2.11 Climate action

Goal 13 intends to take urgent action to combat climate change and its impacts. The National Adaption Plan (NAP) 2021-2050 sets out a framework to integrate adaptation across sectors and levels of government in the short-term (until 2025), medium-term (until 2030), and long-term (to 2050). The short-term and medium-term actions are designed to help the government achieve the adaptation actions set out in its 2020 Nationally Determined Contribution (NDC) along with other plans.<sup>54</sup> Major interventions in climate action include building resilience and adaptive capacity, reducing greenhouse gas emission, introducing climate-proofing technology in infrastructure, and strengthening climate data systems for better planning.

**Table 4.11: Interventions and Investment Requirement for SDG11 (Rs billion)**

Intervention/Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Road construction and upgradation including storm drainage	19.75	31.75	852.25	30.62
Safe houses (incl. Janata housing)	10.00	10.00	70.00	10.00
Bus Park	6.80	4.00	28.00	4.00
Public Building	51.00	37.50	262.50	37.50
Emergency Evacuation Centre	0.50	1.00	7.00	1.00
New and smart cities	2.50	2.50	17.50	2.50
Landfill, Cultural heritage, Land-pooling	3.00	4.22	25.65	3.66
Province Programme (OSR)	1.13	1.94	10.92	1.56
Local Level Programme (OSR)	29.74	50.97	286.61	40.95
Unclassified	34.50			
<b>Total</b>	<b>158.92</b>	<b>233.89</b>	<b>1560.43</b>	<b>222.92</b>

Source: Information from official sources and estimation of the study team

<sup>54</sup> The 15th Plan of the government has adopted the concept of green growth and climate compatible development path. There are a number of projects under implementation as prioritized in NAPA and LAPA documents. Tracking climate action related allocation in the budget through climate coding has been in practice for several years. The government budget encompasses many components related to adaptation measures and partially the mitigation measures as outlines in the SDGs Report (NPC, 2018).

As per climate coding in the federal and subnational budgets, Nepal is allocating less than 1.0 percent of the consolidated budget to directly climate-related projects. Besides, indirectly climate-related projects/programmes are included in several other programmes that capture climate change – such as those in agriculture, water and sanitation, energy, transport, and forestry. As costing for climate action does not have practical tools, the investment requirement is estimated on the basis of current budget allocation and targets set for 2030 with key interventions identified for achieving the targets.

The annual average investment requirement for climate change adaptation and mitigation is estimated at Rs29.4 billion during 2024-30. The largest share (more than 50 percent) will be required for climate-proofing of infrastructure projects. Building resilience and adaptive capacity requires about one-fifth of the investment requirement. Subnational governments are also expected to allocate some portion (8 percent) of their OSR in climate action (Table 4.12).

#### 4.2.12 Life on land

Goal 15 is set to protect, restore, and promote sustainable use of terrestrial ecosys-

tems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss. The targets include the conservation of forests, wild life, biodiversity and land and integration of ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.

The government's Forestry Sector Strategy (FSS) 2016-25 identifies seven key thematic areas that form the core area of the strategy, namely: managing forests, ecosystems and conserving biodiversity, watersheds, responding to climate change, promoting enterprise and economic development, enhancing capacities, institutions and partnerships, and managing and using forestry sector information.<sup>55</sup> As the strategy very much covers most of the interventions necessary for life on land, financing need for its implementation has been considered as that required for SDG15.

The budget assigned for forestry in the government's Annual Development Programme for FY 2022/23 is taken as the basis of costing the forestry sector for SDGs. The budgets for climate action are added to address the indicators related to ongoing forest

**Table 4.12: Interventions and Investment Requirement for SDG13 (Rs billion)**

Interventions/ Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Building resilience and adaptive capacity	6.90	5.53	42.80	6.11
Reducing emissions through mitigation	0.97	0.77	6.00	0.86
Strengthening climate data	1.29	1.03	7.99	1.14
Monitoring and Evaluation	0.94	0.75	5.85	0.84
Climate-proofing technology for infrastructure	13.65	19.08	125.80	17.97
Province Programme (OSR)	1.45	2.48	13.97	1.99
Local Level Programme (OSR)	0.34	0.58	3.27	0.47
<b>Total</b>	<b>25.53</b>	<b>30.23</b>	<b>205.67</b>	<b>29.38</b>

Source: Information from official sources and estimation of the research team

<sup>55</sup> FSS is expected to deliver five major outcomes such as enhanced forest productivity and sustainable supplies of products and services, improved biodiversity, watersheds and ecosystem services, inclusive, competitive and accountable forestry sector organizations and institutions, enhanced climate resilient capacity of society and forest ecosystems, and improved livelihoods and forestry sector contribution to national economic development.

actions. The CFUGs<sup>56</sup> annual investment in community forestry has been incorporated in resource estimates for the forestry sector. The costing of major interventions for Goal 15 is based on the targets set for this goal in the SDGs Strategy Report (NPC, 2018) and interventions made by subnational governments in this goal are included in the financing requirement for the targets.

The annual average investment in Goal 15 is estimated at Rs50.6 billion during 2024-30 (Table 4.13). Conservation of forests and biodiversity would account for nearly two-thirds of the investment requirement for this sector. Similarly, subnational government programmes financed through OSR comprise about 15 percent of the investment requirement.

#### 4.2.13 Peace, justice and strong institutions

The major interventions costed for Goal 16 include access to justice, capacity building for anticorruption, service delivery improvement, and capacity development. Costing of governance is done through the proximate

interventions to achieve the targets as set in SDGs Report (NPC, 2018) indicators. They include access to justice (reflected in spending under law and justice), perceptions of corruption (reflected under anti-corruption), direct deaths from violent conflicts and displacements (reflected in spending for peace and security which includes police), higher voter turnout (reflected in spending for electoral awareness), and quality of public administration (reflected in improvement in service delivery). Other indicators are mostly addressed through policies and institutions.

Monitoring the SDGs agenda requires substantive improvements in national statistical capacity. However, collecting accurate, relevant and timely data in various dimensions of sustainable development has still been a daunting task, particularly for collecting administrative data from subnational governments. And as COVID-19 has obstructed several surveys, timely availability of statistics remains a challenge. Costing of NSO spending requirements is done in consideration with its ongoing operating expenses and surveys in the offing.

**The total investment requirement to achieve the targets set for 2030 is Rs21,164.7 billion for 2024-30, amounting to annual average investment of Rs 3,023.5 billion.**

**Table 4.13: Interventions and Investment Requirement for SDG15 (Rs billion)**

Intervention/ Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Conservation of National Forest/ Biodiversity conservation	19.80	38.59	28.31	29.52
Wildlife conservation	1.92	3.73	2.74	2.86
Herbal Development	0.54	1.05	0.77	.802
Sustainable Forest Management and enhancing rural livelihood	1.45	2.83	2.07	2.16
Training Research and Development	1.88	3.66	2.68	2.80
Investment in community forestry	2.87	5.60	4.11	4.28
Monitoring and Evaluation	3.45	6.71	4.93	5.14
Province Programme (OSR)	1.29	2.21	48.55	1.43
Local Level Programme (OSR)	0.93	1.59	2.03	6.14
<b>Total</b>	<b>34.12</b>	<b>65.96</b>	<b>354.37</b>	<b>50.61</b>

Source: Information from official

<sup>56</sup> There is a huge investment in the forestry sector by the Community Forestry User groups (CFUGs). Until July 2023, 22,415 community Forestry User Groups (CFUGs) had been formed while 2,272,356 hectares of national forest has been handed over as community forests, 2,927,329 households have benefited from the programme and 1 million volunteers are mobilized in managing the forest resources (fecofun.org.np).

**Table 4.14: Interventions and Investment Requirement for SDG16 (Rs billion)**

Intervention/ Year	2023	2030	Total 2024-30	Annual Avg (2024-30)
Law and justice	6.03	7.42	47.63	6.80
Peace and security	165.73	203.82	1307.98	186.85
Monitoring and evaluation	1.92	2.33	15.16	2.16
Anti-corruption	1.21	1.49	9.54	1.36
Planning and data generation cost	3.26	4.01	25.76	3.68
Electoral Awareness	5.50	6.76	43.41	6.20
Other governance commissions	2.99	3.68	24.00	3.37
Digitization and service delivery	10.88	13.38	85.84	12.26
Province Programme (OSR)	3.63	6.23	35.02	5.00
Local Level Programme (OSR)	48.59	82.37	468.24	66.89
<b>Total</b>	<b>249.75</b>	<b>332.43</b>	<b>2062.18</b>	<b>294.60</b>

Source: Information from official sources and estimation of the research team

The investment requirement for SDG 16 interventions is Rs294.6 billion per annum for 2024-30. Most of the investment (63.4 percent) is allocated to peace and security (which includes spending on policing) while service delivery (administrative) expenses of subnational governments financed through OSR accounts for nearly one-fourth of the investment requirement (Table 4.14). The SDG 16 investment requirement for service delivery and creating a peaceful society has increased substantially as the implementation of federalism with three tier governments in operation has required additional institutions, infrastructure and human resources.

### 4.3 Overall SDGs Investment Requirement

The total investment requirement to achieve the targets set for 2030 is Rs21,164.7 billion for 2024-30, amounting to annual average investment of Rs 3,023.5 billion (Table 4.15). The largest chunk (24.1 percent) of this investment requirement goes to infrastructure, followed by energy (11.9 percent), and poverty reduction (11.4 percent). The large cost of social protection has resulted in a higher investment requirement in poverty. Education and health account for 9.8 and

8.7 percent of the investment requirement while the investment share of sustainable cities and communities is 7.4 percent. Subnational governments are expected to invest 11.0 percent of the investment requirement from their own-source revenue.

In proportion to GDP (reference growth rate of 6 percent), the average SDGs investment requirement reaches 44.9 percent in 2030. This SDGs investment requirement is obviously high, yet is achievable with mobilization of larger financing sources in productive areas thus improving the efficiency of investment.

SDGs requiring large investment as a proportion to GDP are: Goal 9 (11.8 percent), energy (5.0 percent), health (4.4 percent), education (4.5 percent), sustainable cities and communities (2.9 percent), peaceful societies (4.1 percent), and agriculture (2.2 percent). Goal 1, which mostly includes social protection, comprises 5.1 percent of GDP in 2030. The subnational governments invest 5.3 percent of GDP in the SDGs and the rest goes to live on land, decent work, gender, and climate action.

Estimated per capita SDGs investment is \$755 on average during 2024-30. In education and health, per capita investment is \$74.2 and \$

**Table 4.15: Overall Investment Requirement for SDGs (Rs billion)**

SDGs/ Period	2023	2030	Total 2024-30	Ann. Avg (2024-30)	Share (%)
End Poverty	266.58	410.85	2414.94	344.99	11.4
Zero Hunger	92.48	190.41	1106.37	158.05	5.2
Health and Well-being	162.71	352.81	1849.97	264.28	8.7
Quality Education	230.11	364.45	2083.81	297.69	9.8
Gender Equality	3.68	8.29	42.46	6.07	0.2
Water and Sanitation	173.50	188.22	1271.91	181.70	6.0
Clean Energy	289.47	403.51	2514.19	359.17	11.9
Decent Work and Growth	86.29	92.93	604.09	86.30	2.9
Industry and Infrastructure	429.33	958.20	5094.44	727.78	24.1
Sustainable Cities and Communities	158.92	233.89	1560.43	222.92	7.4
Climate Action	25.53	30.23	205.67	29.38	1.0
Life on Land	34.12	65.96	354.27	50.61	1.7
Peace, Justice and Strong Institutions	249.75	332.43	2062.18	294.60	9.7
<b>Total required investment</b>	<b>2202.47</b>	<b>3632.04</b>	<b>21164.74</b>	<b>3023.53</b>	<b>100.0</b>
Of which: Province	24.899	42.67	264.84	33.11	1.3
Local	224.644	385.00	2389.45	298.68	11.3

Source: Estimation of the research team

65.8 respectively on average during 2024-30. The total investment required for achieving the defined targets between 2024 and 2030 is estimated at \$163 billion. On an annual basis, the average investment requirement is \$ 23billion for 2024-30.

#### 4.4 Comparison with SDGs Investment Requirement Estimated in 2018 Report

The investment requirement estimated in the previous study (NPC, 2018) and in this study differ in several aspects. First, there have been changes in the targets and indicators for many of the SDGs and thus new interventions have been added to address the progress gap so far. Second, unit costs have become much higher compared to those in 2017 when costing work was done. For instance, the cost escalation as reflected by the GDP deflator stood at 160 in 2023 compared to a base of 100 in 2015. Third, the cost structure has changed with the fuller implementation of federalism.

And fourth, public finance priorities have changed along with changes in the structure of the economy and the evolving role of the private sector.

A comparison of this overall SDGs investment requirement with the previous report (NPC, 2018) reflects a shift in the structure of investment. The previously estimated total investment requirement was Rs 2,025.6 billion on average for 2026-30 period. The estimated investment requirement from this study which is, on average, Rs3,023.5 billion and \$23.3 billion comes close to the estimate, despite increased cost of interventions and difference in time period. The difference in investment requirement across the goals mainly appears because of the difference in GDP growth in two studies (Table 4.15).

In terms of the per capita investment requirement, this comes to \$755 in the 2024 costing compared with \$651 in the 2018 costing at the exchange rate of that time. Both the investment requirements are based on the average population of 2024-30 as per the 2021 census.



## Chapter 5

# SDGs Financing Strategy

**S**DGs financing in Nepal is grow- ingly beset with challenges such as low economic growth, single digit domestic saving rate, eroding domestic tax base, narrowing space for domestic borrowing, falling external aid in grants, large bilateral borrowings coming in controversy and low absorptive capacity of multilateral aid in concessional form. The challenges have been exacerbated by rising unit cost of outputs amid a docile environment for private sector investment and delimiting role of NGOs. As the previous chapters noted, with most SDGs being off-track in their targets, financing investment to catch up with progress requires upscaling both domestic and external resources along with ensuring higher efficiency of the investment.

While low per capita income at around \$1,400 per capita, low and deteriorating domestic savings rate (hovering at around 6 percent of GDP during 2020-23), relatively high tax incidence (consolidated revenue at 23 percent of GDP in 2023), and growing domestic debt burden (21 percent of GDP in 2023) delimit the country's domestic resources for financing SDGs. External financing through private sources such as FDI or commercial borrowing have also been constrained with a weakening investment climate. Thus, the SDGs' financing gap observed so far has to be largely met through ODA. However, several commitments in trade, aid, investment and financing for SDGs have not been significantly met. The

global SDGs report 2023<sup>57</sup> shows only 23.4 percent of the indicators been achieved or on track in Goal 17.

The following sections delve into the domestic and external sources of SDGs financing, analyse the scope for mobilization of additional financing sources, and flag the key strategies for meeting the financing gap. With prospective contributions of each of the public, private, household and NGO sectors for each of the SDGs, the financing gap is estimated for SDGs clusters as mentioned in Chapter II; and the gap in both the public and private sectors is analysed to objectively draw strategy to mobilize financing sources for bridging the gaps.

## 5.1 Analysis of Financing Sources

The government having already synchronized its plans and budgets with the SDGs, priorities are accorded to financing activities related to basic SDGs such as poverty, health, education, gender, water, energy and infrastructure. Chapter IV revealed that such allocation has not only been insufficient to meet the 2030 targets, but has also been less efficient over time. Taking account of the time left and the likely financing constraints, several targets are already revised downwards (Chapter III) and investment shares of the financing entities have been restated as described in the following sections.

**With most SDGs being off-track in their targets, financing investment to catch up with progress requires upscaling both domestic and external resources along with ensuring higher efficiency of the investment.**

<sup>57</sup> UN (2023), The Sustainable Development Goals Report, Department of Economic and Social Affairs, [sdgs.un.org/documents/sustainable-development-goals-report-2023-53220](https://sdgs.un.org/documents/sustainable-development-goals-report-2023-53220)

**To set roles for all the development actors, including the private and non-government sectors in SDGs financing, the financing gap analysis has been done at a disaggregated level covering all the defined stakeholders.**

Although Nepal has accomplished about two-thirds of the milestones set for the mid-way of SDGs implementation – satisfactory progress compared with that of nearly half of the 193 countries, the existing low base of development requires substantial scaling up of investments in economic sectors such as agriculture, manufacturing, social services such as health, education, water supply, social protection and gender, and basic infrastructure such as energy, transport, and ICT to achieve the SDGs by 2030. This implies a necessity for scaling up resource mobilization on both the domestic and external fronts.

To set roles for all the development actors, including the private and non-government sectors in SDGs financing, the financing gap analysis has been done at a disaggregated level covering all the defined stakeholders. The strategy for mobilizing financing sources also follows the sectoral gap analysis by the SDGs actors.

## **5.2 Household Financing**

In a country like Nepal where nearly one-seventh of households exist in absolute poverty and per capita income is very low, households are not normally expected to contribute to SDGs financing from out-of-pocket expenses. However, given the inequality of income and affordability of high-income group of households, they are also expected to contribute part of the SDGs financing requirement. There is a strong conviction that poor households should not be burdened with such contributions, also because direct and indirect user fees such as for primary education, essential healthcare or basic water supply are a barrier to access to these services for the poor. Ending user

fees often requires increased aid to make up for the government revenue shortfall.

Formulating household contributions for the financing of SDGs requires policy coherence, such as no fees for basic social services including primary health, school education, and other utilities consumed by the poor. Household contributions have to be designed on the basis of ability to pay across all sectors. The following points are considered while making provision for household out-of-pocket spending:

(i) Restricting private out-of-pocket contributions to those areas where the incentive effects of well-designed user fees are compatible with the overall policy objectives.

(ii) User fees not projected to contribute to the cost of universal social services such as primary school education, adult literacy programmes, improving gender equality, basic health care, nutritional interventions, and transport infrastructure.

(iii) Making a provision for richer households to bear some of the financing requirement, as they can bear some of the cost of agriculture inputs, secondary school education, tertiary health care, urban infrastructure services, energy consumption beyond certain limit, water supply and sanitation, etc.

To calculate households' ability to pay for these interventions, households are divided into three segments based on the latest living standard survey (CBS, 2011):

(i) The first segment consists of households whose per capita income is below the national poverty line. These households are unable contribute to either capital or operating costs, because their incomes are already

insufficient to meet food and other basic needs. They comprise about 13 percent of all households.<sup>58</sup> These households will not be able to pay any fees or charges for SDGs services and thus are primarily exempted from contributions other than labour.

(ii) The second segment of households comprise of per capita income above the poverty line and below twice the national poverty line income. These households are estimated to account for about 60 percent of the population. They are expected to partially cover operating costs as well as capital costs of SDGs goods and services.

(iii) The third segment consists of remaining households (29 percent). These are assumed to be able to pay for a significant share of the operating and capital costs. In the alternative scenario, high GDP growth is expected to pull more poor households in middle income strata, so the richest household group is expected to remain mostly the same.

In the previous report (NPC, 2018), the proportion of poor households in rural areas being higher than in the urban areas, an attempt was made to classify the households by location. After restructuring of administrative set-up, structure of the rural and urban population distribution has changed. Urbanization is happening quickly with huge rural to urban migration taking place. Thus, the blurring definition of rural and urban areas and the process of demographic transition makes the classification redundant so far as household financing for SDGs is concerned.

Richer households are expected to contribute to financing poverty through contributory social protection system, paying for recurrent or O&M cost for public utilities and services designed for addressing poverty, and also contribute to targeted local infrastructure projects. They are also expected to cover some of the recurrent expenses in agriculture and irrigation, and be refrained from subsidies. In health also, richer households can pay higher education fees, health insurance, and bear a portion of the recurrent cost of public sector health services while making full payment for private sector services. Similarly, they are expected to pay or contribute to the service charges in water and sanitation, energy, transportation, and ecosystem services. As the poorest segment cannot afford such expenses, OoP spending is not assigned for households under the income poverty line. They are only expected to make small payments for some basic services to prevent the misuse or overuse of freely available goods and services. The contributions of each income strata are detailed in Table 5.1.

One important aspect in household financing of the SDGs that is taken care of relates to the risk of double counting the household contributions (fees and charges) as sources of financing public investment. When household contributions are separately accounted for as a source of SDGs financing, it is not counted again under government revenue. As some of such charges are already a component of the government's non-tax revenue, they are adjusted to estimate direct household contributions to financing SDGs' investment. This has been resolved

<sup>58</sup> In 2022-23, 20.3 percent of the households were in absolute poverty. However, by 2030, it is aimed that households in absolute poverty would be less than 6 percent as per the new definition of poverty. The average of these two ratios is taken for classifying the group of households into poor and non-poor

**Table 5.1: Proportion of Household Financing (% of SDGs Investment Requirement by Income Group of Households)**

Sectors/ Types of HHs	HH1	HH2	HH3
Proportion	0.13	0.55	0.32
End Poverty	0	5	10
Zero Hunger	0	5	15
Good Health and Well-being	0	5	10
Quality Education	0	10	15
Gender Equality	0	1	1
Water and Sanitation	1	3	10
Clean Energy	1	1	5
Decent work and Economic growth	0	0	5
Transport, Industry and ICT	1	4	6
Sustainable Cities	1	6	10
Climate Action	0	1	2
Life on Land	0	5	5
Peace, justice and Strong Institutions	0	1	2

Source: CBS (2021) and estimation of the research team

Note: HH1=proportion of households below poverty line (average of 2022 to 2030); HH2= proportion of households below twice the poverty line income of Rs72,800; and HH3= proportion of households at higher income level, i.e. above twice poverty line income (source NLSS, 2022-23).

by separating the fees and charges like electricity, water, sanitation, school and hospital fees going to government revenue from the payments made by the household. The adjustment is taken care of in the proposed fee and charge structure of the government revenue under the projection of the macroeconomic framework for SDGs.

The household sector is estimated to contribute about 4.0 percent of per capita income in financing SDGs investment through out-of-pocket expenses (Table 5.2). Given the growth of households' income projected in the macroeconomic analysis, this expense is affordable and does not restrain access to basic services, especially for the poor.

**Table 5.2: Projection of Household Financing**

Items/Year	2023	2030	2024-30	Annual Avg 2024-30
Per capita income average (Rs thousand)	181.4	384.6	1996.0	285.1
Per HH income (Rs thousand)	778.9	1653.8	8582.9	1226.1
Out of pocket (OoP) expenses ( Rs billion)	85.1	143.6	832.9	118.9
Per HH OoP spending (Rs thousand)	12.8	21.7	126.2	18.0
SDGs Investment Requirement (Rs. billion)	2202.5	3632.2	21164.7	3023.5
HH OoP spending/SDGs investment (%)	3.9	4.1	4.0	4.0
HH OoP/HH income (%)	1.6	1.3	-	1.5

Source: Estimations of the research team  
778k; per hh spending 13116

Globally, it is observed that households are contributing between 5 percent and 10 percent of SDGs financing requirements. This estimation is in line with the global per capita O-o-P spending expected during the implementation of SDGs so far. As the O-o-P expenses expected for households should be justified against low per capita income and high income inequality, the proposed O-o-P financing takes care of such concerns.

### 5.3 Public Sector Financing

The public sector has a major role in achieving several SDGs related to shelter, food, education, health care, social protection, environment and climate change while also upholding fundamental rights of the citizens and thus promoting good governance. Accordingly, the share of public sector investment in each goal is estimated and based on that share, and the public sector is expected to invest 56 percent of the SDGs investment requirement (Table 5.3). Based

on the prospective share of the public sector in the total SDGs financing, the investment to be done by this sector is estimated.

The shares are calculated with reference to (i) exclusive or shared responsibility of the public sector to deliver the expected outputs; (ii) potential resource available to finance the investment requirement; and (iii) institutional capacity to deliver the expected results of the goals.

As Table 5.4 shows, revenue and domestic borrowing will comprise of nearly 73 percent of the public investment requirement on average during 2024-30, provided that revenue grows by 7 percent in real terms and net domestic borrowing remains at 2 percent of GDP. This is based on the assumption that 72.8 percent of revenue will be available for SDGs investment while all domestic borrowing will be allocated in SDGs areas. The current trend of ODA with a 10 percent increment every year will cover 17.7 percent of the investment requirement,

**Table 5.3: Public, Private, Cooperatives/NGO and Household Sector Shares in Investment Requirement (%)**

SDGs areas / Investment	Public Sector	Private Sector	Cooperative, NGO Sector	Household Sector	Total
Poverty	83	10	3	4	100
Agriculture	56	30	7	7	100
Health	67	25	3	5	100
Education	65	25	3	7	100
Gender	79	10	10	1	100
Water and Sanitation	75	15	5	5	100
Energy	19	75	4	2	100
Decent Work and Growth	22	75	2	2	100
Industry, ICT, Infrastructure	48	45	4	3	100
Sustainable Cities	48	40	6	6	100
Climate Action	84	10	5	1	100
Life on Land	79	10	7	4	100
Peace, Justice, Institutions	84	10	5	1	100
Share in SDGs Investment requirement	57.54	34.35	4.18	3.95	100

Source: Estimation of the research team.

