Social Outlook for Asia and the Pacific
Poorly Protected
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Social Outlook for Asia and the Pacific
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Foreword

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) has one overwhelming priority: supporting its member States achieve the goals of the 2030 Agenda for Sustainable Development. At the heart of this agenda is a commitment to eradicate poverty in all its dimensions. This ambition has shaped this report, which celebrates our region’s successes but shines the spotlight on remaining challenges.

Today, 1.2 billion people in the Asia-Pacific region live in poverty of which 400 million in extreme poverty, mostly in South Asia. Many lack access to services as essential as clean water, electricity, education, health care and bank accounts. This deprivation of opportunity is entrenching poverty, perpetuating it over generations. It is particularly acute in rural areas where work can be dangerous and low paid, health care unavailable or unaffordable and sanitation services lacking. Social protection remains the preserve of a minority, leaving 60 per cent of our population exposed to sickness, disability, unemployment or old age.

Put simply, we need to invest more in our people if we are to achieve the 2030 Agenda for Sustainable Development. Ours is a region which spends below the global average on social protection, health care and education. Yet our research points to a simple correlation on which we must act. Countries which have spent a higher share of their budget on people’s development achieve the greatest poverty reduction. ESCAP quantifies additional investments needed at some $281 billion a year to close the gap as a share of GDP in these sectors. Increasing spending across these areas could lift 328 million people out of poverty and 52 million out of extreme poverty.

Social protection has the greatest poverty reduction potential, and would particularly benefit the most vulnerable. Cambodia, Bhutan, Mongolia, Thailand and Viet Nam have led from the front with this approach and have expertise to share. Our report’s analysis concludes judiciously targeted investment in social protection could eliminate extreme poverty in Bangladesh, India, Nepal and the Philippines by 2030. At a time when inequalities between and within countries are widening, increased investment in the social sector could therefore make a major contribution to getting the region back on track to achieving the 2030 Agenda. That is an opportunity, which I hope, this report will help us seize.

Armida Salsiah Alisjahbana

Under-Secretary-General of the United Nations and Executive Secretary of ESCAP
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Explanatory Notes

ESCAP groupings of countries

**East and North-East Asia (ENEA):** China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia; and the Republic of Korea

**North and Central Asia (NCA):** Armenia; Azerbaijan; Georgia; Kazakhstan; Kyrgyzstan; Russian Federation; Tajikistan; Turkmenistan; Uzbekistan

**Pacific:** American Samoa; Australia; Cook Islands; Fiji; French Polynesia; Guam; Kiribati; Marshall Islands; Micronesia (Federated States of); Nauru; New Caledonia; New Zealand; Niue; Northern Mariana Islands; Palau; Papua New Guinea; Samoa; Solomon Islands; Tonga; Tuvalu; Vanuatu

**South-East Asia (SEA):** Brunei Darussalam; Cambodia; Indonesia; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Thailand; Timor-Leste; Viet Nam

**South and South-West Asia (SSWA):** Afghanistan; Bangladesh; Bhutan; India; Iran (Islamic Republic of); Maldives; Nepal; Pakistan; Sri Lanka; Turkey

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<td>China</td>
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<td>Fiji</td>
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<td>Micronesia (Federated States of)</td>
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<td>IND</td>
<td>India</td>
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<td>Iran (Islamic Republic of)</td>
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<td>Kyrgyzstan</td>
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<td>LAO</td>
<td>Lao People's Democratic Republic</td>
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<td>Sri Lanka</td>
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<td>Tajikistan</td>
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<td>TUR</td>
<td>Turkey</td>
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<td>VNM</td>
<td>Viet Nam</td>
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<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>BAU</td>
<td>business as usual</td>
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<tr>
<td>BIC</td>
<td>Bayesian Information Criterion</td>
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<tr>
<td>Bottom 40</td>
<td>Bottom 40 per cent of households in wealth distribution</td>
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<td>CGE</td>
<td>computable general equilibrium</td>
</tr>
<tr>
<td>CMP</td>
<td>Child Money Programme</td>
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<td>DHS</td>
<td>Demographic and Health Surveys</td>
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<td>GDP</td>
<td>gross domestic product</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>LCA</td>
<td>latent class analysis</td>
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<td>LPG</td>
<td>liquid petroleum gas</td>
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<tr>
<td>MEF</td>
<td>Ministry of Economy and Finance</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MICS</td>
<td>Multiple Indicator Cluster Surveys</td>
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<td>NCD</td>
<td>non-communicable diseases</td>
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<td>NSPC</td>
<td>National Social Protection Council</td>
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<td>NSPPF</td>
<td>National Social Protection Policy Framework</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
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<tr>
<td>pp</td>
<td>percentage point(s)</td>
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<tr>
<td>PPP</td>
<td>purchasing power parity</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>Top 10</td>
<td>Top 10 per cent of households in wealth distribution</td>
</tr>
<tr>
<td>Top 60</td>
<td>Top 60 per cent of households in wealth distribution</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>WDI</td>
<td>World Development Indicators</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Executive Summary