**Table 5.4: Public Sector Investment Requirement, Financing Sources and Financing Gap (Rs in billion)**

Indicators	2023	2030	Total 2024-30	Avg (2024-30)
Revenue and Domestic Borrowing (for SDG)	996.2	1592.1	9197.7	1314.0
Total Required Public Investments	1297.1	2091.5	12178.3	1739.8
Domestic Financing Gap	300.9	499.4	2980.6	425.8
Domestic Financing Gap as % of investment	23.2	23.9	24.5	24.5
ODA (available for SDGs areas)	190.2	370.7	1985.1	283.6
Total Available Public Resources	1186.5	1962.7	11182.8	1597.5
Financing gap After ODA	110.6	128.8	995.5	142.2
Overall Financing Gap, % of Investment Requirement	8.5	6.2	9.3	8.4
Domestic Finance Gap as % of GDP	5.6	6.2	6.2	6.2
Public Finance Gap as % of GDP	2.1	1.6	1.73	2.1

Source: Estimation of the research team. Figures may not perfectly add up due to rounding errors.

Note: Considering 70 percent of revenue and 90 percent of ODA to go in SDGs

leaving a financing gap of 9.5 percent to be addressed through additional efforts to mobilize domestic as well as external finance.

In case revenue elasticity remains only unitary, implying revenue growth on par with GDP growth in real terms, the financing gap will rise to Rs484.4 billion and as percentage of the public investment requirement, it reaches 11.5 percent.

A breakdown of the public financing gap between SDGs areas shows the public sector financing gap to be the highest for investment in infrastructure, water and sanitation, transport, industrial and urban infrastructure, education and health, which comprise most of the financing gap. The energy sector does not face a financing gap as most of the investment in this sector is to be financed by the private sector (Table 5.5).

### 5.3.1. Public Investment Requirement at Federal Level

The public sector in the federal structure is defined as the sum of federal, provincial and local governments. Currently, their share in national public finance averag-

es 68 percent, 10 percent and 22 percent respectively as shown in the consolidated public finance account of FCGO for FY 2020/21 and FY 2021/22. Their aggregate and respective contributions in the public investment requirement in SDGs has been discussed on the basis of their current share in public sector finance.

The revenue of the federal government increased by 15 percent on average between FY 2016 and 2022. The revenue system, which had been buoyant in the years before COVID-19, did not grow in recent years for reasons including changing structure of trade, slow growth of imports – the major source of tax revenue, economic slowdown due to tighter monetary and fiscal stances and weaker revenue administration. Projection of revenue is based on an assumption of 6 percent growth in real GDP and buoyancy of revenue to GDP at 1.2 for 2024-30. This implies a projection of 7 percent real growth per annum of revenue to 2030.

While gross domestic borrowing (for all tiers of government) is set at less than 5 percent of GDP, net domestic borrowing will

**A breakdown of the public financing gap between SDGs areas shows the public sector financing gap to be the highest for investment in infrastructure, water and sanitation, transport, industrial and urban infrastructure, education and health, which comprise most of the financing gap.**

**Table 5.5: Public Sector SDGs Investment Requirement, Financing Sources and Financing Gap (Rs billion) average of 2024-30**

SDGs areas Investment	Total Investment	Public Investshare (%)	Public Invest Requirement	Available Public Domestic Finance	Public sector Finance gap	Available ODA	Overall gap
End Poverty	344.99	83	285.7	270.7	15.0	17.1	-2.1
Zero Hunger	264.28	56	88.7	40.7	47.9	36.5	11.5
Good Health	297.69	67	176.0	63.1	112.9	5.4	107.5
Quality Education	6.07	65	192.5	74.9	117.6	2.3	115.3
Gender Equality	181.70	79	4.8	1.3	3.5	17.8	-14.3
Water and Sanitation	359.17	75	136.9	18.4	118.5	33.5	85.0
Clean Energy	86.30	19	67.5	43.4	24.2	31.5	-7.4
Decent Work and Growth	158.05	22	18.6	10.5	8.0	35.9	-27.9
Transport, Industry and ICT	727.78	48	349.3	86.7	262.6	41.8	220.8
Sustainable Cities	222.92	48	108.0	38.1	69.9	3.6	66.2
Climate Action	29.38	84	24.7	0.0	24.7	40.2	-15.5
Life on Land	50.61	79	40.0	13.1	26.9	14.3	12.6
Peace, Justice	294.60	84	247.2	285.1	-37.9	3.6	-41.5
Unallocated	0.0	0.0	0.0	367.9	-	28.0	-
<b>Total</b>	<b>3023.53</b>		<b>1739.8</b>	<b>1314.0</b>	<b>793.7</b>	<b>311.6</b>	<b>510.1</b>

Source: Estimates of the research team. Figures may not perfectly add up due to rounding errors.

Note: Considered 70% of revenue and 90 percent of ODA to go in SDGs

hover at less than 2 percent of GDP. This is because domestic debt service is rising fast. The public sector's domestic borrowing is limited to this level to help maintain macro-economic stability and domestic debt sustainability while ensuring finance available for the private sector to carry on investment programmes related to the SDGs.

Domestic financing source for public investment in SDGs is the summation of revenue and domestic borrowing and about 70 percent of such source goes along the SDGs areas. Similarly, 90 percent of the projected ODA inflow is considered to be available for financing SDGs. Currently, almost three-quarters of revenue goes to SDGs areas, but growing debt servicing and other administrative and security expenses unrelated to the SDGs will reduce the proportion of revenue available for financing the SDGs.

The current resource allocation pattern has been followed to allocate the potential domestic resources available for financing major SDGs areas. The share of respective SDGs areas as reflected in the ministry-wise allocation of domestically financed resources in the annual budget of FY2022/23 is taken as the basis for allocating domestic financing of the public sector to be available for SDGs financing. However, as not all the revenue available to SDGs financing could be allocated by goals (for instance, the budget belonging to Ministry of Finance), about 28 percent of such revenue remains unallocated by goal. For some ministries covering more than one goal, revenue allocation by ministry will also be unrealistic. So a blend of functional and economic classification of public finance is considered to assign revenue to the goals.

**Table 5.6: Share Federal, Provincial and Local Governments in Public Finance and Investment in SDGs (%)**

Items	Federal	Provincial	Local	Total
SDGs investment	70.0	9.0	21.0	100.0
Own Source Revenue	76.3	6.8	16.9	100.0
Domestic Borrowing	70.0	9.0	21.0	100.0
ODA	87.1	3.6	9.3	100.0

Source: Estimates of the research team.

Note: The spending going to subnational governments going through IGFT is financed through ODA and domestic borrowing as well. Thus, assuming the share of domestic borrowing at subnational governments to be in proportion to spending shares, domestic borrowing to sub national governments is allocated.

### 5.3.2 Federal Level SDGs Investment Requirement, Financing Sources and Financing Gap

As per the unbundling report of the Federal Nepal, the federal government is responsible for the implementation of most SDGs with concurrent responsibility also for provincial and local government. Similarly, the Inter-Government Fiscal Transfer Act provides the basis for revenue sharing. Directives issued by NNRFCA give the distribution of revenue between national and subnational governments. Assuming that the present laws and mechanisms of fiscal transfer do not change over the next seven years, the federal government's share in

SDGs investment has been calculated at 70 percent (Table 5.6).

Based on the above expenditure and revenue sharing from the federal government, the SDGs investment and financing requirement of the three tiers of the government is analysed. Accordingly, the SDGs financing requirement at the federal level will be Rs1,217.8 billion on average during 2024-30 and available financial resources for investment including ODA (Rs 247 billion) will be at Rs1,132 billion (Table 5.7). This leaves an unfunded gap of Rs85.9 billion (7.3 percent on average of investment requirement at the federal level) during 2024-30.

**Table 5.7: Sources of Financing of the Federal Government Investment Requirement (Rs billion)**

Items	2023	2030	Total 2024-30	Avg 2024-30
Revenue and Domestic Borrowing (available for SDGs areas)	671.1	1072.2	6194.9	885.0
Federal Required Investments	908.0	1464.1	8524.8	1217.8
Federal Domestic Financing Gap	236.9	391.9	2330.0	332.9
ODA (available for SDGs areas)	165.7	322.9	1729.0	247.0
<b>Total Available Resources</b>	<b>836.7</b>	<b>1395.1</b>	<b>7923.9</b>	<b>1132.0</b>
Federal Financing Gap after ODA	71.2	69.0	601.0	85.9
Federal Financing Gap % of Fed Investment requirement	7.8	4.7	-	7.3

Source: Estimation of the research team.

Note: Federal spending is relatively high for the reason of larger social security, education and health spending to be borne by the federal government, and transferred to sub national governments through IGFT.

**Table 5.8: Sources of Financing of the Province Government Investment Requirement (Rs billion)**

Items	2023	2030	Total 2024-30	Avg 2024-30
Province revenue and Domestic Borrowing (available for SDGs)	106.0	169.6	979.4	139.9
Province Required Investments	116.7	188.2	1096.1	156.6
Province domestic financing gap	10.7	18.7	116.6	16.7
Province domestic financing gap % of province investment requirement	9.2	9.9	-	10.7
ODA (available for SDGs areas)	6.8	13.3	71.5	10.2
Province Financing Gap	3.8	5.3	45.2	6.5
Province Financing Gap as % of Province Investment Requirement	3.3	2.8	-	4.3

Source: Estimation of the research team. Figures may not perfectly add up due to rounding errors.

### 5.3.3 Province Level SDGs Investment Requirement, Financing Sources and Financing Gap

Based on the expenditure and revenue sharing formula mentioned in Table 5.6, the SDGs financing gap is calculated as the difference between the required investment at provincial level and finance available. (Table 5.8). This is also based on an assumption that the present trend of IGFT and revenue sharing mechanism will remain the same until 2030.

The difference between financing available for the provincial government and its investment requirement shows the gap at 2.8 percent of the investment requirement in 2030 and averages 4.3 percent during 2024-

30. The gap has to be funded through the federal government through IGFT, revenue sharing, and higher ODA mobilization for the provinces. Provinces can outsource some of the investment to the private sector.

### 5.3.4 Local Level SDGs Investment Requirement, Financing Sources and Financing Gap

Based on the expenditure and revenue sharing formula in Table 5.6, the SDGs financing requirement at the local level, finance available and then the financing gap is calculated (Table 5.9). This is based on an assumption that the present trend of IGFT and revenue sharing mechanism with the local level will not change until 2030.

**Table 5.9: Sources of Financing of the Local level Government Investment Requirement (Rs in billion)**

Items	2023	2030	Total 2024-30	Avg 2024-30
Revenue and Domestic Borrowing (available for SDGs areas)	219.1	350.2	2023.4	289.0
Local Required Investments	272.3	439.2	2557.4	365.3
Local domestic financing gap	53.2	88.9	534.0	76.2
ODA (available for SDGs areas)	17.7	34.5	184.6	26.4
<b>Total Available Resources</b>	<b>236.8</b>	<b>384.7</b>	<b>2208.0</b>	<b>315.4</b>
Local financing gap after ODA	35.6	54.5	349.4	49.9
Local Financing Gap as % of Local investment requirement	13.1	12.4	-	13.8

Source: Estimation of the research team. Figures may not perfectly add up due to rounding errors.

**Table 5.10: SDGs Financing Gap in 3 Tier Governments (Rs in billion)**

Items	2023	2030	Total 2024-30	Avg 2024-30
Financing Gap at Federal Level	71.2	69.0	600.9	85.8
Financing Gap at Province Level	3.8	5.3	45.1	6.4
Financing Gap at Local Level	35.5	54.4	349.4	49.9

Source: Estimation of the research team

The annual average local level SDGs investment financing gap would average 13.8 percent of the investment requirement at the local level during 2024-30. The gap has to be funded from federal government sources of IGFT, revenue sharing, and more ODA mobilization for local levels through the federal government. Some gaps could be locally managed with commercial borrowing through TDF and financial institutions.

The summary of public sector SDGs financing gap is presented in Table 5.10

In an alternative scenario, revenue share of the federal government is reduced by 3 percentage points to 73 percent to assess the financing gap. Accordingly, revenue sharing structure changes with 73 percent share for federal, 7 percent for province and 20 percent for local level.

In this scenario, the federal financing gap increases to Rs121 billion on average during 2024-30 from Rs 85.8 billion whereas there

is no significant change in the financing gap at province level. The financing gap at the local level reduces to Rs14.5 billion from Rs 49.9 billion on average during the same period (Table 5.11). This has several policy implications on fiscal transfer and revenue sharing in the coming years.

## 5.4 Private Sector Investment

The private sector holds more than three-quarters of the gross capital formation in the country and thus is crucial to achieve several SDGs through innovative investment in industries and commercial infrastructure, undertaking economic and social sector projects through public private partnership, and through responsible business to protect the environment and help climate change adaptation and mitigation. It is best equipped with the knowledge, technology, and financial resources necessary for investing in key physical and in-

**Table 5.11: SDG's Financing Gap in 3 Tier Governments (Rs in billion)**

Items	2023	2030	Total 2024-30	Avg 2024-30
Financing Gap at Federal Level	97.9	111.9	848.6	121.2
Financing Gap at Province Level	3.8	5.2	44.9	6.4
Financing Gap at Local Level	8.8	11.5	101.9	14.5

Source: Estimation of the research team

dustrial infrastructure development. It can also contribute to sustainable development through its corporate social and environmental responsibility.

In view of the large financing gap in the public sector for SDGs – particularly in infrastructure and industry, the role of the private sector is becoming even more important than before. A boost in private investment can build on the complementarity and potential synergies with the public sector to accelerate the pace of achieving the 2030 targets. In addition to domestic private investment, external private investment flows including foreign direct investment (FDI) and other external sources of finance is needed to meet the financing gap. The following section examines how the private sector can play a crucial role in financing almost all the SDGs' investment requirements and thus can help in achieving all the goals.

To end poverty in all its forms everywhere (SDG 1), the private sector can accelerate pro-poor growth by investing in job-intensive small and medium industries, providing inclusive financial services to the households at the bottom of development ladder, creating jobs and offering fair wages, providing social security to its workforce, innovating for enterprise development through business incubation and on-the-job training and thus creating self-employment, and working towards social protection floors.

To end hunger, achieve food security and improved nutrition, and promote sustainable agriculture (SDG 2), the private sector can contribute through responsible production and trade of safe, nutritious and sufficient food, increasing agricultural productivity and the incomes of small-scale food producers through the supply of agro inputs, value chain financing, competitive markets for agro produce, innovations in productive

resources and inputs, knowledge, financial services including crop and livestock insurance, markets, and opportunities for value addition and non-farm employment.

To ensure healthy lives and promote well-being for all at all ages (SDG 3), the private sector can contribute through investment in health infrastructure, services and production of health workers and specialists. Particularly, it can contribute to healthy lives through specialized hospitals, clinics, labs, teaching hospitals, production and distribution of drugs and equipment, health insurance services, financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines. The private sector can also contribute to wellbeing through responsible business for reducing hazardous chemicals and air, water, and soil pollution and contamination, tobacco control, medical research and trainings.

To ensure inclusive and equitable quality education and promote life-long learning opportunities for all (SDG 4), the private sector can complement the public sector through investment in education for access to affordable quality technical, vocational and tertiary education, including university education, imparting technical and vocational skills, for employment, decent jobs and entrepreneurship, scholarships for poor, disabled, indigenous, and children in vulnerable situations. It can also opt for non-profit educational service through its social responsibility window.

Achievement of gender equality and to empower all women and girls (SDG 5) is not possible without the private sector's contribution, as it is the major actor in the economy and largest creator of employment. It can contribute to achieve gender equality by ending all forms of discrimina-

**The private sector can play a crucial role in financing almost all the SDGs' investment requirements and thus can help in achieving all the goals.**

**To ensure access to affordable, reliable, sustainable, and modern energy for all, the private sector can be a major contributor, as it can profitably invest in modern and renewable energy generation, transmission and distribution.**

tion against all women and girls in private sector jobs and works, and eliminating all forms of violence against all women and girls in the work place. It can also contribute to women's empowerment by encouraging and promoting women for full and effective participation and equal opportunities for leadership at all levels of decision-making in business, honouring universal access to sexual and reproductive health and reproductive rights with gender-friendly working social security provisions, promoting women's ownership and control over land and other forms of property, financial services, inheritance, and other productive resources.

Ensuring the availability and sustainable management of water and sanitation for all (SDG 6) requires the private sector to complement the public and community sectors in improving water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, minimizing the proportion of untreated wastewater, and promoting water recycling and safe reuse, and increasing water-use efficiency across all sectors. The private sector can play a responsible role to ensure sustainable withdrawals and private sector supply of freshwater, to help the government to protect and restore water-related ecosystems - including mountains, forests, wetlands, rivers, aquifers and lakes, to support and strengthen the participation of local communities for improving water and sanitation management as corporate social responsibility.

To ensure access to affordable, reliable, sustainable, and modern energy for all (SDG 7), the private sector can be a major contributor, as it can profitably invest in modern and renewable energy generation, transmission and distribution. This can be done through investment in and production of affordable,

reliable, and modern energy services, improving energy efficiency, innovations, and clean energy research and technologies, by promoting investment in energy infrastructure and clean energy technologies, investing in power transmission and distribution, and producing equipment and machines for hydropower. The private sector share in installed electricity capacity, which stood about 45 percent in 2023, may be extended to transmission and distribution with proper legal provisions put in place.

Promotion of sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8) is mostly related to private investment and its efficiency. Given the large (three-quarters) share of the private sector in gross capital formation and jobs creation (four-fifths), investment in areas that contribute to broad-based green growth along with high job creation through investment in, for instance, tourism can help achieve sustainable growth. Particularly, it can be done by achieving higher levels of economic productivity through diversification, technological upgrade and innovation, including through a focus on high value added and labour-intensive sectors. Besides, promoting entrepreneurship, creativity and innovation, and encouraging formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services, and improving resource efficiency in production, also supports this goal's achievement.

Building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation (SDG 9) can be achieved through sole private or public-private partnership initiatives in developing quality, reliable, sustainable and resilient infrastructure that are commercially feasible. The private sector is instrumental in promot-

ing inclusive and sustainable industrialization, providing financial services including affordable credit and integrating them into value chains and markets to small-scale industrial and other enterprises, upgrading and retrofitting industries to make them sustainable, taking over ownership or management of public enterprises and operation with increased resource use efficiency, and adopting clean and environmentally sound technologies and industrial processes. This sector can also enhance – through tax and government subsidies – scientific research, upgraded technological capabilities of industrial sectors in all countries, higher R&D spending and larger access to ICT, and universal and affordable access to internet.

To reduce inequality within and among countries (SDG 10), the private sector has to be as responsible as other state actors. The private sector can operate a socially responsible business by distributing a fair share of the output of the factors of production like labour, capital and technology. This is highly important at present when technology and capital are drawing the most of profit and the labour force is getting the lowest share.<sup>59</sup> On the whole, the private sector can contribute to reduced inequality through fair and non-discriminatory pay to workers, ensuring equal opportunities for employment and enterprise development, by promoting social insurance and social assistance, and by engaging in inclusive financial services and by transparent economic activities.

To make cities and human settlements inclusive, safe, resilient and sustainable (SDG 11), the private sector can contribute a lot by investing in adequate, safe and affordable housing and basic services, as well as in safe, affordable, accessible and sustain-

able transport services. With credible policies and regulations, the government can help sustainable urbanization and promote planned human settlement, support, protect and safeguard the world's cultural and natural heritage, and develop green and safe public spaces particularly for women and children, older persons and persons with disabilities.

Ensuring sustainable consumption and production patterns (SDG 12) is primarily the responsibility of the private sector. It can contribute to this goal by sustainable management and efficient use of natural resources, reducing food waste at the retail and consumer level, reducing food losses along production and supply chains including post-harvest losses, achieving environmentally sound management of chemicals and all waste throughout their life cycles in accordance with agreed international frameworks and significantly reducing their release to air, water and soil to minimize their adverse impacts on human health and the environment. It can also contribute by reducing waste generation through prevention, reduction, recycling, and reuse, adopting sustainable practices and integrating sustainability information into the monitoring and reporting process.

Taking urgent action to combat climate change and its impacts (SDG13) as mainly a state responsibility, the private sector can also play a responsible role to achieve this goal through the reduction of GHG emissions and those of other gases that add to global warming, strengthening resilience and adaptive capacity to climate-related hazards and natural disasters, developing mitigation actions and transparency on implementation. It can also benefit from the global fund available in climate financing.

**Ensuring sustainable consumption and production patterns is primarily the responsibility of the private sector.**

<sup>59</sup> National Industrial Survey (NSO, 2023) shows the share of workers in manufacturing value added at 33.8 per cent compared to 27.5 per cent in 1991.

**The estimated resources availability for the private sector's financing of the SDGs shows that the largest financing gap in the private sector is in infrastructure, comprising industry, transport, urban development and energy.**

Protecting, restoring and promoting sustainable use of terrestrial ecosystems, managing forests, combating desertification, halting and reversing land degradation, and preventing biodiversity loss (SDG 15) depends heavily on the production and consumption patterns of the private sector. By internalizing the environment costs such as treating waste-water flows, emissions, solid waste disposals and other air pollution from private vehicles, the private sector can partner with the public sector to achieve this goal.

To promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (SDG 16), all of society's actors - including the private sector - have to adhere to the rule of law at the national and international levels, stop illicit financial and arms flows, control corruption, and promote effective,

accountable and transparent institutions and companies. The private sector can support this goal by honouring human rights at the workplace and protecting fundamental freedoms of workers and employees.

Strengthening the means of implementation and revitalizing the global partnership for sustainable development (SDG17) is also the responsibility of all of society's actors, including the private sector. The financing gap in SDGs can be reduced with the participation of the private sector in strengthening domestic resource mobilization, helping to improve domestic capacity for tax and other revenue collection, mobilizing foreign investment, engaging in public-private partnerships, and engaging in policy formulation, implementation and monitoring the SDGs.

Based on the above discussion, it is estimated that the private sector will contrib-

**Table 5.12: Private Sector SDGs Investment Requirement, Financing Sources and Financing Gap by Goals, Average 2024-30 (Rs billion)**

SDGs areas	Total Investment requirement	Share of Private investment in Total	Private Investment Requirement	Available Domestic Finance	Available Private Finance (FDI)	Financing gap in private sector
End Poverty	344.99	10	34.5	26.1	0.0	8.4
Zero Hunger	158.05	30	47.4	33.6	6.4	7.4
Health and Well-being	264.28	25	66.1	38.5	11.6	16.0
Quality Education	297.69	25	74.4	52.8	5.8	15.8
Gender Equality	6.07	10	0.6	0.4	0.0	0.2
Water and Sanitation	181.70	15	27.3	8.9	5.8	12.6
Clean Energy	359.17	75	269.4	63.7	133.0	72.7
Decent Work and Growth	86.30	75	64.7	26.0	32.6	6.2
Transport, Industry and ICT	727.78	45	327.5	68.2	93.7	162.5
Sustainable Cities and Communities	222.92	40	89.2	76.5	11.6	1.1
Climate Action	29.38	10	2.9	2.7	0.0	0.2
Life on Land	50.61	10	5.1	4.3	0.0	0.7
Peace, Justice and Strong Institutions	294.60	10	29.5	4.1	0.0	25.4
<b>Total</b>	<b>3023.5</b>	<b>34.3</b>	<b>1038.5</b>	<b>405.9</b>	<b>300.4</b>	<b>329.2</b>

Source: Estimation of the research team.

ute 34.5 percent of the SDGs investment requirement for 2024-30. A large portion of such investment will go to energy, manufacturing and physical infrastructure, housing, tourism and agriculture. Of the total investment requirement, the private sector is expected to contribute 75 percent of the investment requirement in energy, 45 percent in industry and infrastructure, 40 percent in sustainable cities and communities, 30 percent in agriculture, and 25 percent each in health and education. In other areas, such as water and sanitation, gender, climate action, forestry and poverty reduction interventions, the private sector is expected to contribute less than 15 percent of the investment requirement in each goal (Table 5.12).

The estimated resources availability for the private sector's financing of the SDGs shows that the largest financing gap in the private sector is in infrastructure, comprising industry, transport, urban development and energy. The other areas expected to face larger financing gaps are health and education, as these are expected to demand more private investment. On an average, private sector financing gap amounts to 4.8% of GDP annually (Table 1.13)

The sources of private finance are equity generated through domestic savings, for-

eign equity mobilized through FDI, debt financing through domestic and foreign banks, and resources shared with the public sector through PPP and VGF mechanisms. A review of sectoral allocation of bank credit for 2016-22 shows 63 percent of credit went directly or indirectly to the SDGs areas - mainly in infrastructure and industry, followed by urban housing and agriculture. Thus, expecting bank credit allocation to improve further towards development areas, three-quarters of bank credit to the private sector is estimated to go to SDGs areas.

Resources available in the private sector, based on the current bank credit allocation and FDI inflow patterns, will have to be restructured with higher financing made available to energy, agriculture, health and education. Bank financing is important for the achievement of SDGs, because it is by far the highest source of funding. Currently, banks and financial institutions are directed to invest 25 percent of their resources in directly-productive areas such as agriculture, energy, small and medium enterprises, tourism, and some manufacturing industries. Assuming this directive is adhered to, a significant portion of bank financing would be available for several SDGs. Similarly, banks and financial institutions are directed to invest 5 percent of

**Table 5.13: Private Sector SDGs Investment Requirement, Financing Sources and Financing Gap (Rs. billion)**

SDGs /Year	2023	2030	Total 2024-30	Avg 2024-30
Equity Finance	214.9	370.8	2076.5	296.6
Bank Credit	292.7	464.5	2612.0	373.1
FDI	26.4	51.5	275.9	39.4
Total Available resources	534.1	887.0	4965.4	709.3
Private Investment requirement	764.5	1246.5	7269.5	1038.5
Private Financing Gap	230.4	359.5	2304.1	329.2
Private Sector Finance Gap % of Investment Requirement	23.8	24.4	40.5	23.4
Private Sector Finance Gap % of GDP	4.3	4.4	-	4.8

Source: Estimation of the research team

their credit to the deprived sector, which serves for financing poverty reduction investment. This is one other crucial area that supports the meeting of SDGs investment financing requirements through the private sector's contributions.

The private sector's financing gap will have to be met by reorienting non-SDGs investments towards the SDGs, mobilizing more equity, bank financing and external (FDI) financing for the SDGs areas with large financing gaps, such as industrial and physical infrastructure. An incentive and facilitating environment needs to be created to motivate private investment in these areas. As coercive measures will not work in a liberal market economy, policy-based reorientation will be possible through taxation, subsidies, public-private partnership, market-based pricing of goods and services provided through the private sector, viability gap funding and other support measures such as industrial infrastructure to finance the SDGs.

Two forms of public-private partnership in the SDGs' financing are important - Public-Private Partnership (PPP) and Viability Gap Funding (VGF). The main constraint in Nepal's infrastructure sector is a lack of sources for finance. More than the overall difficulty of securing funds, some projects may not be financially viable for the private sector although they are economically justified and necessary. This is the nature of several infrastructural projects that are long-term and development-oriented. For the successful completion of such projects, the government has to design VGF. That means a grant to support projects that are economically justified but not financially viable for private sector investment. In such projects, the government can offer a grant under VGF as a capital subsidy to attract the private sector players to participate in PPP projects that are otherwise financially

unviable. Projects may not be commercially viable because of long gestation periods and small revenue flows in future.

VGF grants have to be available only for infrastructure projects where private sector sponsors are selected through a process of competitive bidding. The VGF grant can be disbursed at the construction stage itself, but only after the private sector developer makes the equity contribution required for the project. The usual grant amount can be set at not more than one-fourth of the total capital cost of the project. Funds for VGF will have to be provided from the government's budgetary allocation. The project agreements must also follow the best practices that would secure value for public money. Regular monitoring and evaluation should be managed by the lead financial institutions for the disbursement of the grants. The lead financial institution for the project is responsible for regular monitoring and periodic evaluation of project compliance with agreed milestones and performance levels, particularly for the purpose of grant disbursement.

Providing some financial security to the private sector should draw more private investment into this critical sector in Nepal and, in doing so, reduce pressure on government finances. And once the private sector better understands the Nepal energy and other infrastructure sector, private sector players will be able to recover most of the investment within three to four years when VGF is made available under this grant assistance.

## **5.5 Financing from cooperatives, communities and non-government sectors**

The cooperative movement in Nepal, which had grown by leaps and bounds during

**Table 5.14: Sources of Financing Cooperatives, Communities and Non-Government SDGs Investment Requirement (Rs billion)**

Items	2023	2030	Total 2024-30	Avg 2024-30
NGO <sup>61</sup> and cooperative financing	93.1	150.5	884.0	126.3
Household financing	86.7	143.6	832.9	118.9
<b>Total Available Financing</b>	<b>179.7</b>	<b>294.1</b>	<b>1716.9</b>	<b>245.3</b>
Financing as % of SDGs Investment need	8.0	8.1	-	8.1

Source: SWC, FECUFON, MOLMCPA and estimation of the research team

2000-2015, has receded in recent years due to a liquidity crunch and financial stress. As the revision in the Cooperatives Act has encouraged mergers and acquisitions while also discouraging the establishment of new cooperatives, the number of cooperative organizations has hovered around 32,000 for some years with their shareholder members also remaining at around 7.4 million.<sup>60</sup> These cooperatives are involved in diverse economic activities, including agriculture, dairy, manufacturing, financial services, and communication, energy, education, health, and consumer services. Their contribution to transforming agriculture, providing affordable health care services and promoting inclusive finance is encouraging. Thus, if we take account of the activities of cooperatives, their contribution in the achievement of SDGs is commendable.

NGOs working in the country are supporting the achievement of SDGs through their engagement in social mobilization, capacity development, and creation of small infrastructure and supporting community organizations to build social capital. During 2018-23, NGOs have also mobilized about Rs24 billion annually for spending on social and economic activities. Their potential contribution in SDGs financing for the next seven years is based on this past trend.

Community organizations, including forest and water users' group, which also mobilize funds for investment, are added to NGO spending.

INGO contributions increased significantly, from \$131.8 million in FY 2019/20 to \$160.2 million in FY 2020/21. About 70 percent of that is estimated to go on the social sector, including health, education, drinking water, women and children, youth welfare and labour.

The annual average financing available for the Cooperative and NGO sector is estimated at Rs126.3 billion for 2024-30. On average the annual availability of financing resources for this sector throughout the SDGs period is Rs245.3 billion (Table 5.14). The household, cooperative and NGO sector are not expected to face financing gaps because they are likely to finance the SDGs from the resources available for them.

## 5.6 Overall SDGs Financing Gap

An analysis of the SDGs investment requirement and different sources of SDGs financing shows a large financing gap of Rs 754.9 billion on average per annum during

<sup>60</sup> MOF, Economic Survey 2079/80, Government of Nepal

<sup>61</sup> Social Welfare Council Annual Report, 2023; it shows average amount of NGO fund approved by Social Welfare Council during 2018-23 was Rs 24 billion. In 2023, it was Rs 31 billion.

**Table 5.15: Overall SDGs Financing Gap (Rs in billion)**

Overall SDGs Finance gap	2023	2030	Total 2024-30	Annual Avg (2024-30)
Public Sector	300.8	499.5	2980.6	425.8
Private Sector	230.4	359.5	2304.1	329.2
Cooperative and NGO sector	0.0	0.0	0.0	0.0
Household Sector	0.0	0.0	0.0	0.0
Overall SDGs Finance gap	531.2	859.0	5284.7	754.9
<b>Overall Gap as % of GDP</b>	<b>9.8</b>	<b>10.6</b>	-	<b>11.1</b>

Source: Estimation of the research team

2024-30. This amounts to 11.1 percent of GDP for the period. The annual average financing gap in the public sector is as high as Rs 425.8 billion for 2024-30 while the gap for the entire SDGs period is Rs 2,980.6 billion. This gap exists even after adjusting the likely 10 percent growth in ODA inflow. Thus, meeting the 2030 targets calls for higher development cooperation from external partners committed to supporting the SDGs' achievement.

The private sector financing gap amounts to Rs 329.2 billion on average per annum during the period; and for the whole period (2024-30), it amounts to Rs 2,304 billion (Table 5.15). As discussed earlier, no financing gap is considered for other sectors.

In \$ terms, achieving the set targets for 2030 would require additional financing of \$40.65 billion to be mobilized through all possible sources, such as savings, borrow-

ings and ODA throughout the remaining period from 2024 to 2030.

Given the ambition of the SDGs and their investment intensity, available resources from the public and private sectors along with the cooperatives, communities and NGOs, the financing gap is to be expected and can be met with additional efforts to mobilize resources in all these sectors.

The financing gap comprises of an economic growth scenario of 6 percent throughout 2024-30. As revenue mobilization and domestic borrowings are linked to economic growth, a high growth scenario would automatically result in higher domestic resource mobilization. As a result, there would be a change in the financing gap of the public sector.

A scenario of higher economic growth at 7 percent and revenue growth of 8.0 percent (assuming buoyancy at 1.2) is also developed

**Table 5.16: Overall SDGs Financing Gap at Higher GDP Growth (Rs billion)**

Overall SDGs Finance gap	2023	2030	2024-30	Annual Avg (2024-30)
Public Sector	309.9	415.5	2671.6	381.6
Private Sector	246.9	384.2	2404.0	343.4
Cooperative and NGO sector	0.0	0.0	0.0	0.0
Household Sector	0.0	0.0	0.0	0.0
Overall SDGs Finance gap	556.7	799.6	5075.6	725.1
<b>Overall Gap as % of GDP</b>	<b>10.3</b>	<b>9.2</b>	-	<b>10.3</b>

Source: Estimation of the research team

**Table 5.17: Overall SDGs Financing Gap at Lower GDP Growth (Rs billion)**

Overall SDGs Finance gap	2023	2030	Total 2024-30	Annual Avg (2024-30)
Public Sector	292.0	578.8	3277.0	468.1
Private Sector	214.0	337.2	2210.2	315.7
Cooperative and NGO sector	0.0	0.0	0.0	0.0
Household Sector	0.0	0.0	0.0	0.0
Overall SDGs Finance gap	506.1	916.0	5487.2	783.9
Overall Gap as % of GDP	9.4	12.1		11.9

Source: Estimation of the research team

to compare the financing gap for different growth scenarios (Table 5.16).

In the higher growth scenario, the annual, average public financing gap would be Rs 381.6 billion during 2024-30, or Rs 44.2 billion lower than that in the reference growth scenario. In terms of GDP, the financing gap would remain at 10.3 percent on average compared with 11.1 percent of GDP in the reference GDP growth scenario. This indicates a potential to reduce the financing gap with higher economic growth and better revenue mobilization.

A scenario involving lower economic growth at 5 percent and revenue growth of 6 percent (assuming buoyancy at 1.2) is also developed to compare the financing gap at a lower growth scenario. In this scenario, the public financing gap would rise to Rs 468.1 billion on average per annum during 2024-30, which is Rs 42.3 billion higher than that in the reference growth scenario. In terms of GDP, the financing gap would increase to 11.9 percent on an average compared with 11.1 percent of GDP in the reference GDP growth scenario (Table 5.17). As some of the targets and financing sources are linked to GDP, this growth scenario will miss their achievement, particularly industry (manufacturing), social protection and governance.

As the economic transformation takes place, the tax base will widen from non-taxable

agriculture to taxable industry and services. However, tax rates could also be realigned to raise private sector investing in SDGs areas. So there is a risk that revenue would fall short of the target. In that case, the public sector financing gap would be even higher than in the reference growth scenario.

## 5.7 Resource Mobilization strategy at the Federal Level for Financing SDGs

The revenue mobilization strategy for achieving the SDGs will have to serve three critical objectives: (i) mobilizing higher revenue through progressive taxation system; (ii) incentivizing private and other non-government sectors to allocate their investments and resources towards SDGs; and (iii) safeguarding the poorest people from the incidence of taxation. While undertaking the first objective, due care must be given to the ability to pay and the likely impact and incidence of the taxes on different income groups. For the second objective, due consideration should be given to the revenue forgone and tax base widened with the foregone revenue. And for the third, indirect taxes need to be designed in such a way that the basic consumption of the poorer people is not hurt due to tax burdens.

Considering the recent trend in revenue mobilization – mostly prompted by structural

**The revenue mobilization strategy for achieving the SDGs will have to serve three critical objectives: (i) mobilizing higher revenue through progressive taxation system; (ii) incentivizing private and other non-government sectors to allocate their investments and resources towards SDGs; and (iii) safeguarding the poorest people from the incidence of taxation.**

shifts in the pattern of import tariffs and the volume imports, implementation of trade agreements as per international commitments and laxity in tax administration – several issues have to be addressed for a consistent SDGs financing strategy in the public sector. They include: (i) additional efforts to mobilize revenue, particularly through higher tax compliance and enforcing progressive taxation to ensure equity in tax system; (ii) setting prices, user fees and charges for the public goods and services putting the affordability of the people left behind at centre stage, which can directly help to achieve the SDGs for all; (iii) creating a fiscal space for SDGs through prioritization of public spending and allocating higher budget to the SDGs areas; (iv) restructuring public enterprises and creating space for public private partnerships in the implementation of large infrastructure projects; (v) restructuring domestic debt and taking initiatives for external bilateral debt relief; and (vi) soliciting the global community for more ODA to meet the resource gap in financing the SDGs.

**Revenue Mobilization:** Until the outbreak of COVID-19, the government had introduced several successful efforts in mobilizing domestic revenue through tax measures. Harmonization of customs duty structure, introduction of VCTS, the start of a more progressive tax structure, enforcement of VAT along with withdrawal of the VAT refund scheme, and making business entities' bank loan demands compatible with tax returns made by the entities were among the critical measures. Subsequent tax policy reforms have been derailed along with instability in the government and low appetite for reforms. Tax policy reforms have to be accelerated to

enhance the fiscal space for the SDGs' needs, overweighing the economic distortions of tax the government collects by the benefits of incremental financing for transfers and public goods provision.

Traditionally, Nepal has relied heavily on import-based revenue, customs, VAT and excise duty collected at the customs point, comprising about 57 percent of tax revenue in FY 2022/23. With the changing composition in the trade and tariff regime, particularly related to vehicle and petroleum imports, the government is losing large volume of revenue for the sake of reducing greenhouse gas emissions.<sup>62</sup> This clearly manifests the trade-off between policies introduced to mitigate climate change and the government's revenue collection. While greenhouse gas emissions in the transport sector is only a small portion of the total emissions, it looks like that the existing tariff regime has to be revised for the medium term.

Even if domestic resource mobilization follows the trend, Nepal does face a serious financial crunch if it is to meet the SDGs. Further, there are many downward risks like (i) slowing down of GDP growth, which is expected to grow by 6 percent per annum on an average; (ii) difficulty in full adjustment of prices, fees and charges for public goods and services also in the context of limited local government capacity to enforce fees and charges; (iii) chances of reduction in tax rates without sufficiently compensatory measures to widen the base and improve the tax compliance; and (iv) change of the aid environment.

In view of the shortage of financial resources, along with fiscal volatility, a set of revenue-broadening measures is needed. Learn-

<sup>62</sup> The downward revision of import duty on electric vehicles is estimated to reduce customs (including excise and VAT) duty collection by nearly Rs 50.0 billion a year if current trend of EV import continues. While the switch from automotive to electric vehicles has also caused higher foreign exchange loss, the trade-off between the objective of clean transport and revenue collection requires a reconsideration.

ing from the lessons of other countries in a comparable stage of development, the government may carry out the following measures to create fiscal space for investing in the SDGs.

- i) Integration of off-budget operations into a comprehensive budgetary framework. Although the budget system in Nepal has covered most public operations, there are several funds being operated outside budget, i.e. special funds for labour, environment and other trust funds. All these off-budget operations using public resources are subject to budgetary management and monitoring. Integrating these funds into a comprehensive budgetary framework will not only increase budgetary comprehensiveness and strengthen public finance management, but also help prioritize resources for the SDGs.
- ii) Expanding coverage of user fees/charges. User fees/charges are the levies on quasi-public goods/services, based on a market economy principle "beneficiary pays." It is commonly used in market economies, and has been proved to be effective in promoting market mechanisms. As Nepal is gaining pace in its private sector development, user fees/charges will become indispensable. The following areas have potential for collecting user fees/charges: water supply and waste-water treatment, electricity, health care, and tertiary education.
- iii) Involving private sector in public service provision. Public-private partnerships (PPP) are arrangements between government and private sector entities for the purpose of providing public infrastructure, community facilities and related services. Such partnerships feature the sharing of investment, risk, responsibility and reward between the partners. Involving the private sector in public service provision, through O&M, BOT, BTO and BOO will not only promote private sector development, but also conserve scarce public resource for financing the other key public services. Both will help to attract FDI to the country.
- iv) Widening the tax base by eliminating exemptions and broadening coverage. Elimination of VAT refunds, minimizing the list of VAT exemptions, inclusion of professional services in VAT, introduction of social security tax and inheritance tax, introduction of minimum tax on remittances and bringing informal business activities (including those related to IT and start-ups) are some of the potential instruments for widening the tax base. The introduction of such taxes is needed to meet the huge non-contributory social security liability created by lowering the eligible age for old age benefits. Thus, while the minimum age for eligibility to old age benefit has to be taken back to 70 years, the social security tax for those not enrolled in contributory social security schemes could be an instrument to finance such liabilities.
- v) Revising tax rates. Some tax rates can be revised to address distortions in the tax system. For instance, as a large customs duty difference between the finished goods and their parts has provided undue protection to the assembly industries and posed a huge revenue loss, the difference has to be reduced to a single slab of 10-12 percent. Similarly, as the huge duty difference between electric and petroleum-fuelled vehicles is creating a significant loss in government revenue while causing higher foreign exchange spending, the duty difference has to be limited to 25-30 percent as a maximum. There are several other

- very low duty rates that could be raised along with tightening the border and customs administration.
- vi) Updating reference prices and cross-checking transaction values. While customs duty assessment has to be done on the basis of transaction value of the imported items, its application at a situation of cross border business nexus, fake billing, and L/C under-invoicing results in a large revenue loss. Regularly updating the international prices and intelligence of business connections would be effective in sticking to transaction-based tax assessment.
  - vii) Controlling revenue leakage. Despite the introduction of VCTS, there is huge revenue leakage in imports. Reference prices for some goods imported from India are too low, making room for high revenue loss. Periodic updates of the valuation along with effective application of VCTS would help higher revenue collection.
  - viii) Bringing funds generated by public entities into treasury. Various government agencies and public enterprises hold substantial funds generated from the sales of goods and services but not submitted to the exchequer. Income from proceeds of agriculture, forestry, tourism, culture, telecom, civil aviation, roads and more. are held by respective agencies. Revenue diverted from the federal tax system to development agencies such as tourism development tax, telecommunication charges, various fees and charges of service providers are some of such cases. These funds can be partly mobilized for meeting the gap in SDGs financing.
  - ix) Forging effective coordination among revenue enforcement agencies. While strong coordination between the Customs Department, Revenue Investigation Department, PCA department and Armed

Police would deliver better revenue results. Similar actions by the Department of Anti Money Laundering and the Revenue Department could contribute to higher domestic revenue collection.

## 5.8 Resource mobilization strategy at the provincial level for financing SDGs

Fiscal sustainability of the provinces has been a challenge for the country and has implication for the effective implementation of federalism. The challenge arises from both the spending and revenue sides. Higher recurrent expenditure to run the new administrative set-up is putting pressure for more resources, and limited scope for mobilizing additional revenue is compelling provinces to depend more on fiscal transfers from the federal government. Aside from the expected high dependency on budgetary transfers from the federal government, provincial and local pressure for expansionary budgets may result in fiscal stress at the national level.

The Public Expenditure Tracking Survey (PETS) of seven provinces (UNDP, 2023) shows a mixed trend in setting SDGs priorities and budget allocation. Despite poverty being a major development challenge, financing for SDG 1 is not explicitly prioritized in the provincial budget allocation – as only 1 percent to 5 percent of the budget during 2020-22 has directly gone to end poverty. An increasing number of financial institutions to support poverty reduction has not worked in the absence of coordination between provincial governments and the available financial resources in the provinces.

Allocations for SDG 2 during 2020-22 ranges from 10.6 percent to 18.8 percent of all allocations of the provinces. For SDG 3, the budgetary allocation ranges from 2.6 percent in the initial years to 12.4 percent in later years,

while for SDG 4 it ranges between 4 percent and 10 percent of budgetary allocations. The allocation in SDG 9 is mostly towards transport infrastructure covering around 30 percent of budget allocation. While there is little budget allocation for Goal 13 and 15, the allocation for Goal 16 amounts to more than 8 percent of the budget.

As the PETS Report notes, there is a need to clarify the roles and mandates of the provinces by enacting the remaining federal as well as provincial acts and thus removing duplication in their roles and mandates. The provincial planning commissions have to identify key SDGs indicators by different SDGs goals based on the provincial SDGs' priorities and then coordinate with line ministries for budget allocation. Provinces can improve the efficiency of public spending in SDGs by ensuring consistency in the periodic plan, medium-term expenditure framework, and annual programme, reprioritization of budget allocation across SDGs, focus on the efficiency of public expenditure, and formulation of effective public procurement acts, following strict norms and standards in procurements, and reducing irregularities.

In the current fiscal structure, provinces have to make additional efforts to collect more revenue in the areas of concurrent authority, induce and compel local governments to share revenue collected under the concurrent authority, make a survey of revenue potentials in the areas of sole authority and collaborate with the federal government in better revenue sharing of natural resources.

There are several areas where provincial governments can collaborate with the private sector, including industrial infrastructure, commercial physical infrastructure such as industrial corridor, transport management, urban housing, commercial agriculture, university education, tertiary health care, social

protection, environment and climate change.

Provinces can also collaborate with the federal and local governments in creating fiscal space for the SDGs through joint investment on a cost-sharing basis, including through complementary and special grants. Some commercial projects serving the SDGs, such as agricultural warehousing, cold storage, tourism infrastructure, housing schemes and renewable energy projects, could also be operated in collaboration with the financial institutions. The spending efficiency of the provinces also have to be raised to fully utilize the available resources.

## 5.9 Resource mobilization strategy at the local level for financing SDGs

The source of revenue for most local governments is currently IGFT, incomes derived from Integrated Property Taxation (IPT), and royalties and service charges. As the central government collects revenue from larger sources, such as customs, income taxes, VAT, and excise revenue, most local governments depend heavily on allocations from the central government through revenue sharing and equalization grants. They also face several capacity challenges to mobilize revenue of their sole authority due to (i) lack of appetite of political leadership to mobilize potential resources due to a perceived fear of becoming unpopular; (ii) lack of qualified staff with technical and administrative capacities to plan, implement, operate and maintain plans to mobilize revenue; (iii) Insufficient legal and administrative frameworks for taxation; and (iv) lack of information and record of tax payers and potential tax payers.

**Own Source Revenue (OSR):** The Constitution empowers municipalities to raise internal revenue from taxes, service charges, fees,

penalty and fines. Because of deficiencies in the revenue administration system, some municipalities have not been able to generate enough internal revenue. The following strategies have to be followed to enhance internal revenue.

First, the revenue administration system has to be strengthened. For this, local governments need to review the revenue management system, strengthen the role of the Revenue Advisory Committee (RAC), introduce house numbering, prepare a Revenue Implementation Plan to improve the revenue management system and regularly follow up to monitor achievements made against the action plan.

Second, the own source revenue database needs to be updated and made functional. Using information technology, local governments can computerize data by introducing OSR software, digitizing tax payer profiles, and updating records of the tax payers on a regular basis.

Third, regular revision of tax and non-tax revenue rates has to be made to put them in line with changing price and consumption patterns. Local governments will have to make surveys of the tax base and revise tax and non-tax rates to capture prices and trends. Municipalities should introduce an Integrated Property Tax (IPT) system as only a few of them have so far done so.

Fourth, local governments will have to introduce a billing system that provides information to taxpayers about their dues at the beginning of each year. Introduction of penalties to defaulters at the progressive rate, use of banking system for revenue collection, and

withholding municipal services when dues are not cleared could also be introduced.

Fifth, local governments can frame a cost recovery policy of infrastructure systems operated by the municipality to mobilize revenue. They must recover at least the recurrent and part of the capital cost for providing specific services, e.g. sewerage, water supply, and electricity services. But they should ensure that the revenue collection from specific services is used for maintaining such services.

Sixth, distribution of royalties from natural resources will have to be fair and justified. As local governments have fewer such resources, they should also benefit from the national resources. Legislation on the distribution of royalties from natural resources has to be drafted and revenue to be allocated as per the necessity and capacity of the local level. Finally, local governments should encourage project implementation through Users Group and a PPP model. As people's participation in development will ensure benefits including the transparent and efficient use of resources, local governments should implement projects through user groups.<sup>63</sup> For projects in the PPP model, the Procurement Act has to make provisions and select projects based on the PPP policy and guidelines. PPP can apply for infrastructure projects like solid waste management, toll roads, bus parks, convention and exhibition halls, industrial villages, children's amusement parks, and city transportation services.