Recognizing the centrality of addressing poverty in all its manifestations, Sustainable Development Goal (SDG) 1 of the 2030 Agenda for Sustainable Development sets out to end poverty in all its forms everywhere. Its Target 1.2 aims to reduce, at least by half, the proportion of men, women and children of all ages living in poverty in all its dimensions by 2030. Target 1.3 of the same goal calls for nationally appropriate social protection systems and measures for all, including floors, and substantial coverage of the poor and the vulnerable.

This publication argues that to reduce poverty in Asia and the Pacific, countries need to step up their investment in people, in particular on social protection, education and health care. To be effective, existing social development policies need to reach the furthest behind. This requires policymakers to identify the country-specific population groups that are disproportionally poor and deprived as well as the specific barriers that hinder their escape from poverty.

MESSAGE 1
Despite the region's progress, poverty remains a key challenge

Between 1990 and 2015, socioeconomic achievements moved more than 80 per cent of the region's extreme poor out of poverty. China and India drove this trend, with China also significantly reducing the proportion of its population living in extreme poverty. In most Asia-Pacific countries, the poor are also marginally better off, as measured by improvements of the poverty gaps. For example, in Myanmar, the gap decreased from 76 to 11 per cent of the $3.20 poverty line, whereas in Bhutan, it fell from 49 to 0.5 per cent.

Despite these tremendous improvements, 1.2 billion people in the Asia-Pacific region still live on less than $3.20 a day. Out of 1.2 billion, 400 million are estimated to live in extreme poverty, below the threshold of $1.90 a day. Of these, almost two thirds live in South Asia, particularly in India. However, smaller countries, such as Papua New Guinea, the Solomon Islands and Timor-Leste continue to have the highest poverty rates and the highest poverty gaps. Throughout the region, poverty is also much higher in rural than in urban areas.

MESSAGE 2
Lacking access to basic services undermines human development

Limited access to fundamental needs, such as basic drinking water, basic sanitation, electricity, clean cooking fuels, a bank account and education undermine human development. This non-monetary form of poverty cuts across generations by impeding their equal participation in society, their ability to feed a family and to live a long, healthy and happy life with dignity.

One and a half billion people, most of whom live in the region's rural areas, lack improved sanitation and less than four in ten have access to affordable health care. About one billion people also work in hazardous and low-paid jobs with insecure employment contracts and little, if any, social protection, with women holding the greater proportion of such jobs. In Afghanistan, Cambodia, Lao People's Democratic Republic and Myanmar, more than eight out of ten households are deprived of several of these basic opportunities.

MESSAGE 3
Underinvestment in people impedes poverty reduction

No country analysed in this report meets the world averages of social spending on social protection, education and health care. Most countries in the Asia-Pacific region spend, on average, less than one-third of the global average of 11.2 per cent of GDP on social protection. Expenditures on education and health care are closer to, but still below, the global averages. Overall, the region needs additional investments of $281 billion per year to match the global spending levels as a share of GDP on these three sectors. More than two thirds of this additional spending would need to be directed to social protection programmes alone.

The implication of this significant underinvestment in social protection is that 60 per cent of the region's people are unprotected against risks such as sickness, disability and unemployment, or during pregnancy or old age. Social protection coverage has the greatest potential to reduce poverty and is one of the core ways the region can see an end to poverty.
MESSAGE 4

A lower level of economic development is not a reason for low social investments

Countries that have driven poverty reduction trends, even at the $3.20 a day rate, have also invested more in education, health and social protection. Oppositely, countries that spend the least often have higher levels of poverty. Levels of investment in the social sector varies significantly between countries with similar income levels. However, social investments can drive development and poverty reduction and countries should not wait to become rich before stepping up this investment.

Governments with higher political commitment to social investments not only spend a higher share of their budget on their people's development, but tend to spend more effectively with better outcomes as a result. Examples of low- and lower-middle income countries that have been successful first movers in this regard include Cambodia, Bhutan, Mongolia, Thailand and Viet Nam.

RECOMMENDATION 1

Accelerate poverty reduction by boosting investment in people

To accelerate progress towards ending poverty, governments need to boost the amount of public spending on social protection, education and health care. The evidence for increasing the level of investment in people in the Asia-Pacific region is overwhelming: around 328 million people would be lifted out of moderate poverty and 52 million people out of extreme poverty with more countries fully eradicating poverty by 2030. Countries would also see an increase in their GDP growth together with reduced income inequalities.

RECOMMENDATION 2

Reap maximum benefits by focusing on social protection investment

The majority of countries in the region need to step up investments in inclusive social protection to meet the global average. The report estimates that such increased investments could be a game changer for poverty reduction by lifting at least 233 million people out of poverty in the Asia-Pacific region. Through increased social protection investments, extreme poverty would also be fully eliminated by 2030 in Bangladesh, India, Nepal and the Philippines, countries that would otherwise miss this target. To leave no one behind, social protection must be inclusive and adequate.

RECOMMENDATION 3

Ensure that social protection investment reaches those left behind

Countries, such as Mongolia, with the highest success rates of reducing poverty through social protection, have designed and implemented inclusive and universal programmes. On the contrary, the region's best performing poverty-targeted programmes record exclusion rates of more than 40 per cent. In these countries, benefits are also often very low, with limited impact for those lucky enough to receive the benefits. Countries that rely on poverty-targeting, with the well-intended aim of directing limited resources to those furthest behind, should therefore consider more inclusive approaches towards reaching the poor.
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Over the past decades, the Asia-Pacific region has made considerable strides in social development, driven by economic growth, which generated new jobs, increased incomes and improved access to basic services and other opportunities. In several countries, more than 80 per cent of the extreme poor were lifted out of poverty.

Despite these advancements, 400 million people are estimated to live below the extreme poverty line of $1.90 a day and another 800 million people are trapped on incomes above $1.90, but below the moderate poverty level of $3.20 a day. An even larger number of people are deprived of basic services and opportunities. Less than 4 out of 10 people in the region have access to health care, and out-of-pocket expenditures for health care are among the highest in the world. One and a half billion people in the region lack access to improved sanitation. The largest numbers of poor and deprived populations live in rural areas.

Large and often increasing inequalities also exist in educational attainment, ownership of a bank account and access to clean fuels. For example, despite high enrolments, in one third of the countries in the Asia-Pacific region, attendance rates in secondary education for the poorest quintile remain below 30 per cent, with four countries at 10 per cent or below. Meanwhile, attendance rates for children from the upper quintile in these countries can be as high as 80 per cent. These gaps cement poverty and deprivation throughout Asia and the Pacific.

This report argues that this large number of poor, deprived and vulnerable people is the manifestation of the exclusion of vulnerable groups from reaping the benefits generated by economic growth and of insufficient investment in people. It also posits that countries do not have to become rich before committing to building their human capital by investing more in people. Investments in education, health care and social protection have
had a measurable impact on poverty reduction, irrespective of the economic development of the country that introduces them. That impact can be significantly magnified by increased and smarter investments.

Currently, most countries in the Asia-Pacific region spend well below the global averages on social protection, education and health care. In fact, developing countries in the region spend on average about 3.7 per cent of GDP on social protection, compared to the world average of 11.2 per cent. This underinvestment is the reason why 60 per cent of the population in the region has no protection if they fall ill, have a disability, become unemployed, pregnant or old.

Social development has taken centre stage in the global debate surrounding the adoption of the 2030 Agenda for Sustainable Development. As core components of sustainable development, several of the Sustainable Development Goals (SDGs) encapsulate tangible social development objectives. For example, SDG 1 aims to end poverty in all its forms, SDG 2 targets the end of hunger, SDG 3 ensures healthy lives, SDG 4 emphasizes quality education, and SDG 5 promotes gender equality. SDG 6 aims to provide clean water and improved sanitation and SDG 7 ensures the accessibility of sustainable and modern energy to all. SDG 8 requires the creation of decent work opportunities, and SDG 10 aims to reduce inequality.