**Intergovernmental Fiscal Transfers:** Four types of fiscal transfers are made from the federal to the local governments – equalization grant, conditional grant, complementary grant and special grant constitute significant share of the local government sources of

<sup>63</sup> However, the likely distortions in such process should be controlled through strong mechanism for accountability and financial responsibility in the local level public procurement act.

spending. Fiscal equalization grants to the local level entity is based on their expenditure need, their capacity to generate revenue, and the efforts made by them. Provinces and local governments also share the revenue generated from certain taxes on the basis of their expenditures needs and their capacity to generate revenue, in accordance with provincial law. Conditional grants, which deal with the transfer of programme implementation responsibility to the provincial government, can be aligned with the SDGs to address their financing gap. While complementary grants and special grants are extended under certain circumstances for collaborative development projects, setting SDG-consistent criteria for approving complementary and special grants to provinces will help to minimize the SDGs financing gap.

A clear and SDG-oriented intergovernmental transfer system will have many benefits, including (i) ensuring predictability that helps local governments to plan long-term investments; (ii) creating a creditworthy base of cash flows that can be leveraged; and (iii) providing an ability to design credible incentives to encourage them to meet the goals. However, a fluctuating trend of federal and provincial government revenue collection creates uncertainty in projecting revenue, with conditional grants being preoccupied with prior conditions and complementary as well as special grants not being approved in time for the budget cycle cause difficulties for local governments during their preparation of budgets and programmes.

To streamline local government programmes with the SDGs, the federal government should set a transparent and predictable fiscal transfer system to promote SDGs investment through a close collaboration with the National Natural Resources and Fiscal Commission (NNRFC). The NNRFC should develop an appropriate formula for fiscal transfer

considering SDGs achievements and gaps as flagged by national and local SDGs reports.

The IGFT should facilitate legitimate grants for implementing SDGs by introducing a combination of unconditional and conditional grants. Introduction of a new window for Special SDGs Investment Grants may also be necessary. The NNRFC can study the SDGs expenditure needs of the local governments, assess their capacity in generating and raising revenues, and make arrangements to allocate fiscal equalization grants on the basis of their need for SDGs financing and available resources. The federal government can establish SDGs funds under SWAp for funding local social and physical infrastructure development through conditional grants for SDGs implementation. The federal fiscal transfers for SDGs can be linked to multi-year investment plans or multi-year fiscal frameworks by local governments. This implies that the local governments should have their SDG-based periodic plans with which IGFT could be linked.

While a performance-based grant system incentivizes local governments to perform better and obtain higher transfers from the federal government, this should not penalize those unable to perform better due to capacity constraints. In this regard, improvement in performance-based allocation is needed along with providing technical backstopping to the local governments for improvements in budgetary performance.

Application of IT and e-governance systems in local governance will help higher revenue mobilization as well as promoting transparency and efficiency in their operation. That incentivizes federal government to allocate more resources for their spending. Local governments should strengthen monitoring and evaluation of sector ministry/departments' fiscal transfer to municipalities to prevent sec-

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toral ministries from arbitrarily 'pulling back' resources provided to the local governments.

**Local Borrowings:** The analysis of local financing requirements and available resources shows that the existing financing sources are not enough to meet the SDGs' needs. So borrowing will be necessary from banks and financial institutions for commercial projects. This could be done by issuing project-specific local government bonds or directly borrowing from banks for PPP projects. The restructuring and financial capacity enhancement of the Town Development Fund (TDF) is one alternative source of funding local government projects serving SDGs.<sup>64</sup>

There are at least two windows that municipalities can use for borrowing, namely the TDF and the banks and financial institutions. As municipal financing needs are much higher than the present income of the municipalities, debt financing is an option, which will enable municipalities to finance beyond the capacity of their present revenue mobilization. As such, commercial infrastructure projects could be designed in such a way that the principal and interest of the investment could be recovered from user fees, charges, or local taxes raised from facility users.

Mobilization of funds from capital markets, such as public issue of the shares of commercially-viable infrastructure projects, consortium financing, and bond issues on project-specific needs, are among the other means of financing for SDGs related to water and sanitation, energy, transport, industrial infrastructure, housing, urban utilities, and satellite cities. Commercial borrowing, PPP and use of public land as equity in infrastructure projects can provide a strong framework to finance capital investments. Taking account

of the huge SDGs infrastructure financing gap and the prospect for commercially-viable infrastructure projects at the municipal level, it is necessary to strengthen their borrowing and implementation capacity. For this, Nepal needs more developed and detailed regulation of the purpose of municipal borrowing, the amount and the conditions, the timing, the procedures for handling borrowing, the sources of borrowing and other technicalities.

There are several reforms that will make municipalities eligible for more commercial borrowing from banks and financial institutions. The selection of commercially-viable projects, pre-determined user fees or charges to be collected from infrastructure users, expansion of the internal revenue base and its effective collection, effective provision of loan recovery through legal actions including acquiring of the collaterals pledged for loan, and central government incentive mechanisms like topping the loan by matching grants for social infrastructure projects, are some of the possible areas of reform.

An enhanced role for TDF as a financing institution will be necessary to make borrowing available and affordable for local government at the urban municipal level. This is constrained by both demand and supply side weaknesses. Studies have suggested evolving TDF as a financial intermediary with a strong capital base and capable management (TDF, 2017). This should be followed by enabling easy access for local governments to such financial services. The federal government can create soft lines of credit for TDF to finance local infrastructure projects at affordable interest rates.

**External Borrowing of the Local Governments** The Constitution allows

<sup>64</sup> Such an arrangement calls for improving project design, cost-recovery practices, budget transparency, and credible financial management.

external borrowing with central government approval at the provincial level only and local governments are not directly allowed to mobilize external grants or loans. However, local governments can take initiatives to mobilize external resources for infrastructure through the central or provincial government. However, aid fragmentation, duplication, and the politicization of external development financing have to be addressed.

**Public Private Partnership (PPP) for Local Infrastructure Financing:** Public private partnerships for the development of essential public infrastructure and services is crucial – as well as effective – to adding momentum to meeting investment gaps for key SDGs locally while making public services effective by ensuring optimal use of managerial skills, innovative technology, appropriate human resources and capital available with the private sector. As the financing gap in SDGs can be met through the PPP, transparency and accountability by both sides are critical for credible partnership. Also, strong local policy frameworks need to be created before working on establishing the legal framework to ensure the practicality of implementing PPP projects. The way forward therefore involves strengthening the legal framework, enhancing the implementation capacity, arranging alternative financing for projects, and scaling up efforts.

**Public Community Participation (PCP) for Local Infrastructure Financing :** Those who live in municipalities are increasingly eager to participate in the local infrastructure with their financial and management inputs. The experience of municipalities in working through strong networking and partnership arrangements with communities has proved sustainable infrastructure can be created with less investment than

in other projects. Collaboration of the municipalities with the community people and community organizations would help to meet the SDGs, and particularly the infrastructure financing gap, while ensuring transparency, efficiency and effectiveness in resource uses. Local governments can work with socially-mobilized groups (e.g. voluntary workers such as Female Community Health Workers (FCHVs) and School/health Management Committees) who carry out developmental activities by engaging in planning and oversight processes and effectively link with supply side governance agencies.

**Other sources of local government financing**  
Local infrastructure can be financed through instruments like value capture, viability gap funding, land-pooling, and BOT. As investments made by the government in, for instance, airports, roads, bridges, public offices, universities, hospitals, and industrial parks, tend to increase the land value surrounding the facilities, value added or betterment levies, land pooling in the areas adjacent to an infrastructure for resale, and land development schemes can be used as tools to capture the property value in parts of the municipalities where new infrastructure investment takes place.

When local government cannot meet all the infrastructure financing requirements for SDGs, the private sector has to be brought into the development process. But as not all the projects can be commercially viable, viability gap funding will help the local governments to mobilize private investment and save public resources from being held up in a limited number of projects that they would otherwise have to invest in. Land pooling through the implementation of land bank, and special purpose institutions managing land for advanced agriculture and collecting

**Collaboration of the municipalities with the community people and community organizations would help to meet the SDGs, and particularly the infrastructure financing gap, while ensuring transparency, efficiency and effectiveness in resource uses. uryity, lack of adequate jobs creation, among others.**

revenue from the business, will also add to local resources.

### 5.10 Public Finance Efficiency, Expenditure Switching, and Synergy in achieving SDGs

Nepal's public finance trend shows fiscal space being squeezed owing to a slow pace of revenue mobilization, growing debt stress, rising social protection spending, costs of COVID-19 prevention and treatment, and growing contingent liabilities arising from disasters, also triggered by the effect of climate change. In addition, higher administrative expenses related to federalization and infrastructure creation is adding fiscal strain to the federal government while low efficiency in public finance is sucking more than the required resources to achieve the SDGs targets.

Despite increasing expenditure efficiency often being suggested as the main instrument to enhance fiscal space for SDGs, acquiring any fiscal gain from efficiency should consider inclusion and distributive concerns. This is because inclusion and equity could be undermined in an effort to create more efficiency, and the goal of 'leaving no one behind' could be overlooked. Overall, the benefit incidence (who receives the benefit of government services) and expenditure incidence (how government spending affects private income) are important considerations in expenditure switching and resource allocation prioritization policy for achieving SDGs.

There is less room for Nepal to create fiscal space by expenditure switching. More fiscal space can be created by involving the private sector, cooperatives, the communities and community organizations in the SDGs' financing. Energy, urban transport, communication, tourism, industry, agriculture,

finance, social protection, and tertiary education and health services are among the areas where more responsibility can be attributed to non-government sectors and save resources for investment in those SDGs areas where there is larger public responsibility.

Overall, the financing of SDGs with larger fiscal space calls for efficient and pro-poor allocation of federal, provincial and local government resources, avoiding duplication in institution creation, overlap in programme implementation, taxes and subsidies, social protection schemes, and minimizing recurrent expenses. The growth of some of the recurrent spending can be tied up with the real growth rate of the economy so that revenue surplus could be generated for infrastructure investment. Examples of such recurrent spending may include (i) defence and police force spending; (ii) administrative expenses not directly linked with service delivery to SDGs areas; (iii) public utilities not directly delivering SDGs; and (iv) subsidies and transfers not directly linked to the SDGs.

### 5.11 Official Development Assistance

As financing needs for SDGs investments is far greater than the fiscal space available to the government, Nepal will need a significant increase in fiscal space. This will require more global cooperation along with domestic efforts. As the analysis in the previous section showed, even substantial progress in domestic resource mobilization will not be sufficient to meet the SDGs financing gap, and external financing in line with global commitments has to be realized. Of the external financing support, the country should make efforts for mobilize aid in grant form for some of the SDGs related to the social sector, climate action, and governance even as the country graduates from LDC status by 2026. This is

**The financing of SDGs with larger fiscal space calls for efficient and pro-poor allocation of federal, provincial and local government resources, avoiding duplication in institution creation, overlap in programme implementation, taxes and subsidies, social protection schemes, and minimizing recurrent expenses.**

necessary to meet the larger expenses in recurrent spending in social sectors, climate actions, and to maintain macroeconomic stability and debt sustainability.

Both the quantity and quality of ODA needs to improve substantially to meet the financing gap, as some of the aid is going into non-SDGs areas. New ODA for the SDGs must be much better targeted than now. Currently, most ODA comes in energy and infrastructure followed by social sectors like education and health. There is very little ODA for production sectors like agriculture and manufacturing, while the amount for urgent climate action is minuscule. Most incremental aid needs to be provided in the form of budget support or sector-wide approaches to support the scaling up of national programmes under the SDG-based strategies.

Nepal has developed a series of climate finance-related policies, legal instruments and institutional mechanisms to promote low carbon pathways and climate-resilient development. To continue the progress it has made in climate finance to address meaningful mitigation and adaptation actions, nearly \$48 billion is needed until 2050 to implement 64 climate change adaptation programmes, according to NAP funding gap estimates.<sup>65</sup> Almost \$25 billion is required to achieve NDC conditional mitigation activity-based targets and \$3.4 billion for its NDC unconditional targets. To achieve climate-related SDGs targets by 2030, some studies estimate almost \$20 billion from 2023-2025 and almost \$30 billion from 2026-2030<sup>66</sup> will be needed, which the country cannot afford.

A large portion of this financing need has to be met through ODA. However, the volume of ODA, despite increasing over the years, has declined in proportion to GDP. And if

the current level of ODA is maintained, it will not meet the financing requirements for the SDGs. The risks associated with such underfunding are: (i) SDGs targets to be set at a lower bound thus missing the spirit of the SDGs; and (ii) government to resort to higher domestic borrowing and thus head towards fiscal unsustainability and a domestic debt trap. As neither of these two are acceptable, development partners will have to scale up ODA to meet the country's SDGs financing gap.

Utilization of aid is equally important for bridging the SDGs financing gap. During the last seven years, aid disbursement stood on average at 40 percent of the commitment. The underlying causes behind low aid absorption has to be corrected while looking for higher aid commitment. As aid effectiveness has always been an issue in Nepal's development process, results-based aid management is just as important as improvements in its utilization rate.

The concept of SDGs is also based on an assumption that the main strategy for facilitating 'development' is the transfer of resources (through ODS, FDI and trade routes). This is, however, not sufficiently addressed within the global framework of the SDGs, and also as unequal and unfair national trade relations are not monitored through UN lens.

Nepal's graduation from LDC status is an important milestone for the country's development trajectory and a reflection of some level of socio-economic progress so far. However, graduation might imply losing a host of international support measures offered by the international community to aid Nepal's efforts in overcoming its development-related challenges. Major implications are related to market access mainly in terms of tariffs and subsidies, rules of origin, trade in services,

**A large portion of SDGs financing need has to be met through ODA. However, the volume of ODA, despite increasing over the years, has declined in proportion to GDP.**

<sup>65</sup> 2023-uAQc62-ADPC-Accessing\_Climate\_Finance\_in\_Nepal\_ForWeb.pdf

<sup>66</sup> ibid

**A  
macroeconomic  
framework  
consistent  
with SDGs  
investment  
is essential  
to assess the  
impact of such  
investment on  
broader social  
and economic  
sectors like  
output, poverty,  
employment,  
external sector  
balance, and  
public debt.**

development cooperation, and intellectual property rights.

The country will lose the preferential market access available through LDC-specific schemes under the Generalized System of Preferences (GSP) and other arrangements. However, as most exports (68.0 percent in 2023) are destined for India with preferential market access built into the bilateral trade treaty, no significant effect will be seen in exports to India. Exports to other countries, mainly US and European countries, will face tariff increases after the loss of LDC-specific tariff preferences. In some destinations, a huge proportion of current exports face zero duties even without being granted any preferences. Thus, considering the direction and volume of exports, the challenge appears more to trade capacity than to preference erosion. Cash subsidies provided for some exports may have to stop, affecting exports of both agricultural and non-agricultural products unless they become competitive.<sup>67</sup>

Along with tariff implications, LDC graduation will have implications for rules of origin and the country will face more stringent rules of origin provisions in preference-granting countries. Many products, particularly apparel and made-up textile products, will face more stringent rules of origin in the form of double transformation requirements compared to the single transformation required for the LDCs.<sup>68</sup>

There will be some impact on ODA, which is an important source of finance, accounting for about a quarter of public expenditure. The impact will be more pronounced with respect to

bilateral aid, and less to multilateral aid. Two multilateral development partners, the World Bank and ADB, provide nearly two-thirds of the ODA and are least affected by graduation. It is quite likely that the World Bank will offer blended credit, which is marginally less concessional than the IDA's regular credit, and this may also be the case for ADB. Since bilateral ODA is affected by considerations other than LDC status, the volume, and terms and conditions of bilateral ODA will be marginally affected by graduation.<sup>69</sup>

Overall, LDC graduation will have some impact on market access for trade and investment in goods and services mainly through changes in tariff and subsidy regimes, rules of origin, and intellectual property rights. As the impact of graduation on development cooperation is likely to remain marginal, a greater FDI flow with an improved foreign investment environment can compensate for the loss of ODA inflow.

## **5.12 Macroeconomic Outlook Consistent with SDGs Investment and Financing Requirements**

A macroeconomic framework consistent with SDGs investment is essential to assess the impact of such investment on broader social and economic sectors like output, poverty, employment, external sector balance, and public debt. The following section gives an outlook for these variables for 2024-30.

- (i) Given the poverty elasticity of growth at 0.25, and assuming GDP growth to

<sup>67</sup> Pandey P.R. et. al. (2022), Nepal's graduation from the LDC category: Implications for international trade and development cooperation. Kathmandu: South Asia Watch on Trade, Economics and Environment (SAWTEE)

<sup>68</sup> *ibid.*

<sup>69</sup> Upon graduation, an despite being excluded from the committed aid specific to the LDC group, Nepal - as a developing country - will be eligible for aid under another commitment of developed countries to provide 0.7 percent of GNI as ODA to developing countries. Graduation from the LDC category could potentially affect, in the medium term, a portion of the core resources of the UN agencies mandated to provide to LDCs.

be 6.0 percent on average, absolute poverty is estimated to come down to 5.0 percent by 2030.

- (ii) Given the historical employment elasticity of growth at 0.325, the number of effectively unemployed labour force (including labour underutilization) will be 0.25 million per year. However, the inclusive nature of SDGs investment along with labour market-related interventions can potentially increase employment intensity of growth. So if the employment elasticity reaches 0.5. This, given 6 percent growth, will generate 0.3 million jobs each year until 2030.
- (iii) The share of revenue to GDP will reach 26.1 percent in 2030 at reference GDP growth rate of 6 percent and revenue growth at 7 percent.
- (iv) Given the revenue performance, external financing need for the SDGs, and the size of public expenditure to be financed by external borrowing, outstanding external debt will fall to 16.8 percent of GDP in 2030. If the public sector financ-

ing gap is to be solely financed by ODA comprising 95 percent as loan, then external debt will remain at 18.4 percent, slightly below the current level. If gross domestic borrowing remains at 5 percent of GDP until 2030, then domestic debt will increase to 43.5 percent of GDP by 2030. However, if domestic borrowing in net terms remains at 2 percent of GDP per annum until 2030, outstanding domestic debt would be 25.7 percent in 2030. Therefore, the total outstanding debt would be 42.5 percent of GDP, broadly at the present level. Therefore, the SDGs investment requirement by the public sector as estimated for achieving the SDGs is consistent with debt sustainability.

A policy option for reducing domestic debt to 1 percent of GDP per annum and covering the financing gap by ODA with 15 percent growth would result, and increasing ODA would imply outstanding external debt to GDP to 18.5 percent. Domestic borrowing falls to 19.8 percent of GDP in this scenario.



## Chapter 6

# Strengthening Implementation Partnership

**T**he role of SDGs stakeholders has so far remained satisfactory with public sector, private sector, NGO and cooperative sectors' involvement in policy formulation, implementation, financing, monitoring and evaluation of progress. The role of the public sector, expected to be predominant in the implementation of the SDGs, remained subdued with the transition of the government system from unitary to federal. The federal government began SDG-based planning, programming and budget allocation early on. However, the subnational governments took time to design SDG-based plans and programmes. This has been more so with local governments. The following sections focus on the strengthened partnership of the national government with provincial and local governments, the private sector, cooperatives and the NGO sector, other civil society organizations, and external development partners – as an attempt to energize their shared responsibility.

## 6.1 Partnership with Provincial Governments

The Annexes of the Constitution, Financial Procedure and Financial Responsibility Act, Report on Unbundling of Duties and Responsibilities of the Federal, Provincial and Local Governments, and several other legal arrangements guide the roles of provincial governments to act on SDGs. Voluntary

National Review Reports, Civil Society Report on SDG, Voluntary Local Review Reports (UNDP, 2022), National Framework for Leave No One Behind (2023) and Public Expenditure Tracking Survey (UNDP, 2022) have revealed several issues related to SDGs implementation – from policy lapses, implementation capacity, and efficiency of investment. This indicates that provinces are not yet fully focusing on SDGs indicator-based planning and budgeting; also, as their budgets and periodical plans are less consistent in terms of priorities in allocations. The quality of project implementation is poor due to a lack of proper monitoring, officials in the provincial government being frequently transferred, and weak monitoring and record keeping systems. Grey areas in the responsibility of provincial and local governments resulting in duplication of activities have eroded the efficiency of public spending.

Budget spending at the province level are not fully SDG-coded so far, so complete expenditure tracking remains difficult. Proper coding of budget allocation will provide feedback to reprioritize budget across SDGs and guide fiscal transfers from the federal government. Meanwhile, the efficiency of public expenditure along with improved budget release and implementation processes, ensuring transparency and accountability in public finance management, will strengthen partnerships with the federal government and other stakeholders. The SDGs monitor-



**The role of SDGs stakeholders has so far remained satisfactory with public sector, private sector, NGO and cooperative sectors' involvement in policy formulation, implementation, financing, monitoring and evaluation of progress.**

**Partnership at the local level implies that all stakeholders, actors and institutions at that level participate and play effective roles in the formulation, implementation, and monitoring of SDGs.**

ing framework and voluntary review of the progress will also enhance their credibility to garner stronger partnership.

Further clarification of the roles and mandates of the provinces through the enactment of remaining federal as well as provincial acts will facilitate continuation of priority SDGs interventions of the provinces. Coordination among all the three tiers of government, with NPC taking the lead, has to be strengthened in preparing periodic plans, programmes and budgets. Provincial planning commissions must identify key SDGs indicators by different SDGs goals based on the provincial SDGs' needs, and issue guidelines to ministries for formulating annual programmes. Consistency should be maintained between the periodic plan, medium-term expenditure framework, and annual budget programmes.

## **6.2 Partnership with local governments**

Partnership at the local level implies that all stakeholders, actors and institutions at that level participate and play effective roles in the formulation, implementation, and monitoring of SDGs. This is necessary to improve people's lives while leaving no one behind. Such partnership promotes better planning as per local needs and priorities, effective service delivery, and effective partnership with the local organizations. Devolution of revenue base and other resources through fiscal transfers to local governments, along with large revenue transfers from the federal and provincial governments, implies that local governments should forge a credible partnership with stakeholders to carry out the sustainable development programmes. Unless the existing tensions on power and resource sharing among the three tiers of

government is resolved, strong partnership will remain subdued.

Despite the localization efforts of the SDGs, the protracted transition from centralized planning and governance practice took a while for local governments to gear up their plans, programmes and budgets towards priority SDGs areas. The voluntary local review of SDGs by 14 municipalities reveals that the political process, bureaucracy and local stakeholders were less prepared for such planning. It is very important to have a political willingness to translate the 2030 agenda into actions and strengthen partnerships to handle the development agenda effectively.

As both external and domestic development partners are willing to work at the local level in partnership with local governments as far as SDGs implementation is concerned, some regulatory relaxations from the federal government in such collaboration is felt crucial. Local governments may access development partners to identify local SDGs needs, support implementation, and capacity development. A framework for aid coordination and resource pooling could be put in place to harmonize their activities and to create synergies in their support. The federal government will have to develop appropriate guidelines to facilitate such initiatives so that there is consistency across all local government so far as mobilization of development partners for the implementation of the SDGs is concerned.

## **6.3 Partnership with the Private Sector**

There are several areas in which the private sector can work as a strategic partner of the government in all three tiers of govern-

ment to achieve most of the SDGs – from ending poverty and hunger, food security, jobs creation, decent wages, infrastructure development and environment protection, and good governance to social security. Decent work for all, productive employment and inclusive economic growth predominantly hinge on the activities of the private sector, as it is the main investor, job creator and catalyst of economic activities. The enactment of Public Private Partnership Act has provided an opportunity for the government to work with the private sector in infrastructure, energy, tourism, agriculture, transport, and housing, among others. Private sector has a responsible role in climate change adaptation and mitigation, minimizing greenhouse gas emissions, protecting life below and above water, and conserving environmental natural resources, including forests. Developing sustainable cities and promoting sustainable consumption and production are, for the most part, private sector and household activities.

Several initiatives have been taken by the government and the private sector to forge partnership in implementing the sustainable development agenda.<sup>70</sup> In November 2023, the ‘Green Growth Advisory Service’ was established at the FNCCI to promote the green economy through the practices of business and industry to benefit the environment and society, and create opportunities for economic growth, market competition, and long-term sustainability. The Advisory Service is expected to provide regulatory guidance to ensure the

implementation of green growth by establishing metrics and indicators to measure the importance of green growth, advocacy, and progress at the central, state, and local levels. It would work in cooperation with concerned stakeholders to exchange knowledge, technology, and best practices related to green growth.

FNCCI urges the government to facilitate PPPs by creating an enabling environment for private investment, promoting entrepreneurship, and providing the necessary infrastructure.<sup>71</sup> However, with a trust deficit between the two partners, stronger collaboration is lacking, also as the apex level Steering Committee chaired by the Prime Minister and Working Committee headed by the Vice-Chair of NPC meant for coordination and facilitation, remains inactive. An effective partnership between the government and the private sector in SDGs remains elusive, added to a lack of defined responsibility and incentive offered by the government.