Through the Regional Roadmap for Implementing the 2030 Agenda for Sustainable Development in Asia and the Pacific, the region has also identified social development as a priority thematic area. The Roadmap has called specifically for analytical studies and policy advocacy to address inequalities, reduce poverty and enhance social protection. This report is a response to this call for further analysis of the key issues surrounding poverty.

To assist policymakers in identifying population groups that have not yet benefited from economic growth and poverty reduction efforts in the region, the report conducts a cross-country analysis of poverty in the Asia-Pacific region, both from the monetary and non-monetary (defined here as deprivation) perspectives. The report suggests ways to further bolster public spending in social development in order to successfully implement the 2030 Agenda for Sustainable Development, in particular, the achievement of SDG 1.

The recommendations proposed hinge on different methodologies: the use of cross-country individual and households’ data, computable general equilibrium (CGE) modelling to estimate the impact of increased investments in the social sector for achieving SDG 1 and the identification of the profiles of poor and vulnerable groups of people through latent class analysis (LCA).

The report is structured as follows: chapter 1 analyses trends in income poverty across and within countries in Asia and the Pacific; chapter 2 expands into the non-monetary aspects of poverty and examines deprivation in the region; chapter 3 discusses the inadequacy of public spending - on health care, education and social protection; chapter 4 estimates the reduction in poverty that could come from reaching the global levels of social spending; chapter 5 analyses how to best invest to reach the poorest segments of the population, by identifying the specific profiles of the poor; and chapter 6 concludes the report with a set of recommendations for policymakers to work toward ending poverty in the Asia-Pacific region.
Chapter 1

Poverty remains a challenge
Eradicating extreme poverty is at the centre of all international development efforts. Since 2000, the United Nations has embedded the goal of eradicating extreme hunger and poverty in the first of the Millennium Development Goals (MDG). Likewise, ending poverty in all its forms and dimensions is the first of the Sustainable Development Goals (SDG) and an integral part of the entire 2030 Agenda for Sustainable Development.

The 2030 Agenda, envisages a future in which all people, not just the wealthy, can enjoy prosperous and fulfilling lives. This commitment to leave no-one behind has underpinned a shift in the way poverty-reduction strategies are presented. For instance, SDG 1 aims to develop social protection systems and measures for all, including floors, and by 2030 aims to achieve substantial coverage of the poor and the vulnerable.

The poverty-eradication discourse has also placed special emphasis on minimum living standards as recognized in article 25 of the Universal Declaration of Human Rights adopted by the United Nations General Assembly, in 1948. The article states that everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, medical care and necessary social services. Hence, in the 2030 Agenda, the goal of income poverty eradication is framed jointly with other poverty-related targets, associated with the social, economic and environmental dimensions of development. SDG 3 on health, SDG 4 on education, SDG 6 on water and sanitation and SDG 10 on reducing inequality within and among countries all contribute towards poverty eradication.

The set of indicators established to measure these goals also reflect both monetary and non-monetary considerations. Monetary poverty is measured in both absolute terms (Indicator 1.2.1: “The proportion of the population living below the national poverty line, by sex and age”) and relative terms (Indicator 10.2.1: “The proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions”). These interlinkages require policies that embrace an increasing number of socioeconomic areas to reach the furthest behind.

Overall, poverty definitions can be linked back to three main approaches used by academics and practitioners, namely (1) the monetary approach; (2) the capability approach; and (3) the social exclusion approach. The monetary approach, mainly used in this chapter, identifies poverty as a shortfall either in income or consumption expenditure from a set benchmark. The next chapter will focus on the non-monetary approach, which emerges from the capability and the social exclusion approach.

1.1 Defining poverty

Measures of monetary poverty rely on indicators of welfare, such as income, consumption, wealth, food energy intake and other proxies for assessing whether a household can afford enough basic food and non-food items to meet minimum requirements.