While the Steering Committee and the Working Committee should to be more proactive in bringing the private sector on board, milestones for key SDGs targets and indicators for this sector will have to be set through collaborative initiative. Specifically, SDGs indicator-wise roles and responsibility of the private sector (and other actors) will have to be defined through an action plan developed for the remaining period of the 2030 agenda with a strong joint monitoring mechanism in place. The apex bodies of private sector business organizations such as

**Several initiatives have been taken by the government and the private sector to forge partnership in implementing the sustainable development agenda.**

<sup>70</sup> An initiative was taken by the government and development partners led by UNDP for “Accelerating Implementation of Sustainable Development Goals in Nepal” in 2020 to gear up private sector in this process. NPC, MOF, Ministry of Forests and Environment at Federal Government, National Statistics Office, and Provincial Governments remain as the key implementation partners while Federation of Nepalese Chamber of Commerce (FNCCI), Confederation of Nepalese Industries (CNI), Nepal Chamber of Commerce (NCC), Federation of Nepali Cottage and Small Industries (FNCSI), National Cooperative Federation (NFC), Civil Society Organizations (CSOs), and Public Enterprises are the supporting partners.

<sup>71</sup> State of Private Sector in Nepal, Contributions and Constraints, May 2023.

FNCCI, CNI, FNCSI, and CoC should take SDGs as their corporate social responsibility and work closely with their member entities.

## 6.4 Partnership with Cooperatives, Civil Society Organizations and NGOs

The participation of stakeholders like civil society groups, cooperatives, NGOs, media and community groups, has been considered critical for localization of goals and targets of SDGs at the national, provincial and local levels, for their implementation, monitoring and evaluation, and to provide feedback to planning and budgeting entities.

**Cooperatives:** National Cooperative Federation (NCF) has made several attempts to mainstream SDGs in the activities of cooperatives through orientations, seminars, trainings and publication of guidebooks.<sup>72</sup> NCF and UNDP Nepal have signed an agreement to strengthen the role of cooperatives for the achievement of the SDGs, through partnership and collaboration to undertake joint initiatives to raise awareness on the SDGs and mobilize cooperatives at all levels along with other stakeholders and advocate for their contribution to the achievement of the goals. Through this partnership, NCF has mobilized its vast network of cooperatives to localize the SDGs and contribute to their achievement. UNDP and NCF have collaborated through advocacy to create a conducive environment for the cooperatives to work with

provincial and local partners, including governments, civil society and the private sector for the advancement of the SDGs.

The partnership with cooperatives in sustainable development has remained subdued at the moment, because of mission drift in some large cooperatives – mostly those engaged in saving and credit services, lending for consumption and real estate, and consequently falling into a liquidity trap. In the absence of specialized regulatory mechanisms and oversight, their activities have remained unsustainable. With the responsibility of cooperative registration and oversight handed over to local governments, the situation has worsened. However, most cooperatives working in production such as agriculture, small industrial enterprises and basic services, are doing well. To strengthen partnerships in SDGs implementation, a time-bound road map with defined tangible or measurable outputs for primary cooperatives is to be worked out for accelerated interventions in sustainable development activities.

**CSOs:** Civil Society Organizations (CSOs) have engaged themselves in empowering people in economic, political, and social fronts through their actions, advocacy and monitoring of the SDGs' progress. They formed a common platform – the 'Nepal SDGs Forum' – as early as in 2016 to engage collectively in the SDGs processes.<sup>73</sup> As the main aim of this forum is to engage CSOs in the sustainable development process in an effective, accountable and systematic manner, the government has strategically part-

The participation of stakeholders has been considered critical for localization of goals, for their implementation, monitoring and evaluation.

<sup>72</sup> Guidance on Sustainable Development Goals for Cooperative Movement in Nepal' guides both primary cooperatives as well as district and central level unions regarding how they could contribute in SDGs implementation. The document suggests as to how their work could be aligned with SDGs needs and priorities.

<sup>73</sup> The forum involves in information sharing, advocacy, capacity development, mobilization, knowledge management, CSOs' accountability and engages with government, local governments and other development actors at all levels.

nered with this forum in preparing voluntary national reviews and other activities.

With the CSOs' contributions, NPC presented its first VNR report in 2017 and the second in 2020 at the High-Level Political Forum (HLPF). In 2020, it prepared the CSOs' Voluntary National Review (VNR) and submitted to the government. The Nepal Civil Society Report on SDGs - 2023 was a continuation of civil society engagement in SDGs reviews bringing diverse perspectives through consultations.<sup>74</sup> The Nepal SDGs Forum, while playing a complementary role in preparing VNR, has been a platform for SDGs initiatives at grass-root level.

The CSOs' role can be further strengthened and accelerated in implementing the SDGs and monitoring from a citizens' perspective. For this, the government has to create an enabling environment for CSOs to recognize their active role and consider them a pivotal partner in SDGs implementation. The government should listen to CSOs' concerns on the shrinking civic space for civil society and the demands to present VNR at least twice between 2024 and 2030 and engage CSOs in the process.

Some institutional arrangements will be important to fully harness the potential within the CSOs. First, the apex level SDGs coordination framework must be functional and inclusive to make the partnership and roles of CSOs visible and defined. Second, the roles and responsibilities of the CSOs in implementing specific SDGs targets and achieving the output set by the indicators should be clearly defined and executed as

mentioned in the SDGs Report (NPC, 2017 and 2018). Third, regulations and guidelines for CSO operation should be issued in consultation with the stakeholders. A proper balance between their operational flexibility and accountability to all tiers of government should be in place. Fourth, a strong oversight and monitoring mechanism to track their activities, financial flows, and outputs to obtain feedback for policies and planning should be in place at both national and subnational levels. NPC, as the focal government agency for SDGs, must engage CSOs in each stage of SDGs planning, programming, implementation, monitoring and evaluation.

**Youth Organizations:** Youth are crucial stakeholders responsible for implementation of the SDGs as they constitute nearly 40 percent of the country's total population. As the National Youth Policy 2015 prioritizes their mobilization for environmental protection, climate change, and sustainable development by building their capacity, enhancing their participation and developing leadership for social change, their involvement in the sustainable development process must be prioritized and mainstreamed in national development.

The partnership in SDGs with youth organizations has progressed little to date. One research<sup>75</sup> to assess the status of youth engagement in the implementation and achievement of the SDGs, particularly SDG 12, SDG 13, and SDG 15, reveals that only 22 percent of respondents have a very sound knowledge of the SDGs. More than 45 percent are observed to having

<sup>74</sup> The report also brings a perspective of organizations with expertise in the specific goal or theme, highlighting the current situation and recommendations.

<sup>75</sup> Effective Youth Engagement in SDGs", Nepal Youth Council (NYC)/ WWF Nepal, <https://nationalyouthcouncil.org/wp-content/uploads/2021/08>

good knowledge; 20 percent have average knowledge on SDGs; while 12 percent of the respondents were unaware of the SDGs.

The fact that more than 50 percent of youth have shown interest in being involved in the SDGs process through their respective fields provides opportunities to harness their potential for the development agenda at a time when about 58 percent are not considering involvement in the SDGs process despite their capacity.<sup>76</sup> This shows that despite youth being eager to be involved in the SDGs process, there is a lack of clear plans, policies and strategies across all tiers of government to effectively engage with the SDGs process. Thus, it is necessary that youths are effectively involved in SDGs policy and planning formulation in all tiers of government.

**Partnership with Other actors:** Mothers' Groups, Associations of Disabled Persons, LGBT Community, Trades Unions, Media Society, Academia, Research Institutions, etc. are also engaged in SDGs dialogues and in identifying their roles in SDGs implementation. A series of discussions are held around social protection and the achievement of SDGs through the social issues and labour market interventions. Partnership with these groups so far being ad hoc and ritual, strengthening state mechanism to recognize their roles in leaving no one behind and thus creating a credible avenue for partnership at all the levels of government is essential to accelerate the implementation of the SDGs agenda.

## 6.5 Partnership with International Development Partners

**Partnership with UN Agencies:** The United Nations is supporting the implementation of the SDGs in partnership with governments at all the levels, the private sector, civil society, and citizens. The partnership has already led to tangible results in formulation of SDG-based periodic plans, to inspire responsible business practices and SDG-oriented investments with business ventures being adapted to climate change and geared towards innovative and cost-effective technologies. It has worked with all the stakeholders to uphold international norms and standards to respect the rights of women and vulnerable communities as well as implementing special policy measures to meet their basic needs. So far, as the UN agencies have become instrumental in building national, provincial and local capacities to integrate the SDGs into the planning, programming, and budgeting processes, their efforts should be scaled up to strengthen their capacity for implementation, monitoring and evaluation.

UNDP has supported the Development Finance Assessment (DFA)<sup>77</sup> to provide an overview of development finance flows, institutions and policies that can align finance with national development priorities. The DFA identifies strategies to improve efficiency and effectiveness in the utilization of existing resources, and opportunities for the mobilization of additional resources.

<sup>76</sup> Ibid

<sup>77</sup> The assessment provides an overview of Nepal's development finance flows, and the institutions and policies that align this finance with national development priorities. It provides recommendations to enhance the alignment of finance flows to national development goals, improving the basis for achieving development results. The UN communication team has also developed SDGs awareness materials that demonstrate interconnectedness among the goals and need of holistic approach to address the interrelated problems collectively.

UNDP has supported the preparation of SDGs baseline reports, SDG-based plans and MTEF, training at the subnational level, and prepared Public Expenditure Tracking Survey (PETS) at the provincial level. A Voluntary Local Review (VLR) of the SDGs was undertaken by 14 municipalities representing all provinces and regions to assess the progress and weaknesses in implementing the SDGs at that level. At a political level, UNDP has initiated orientation programmes to parliamentarians, province assembly members and elected representatives at the local level.

UNDAF has been a platform on which the diversified expertise and the resources of UN agencies are integrated for the delivery of coherent development programmes. UNDAF 2018-2022 provided an overall framework for the joint United Nations Country Team's work in support of the 2030 Agenda for SDGs and national development priorities. Its outcomes focus on supporting the 2030 Agenda and fundamental rights enshrined in Nepal's Constitution aiming to leave no one behind in the country's development. The next cycles of UNDAF—United Nations Sustainable Development Cooperation Framework could be instrumental in accelerating those SDGs that create synergy for the achievement of many more SDGs.

**Partnership with UN LDC Forum:** UNCTAD's Least Developed Countries Report 2023 calls on the global community to urgently address the critical financial challenges faced by the world's 46 most vulnerable nations. Multiple global crises, the climate emergency, growing debt burdens, dependence on commodities and declining foreign

investments in LDCs have strained their finances, jeopardizing their progress towards the SDGs, including a low-carbon transition. The Loss and Damage Fund, announced during COP27 and reinforced in COP28 as an agenda for climate justice for LDCs. The government should work closely with this forum to ensure that the damage is compensated through the financial contributions of countries responsible for the loss and damage. As this fund could be a game-changer if LDCs are among the main beneficiaries, a government advocacy partnership with this forum would be instrumental in ensuring that enough resources are available, and disbursements are just and swift.<sup>78</sup>

**Partnership with Multilateral Financial Institutions:** The World Bank and ADB, the two largest multilateral financial institutions, are partnering with the government in mobilizing funds for SDGs implementation. Fiscal and fiduciary discipline and effective aid utilization is critical in ensuring that the partnership works to meet SDGs financing gaps.

**Partnership with Bilateral Donors:** Bilateral development partners have also committed to support Nepal in sustainable development. However, the partnership will strengthen when bilateral aid flows through the country system are utilized as per the national priorities.

## 6.6 Partnership with INGOs

The role of INGOs is significant in promoting CSOs' initiatives, as they are mobilizing about 10-15 percent of ODA annually.<sup>79</sup> INGOs and their local NGO partners have

<sup>78</sup> UNCTAD (2023) The Least Developed Countries Report, United Nations Conference on Trade and Development.

<sup>79</sup> In 2021, INGOs disbursement stood about 10 per cent of ODA disbursement.

a meaningful presence in humanitarian and development work in Nepal while NGOs and CSOs have benefited from INGOs in familiarizing with humanitarian and development approaches, and strategies, including the SDGs, through their expertise, experience, resource mobilization, and global connections.

INGOs have contributed to disaster response and recovery efforts, such as the COVID-19 pandemic, and have worked in close coordination and collaboration with government and local partners. Meanwhile, their activities are guided by the SDGs along with other international and national goals and plans, national strategic plans and priorities set by the Government of Nepal.<sup>80</sup> Their contribution is seen in knowledge transfer, technical assistance, capacity building, project piloting and reaching out to hard-to-reach areas.<sup>81</sup>

The Association of International NGOs in Nepal (AIN) has 121 INGO members and works in diverse sectors. It aims to promote poverty reduction, sustainable development, enduring peace, human rights, and social inclusion. Its members operate through 13 thematic working groups responsible for taking forward the most important thematic areas, viz. health, education, livelihood, disability, WASH, nutrition, climate change, gender equality, social inclusion, child protection, disaster management and response.

However, INGO operations have been mostly concentrated in and around the Kathmandu Valley. Their effectiveness and mission have often been questioned, and thus attempts are made to improve regula-

tions for them. AIN has lately adopted Basic Operating Guidelines to improve the image and public perception of INGOs, to increase transparency and accountability and to enable them to work during difficult times.

## 6.7 Global Commitment and Partnership Issues

Global partnership commitments have been made through SDG 17 to support developing countries in aid, trade, investment, technology transfer, and capacity development. The Global Outlook on Financing for Sustainable Development 2021 estimated the financing gap to achieve the SDGs in developing countries at several trillions of dollars annually before the pandemic. The report flags the unprecedented challenges the international community faces to implement the holistic financing strategy set out in the Addis Ababa Action Agenda (AAAA). The report concludes with a plan of action for all actors to work jointly to reduce market failures in the global financial system and to seize opportunities to align financing in support of the 2030 Agenda.<sup>82</sup>

The High-level Political Forum on Sustainable Development (HLPF), under the auspices of the UN General Assembly in September 2023, declared a shared commitment to review progress and accelerate the implementation of the 2030 Agenda for Sustainable Development, to effectively implement the 2030 Agenda and its SDGs. The forum has committed to collectively pursue sustainable development, including through international cooperation and partnership on the basis of mutual trust and for the full benefit of all, in a spirit of global

<sup>80</sup> Sushil Koirala (2022), INGOs in Nepal: What they do, what they want to achieve, Nepal Live Today

<sup>81</sup> Ibid

<sup>82</sup> Global Outlook on Financing for Sustainable Development 2021, A New Way to Invest for People and Planet, <https://www.oecd.org/development/global-outlook-on-financing-for-sustainable-development>, 2021.

solidarity, for the common future of present and coming generations while realizing the principle of common but differentiated responsibilities. As the forum has vowed to strengthen multilateral and international cooperation for the poorest and most vulnerable countries, to help them recover from the ongoing effects of the COVID-19 pandemic and strengthen resilience, including through pandemic prevention, preparedness and response, Nepal's economic diplomacy in general and aid diplomacy in particular must be activated to benefit from the potential global cooperation.

### **6.8 Partnership with Regional Cooperation Organizations and deepening South- South Cooperation**

The South Asian Association for Regional Cooperation (SAARC) was established nearly four decades ago to reduce poverty and enhance the welfare of the regions' people. It is an organization that could take up initiatives to take the SDGs forward. However, the organization has remained largely inactive through the period of SDGs implementation. The region has to work collectively to address the SDGs, which have cross-border implications such as trade, investment, technology transfer, tourism, capital flows, migrant workers and climate action.

BIMSTEC and AIIB are two other Asian development cooperation organizations than could be instrumental not only for Nepal but for the region as a whole to finance SDG-related projects. While more energy and infrastructure-related financing of SDGs through AIIB could be sourced for the public sector, upscaling the financing of other development banks such as ADB and

IFC to work with the private sector could help meet the SDGs financing gap in the private sector.

Finance available from other regional cooperation frameworks, such as Belt and Road Initiatives, could be utilized in public sector infrastructure projects with reasonable rates of return. If more external financing in economic and infrastructure sectors could be mobilized, resources available in the public sector could be allocated for social and environmental sectors so that such SDGs are also achieved.

### **6.9 Partnership for Reviews, Monitoring, Evaluation and Progress Reporting**

NPC, as a focal point for SDGs monitoring and evaluation, is partnering with other stakeholders in preparing VNR, mid-term review and other SDGs reports. NPC's Monitoring and Evaluation Guidelines aim for a results-based monitoring and evaluation system as an integral part of every plan, policy, programme, and project beginning at the early stages of formulation. It aims to ensure responsibility and accountability among the key constituents engaged in service delivery. It seeks to enable appraisal and measurement of direct and indirect impacts of development interventions on the lives of people; to ensure results from development investments; and to improve effectiveness and result-orientation in future policies and programmes by obtaining feedback from past experiences. However, this will only deliver results if the capacity of monitoring institutions is strengthened and strong databases and reporting systems are in place to make monitoring truly results-based.

Legislation on Monitoring and Evaluation would strengthen the NPC capacity to monitor SDGs progress more effectively along with forging credible partnerships with other stakeholders. So far, along with NPC, some government agencies, NGO federation, SDGs Forum, and development partners, are working on monitoring and evaluation to track inputs, activities, processes, outputs, outcomes and impacts of policies, programmes, and projects implemented by central and local level public agencies. Further strengthening is needed in the M&E capacity of NPC along with building the capacities of other stakeholders in effective monitoring, impact assessment and provision of feedback to policymakers.

Census and surveys for data and information on SDGs are done through collaboration with development partners and NGOs. The SDGs Report (NPC, 2018) flagged a serious data gap with only 217 of the 473 SDGs indicators having data at the desired frequency, disaggregation and quality. Data for 98 indicators were not available. Thus, as substantial investment has to be made in generating and improving data sources, improved and stronger partnerships between all development actors is necessary.

The National Statistics Office has been established with the sole authority of SDG-related data collection, statistics and monitoring through the SDGs portal. Surveys are tailored to the data requirement for SDGs monitoring, particularly for gender, social group, class and geographical location-based target setting, analysis, and monitoring of outcomes. However, gaps in administrative data processing and dissemination have deteriorated, with the federal governance system and subnational governments not sharing data in a timely manner. Low priority is also accorded to data

collection and dissemination when there is laxity in laws and staff shortage in service delivery.

SDGs Acceleration Actions – initiatives voluntarily undertaken to accelerate the SDGs implementation by governments and other non-state actors – build on existing efforts (scaling up, new phase, etc.) related to the achievement of one or more SDGs or addressing their interlinked nature. The importance of monitoring and evaluation of SDGs accelerators will be more important in the coming years as the deadline for their achievement comes closer. Thus, the collective efforts of the government, CSOs and development partners in M&E will be even more important. In particular, there is no strong mechanism to collect data on private sector investment in SDGs and monitor its progress, NSO should collate private sector investments, codify them as per the SDGs, and provide feedback for policy responses to the gaps, if any. In this regard, the government can set up a joint monitoring mechanism with the private sector and CSOs to conduct annual reviews of the progress made in SDGs by every stakeholder.

## 6.10 Institutional Reforms for Strengthening Partnership

Proper institutional mechanisms in state and non-state actors should be in place to ensure that interventions related to SDGs are executed in a coordinated, coherent and complementary manner. In this regard, the roles of federal parliament, provincial assemblies and municipal assemblies will be crucial particularly for prioritizing budget allocation to priority areas, and for creating and reforming laws to facilitate and govern the implementation and monitoring of the

**The roles of federal parliament, provincial assemblies and municipal assemblies will be crucial particularly for prioritizing budget allocation to priority areas, and for creating and reforming laws to facilitate and govern the implementation and monitoring of the SDGs.**

SDGs. Federal parliamentary and province assembly committees will be instrumental in monitoring the progress in implementation and outcome of the SDGs interventions. As parliamentary committee for the SDGs has been formed for focused work of the parliament in this area, the same does not exist at the subnational level. Thus, creating such institutions at provincial and local levels will help expedite SDGs programmes during the remaining SDGs period. As each level of government has the legislative power to enact their laws relating to financial rights, conferred authority to formulate their annual budgets, take decisions, prepare policies and programmes and implement them within their functional jurisdictions, implementation of SDGs at the local and provincial levels also needs to be institutionalized within this power-sharing mechanism.

There is a realization from the VLR of selected municipalities that the national SDGs have to be localized in line with local priorities for higher, more equitable, and inclusive outcomes. This experience can be applied for expediting the implementation of SDGs at local levels. Strong partnership with local governments could be built with a clearly defined collective and differentiated roles and incentives for SDG-based budgeting through a fiscal transfer mechanism.

Despite that, localization of the SDGs at the provincial and local levels is critical for the universal, equitable and inclusive outcome of sustainable development efforts. The political setup at those levels is apparently not so geared up to this direction.<sup>83</sup> If the PET survey and VLR are any indication, the SDGs have not been fully mainstreamed in their development agenda. Thus, along

with the federal government supporting the preparation of SDG-based provincial and local development strategies through a defined institutional set up like the NPC, capacity development support should be institutionalized through a local training academy or outsourced agency.

The role of NPC can be revamped to coordinate macro-economic policies, to restructure public expenditure, support alignment of the provincial plan and budgets to the SDGs, and monitoring the progress at each tier of the government. It can also develop a framework for PPP in all three tiers of government, which is yet to take shape. The complementary and special grants that are approved with the recommendation of NPC would benefit from being linked with the gap in SDGs progress, and decisions should be taken by a consultative process and transparently.

At a time when the SDGs financing gap is very wide and sources of public spending are narrowing, the role of the Ministry of Finance (MoF) has been critical not only to mobilize more resources and reallocate those resources towards SDGs priorities, but also to groom partnership with subnational governments by regularly holding consultation meetings of Intergovernmental Fiscal Council. The role of MoF is equally important for allocation of intergovernmental fiscal transfers (in consultation with NNRF), which are important sources of financing local government, SDGs performance-based budget allocations, and sharing revenue among the various levels of the government. MoF will have to track the provincial and local revenue as assigned by the constitution and ensure fiscal discipline at all levels through control and facilitating

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<sup>83</sup> In the SDGs Orientation Programme hosted by Province Assemblies of all the 7 provinces with the support of UNDP for Province Assembly Members in early 2023, there was not only low turnout of Assembly Members in some of the Provinces, even the leadership was found to such apathetic to such initiative.

**The institutions of the private sector will have to gear up themselves as responsible to mainstream the SDGs into their business plans and investment activities.**

measures. MoF should also act as a bridge between the financing needs of the subnational governments and donor interest.

The role of sectoral line ministries, departments and authorities has also to be redefined. They have to be brought on board to align their programmes at all the levels with the private sector in line with SDGs priorities. Devolving in letter and spirit the functions, functionaries and finance in core SDGs as per the authorized role of provincial and local levels and putting in place an effective monitoring framework would build confidence and help the institutionalization of partnership prioritizing the SDGs programmes. The apex SDGs implementation monitoring body should hold frequent dialogue for tracking progress, addressing challenges and working in a coordinated manner to achieve the targets. The existing institutional and organizational setups for SDGs monitoring have to be activated. MoF, NPC and the Prime Minister's Office should be in a position to coordinate all these activities and bring all stakeholders on board.

The institutions of the private sector, mainly the FNCCI, CNI and FNCSI will have to gear up themselves as responsible apex organizations to mainstream the SDGs into their business plans and investment activities. They should also set up focal units to facilitate, coordinate and monitor the changes made in business models to address the measures needed for achieving the SDGs. A business-to-business cooperation mechanism between developing countries in the region could be developed to learn, share and implement investment and business activities that support the achievement of SDGs along with making a business case for the investment.

The institutions of the civil society are, by and large, doing much work in SDGs ad-

vocacy, implementation and monitoring. However, their activities remain uncoordinated, particularly with local governments, and some of them even lack effective service delivery. While the concerns of NGOs on overregulation could be considered, there must be an effective institutional mechanism for enforcement of the law to ensure that they do not drift from basic objectives. The provision of registering NGOs at the local level amid the absence of strong monitoring mechanism at that level suggests that the role of Social Welfare Council has to be stronger to perform this responsibility.

The National Natural Resource and Fiscal Commission (NNRFC), exercising its power to distribute revenue from natural resources and advising the federal government on the size and modality of fiscal transfer, must be cognizant of the roles and responsibilities of each level of government in financing the SDGs. The amount of domestic borrowing and its allocation should be linked with the implementation of programmes linked to core SDGs.

NPC is the designated institution for monitoring the progress of SDGs targets, strengthening data and reporting systems for proper tracking of progress. Its job is also to make disaggregated data available for monitoring progress across the whole spectrum of society. With the new Statistics Act 2019, CBS has been restructured into NSO with supervisory responsibility shifted to PMO from NPC. This has delinked the relationship between SDGs monitoring and data-generating agencies. There is a need to relink NSO with NPC to effectively monitor SDG. It has been challenging to obtain consolidated data and statistics from the federal, provincial and local levels due to inadequacy in statistical literacy on the practical aspects of producing national statistics. As enforcement of the Statistics Act is lacking, there is no compelling ground



for all levels of government to share the administrative data as well. In the absence of adequate resources at NSO, improvements in the statistical system, with its capacity to produce and supply the necessary statistics as per the situation, needs international commitment and supports. While efforts ought to be made to reduce the burden on respondents, increasing due to more censuses and surveys conducted by the government, the private sector, cooperatives, academia and non-governmental actors, cooperation from the people is also needed to get the right information.

To sum up, partnership among the three tiers of government, non-government, private and non-government /community sectors require further strengthening for SDG-based plan preparation, implementation, monitoring, and evaluation process for the remaining SDGs period. The political ownership of the sustainable development agenda through setting of Parliamentary Committees at the federal level has to be extended to the subnational level. Political parties and their entire apparatus could be further geared to accelerate SDGs implementation at the national and subnational levels.



## Chapter 7

# Policies and Priorities

The third Voluntary National Review of the SDGs has revealed a serious gap between their targets and progress so far. This has to do with (i) shortfall in required investment to be made by the public as well as private and community organizations; (ii) low efficiency of investment, also due to lack of credible execution; and (iii) pandemic and economic shocks. Narrowing the investment and progress gap is not possible without reorienting the policies, strengthening the institutions and setting priorities within a long list of targets and indicators.

As discussed in Chapter III, some SDGs interventions are qualitative and are not costed. They operate through policies, regulations and administrative enforcement. In particular, targets under SDG1, SDG5, SDG8, SDG10, SDG12, SDG16, and SDG17 are addressed through policy. Besides, creating synergies in SDGs outcomes while minimizing trade-offs also demands credible policies, priorities, and establishment of facilitating institutions. The following section delves in these areas and suggests policies, institutions and priorities with which to achieve targets related to poverty, inequality, injustice, exclusion, or lack of good governance.

## 7.1 Reorienting Macroeconomic Policies for the SDGs

Sound macroeconomic policies are crucial for promoting sustainable growth while

maintaining stability, addressing poverty, inequality, ensuring trade competitiveness and promoting an investment climate, among others. While sector policies and strategies are equally important, policies related to government, market, civil society, and development partnerships are decisive in narrowing the gap between targets and progress to date.

The sustainable development agenda has embedded the need for transformative pro-poor, pro-gender, and inclusive macroeconomic policies to support SDGs outcomes. Frequent global financial and economic crises have showed the inherent weakness of the present financial architecture; and the wave of financial globalization has not necessarily reduced among-countries and in-country inequality. It has not served sustainable development or an inclusive global economy. Similarly, global evidence shows that high economic growth, while a necessary condition for higher development outcomes, does not ensure a better world to live in which to live when growth is driven by a narrow set of economic sectors, exploitation and unsustainable use of natural resources, high carbon emissions, and rising income inequality. This is why the new development paradigm as reflected in the Human Development Reports and internalized by 2030 agenda for sustainable development advocates for pro-poor, inclusive and green growth economic policies.

In recent years, the global economy is not seen as conducive to bringing SDGs progress on track. A persistent slowdown in

**Narrowing the investment and progress gap is not possible without reorienting the policies, strengthening the institutions and setting priorities within a long list of targets and indicators.**

**Addressing the challenges call for a broad, coherent and integrated macroeconomic policy framework with (i) renewed focus on the real economy, climate change and environment; (ii) built-in rebalanced growth and distribution; and (iii) reorientation of international development policy towards fair and equitable access to trade, investment, technology, and financial resources and opportunities for all.**

global growth, weaker trade and investment flows, reversal of protectionism in several countries, war in Ukraine and the Middle-East, a cold war on trade and technology, climate change effects that involve huge adaptation and mitigation costs, and the protracted adverse effect of COVID-19 are worrisome barriers for meaningful global cooperation as expected by SDG 17. Moreover, rising debt stress in several developing countries has squeezed fiscal space for further borrowing to meet the financing gap.

Addressing the above challenges call for a broad, coherent and integrated macroeconomic policy framework with (i) renewed focus on the real economy, climate change and environment; (ii) built-in rebalanced growth and distribution; and (iii) reorientation of international development policy towards fair and equitable access to trade, investment, technology, and financial resources and opportunities for all. The primary goal of macroeconomic policies in the context of Nepal is to reorient productive resources towards high, inclusive and green growth and sustain that process to end poverty and move to a path of prosperity.

For some years, Nepal has fallen to a low GDP growth trajectory with high inflation, a weak external sector, and low public as well as private investment in critical SDGs areas. Low growth has created a vicious cycle of low revenue collection, low public investment, and then again low growth. By the mid-2020s, a policy deadlock existed with inflationary pressure and a weak external sector demanding tighter macroeconomic policies, while a recessionary trend in business and investment activities required an accommodative macro policy regime.

Nepal's economy is beset by a slow and unusual structural transformation process.

During the 2011 to 2020 period, the share of manufacturing output in GDP has remained at around 5 percent; while for the same period, that of agriculture fell from 31 percent to 24 percent with most of the share being taken by the service sector. Structural transformation from agriculture and manufacturing to services implies a transition from high employment-intensive to low employment-intensive sectors, creating a large unemployed labour force and then slowing down the pace of poverty reduction.

Structural transformation of the economy being embedded in the SDGs, realizing the target of consistently lowering the share of agriculture in GDP and raising that of industry, and particularly the share of manufacturing from 5 percent in 2023 to 9 percent of GDP by 2030 requires macroeconomic policies to guide and reorient private investment towards this sector. They include policies such as fiscal (tax and non-tax revenue, subsidy and transfers, public enterprise operations and debt management), private investment promotion, monetary and financial, trade, and foreign exchange. These policies have remained grossly insufficient to orient private investment towards industry – mainly the manufacturing sector. These policies should be reformed in order to bring in more investment in manufacturing. But as domestic policies are not formulated in isolation, and as the global policy environment affects them, policy coherence at the national level has to be supported by policy coherence at the international level, providing the country with the policy space needed to implement its national development strategies and to achieve the goals.

Despite several efforts to make financial policies inclusive and pro-poor, and learning from the series of financial crisis in the last three decades, they are still almost blind in relation to economic growth, jobs,

income equality, gender, environment and social responsibility. In recent years, developing countries having been shattered by soaring energy and food costs, climate emergency, and the COVID-19 pandemic, The UN has warned of vulnerable countries at greater risk of debt distress and a lower ability to invest in growth, climate action and long-term sustainable development.<sup>84</sup> Rapidly tightening global financial conditions and rising borrowing costs are taken as 'indicative of a flawed global financial architecture designed for a world that no longer exists, and is too short-sighted, crisis-prone, and deeply unequal'.<sup>85</sup>

During the Paris summit, UN Secretary-General António Guterres has called for a New Global Financing Pact,<sup>86</sup> suggesting that the global financial architecture has failed in its mission to provide developing countries with safety net, and that the international financial system is in crisis. Having crossed halfway to the 2030 deadline, he says, the SDGs are drifting further and even the most fundamental goals on hunger and poverty have gone into reverse after decades of progress, creating an alarming situation particularly for developing and least developed countries. However, it is obvious that designing a new global financial architecture, which has remained on the global agenda for decades, is a time-consuming process and is not possible without broader global understanding.

Empirical evidence shows that extreme inequality hinders economic growth and poverty reduction. Persistent inequality has undermined the achievement of the SDGs in the world and in Nepal.<sup>87</sup> Oxfam (2019)

claims that the richest one percent of the world is occupying more wealth than the rest of humanity and this situation keeps aggravating, as the income of the richest one percent is increasing much more quickly than that of the poorest half of the world's population. That is the case for Nepal, undermining the target of increasing income share of the poor households. Access to productive resources, education and skill development, health benefits, technology transfers, subsidies, a fair wage structure, social security, progressive taxation, and income generation support for the poor will be critical in reducing inequality. Deprived households, as identified by the government, should benefit from these policies and programmes.

An overview of SDGs progress related to macro and sectoral policy paradigms indicate that an immediate restructuring of macroeconomic and sectoral policies is needed to minimize the risk of undershooting the 2030 targets. The following are some of the critical steps for advancing macro-economic policies for sustainable development.

First, macro policies should facilitate concurrent growth and redistribution. Redistribution is often taken as the most effective way to reduce poverty and achieve sustainable development. However, redistribution cannot be sustained if growth is low and fiscal space is limited. Thus, while macro policies will have to support high economic growth, they have to encompass built-in-distribution and inclusion in the growth process. It is evident that macro policies have often widened inequality, eventually undermining the growth process

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<sup>84</sup> UN Deputy Secretary-General Amina Mohammed's address at the Spring Meetings of the World Bank Group and International Monetary Fund, <https://news.un.org/en/story/2023/04/1135627>

<sup>85</sup> *ibid.*

<sup>86</sup> Paris Summit for a New Global Financing Pact, June 2023, <https://press.un.org/en/2023/sgsm21855.doc>

<sup>87</sup> Fighting Inequality in Nepal, The road to prosperity, HAMI and OXFAM, 2019

and slowing the pace of poverty reduction. Thus, fiscal, financial, trade and monetary policies will have to be reoriented towards growth in such a way that they help narrow inequality to meet several SDGs targets.

Second, Nepal's financial system, often guided by international financial policy frameworks and architecture, faces serious issues like perverse allocation of credit, low productivity of bank finance, lack of inclusion, and high post-COVID-19 interest rates and frequent liquidity stress. A lax monetary policy preceded by an abrupt and undue bank recapitalization triggering savings' concentration towards the banking system has raised bank balance sheets manifold with the credit-to-GDP ratio exceeding 110 percent. This has neither promoted growth, nor meaningfully addressed financial exclusion. Microfinance services have expanded unsustainably, and bank finance is still largely focused on larger business, so the 'missing middle' is deprived of financial resources to engage in productive activities.<sup>88</sup> The situation has worsened with the recent discontinuation of concessional loans to agriculture, women entrepreneurs, returnee migrants, and Dalits. The government must review the weaknesses in the existing system and reintroduce the schemes as soon as possible to address that 'missing middle' problem.

Third, at a time when past initiatives for financial inclusion have taken some shape, the debt burden and rising risk of default in cooperatives and microfinance credit is putting a break on the aggressive expansion of an inclusive finance agenda, also when the issue is being politicized with a call for

non-compliance. Restructuring existing policy and regulatory regimes, taking legal action against wilful defaulters and similar provocations, reorienting financial institutions to productive investment, adopting green banking practices, and promoting deeper financial inclusion<sup>89</sup> (including in insurance and payment services) will be necessary to meet several of the SDGs, such as zero poverty, inclusive growth, and sustainable production and consumption.

Fourth, an audit of macroeconomic policies shows their gender bias.<sup>90</sup> The taxation, subsidy, and spending policies of the government are either gender-unfriendly or biased against women. The financial and credit policy of the banking and the financial systems also happen to be gender-biased given their collateral-based lending practices and procedures with women having little entitlement to property as collateral. Beneficiaries of the concessional loan provision for women have also reportedly been males. Microfinance, widely used as an instrument for meeting the financing gap for women, has helped basic livelihoods but has not necessarily brought women prosperity. It is necessary that a gender audit of macroeconomic policies be carried out on a regular basis and the practices of international financial institutions be reviewed for creating a gender-friendly financial architecture. The government should conduct regular audits of existing fiscal and other public policies from poverty, inequality and exclusion perspectives and reorient them for pro-poor growth. This requires an overall review of taxation, subsidy, transfer, and expenditure allocation aspects of public finance. A progressive taxation system with a low tax bur-

<sup>88</sup> More than 550 deposit accounts in the banks are serving less than 2 million borrowers and even the beneficiaries of micro credit are not all poor, as revealed by the recent NRB study.

<sup>89</sup> Recent Nepal Rastra Bank work towards Green Finance through a guidebook (draft) is a creditworthy initiative in this regard (NRB, 2024).

<sup>90</sup> A paper presented by Y. R. Khatiwada on Macroeconomic Policies and Gender at UNDP/NPC workshop on Gender Development in 2014 shows several macro policies are not gender neutral, while some are even gender-unfriendly.

den for the low-income group, along with direct cash transfers for the poor, is what is expected from the government's distributive role. A taxation system that helps productive and efficient resource allocation of the private, household and cooperative sectors is to be developed.

Fifth, a review of existing financial, monetary, credit, and foreign exchange policies through a group of experts is necessary to make them more consistent with the broader objectives of the SDGs, such as inclusive growth, access to productive resources, sustainable production and consumption and good governance for effective service delivery. Efforts aimed at financial inclusion should not be tokenistic; it must be meaningful in terms of making financial service – mostly credit for enterprise – affordable, accessible and reliable. This requires the restructuring of the current financial architecture to sustain microfinance and cooperative sector services, and of the capital market to ensure that small investors do not lose financial assets because of weak regulation and lack of information. While the mandate of monetary policy for price and external sector stability must be honoured, its critical role in allocating credit to productive sectors and thus supporting GDP growth should not be undermined. As such, international cooperation and regulation of money and banking should be cognizant that central banks in developing countries have a role to facilitate growth and thus monetary policy should be designed to strike a balance between economic stability and growth.

Sixth, as credible external sector policies are critical for attracting foreign investment, the government should reform foreign exchange and exchange rate policies to make

them investment-friendly. Particularly when currency appreciates in real terms, export industries face problems of competitiveness while trade deficits put pressure on balances of payment. Nepal's balance of payment has often experienced stress followed by depletion of foreign exchange reserves. While low domestic saving implies a need for substantial FDI to meet the SDGs financing gap, particularly in industrial and physical infrastructure, the foreign exchange policy should be commensurate with the investment requirement. Foreign private equity, venture capital and foreign exchange hedging mechanisms are necessary to attract more FDI in SDGs areas.

Seventh, there is a need to assess existing trade and investment policies, particularly through the lens of sustainable consumption and production. Nepal's entry into SAFTA and WTO has substantially eroded her revenue base while not creating opportunities for new tax areas. There has been a trade-off between low customs duty on e-vehicle imports and revenue collection.<sup>91</sup> The 'free trade' or trade liberalization policy has resulted in unsustainable consumption of imported goods and services. The expansion of consumerism has also caused overexploitation of natural resources. The government should work with the global community towards making the international trade and investment regimes work for the SDGs particularly in sustaining external sector stability, reducing inequality, and pushing forward climate actions.

Eighth, sector policies have to be linked with the macroeconomic policy framework to seek coherence between them and to move towards a socialism-oriented economy that is based on a sustainable development agenda. This requires better un-

**A review of existing financial, monetary, credit, and foreign exchange policies is necessary to make them more consistent with the broader objectives of the SDGs, such as inclusive growth, access to productive resources, sustainable production and consumption and good governance for effective service delivery.**

<sup>91</sup> An estimate of such trade-off is as much as 10 percent of revenue (MoF, 2023)

**Nepal has to foster resilience to global economic shocks and develop macroeconomic policies to insulate the economy from transboundary impacts such as trade blockades, and trade regime or exchange rate regime changes.**

Understanding of policy interactions between sectors like economic, social, physical and industrial infrastructure, investment and trade to accelerate progress towards the SDGs. Meanwhile, an immediate review of existing sector strategies for agriculture, tourism, industry, energy, road, education, health, etc. is urgently needed. More collaboration between all stakeholders and government agencies should take place to identify synergies and trade-offs among key SDGs sectors.

Ninth, with several shocks in its recent history, Nepal has to foster resilience to global economic shocks and develop macroeconomic policies to insulate the economy from transboundary impacts such as trade blockades, and trade regime or exchange rate regime changes. This requires diversification of risks associated with over concentration of trade, finance, investment and employment opportunities. As disasters, pandemics, and other global shocks have often retarded achievements in poverty reduction, macro policy institutions, macro policy framework and sectoral policies related to their implementation have to be resilient to such shocks.

Tenth, the government should avoid a silos approach and follow a whole-of-society approach in policy formulation to ensure that they are not biased against the poor, women, and weaker social groups, and the environment they live in. This means fostering understanding that such policies do not remain blind in terms of their poverty, gender, environment, and other social impacts.

Eleventh, policymakers need to realize that economic growth will be inclusive when most citizens can participate in the production process, share the benefits, are covered

by social protection in case of not being able to participate in the production and benefit-sharing process. For an inclusive growth process, while macroeconomic policies will have to be pro-poor, labour-intensive sectors should be promoted by state interventions that may not be compatible with the norms of a free-market economy.

Twelfth, domestic financial market conditions, taxation systems, and trade and foreign exchange regulations are critical to promoting domestic as well as foreign direct investment, which are essential for harnessing an infrastructure that drives the growth process. A stable macroeconomic condition with credible and predictable fiscal as well as financial policies would be thus necessary to meet the huge financing gap foreseen in the SDGs' implementation. The international community should be working closely together to implement the country strategy for pro-poor growth. Unlocking the constraints for pro-poor economic growth requires enabling global trade, investment and labour market opportunities, which advanced and developing partner countries can also facilitate.

Overall, macroeconomic and sectoral policies need to be encompassing and enabling for all stakeholders to share investment and carry activities towards SDGs responsibilities. Provincial and local governments, business communities, academics, civil society organizations and citizens all have roles to play, whether by adopting local sustainable development solutions, shifting to sustainable business models, inventing smart technologies or adopting sustainable consumption habits. Macro and sectoral policies need to incentivize and facilitate this role.

## 7.2 Sectoral Policy Reforms for the SDGs

Poverty, unemployment and inequality are rooted in sectoral public policies along with the macroeconomic policies underlying the output growth, employment, prices, trade, investment, and income distribution pattern. Ending poverty requires a two-pronged strategy - (i) putting credible macroeconomic policies in place for inclusive, broad-based and higher economic growth; and (ii) ensuring an equitable distribution of income, assets and opportunities through macro, sectoral and social policy interventions in production, labour market reforms, and expansion social protection.

Agriculture has performed poorly in the run-up to 2030, but is marred by bottlenecks such as limited infrastructure and a lack of round-the-year services in irrigation, climate shocks, lack of competitiveness, sluggish transformation from traditional to modern technology, growing monopoly on seeds, and non-tariff barriers to cross-border trade. Agreement under SAFTA has prompted an influx of cheap products from across the southern border while domestic production costs have risen due to growing input costs and soil condition eroding. Unequal subsidy regimes between Nepal and India in agricultural production have distorted domestic as well as export markets. The trade treaty with India requires a renegotiation to protect Nepalese production from duty free import of cheaper products and ensure food security from increasing production at home. This is one area where trade relations with India and China should be non-reciprocal - giving higher space for protection for Nepal's weaker agro-economy.

The Agriculture Development Strategy (ADS), formulated before the full implementation of federalism with much responsibility entrusted to local government has been far from satisfactory.<sup>92</sup> Inadequate response of donors on agricultural development along with labour out-migration and rising costs of production have led to low investment in agriculture. Limited public budget allocation and low incentives for farmers also limit investment. Achieving SDG 2 requires a reversal of this trend at every level. Additional financing of infrastructure, market development, and forward linkages with manufacturing are required to promote agriculture. This includes irrigation, power, rural roads, ICT and agro-processing services. Such provisions should enhance productivity and market access capabilities, establishing quality control mechanisms, and minimizing post-harvest loss of some agricultural produce which is currently very high.

As most agricultural activities are delegated to the local government as part of the federalism process, the roles of subnational governments will be crucial to promote agriculture. It is observed that even subnational governments have not prioritized agriculture in their budgets. Complementary roles of the three tiers of government is needed to transform the agricultural sector. As half of the indicators fall within the jurisdiction of local government, there is no mechanism to assess progress annually at the federal level. Assessing annual trends and progress towards the indicators will remain a challenge until subnational monitoring and reporting is in place, and while skill gaps continue at all levels. The roles and responsibilities of all government levels must be

<sup>92</sup> FY2021/22 review of the ADS shows 12 of the 16 vision indicators on track but the strategically important four indicators related to food grain self-sufficiency, trade, irrigated area expansion, and agriculture productivity growth are lagging behind

clearly defined. Prioritizing spending while tracking progress is urgently required to enhance agriculture productivity and reach food sufficiency.

Basic education and primary health care, as the fundamental rights of the citizen, are perceived as the sole responsibility of the state. Currently, the private sector, cooperatives, and NGOs are involved also in such services. The role of local governments will be critical as they are responsible for school management. The controversy created by Draft Education Legislation will have to be resolved with highest level political consensus in consultation with the apex organization of the local governments. Higher education and research only in science and technology, art and culture and environment and climate change could remain in the public sector.

Overall health expenditure, which hovered at around 5 percent of GDP during the last decade, is largely financed out-of-pocket.<sup>93</sup> In 2020, this comprised 58 percent of the total health expenditure.<sup>94</sup> This implies household contribution to health service spending at about 3 percent of GDP. Many critical care services are in this domain. Health care is the right of every citizen and should be affordable and accessible, no matter whether the institution serving such service is a public or a private entity. The purpose is to make health care affordable, reliable and accessible. This could be addressed through both government and market mechanisms. Making health insurance affordable and accessible through public policies and ensuring quality health service through the private sector services can meet this objective.

Inclusion in health service requires expansion of premium free health insurance for poor and vulnerable groups while also putting open O-o-P spending for those who can afford private service. The ongoing debate on the government's role in secondary education, primary health care, and other services related to the fundamental rights of the citizen should not lose sight of the role of the private sector and cooperatives in delivering education and health services particularly at the tertiary level, through market-based approaches. Enabling policy environment for social business (making profit with social responsibility) in these sectors would complement the public sector responsibility of delivering quality services. The health services provided by private health institutions through health insurance has been discontinued for some time now, but has to be resumed with proper monitoring mechanism in place. The bifurcation of the Health Insurance board into regulatory and operating compartments is necessary.

Despite the impressive progress made in gender parity, particularly on the political and social fronts, there still exists differential socio-economic environments for men and women. The role of women as a productive force and taking leadership in development is often constrained by social and economic values and institutions. Gender biases are embedded in institutions, markets, while economic processes are often reinforced by macroeconomic policies and strategies. Women's work, roles and experiences are different than those of men as they are more likely to juggle their working time between market and non-market economic activities. Yet their economic contributions are not reflected in national

<sup>93</sup> <https://www.statista.com/statistics/780860/health-expenditure-share-of-gdp-nepal/>

<sup>94</sup> JLN DRM Collaborative (2021), Public Expenditure on Health in Nepal: A Narrative Summary, Domestic Resource Mobilization Collaborative. Joint Learning Network for Universal Health Coverage

output. This should be addressed through an amendment in the national accounting system operated by NSO.

Gender parity in school education and in higher education in some years' time will provide a level playing field for women in professional work. Enforcement of minimum wages, non-discrimination in job opportunities and pay scales, safety and non-violence in the work place, and accounting for domestic work in national income, which exist in principle have to be realized in practice. As mentioned in the previous sections, macroeconomic policies, which are often taken as gender-neutral, have to be regularly audited through a gender lens to ensure a policy bias in gender empowerment. Enforcement of the law related to minimum wage and no gender discrimination in wages has to be effective.

As the basic coverage becomes almost universal in the water and sanitation sector, the supply of safe drinking water remains a challenge. Water sources are drying due mainly to contamination from human activities, disasters like earthquakes, and landslides, and diminishing sources of snow-based fresh water mainly as a result of climate change. The government has the twin roles of protecting the source of fresh water and making safe water accessible to all the households. The federal government will have to partner and collaborate with global and local communities to safeguard fresh water sources and work closely with local governments to provide safe water and ensure effective sanitation system in place. Conditional grants and capacity support from federal to local government should increase to safeguard the sources of fresh water, including sustainable use of ground water and ensuring safe water supply.

The energy sector has progressed satisfactorily in recent years with renewable energy capacity expanding, household connections to electricity becoming almost universal, and subsidies to non-renewable fossil fuels being withdrawn (except for cooking gas). There are bigger and long-term challenges now with changing hydrology – also from the impact of climate change – and the rising cost of power generation and transmission. Electricity regulatory bodies, NEA and local governments must work closely to keep the cost of power generation low, ensure a proper energy mix to address rising demand and make electricity viable in the long run. Enforcing competitive bidding, encouraging storage projects on a VGF model and managing geopolitical interests in strategic power projects will be a crucial.

Economic growth is inclusive when most citizens participate in the production process, share the benefits, and get social protection benefits. There are, however, several policy challenges. First, while labour-intensive technology will have to be promoted in economic activities, growing digitalization, automation, and mechanization are squeezing labour market opportunities, particularly for those who are not digitally skilled. Second, markets do not necessarily promote inclusion unless credible state interventions exist, although this may not be conceived as compatible with the norms of a free-market economy. Third, with growth processes being mostly private sector-driven, an absence of a credible tax and subsidy system can still drive the non-inclusive growth process. In Nepal, where the market is evolving and remains less competitive with lapses of strong market-based regulatory mechanism, the government should maintain its role in influencing the growth process through macro and sectoral policies that promote inclusion.



**The federal government will have to partner and collaborate with global and local communities to safeguard fresh water sources and work closely with local governments to provide safe water and ensure effective sanitation system in place.**

**Strong initiatives at both the national and global levels for labour market reforms are necessary for decent work, elimination of forced labour, social security for workers, and removal of gender discrimination in work and pay.**

The present growth of the labour force far exceeds the jobs created in the economy and unless the growth rate remains above 6 percent and remains jobs-driven, under-employment and migration for foreign employment will continue. Thus, the key labour market issues requiring policy intervention are (i) largely informal and yet further informalizing the labour market with little social security coverage; (ii) growing unemployment, particularly among youth; (iii) outmigration for work as unskilled labour force; and (iv) domestic job opportunities being grabbed by workers from across the border.

Strong initiatives at both the national and global levels for labour market reforms are necessary for decent work, elimination of forced labour, social security for workers, and removal of gender discrimination in work and pay. While ILO and other UN agencies have to be more resourceful and capacitated to lead this reform process, role of countries employing migrant workers will be equally important in monitoring their labour market practices and ensuring that migrant workers remain socially protected, unexploited, and not exposed to dangerous and hazardous jobs at the risk of life. A global governance mechanism could be developed for compulsory bilateral labour agreements between the governments of source and destination countries for dignified migrant work. As such, social protection should be taken as a human rights' issue rather than simply a legal provision for labour contracts.

Sustained, high economic growth will be possible only with external market opportunities for exports and capacity to produce competitive goods and services. Given the knowledge-driven production process with substantial flows of both technology and capital, an international framework for the

smooth transfer of technology and support for innovation will be critical in progressing in innovation, technology, and in raising productivity to ensure sustainable production processes. Nepal's progress towards industrialization will be possible only when there is unhindered access to global technology and when non-reciprocal market access and trade facilitation is in place. The global initiative for such market access and technology transfer will have to be materialized if a low-income country like Nepal is to benefit from the window. Advanced economies will also have to support Nepal's technology development, research and innovation in the areas of comparative and competitive advantage in production and exports of the country's industrial output.

Nepal has lagged far behind in the 2030 targets of physical and industrial infrastructure. The quality of physical infrastructure like roads and bridges is a bigger issue, despite road density having doubled since 2015 to nearly 1 km per 1 sq. km of inhabited land. The states' federal structure has divided road construction and management roles to the three tiers of the government where further clarity in their respective roles is required. The next phase of infrastructure development should focus mainly on (i) upgrading the existing road network; (ii) periodic maintenance through the clearly-defined roles of the respective governments; (iii) prioritization of road safety to minimize loss of life and assets; and (iv) adoption of green construction technology using labour to the extent possible.

Managing the huge gap in public sector infrastructure financing requires the creation of space for the private sector to invest in toll roads and bridges, ropeways, metro railways, airports, waterways and skylines with credible legal and financial incentives in place. Instruments such as viability gap funding,

equity sharing and tax concessions for such ventures can be introduced. The BOOT Act, PPP Act and Foreign Direct Investment and Technology Transfer Act should be amended to create a larger space for private financing of transport infrastructure.

Some proposed large projects, such as Nijgad international airport, regional airports, East West Railway, Rasuwagadi – Kathmandu – Pokhara railway and Kathmandu metropolitan transport system are likely to absorb a large proportion of the transport infrastructure. Similarly, construction of industrial estates and ICPs will require huge investment. Such infrastructure could also be developed with the private sector's participation. SPV legislation for Rapid Construction of Key Infrastructure Projects registered in the parliament some years ago could be reintroduced to create a positive ecosystem for the private sector to invest in these areas. Substantial national, regional and global efforts will be necessary to develop inclusive quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being. While the roles of existing international and regional development banks, such as World Bank, ADB and AIIB, will be critical in enabling large investments in infrastructure, bilateral cooperation frameworks under BRI, JICA, Exim Bank Credit and the like will also be instrumental.

Despite efforts to ensure equal opportunities for all to earn income and accumulate assets, the initial – and very unequal – situation continues to widen inequality not only in income and assets, but also in the benefit of sharing of development outcomes.<sup>95</sup>

Inequality is particularly significant in the ownership of productive assets, human capital, and opportunities to prosper. Land inequality has remained the oldest and most fundamental type of wealth inequality as more than two-thirds of households depend on land for their livelihood while the wealthiest 7 percent of households own around one-third of agricultural land, and 29 percent of the population do not own any land at all.<sup>96</sup> Women, who work long hours in agriculture, own only one-fifth of the land. Poor people have limited access to bank credit in the absence of proper collateral to pledge. Inequality on the economic front has in turn affected life chances, as a poor child is nearly three times more likely to die before five years of age than a rich child, and years of schooling becomes shorter for a poor child than for a richer one.

Addressing inequality requires access for all to quality and affordable health and education services, access to productive assets such as land, technology, and finance for business enterprise, creating a progressive tax and subsidy regime, enforcing decent work and a fair wage policy, removal of gender discrimination, social protection schemes, control of corruption, and space for voice and participation even for those left furthest behind.

The Census 2021 revealed a massive migration of people from the hills to the Terai, and from villages to urban areas, causing stress in urban settlements, transportation and utility services. The problems of unplanned settlements and slum dwellings are rising. The government's relocation and resettlement plans have mostly failed in the

**Addressing inequality requires, inter alia, access for all to quality and affordable health and education services, access to productive assets such as land, technology, and finance for business enterprise, creating a progressive tax and subsidy regime.**

<sup>95</sup> In 2010/11, Nepal had one of the highest income Gini coefficients in the world, at 49.42, and the level of income disparity had increased considerably in the preceding fifteen years. The Palma ratio, which compares the income share of the top 10% and the bottom 40%, showed a similar trend. Results of NLSS 2022 will give an update in this. Inequality of wealth is also substantial in Nepal, and the wealth Gini is significantly higher than the income Gini at 0.74 (per capita), underlining how money is trickling upwards over time (Khatiwada, 2019).

<sup>96</sup> Padma Khatiwada, *Fighting Inequality in Nepal*, 2019, <https://www.researchgate.net>

absence of new settlements being linked with livelihoods. Programmes related to safe and decent housing have yet to cover most of the needy households. Land classification as per the land use policy and related acts has been derailed with the federal government deciding to allow fragmentation of land holdings even before land classification from local governments had been completed. For safe and sustainable cities, proper implementation of land use policy, compliance with housing codes, development of planned satellite cities through land-pooling, and upgrading utility services, are necessary.

Nepal is located in an earthquake-prone zone, so massive earthquake episodes are being repeated.<sup>97</sup> Housing permits, enforcement of housing codes, disaster preparedness, post-disaster rescue, relief, rehabilitation and reconstruction-related services works can be best delivered by local government in partnership with the National Disaster Risk Reduction and Management Authority (NDRRMA) set at the federal level. NDRRMA requires capacity development along with a proper cooperation mechanism with provincial and local governments. In a situation of huge resource gaps in addressing housing problems, such disasters heighten the problem manifold. So substantial upscaling of national efforts along with greater international technical and financial support will be necessary to achieve the goal of making human settlements safe, and making housing decent, adequate, and affordable.

Meanwhile, as Janata Housing, Safe Housing, restructuring private houses based on earthquake affected households, and other housing schemes for disaster-affected

households are being implemented at different levels of the government, it is felt that federal government should take up sole responsibility of safe and decent housing and collaborate with provincial and local governments through facilitation of land, finance, and technology. Policies and regulations for climate proofing and disaster proofing of urban development activities should be in place, and institutional mechanisms for their enforcement have to be developed.

Sustainable consumption and production of non-renewable resources have serious implications for the current market-driven behaviour of the people and the use of fossil fuels, excessive exploitation of mines, use of chemicals, plastics, and extraction of ground water for irrigation, domestic use and for industrial purposes. The intergenerational equity in access to non-renewable resources and sound environment calls for the present generation to engage in responsible production and consumption patterns so that they are protected for future generations. In the same way, Nepal's SDG 12 policies should include sustainable use of mines, soil and ground water for growth.

Nepal is one of the most vulnerable countries in the world to climate change, as also expressed by the UN SG during COP 28 in December 2023. The country's national plan of action commits to full net zero emissions by 2045.<sup>98</sup> The country must further integrate climate change measures into federal, provincial and local development, policies, strategies and plans, augment education, awareness and institutional capacity on climate change mitigation, adaptation, and impact reduction focusing on women, youth and local and marginalized commu-

**Substantial upscaling of national efforts along with greater international technical and financial support will be necessary to achieve the goal of making human settlements safe, and making housing decent, adequate, and affordable.**

<sup>97</sup> Following the massive earthquake of 2015, there were earthquakes in Karnali and far western provinces in 2023. These earthquakes, along with causing loss of human life and property, have damaged water supply and sanitation system, destroyed transportation network, and made human settlement vulnerable, thus undermining the goal of creating safer cities.

<sup>98</sup> Nepal's Long-term Strategy for Net-zero Emissions, Government of Nepal, 2021

nities. Climate-smart technologies in agriculture and industry will not only pave the way to the goal of net zero emissions, but also boost productivity, enhance resilience and reduce GHG emissions. The government should discontinue subsidizing all kinds of fossil fuels, introduce a carbon tax on the use of such fuels (instead of an infrastructure development tax), and promote green transport infrastructure mainly for freight and urban mobility services.

While doing this, strong international and – particularly – regional support is necessary to develop mitigation and adaptation strategies, technology transfer in implementing them, and financing of climate change-related programmes. Low fiscal space for the government and competing and even more compelling allocation requirement should call for special financing commitments by the international community, in addition to regular aid commitments for development. Partnerships with advocacy agencies can be instrumental in promoting the climate justice agenda in global forums. Operationalization of the loss and damage fund for climate financing in countries like Nepal and calls to compensate for the damage caused by the economic activities of advanced and neighbouring countries through grant in aid has to be the strategy to carry forward climate action.

Promoting peaceful and inclusive societies for sustainable development directly supports Nepal's aspiration for 'Prosperous Nepal: Happy Nepali', providing access to justice for all and building effective, accountable and inclusive institutions at all

levels. Peacebuilding processes must prevent conflict between societies, communities and people. As greed and grievances are considered the root causes of conflict, addressing these sources of conflict is necessary for sustained peacebuilding. For this, (i) the government should promote inclusive governance at each level through continuous positive discrimination, with an emphasis on those left most behind; (ii) service delivery by all the tiers of the government has to be effective and non-discriminatory; (iii) public investment in capacity-building in peace, justice, and service delivery-related areas needs to be adequate and effective; (iv) legitimate politics and political actors should support state-building processes while discouraging radical, separatist, and ethnicity-based politics; (v) political representation has to be inclusive in party organizations, government and governing entities, ensuring that no community feels excluded from the political system and process; and (vi) the international community should support domestic peacebuilding processes without undermining established norms and values.<sup>99</sup>

As discussed in the previous chapter, the current trend of the global aid, trade and investment environment is undermining the targets set in SDG 17. ODA commitment and utilization both remain unsatisfactory. Public investment in SDGs areas is seriously handicapped due to lacklustre revenue performance and a rising debt service burden. Although Nepal is not a highly indebted country, its public debt servicing amounts to a significant portion of the domestic revenue.<sup>100</sup> Given the huge

**Strong international and – particularly – regional support is necessary to develop mitigation and adaptation strategies, technology transfer in implementing them, and financing of climate change-related programmes.**

<sup>99</sup> Development partners have to continue commitments as reflected in the Busan Partnership for Effective Development Co-operation on 'promoting sustainable development in situations of conflict and fragility' and Paris Principles of Aid Effectiveness and Accra Plan of Action

<sup>100</sup> In FY 2023/24 budget, debt servicing accounts for nearly 23 percent of total revenue (before sharing with subnational governments) and more than 26 percent of revenue (after sharing with subnational governments) of the federal government. As of July 2023, public debt accounted for 41 percent of GDP with external and domestic debts accounting for 21 percent and 19 percent respectively. This was 50 percent more than the debt GDP ratio in 2016.

**Global aid commitment should be re-energized to accelerate SDGs implementation while recovering progress lost due to COVID-19.**

public investment requirement to finance the SDGs and the country's aspiration to graduate from LDC status by 2026, the higher inflow of ODA in loans, would make debt servicing highly stressful. Several UN resolutions have already emphasized total debt cancellation for LDCs, lender countries and institutions should consider writing off the debts for one time with the condition that the cancelled debt be utilized for investing in the SDGs. It is also necessary that the larger ODA flow to LDCs continue to be in the form of grants, conditioned to investing in programmes for implementing the SDGs. Nepal's graduation from LDC status in a few years' time, is likely to result in loss of ODA flows, particularly from bilateral donors. The economic slowdown in OECD countries signals the risk associated with bilateral aid flows. Multilateral aid is unlikely to be affected by LDC graduation, but aid conditionality often makes its utilization difficult for the country.

There has been some improvement in channelling ODA through the government budget system. Of the total ODA received in FY 2022/23, two-thirds was disbursed through the government budget system while one-third was spent through off-budget projects. Although there have been serious efforts to bring ODA and INGO funding to the on-budget system, progress has been very modest, raising risks of sectoral and regional imbalance in allocation, misalignment with national priorities, overlaps in programme operations, and resource gaps in core SDGs financing. As the off-budget aid activities are more pronounced in the case of some larger bilateral donors, it is important to build confidence on the priority, efficiency, and effectiveness of government budgetary systems and convincing development partners to respect the country system and country process in line with Paris Principles of Aid Effectiveness and

its subsequent outcomes. Aid coordination through the SWAp mechanism, particularly for social sectors, and for programmes to be implemented at the provincial and local levels will be even more important when multilateral and bilateral aid agencies intend to work at the subnational levels.

Analysis in Chapter V reveals the larger external financing requirement, despite making efforts to mobilize domestic resources, for bridging the SDGs financing gap. As shared responsibility, the global community must take account of the reality and collaborate in several areas of SDGs' Implementation.

First, global aid commitment should be re-energized to accelerate SDGs implementation while recovering progress lost due to COVID-19. Bilateral and multilateral aid agencies will have to scale up their resources to fund the SDGs' financing gap.

Second, aid should be linked to national priorities within the SDGs, particularly in those SDGs accelerators that create synergies for the achievement of several other goals.

Third, more aid should be channelled through the country system; and national, provincial and local aid will have to be tailored to respective priorities and programmes. Funding through NGOs and INGOs also requires stronger coordination with federal, provincial and local governments.

Fourth, the role of the UN Country Office becomes crucial for effective aid coordination among development partners, while the ONE UN approach to country support should also to be observed in practice.

Fifth, proper evaluation should be made of the existing sector-wide approach in aid

mobilization and upscale the effective ones to implement SDGs interventions, particularly in the provinces and local levels, which are far behind in sustainable human development outcomes.

Sixth, Nepal, being one of the most vulnerable countries to climate change, is facing a huge impediment to achieve several SDGs such as poverty, agriculture, health, water and energy. Climate change adaptation and mitigation measures is very expensive, and with limited country financing capacity, aid in grant for climate action has to be disbursed significantly in the coming years.

Seventh, the country's capacity development programmes at both the national and subnational levels have to be financed from aid in grants. The reason for that is because this area possesses only a social rate of return, and no immediately-visible economic and financial rate of return is observed so that debt service capacity could be enhanced.

### **International Trade and Investment**

International trade and foreign direct investment flows are critical for financing SDGs in a relatively open economy like Nepal's. As the government intends to encourage FDI through the Investment Summit planned for April 2024, showcasing ready-to-go projects and creating an enabling environment for FDI governance will be critical for the success of such an effort. International project finance has been increasingly important for SDGs and climate change investment. The strong growth performance of international project finance can be explained by favourable financing conditions, infrastructure stimulus and significant interest on the part of financial market investors to participate in large-scale projects that require multiple financiers. The instrument also enables governments to leverage public investment through pri-

vate finance participation. However, as FDI flow requires a very competitive business environment, Nepal can get that advantage only with several policy, institutional and operational reforms.

While country rating may be instrumental in assessing the level of sovereign risk in FDI, other mechanisms such as social and environmental rules, foreign exchange hedging, tax concessions, accounting and auditing standards, and the independence of the judiciary are equally important for mobilizing external capital as direct investment. As UNCTAD (2022) suggests, the international community should help to alleviate the constraints that are placing countries like Nepal at a disadvantage for FDI. This includes vastly scaling-up technical assistance to support base erosion and profit shifting, implementation and investment policy adjustment, adopting a multilateral solution to remove implementation constraints.

### **7.3 SDGs Reprioritization**

The political declaration of the SDGs Summit 2019 stresses the urgent need for concerted, accelerated action by all stakeholders at all levels to achieve the SDGs. Moving ahead on the Decade of Action for SDGs implementation by 2030 launched by the Secretary-General, the SDGs Acceleration Action is the planned initiative or effort expected to facilitate and accelerate implementation of the 2030 Agenda and the SDGs. It reflects interlinkages between goals and contributes to policy coherence; builds on existing successful efforts/initiatives (scaling up, new phase, etc.) or introducing new ones; and includes reasonable means of implementation such as finance, technology or capacity building as an element to help ensure the longevity and sustainability of the initiative, among others.

**International project finance has been increasingly important for SDGs and climate change investment.**

Reprioritization of SDGs could be done on this basis.

Reprioritization of SDGs is not an easy task, as they are mostly interwoven with synergies and trade-offs in their achievements. While SDG 1 to SDG 6 are still the most priority agenda items, other development interventions such as in energy, infrastructure and industry, sustainable cities and climate change actions are getting high attention due to the changing structure of the economy, demographic patterns, and the climate threat to humanity. Some empirical studies<sup>101</sup> have observed the most synergistic elements among SDG 3, SDG 7, SDG 8, SDG 9, and SDG 16. However, as synergies are situational (stage of development, location, periodicity, and target-specific), caution has to be taken in generalizing them to other contexts. A special empirical study on such synergy in Nepal's case, with data generated for at least 10 years, is required to make an evidence-based policy decision on reprioritization of sectors that could be useful for planning even beyond 2030.

Nevertheless, it is observed that ending poverty will have the most synergistic relationships with other SDGs en route to 2030. Good health, affordable and clean energy, decent work and economic growth, and industry, innovation and infrastructure have significant synergies with the other goals. Poverty alleviation and strengthening the economy, rooted in innovation and modern infrastructure, therefore continue to be the basis upon which many of the other SDGs can be achieved.<sup>102</sup>

Setting priorities is being perceived as even more imperative for the next seven years since some of the goals have seriously

lagged behind – as discussed in Chapter II; and refocusing resource allocation implementation should be accelerated in those areas. They include agriculture, health, decent work, and key urban infrastructure. Despite that, priorities can be situation-, time- and location-specific and depend on the level of economic development and social structure. Some common reprioritization criteria could be developed based on development experience and evidence. The foremost priority must be accorded to areas that address absolute poverty and human deprivation. The correlates of absolute poverty need to be covered under top priority. Progress been off-track due to COVID-19, and disasters deserve the utmost attention while reprioritizing the SDGs targets.

SDGs reprioritization must be reflected in development policies, strategies, perspective plans, periodic plans and annual budgets of the governments at all levels in terms of domestic resources allocation, aid mobilization, and effective implementation for the next seven years. The reprioritization of policies, programmes, or activities' criteria could be based on (i) direct impact on the achievement of particular SDG; (ii) indirect impact on the achievement of other SDGs; (iii) contribution to gender, social and geographical inclusion; (iv) level of people's participation and ownership; and (v) cost effectiveness and sustainability, etc. In essence, prioritization of projects and programmes should be based, along with direct or indirect contribution to the achievement of any SDGs, on synergies that they can bring to the development process.

While SDGs priorities should be set against fiscal, financial, managerial, institutional and other capacity constraints, the govern-

<sup>101</sup> Christian Kroll, Anne Warchold and Prajal Pradhan (2019), Sustainable Development Goals (SDGs): Are we successful in turning trade-offs into synergies? <https://www.nature.com/articles/>

<sup>102</sup> *ibid*

ment will have to make efforts to unlock the binding resource and other capacity constraints. The fiscal space for SDGs exists in restructuring public expenditure at all levels with reprioritization of allocation, additional tax efforts particularly at the local level where large potential exists, debt swap for SDGs, involving the private sector in commercially-viable infrastructure projects, mobilizing and effectively utilizing external aid and deferring domestic debt amortization for some years.

Nepal has faced several shocks during the last eight years of SDGs implementation. First, the country had to encounter an economic blockade at the southern border for a year or so. Second, there was massive earthquakes in April and May 2015 which caused a huge loss of life, property and physical infrastructure diverting major resources from other SDGs areas to rehabilitation and reconstruction. Third, the outbreak of COVID-19 not only derailed progress in the SDGs, but also eroded the very foundation of growth, jobs and revenue mobilization. Fourth, there have been many disasters including the post-earthquake shocks, floods and landslides drawing larger attention towards rehabilitation and resettlement. Fifth, the weakening macroeconomic condition with slower growth rate, trade and external sector imbalances, an eroding tax base, rising prices, and deteriorating investment climate have pushed the SDGs into the shadow. Sixth, global tensions and weaker growth prospects are posing the risk of erosion in business confidence. As global shocks, conflicts and disasters have nullified several previous development achievements, sustaining the outcomes in future also implies that targets and indicators related to addressing such shocks be prioritized in the SDGs' implementation.

Nepal's graduation from LDC status to developing country status by 2026 and its embarkation on a middle-income country trajectory will have implications for aid, trade and investment, as discussed in Chapter V. Particularly, while multilateral aid will not be affected, some bilateral donors might shift their aid priority to other LDCs. Similarly, trade concessions, such as duty free and quota free market access, will cease to exist causing a loss of market access to Nepalese products in those countries. The graduation would however create better confidence for foreign investment – risk premium on commercial lending might reduce making credit available at lower interest rates. A post-graduation development strategy commensurate with the challenged SDGs outcomes should be revisited and actions undertaken to ensure that the country does not fall back into LDC status.

In an evolving federal system with political power balances shaping the development discourse, SDGs prioritization is also governed by social and environmental imperatives such as conflict resolution, peacebuilding, disaster mitigation or coping with climate change effects at the national level while developing a basic infrastructure for improved service delivery at the subnational levels.

As some SDGs, like poverty, inequality, sustainable consumption and production, are not fully costed, policy priorities will have to address the targets set under these goals. Understanding of synergies between goals can be understood from global empirical evidence and also from the living standard surveys done. An analysis of poverty in Nepal (CBS, 2012) shows that poverty (SDG1) is correlated with a lack of productive assets like land (SDG2), family size and illness (SDG 3), lack of education (SDG 4), and ex-

clusion by geography, and social institutions (SDG 9 and 16), etc. Growing inequality (SDG 10) is related to adverse terms of trade between agriculture and industry or services (SDG 9), unfair labour market conditions (SDG 8) or unequal access to basic services like finance and technology (SDGs 16 and 17). This illustrates that prioritization of some goals over others have the risk of losing synergy from all goals.

MTEF has been developed as a powerful instrument to prioritize programmes and projects as per resources available, cost effectiveness, and likely impact in SDGs outcomes. All the tiers of government must prepare MTEF for the linkage of annual budgets with the periodic plans, and for the operationalization of the SDGs. However, the credibility of MTEF has eroded over time – being taken as a formality rather than an instrument to align ambitions with realities, resources with outputs and priorities among so many necessities of development. SDGs targets can be prioritized following the approach of MTEF where criteria for prioritization can be set in accordance with the global experience of development intervention results such as in girls' education, immunization, water supply or basic energy services.<sup>103</sup> As multidimensional poverty remains a key development challenge for Nepal, priority can be accorded to the areas that help reduce poverty. The major correlates of multidimensional poverty, which is one of the SDG 1 indicators, are nutrition and child mortality (health-related), years of schooling and school attendance (education-related), and access to water, sanitation, clean energy, and housing condition (assets-related). Targets related to these outcomes may be prioritized in the SDGs' implementation strategy.

NPC has developed a project bank to screen development projects by priority and to establish discipline in budget allocation in development projects. This has often been pushed into the shadow while ministries try to programme annual budgets against those listed in the project bank. Provincial and local governments are completely lacking this process, as no such activity has yet been initiated. The project bank based on prioritization criteria and process followed for MTEF can also work as a fiscal instrument to guide SDGs prioritization at subnational levels. Programme and project prioritization criteria will have to encompass key SDGs accelerators – those with the widest and deepest implications for other SDGs targets. Food security, girls' education, basic water and energy services, and a social protection floor could be among them.<sup>104</sup> Given the ambition of the SDGs and resource constraints in their implementation, prioritization and sequencing would remain a key consideration for the next seven years. So effective formulation of the MTEF at the central level, and budgeting and extension at the subnational level would be instrumental in prioritizing SDGs by targets and indicators and ensure resource appropriate allocation. The SDGs priorities could be calculated at policy, target, intervention, and implementation levels. These priorities have to be revisited frequently to assess the output and impact, to drop those that have met their objectives, and to encompass new priorities if needed.

Overall, the following criteria could be applied for SDGs reprioritization. First, the SDGs targets and indicators should be reprioritized in line with the progress gap observed through the Nepal SDGs' progress assessment. Second, reprioritization

<sup>103</sup> This has been extensively discussed in Chapter III.

<sup>104</sup> Such accelerators are drawn from empirical analysis of the historical data from within the country or panel data from several countries.



should consider interventions that have the highest impact to achieve multiple goals. Third, economic growth and jobs lag badly in progress while inequality is also rising. The sixteenth periodic plan allocation priority should be on broad-based, job-intensive, and inclusive growth. Fourth, coping with climate change, reducing disaster risk and ensuring human security are important sustainable development activities that should be reprioritized during the remainder period of the SDGs' implementation.

Fifth, planning and budgeting by subnational governments should be reoriented towards meeting the critical SDGs outcome gaps that might adversely affect the outcome of several other goals. The role of NPC and development partners, particularly the UN Country Office, will have to work closely with the subnational governments

not only for better resource allocation but also for effective implementation. Sixth, synergies and trade-offs between SDGs targets are being gradually observed in some areas. It is time that such effects be studied and their results be considered in SDGs prioritization in planning, budgeting and implementation.

Besides revisiting the project and programme prioritization criteria, there is a need to develop an evidence base for reprioritizing through wider and deeper evaluation of the ongoing and completed priority projects. Only empirical evidence will reveal the impact and synergy brought about by the priority projects and thus guide reprioritization. It is equally important to consider that prioritization is period- and resource-specific, and should be synergic to meet the legitimate challenge of achieving all the SDGs by 2030.



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# Annex

**Table I. Revised SDGs Targets**

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG1	Poverty \$1.9 per day (PPP value)	36.0	8.0	
SDG1	Per capita Gross National Disposable Income (GDNI) (US\$)	766	2500	
SDG1	Proportion of population living below the national poverty line	21.6	4.9	6
SDG1	Women of all ages below national poverty line (%)	25.4	5.8	
SDG1	Children below national poverty line (under 5 years of age, %)	36	5	
SDG1	Multidimensional Poverty Index (MPI)	30.1	10.0	
SDG1	Child MPI (under 5 years of age, %)	36	5	
SDG1	Proportion of population covered by social protection floors/ systems	8.1	80.0	60
SDG1	Social protection expenditure in total budget (%)	11.0	15.0	
SDG1	Households within 30 minutes travel time to health facility (% of total)	61.8	80.6	
SDG1	Households having access to market center within 30 min walk (% of total)	45	90.0	
SDG1	Households covered by formal financial services (% of total)	40	80	
SDG1	Households having property/tangible assets in women's name (percent of total)	19.7	40.0	
SDG1	Loss of lives from disaster (number)	8891	100.0	
SDG1	Missing persons and persons affected by disaster per 100,000 (number)	415	50	
SDG1	Direct economic loss attributed to disasters as percent of national gross domestic product (GDP)	-	1	
SDG1	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	-	100	
SDG1	Proportion of domestically generated resources allocated by the government directly to poverty reduction programmes	55.2	100	
SDG1	Proportion of total government spending on essential services (education, health and social protection)	25.2	30	
SDG1	Sum total of grants and non-debt-creating inflows directly allocated to poverty reduction programme as a proportion of GDP	4.1	12	
SDG2	Prevalence of undernourishment	36.1	3	5
SDG2	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) percent	8.5	5	
SDG2	Proportion of population spending more than two-third of total consumption on food	20	3	
SDG2	Prevalence of severe food insecurity (%)	10.4	6	
SDG2	Prevalence of moderate food insecurity (%)	29.5	19	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG2	Per capita animal source protein production (kg)	4.7	8.7	
SDG2	Per capita food grain production (kg)	320	530	450
SDG2	Global Food Security Index (score)	42.8	90	
SDG2	Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age	36	15	
SDG2	Prevalence of wasting (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age	11.3	4	
SDG2	Percent of children under 5 years of age who are underweight (weight for age <-2SD)	30.1	9	12
SDG2	Prevalence of anemia among women of reproductive age	35	10	10
SDG2	Prevalence of anemia among children under 5 years	46	10	15
SDG2	Land productivity (Mt./ha) \$	3278	7018	
SDG2	Livestock productivity-(Ltr/milking livestock)	600	1000	
SDG2	Round the year irrigated land in total arable land (percent)	25.2	80	60
SDG2	Soil organic matter (SOM in crop land, percent)	1.96	4	
SDG2	Number of DNA bank for variety of seeds	1	1	
SDG2	Number of DNA bank for variety of plants	-	1500	
SDG2	Number of arboretum and breeding center for indigenous species	-	45	
SDG2	Government expenditure in agriculture (% of total budget)	3.3	4	
SDG2	The agriculture orientation index for government expenditures	0.14	0.38	
SDG2	Total official flows (official development assistance plus other official flows) to the agriculture sector (%)	0.8	2.5	
SDG2	Productivity of food grain (mt.tonne/hect.) (Paddy/Wheat/Maize/ Millet/Barley/Buckwheat)	3	4	
SDG2	Food Consumer Price Index	114	208	
SDG3	Maternal mortality ratio per 100,000 live births	258	70	110
SDG3	Proportion of births attended by skilled health personnel	55.6	90	
SDG3	Under-five mortality rate	38	20	25
SDG3	Neonatal mortality rate	23	12	15
SDG3	Number of new HIV infections among adults 15–49 years old (per 1000 uninfected population)	0.03	0.014	
SDG3	Tuberculosis incidence (per 100,000 population)	158	20	
SDG3	Malaria incidence (per 1,000 population)	0.1	0.01	
SDG3	Hepatitis B prevalence (per 100,000 population)	2654	2566	
SDG3	Leprosy cases	2221	0	
SDG3	Kala-azar (Leishmaniasis) cases*	325	0	
SDG3	Lymphatic Filariasis cases	30,000	14,000	
SDG3	Dengue cases	728	0	
SDG3	Active Trachoma Cases	136	44	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG3	Mortality between 30 and 70 years of age from Cardiovascular disease, Cancer, Diabetes or Chronic respiratory disease (per 1000 population)	2.8	1.96	
SDG3	Mortality from cardiovascular disease (per 1000 population)	1.44	1.01	
SDG3	Mortality from cancer (per 1000 population)	0.67	0.47	
SDG3	Mortality from diabetes (per 1000 population)	0.27	0.19	
SDG3	Mortality from chronic respiratory disease (per 1000 population)	0.8	0.56	
SDG3	Suicide mortality rate (per 100,000 population)	16.5	4.7	
SDG3	Percent of hard drug users who ever visited Rehabilitation Centres for comprehensive services	40	75	
SDG3	Percent of people aged 15 years and older having harmful use of alcohol (defined according to the national context)	2	1.8	
SDG3	Percent of women an men (aged 15-49 years) who have never had an alcoholic drinks	-	90	
SDG3	Death rate due to road traffic injuries	19.86	4.96	
SDG3	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	66	80	
SDG3	a. Contraceptive prevalence rate (modern methods) (percent)	47	60	
SDG3	b. Total Fertility Rate (TFR) (births per women aged 15-49 years)	2.3	2.1	
SDG3	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	71	30	
SDG3	a. percent of women having 4 antenatal care visits as per protocol (among live births)	60	90	
SDG3	Percent of poor people enrolled in health insurance	0	100	
SDG3	b. percent of institutional delivery	55.2	90	
SDG3	Percent of women attending three PNC as per protocol	20	90	
SDG3	Percent of infants receiving 3 doses of Hepatitis B vaccine	88	95	
SDG3	Percent of women aged 30-49 years screened for cervical cancer	16.6	90	
SDG3	Percent of people living with HIV receiving Antiretroviral combination therapy	39.9	95	
SDG3	g. percent of population aged 15 years and above with raised blood pressure who are currently taking medication	11.7	60	
SDG3	h. percent of population aged 15 years and above with raised blood glucose who are currently taking medication	25	60	
SDG3	i. Percent of households within 30 minutes travel time to health facility	61.8	90	
SDG3	Proportion of population with large household expenditures (25 % or more) on health as a share of total household expenditure or income	10.7	2	
SDG3	a. Percentage of out-of-pocket expenditure in total health expenditure	53	35	
SDG3	Mortality rate attributed to ambient air pollution (per 100,000 population)	64.2	44.94	
SDG3	Mortality rate attributed to household air pollution (per 100,000 population)	64.3	45.01	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG3	Mortality rate attributed to unsafe water, sanitation and hand washing (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services) per 100000 population	37.7	26.39	
SDG3	Age-standardized prevalence of current tobacco use among persons aged 15 years and older	30.8	15.09	
SDG3	Proportion of the target population covered by all vaccines included in their National Programme	88	95.00	
SDG3	Total net official development assistance to medical research and basic health sectors	12.7	20	
SDG3	Percent of health sector budget for research and development	-	3.0	
SDG3	Percent of government health facilities with no stock out of essential drugs	70	100	
SDG3	Health worker density and distribution (per 1000 population)	1.05	4.45	
SDG3	Total health expenditure as percent of GDP	5	7	5
SDG3	International Health Regulations (IHR) capacity and health emergency preparedness (Percentage)	77	95	
SDG4	Net enrolment rate in primary education (percent)	96.6	99.5	99
SDG4	Primary education completion rate (percent)	80.6	99.5	
SDG4	Proportion of pupils enrolled in grade one who reach grade eight (percent)	76.6	95	
SDG4	Ratio of girls (to boys) enrolled in grade one who reach grade eight	1.04	1	
SDG4	Ratio of girls (to boys) enrolled in grade one who reach grade twelve	1.1	1	
SDG4	Learning Achievement / Score (Math) for Class 5 (%)	53.3	65	
SDG4	Learning Achievement / Score (Nepali) for Class 5 (%)	63	75	
SDG4	Learning Achievement / Score (English) for Class 5 (%)	53.6	68	
SDG4	Gross Enrolment in secondary education (grade 9 to 12) (percent)	56.7	99	90
SDG4	Coverage of child grant for pre-primary education (number in '000)	506	700	
SDG4	Attendance to early childhood education (Gross Enrolment) (percent)	81	99	
SDG4	Ratio of girl's enrolment in technical and vocational education	0.53	1	
SDG4	Ratio of girl's enrolment in tertiary education (graduate level)	0.88	1	
SDG4	Scholarship coverage (percent of total students)	37	42	
SDG4	Working age population with technical and vocational training (%)	25	75	
SDG4	Youth and adults with technical and vocational training (number in '000,annual)	50	480	
SDG4	Gender parity index (GPI) (primary school)	1.02	1	
SDG4	Gender Parity Index (GPI) (secondary school)	1	1	
SDG4	Gender Parity Index (GPI) based on literacy (above 15 years)	0.62	1	
SDG4	Literacy rate of 15-24 years old (percent)	88.6	99	
SDG4	Literacy rate of 15-24 years old (women) (percent)	87.4	99	
SDG4	Public spending per student (Basic education in 'Rs. 000)	15	30	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG4	Human assets index	66.6	76	
SDG4	Gender development index (GDI)	0.53	0.7	
SDG4	Schools with access to electricity (percent)	40	99	
SDG4	Schools with access to internet (percent)	3.9	99	
SDG4	Basic schools with access to "WASH" facilities (percent)	80	99	
SDG4	Disability friendly schools (percent)	15	99	
SDG4	Proportion of teachers in basic education who have received at least the minimum organized teacher training, (percent)	95.5	100	
SDG4	Proportion of teachers in secondary education who have received at least the minimum organized teacher training, (percent)	95.4	100	
SDG5	Wage equality for similar work (ratio of women's wage to that of men)	0.62	0.92	
SDG5	Gender Inequality Index	0.49	0.05	0.25
SDG5	Gender Empowerment Measurement (Index)	0.57	0.69	0.67
SDG5	Ever-married women aged 15-49 years who have ever experienced physical or sexual violence (%) during previous 12 months	28.4	5	
SDG5	Children aged 1-14 years who experienced psychological aggression or physical punishment during the last one month (%)	81.7	13.6	
SDG5	Women aged 15-49 years who experience Physical / sexual violence (percent)	26	6.5	
SDG5	Women and Girls Trafficking (number)	1697	325	
SDG5	Proportion of women aged 20-24 who were married or in union before age 15 (%)	1.75	0	
SDG5	Women aged 15-19 years who are married or in union (percent)	24.5	4.1	
SDG5	Ratio of women to men participation in labour force	0.93	1	
SDG5	Average hours spent in domestic work by women	14	6	
SDG5	Women's representation in national parliament (%)	29.5	40	
SDG5	Women's representation in provincial parliament (%)	0.001	40	
SDG5	Women's representation in local government bodies (%)	0.001	42	
SDG5	Proportion of women in managerial positions	-	33	
SDG5	Women's participation in decision-making level in the private sector (%)	25	45	
SDG5	Women's participation in cooperative sector (%)	50	50	
SDG5	Women in civil service decision making positions (% of total employees)	11	33	
SDG5	Ratio of women to men in professional and technical workers (%)	24	40	
SDG5	Awareness about reproductive rights among girls and women (percent)- Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care.	59.5	90	
SDG5	Women's ownership of property (land and house)	26	40	30
SDG5	Use of Internet by women aged 15-24 years (percent)	19.60	98.00	
SDG6	Proportion of population using safely managed drinking water services)	15	90	90

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG6	Basic water supply coverage (percent)	87	99	100
SDG6	Proportion of population using safely managed sanitation services including a hand-washing facility with soap and water	30	90	
SDG6	Basic sanitation coverage (percent)	82	99	100
SDG6	Percentage of children under age 5 with Diarrhea in the last 2 weeks	12	1	
SDG6	Proportion of untreated industrial wastewater (%)	99	10	
SDG6	Percentage reduction of untreated domestic wastewater	99	70	50
SDG6	Wastage of water – Irrigation (Field losses in %)	40	1	
SDG6	Non- Revenue Water (%)	20	5	
SDG6	Degree of integrated water resources management	-	60	
SDG6	Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	0.7	0.6	
SDG6	Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	0	100	
SDG7	Proportion of population with access to electricity	74	99	
SDG7	Per capita energy (final) consumption (in gigajoules)	16	24	
SDG7	Households using solid fuel as primary source of energy for cooking (percent)	74.7	30	
SDG7	People using liquid petroleum gas (LPG) for cooking and heating (percent)	18	39	
SDG7	Per capita electricity consumption (Kilo watt hour)	80	1500	750
SDG7	Renewable energy share in the total final energy consumption	11.9	50	30
SDG7	Installed capacity of hydropower (MW)	782	15000	9245
SDG7	Ratio of commercial energy use (MJ) to GDP	3.2	3.14	
SDG7	Energy efficiency in Industry (MJ per 1000 rupees of product)	47.2	40	
SDG7	Electric vehicles in public transport systems (%)	1	50	
SDG8	Annual Growth Rate of Real GDP per capita (%)	-0.9	7	
SDG8	Annual Growth Rate of Real GDP (%)	2.3	7	
SDG8	Life insurance coverage (% of population)	5	25	
SDG8	Number of commercial bank branches per 100,000 adults	18	36	
SDG8	Automated teller machines per 100,000 adult population (number)	11	33	
SDG8	Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider	34	99	90
SDG8	Annual growth rate of real GDP per employed person	1.6	10	
SDG8	Proportion of informal employment in non agriculture employment, by sex	70	10	
SDG8	Contribution of Micro-, Small-, and Medium-scale enterprises in manufacturing value added (%)	-	13	
SDG8	Population per bank and financial institution branch (Number)	7206	1500	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG8	Material Intensity in total manufacturing (Rupees of material input to achieve the output value of Rs 100)	66.1	60	
SDG8	Average hourly earnings of female and male employees (NRs.)	32	100	
SDG8	Unemployment rate (%)	12	8	
SDG8	Proportion of youth (aged 15-24 years) not in education, employment or training	38	15	
SDG8	Youth unemployment rate of age 15-24 (%)	24	15	
SDG8	Proportion and number of children aged 5-17 years engaged in child labour, by sex and age	50	15	
SDG8	Tourism direct GDP as a proportion of total GDP and in growth rate	2.6	8	
SDG8	Tourist arrivals (million)	0.8	3	2
SDG8	Average expenses per visitor per day (\$)	70	100	
SDG8	Average length of stay (days)	13.2	17	
SDG8	Annual number of jobs in tourism industries ('000)	90	1000	
SDG8	Aid for Trade commitments and disbursements	0.2	0.4	
SDG9	Road density (km/sq. km)	0.55	1.5	1.2
SDG9	Paved road density (km/sq. km)	0.01	0.25	
SDG9	Manufacturing value added as a proportion of GDP and per capita	6.6	15	8.6
SDG9	Industry's share in GDP (percent)	15	25	
SDG9	Manufacturing employment as a proportion of total employment	6.6	13	
SDG9	Proportion of small-scale industries with a loan or line of credit	20	30	
SDG9	Research and development expenditure as a proportion of GDP	0.3	1.5	5
SDG9	Enrolment in Science and Technology in proportion to total enrolment (percent)	6.8	15	
SDG9	Number of patents registered	75	1000	
SDG9	Total official international support (official development assistance plus other official flows) to infrastructure	4	18	
SDG9	Industrial value added per unit of capital	0.78	1	
SDG9	Proportion of population covered by a mobile network, by technology	94.5	100	
SDG10	Consumption inequality (measured by the Gini coefficient)	0.33	0.16	
SDG10	Income inequality (measured by the Gini coefficient)	0.46	0.23	
SDG10	Share of bottom 40% of population in total consumption (%)	18.7	23.4	
SDG10	Share of bottom 40% of population in total income (%)	11.9	18	
SDG10	PALMA Index	1.3	1	
SDG10	Share of bottom quintile in national consumption (%)	7.6	12	
SDG10	Social Empowerment Index	0.41	0.7	
SDG10	Economic Empowerment Index	0.34	0.7	
SDG10	Political Empowerment Index	0.65	0.85	
SDG10	Ratio of wage index to consumer price index	2.94	3	
SDG10	Proportion of farm households covered by microfinance (%)	24	40	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG10	Financial Risk Index	27	1	
SDG10	Global Competitive Index (Score)	3.9	6	
SDG10	Remittance costs as a proportion of the amount remitted	3.97	2	
SDG11	Population living in slum and squatters ('000)	500	125	
SDG11	Household units roofed with thatched/straw row (percent)	19	5	2
SDG11	Proportion of urban population living in houses with roof of thatches	3.6	0	
SDG11	Households living in safe houses (percent)	29.8	60	75
SDG11	Access to paved road within 30 minutes of walking (%)	51.4	80	
SDG11	Planned new cities (number)	10	60	
SDG11	Budget allocated for the protection of natural and cultural heritage (%)	1.15	2	
SDG11	Affected population due to disaster (number '00000')	22.3	0.5	
SDG11	Concentration of Total Suspension Particulates ( $\mu\text{g}/\text{m}^3$ , 24 hours' average)	230	115	
SDG11	Concentration of Particulate Matters ( $\mu\text{g}/\text{m}^3$ , 24 hours' average)	120	50	
SDG11	Concentration of PM2.5 ( $\mu\text{g}/\text{m}^3$ , 24 hours' average)	40	20	
SDG11	Concentration of Sulphur Dioxide ( $\mu\text{g}/\text{m}^3$ , 24 hours' average)	70	70	
SDG11	Proportion of women victims of physical or sexual harassment in previous 12 months	14	0	
SDG12	Proportion of total water resource used (%)	10	20	
SDG12	Use of fossil fuel energy consumption (percent of total)	12.5	15	
SDG12	Total carbon sink (tons) in forest area	2276	3200	
SDG12	Land use for agricultural production (cereal as % of cultivated land)	80	75	
SDG12	Soil organic matter (percent)	1	4	
SDG12	Consumption of Wood per capita (cubic metre)	0.11	0.05	0.25
SDG12	Post-harvest loss (%)	15	1	
SDG12	Food loss index (% of supply, Cereal)	10	2	
SDG12	Use of plastics (per capita in gram per day )	2.7	0	
SDG12	Re-cycling of plastics in manufacturing industries (% of industries)	24.5	90	
SDG12	Re-use of glass and metal products in manufacturing industries (% of industries)	7.2	90	
SDG13	Green House Gas emission from transport sector (%)	12	6	
SDG13	Community level adaptation plan	31	750	
SDG13	Implementation of adaptation plan	0	60	
SDG13	Climate-smart villages	0	170	
SDG13	Climate smart farming	0	500	
SDG13	Green House Gas emission from industrial sector (%)	12	6	
SDG13	Green House Gas emission from commercial sector (%)	5	2.5	
SDG13	GHG emission (CH4) from Agri sector (Gg)	614	796	
SDG13	GHG emission (N2O) from Agri sector (Gg)	32.6	39.8	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG13	GHG emission (CO <sub>2</sub> ) from Agri sector (Gg)	23014	29063	
SDG13	GHG emission (CO <sub>2</sub> ) from Industrial sector (cement and lime) (Gg)	632	316	
SDG13	GHG emission (CO <sub>2</sub> ) from energy sector (Industrial, transport and others) (Gg)	7959	3979	
SDG13	Local adaptation plan preparation (number of local levels)	4	120	300
SDG13	Proportion of schools covered by climate change education (%)	80	100	
SDG13	Climate responsive budget (direct) as a percent of total annual budget	5.7	10	
SDG15	Forest area as a proportion of total land area	44.7	45	
SDG15	Forest under community-based management (percent of total dense forest areas)	39	42	
SDG15	Protected area (including forest, in percent of total land area)	23.2	23.3	
SDG15	Conservation of lakes, wetlands, and ponds (number)	1727	5000	
SDG15	Bio-diversity hot spot/corridor (forest conservation area) in Number	10	15	
SDG15	Handover of forests to leasehold forest groups (000 hectare)	44.6	44.6	
SDG15	Afforestation in public and private lands (hectare per annum)	4000	5000	
SDG15	Forest Density (average number of trees per hectare)	430	645	
SDG15	Conservation of rivulets and riverbanks through bio-engineering (km)	1675	10000	
SDG15	Dangerous Glacier lakes (%)	0.37	0	
SDG15	Mountain ecosystems covered by the protected areas (%)	67.8	70	
SDG15	Threatened flora (medicinal and aromatic plants) (%)	0.48	0	
SDG15	Community-led anti-poaching units mobilized (number)	400	400	
SDG15	Threatened fauna (mammals, birds, reptiles, amphibians, fishes, insects, Platyhelminthes, mollusks, etc.) (%)	0.81	0	
SDG15	Wild tigers (number)	198	225	
SDG15	Rhino (number)	534	783	
SDG15	Plant (floral) species under conservation plan (number)	3	54	
SDG15	Animal (faunal) species under conservation plan (number)	5	48	
SDG16	Number of victims of intentional homicide per 100,000 population	4.8	0	
SDG16	Direct deaths from armed and violent conflict (number)	11	0	
SDG16	Children age 1-14 years who experienced psychological aggression or physical punishment during the last one month (%)	81.7	0	
SDG16	Number of victims of human trafficking per 100,000 population	46	33	
SDG16	Children trafficking to abroad per annum (reported number)	64	0	
SDG16	Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18	-	0	
SDG16	Transparency, accountability, and corruption in public (score out of 6)	3	5	
SDG16	Un-sentenced detainees as a proportion of overall prison population	-	11	

SDG	Indicator	2015 (Baseline)	2030 (Initial Target)	2030 (Revised Target)
SDG16	Proportion of seized small arms and light weapons that are recorded and traced, in accordance with international standards and legal instruments	11	1	
SDG16	Good governance (Reported along a scale of -2.5 to 2.5. Higher values correspond to good governance) for control of corruption	-0.78	2	
SDG16	Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by competent authority in line with international instruments	5	0	
SDG16	People's perception on corruption (percent of people with at least one instance in the past 12 months that require to give a bribe/present) (Corruption index score)	29	0	
SDG16	Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)	76	95	85
SDG16	Proportion of population satisfied with their last experience of public services	-	95	
SDG16	Proportions of decision-making positions held by women in public institutions	15	35	
SDG16	Proportion of children under 5 years of age whose births have been registered with a civil authority	58.1	100	95
SDG16	Total no. of individual data collected for National identity card in 100,000 population (number)	0	100	
SDG17	Total government revenue as a proportion of GDP	19.1	30	26
SDG17	Proportion of domestic budget funded by domestic taxes	76	80	
SDG17	Macroeconomic Dashboard	0	8	
SDG17	Official development assistance as a proportion of total domestic budget, (%)	15.1	18	
SDG17	FDI as a proportion of GDP (Inward stock) (%)	4.8	20	7
SDG17	Volume of remittances (in United States dollars) as a proportion of total GDP	29.1	35	
SDG17	Debt service as a proportion of exports of goods and services	12.6	15	
SDG17	Outstanding Debt to GDP Ratio (percent)	26.5	35	
SDG17	Internet Density (per 100 person)	49.8	95	
SDG17	Proportion of individuals using the Internet	46.6	95	





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SINGHADURBAR, KATHMANDU