The most common measures of poverty rely on income and consumption data. While income measures refer to the ongoing flow of economic resources that a household receives, such as wages, salaries, money earned through self-employment, private pensions, investments, and social transfers, consumption measures account for the goods and services that individuals purchase to fulfil their needs and wants. The analysis conducted throughout this report relies on statistics that consider both income and consumption-based measures.

Defining a poverty line assumes a clear measurable difference between the poor and the non-poor. A relative poverty is defined in relation to the overall income distribution of a country and is often set at 30 or 50 per cent of the country’s mean or median income. Sometimes, the threshold is also fixed at below 60 per cent of the median income.

Absolute poverty lines are commonly used by governments of low- and middle-income countries. These thresholds are based on the cost of purchasing a basket of commodities and services that meet basic needs. Those who live below the poverty line are poor because they do not have the means to meet their essential food, clothing and shelter needs. Absolute poverty lines have a significant advantage over relative ones as they allow for consistent comparisons of poverty over time.

Poverty measures can also be defined at the national or international level. National poverty lines vary greatly across the Asia and Pacific region both in terms of their value in purchasing power parity (PPP) and their level relative to gross domestic product (GDP) per capita (Figure 1.1). The average national poverty line among the 22 countries for which data are available was $3.51 PPP per day, in 2011, at an average of 19.6 per cent of GDP per capita. China had the lowest national poverty line at $1.78 PPP per day, equivalent to just 6.3 per cent of GDP per capita, and the Russian Federation had the highest national poverty line at $8.30 PPP per day, equivalent to 12.5 per cent of GDP per capita.

At the global level, poverty is measured through international poverty lines, which are periodically set by the World Bank. However, it has been challenging to define a unique threshold that could be adequate for cross-country comparisons that include lower, middle and higher income nations. For instance, in 1990, the World Bank set the international poverty line at $1.00 a day, based on the six lowest national poverty lines from a sample of 33 countries.

The choice of this threshold raised two concerns. First, it failed to take into account other basic needs apart from food and essential non-food spending, such as housing, clothing, and heating. Second, the low amount was not relevant to many countries, which contributed to the slow take-up of the Millennium Development Goals (MDG) agenda in many countries. Therefore, the extreme poverty line was updated to $1.25 a day in 2008 and then to $1.90 a day in 2015, based on a simple average of the national poverty lines from the 15 poorest countries out of a sample of 74 countries. More recently, the World Bank has also agreed on setting higher thresholds at $3.20 and $5.50 a day in middle income countries.

The poverty line as well as other poverty measures derived from it represents a convenient way for conducting different types of within and cross-country analyses (Annex 1.1).
1.2 Trends in poverty

A century ago, around 80 per cent of the global population was considered extremely poor. Despite tremendous population growth, remarkable progress has been made in raising the living standards of the poorest, both in percentage and in absolute terms (Figure 1.2).

The reduction of poverty has accelerated over the past 30 years. According to estimates of the World Bank, almost 1.1 billion people have been lifted out of extreme poverty, globally, since 1990. The most sizeable improvements in eradicating poverty were seen in Asia and the Pacific, where the number of extremely poor people decreased from more than 1 billion to 400 million people.

While economic growth has been vital for reducing poverty, it has not been enough. Growth reduces poverty only when the poor are included in the growth process. In most Asia-Pacific countries, the gains of economic growth have not been distributed equally, resulting in 1.2 billion people still living on incomes below $3.20 a day, with limited opportunity to fulfil their potential.

Among the 400 million people still living in extreme poverty in the region, 8 out of 10 are found in South Asia (Figure 1.3), where over 250 million people live in extreme poverty and almost 900 million live in moderate poverty, most of whom are in India. While India's GDP per capita doubled from 1990 to 2013, this growth was also associated with rising inequality.

1.3 Where are the poor?

While most countries in the Asia-Pacific region have experienced a marked fall in the share of extremely and moderately poor individuals between 1990 and 2013, some nations have contributed more than others in the reduction of poverty, particularly populous countries such as China, India, and Indonesia (Figure 1.4).

Most countries in the region have reduced extreme poverty to below the average global poverty level of 10.7 per cent (Figure 1.5). For instance, China's level of extreme poverty dropped from 67 per cent in 1990 to only 1.9 per cent in 2013. However, Papua New Guinea, Solomon Islands and Timor-Leste still report extreme poverty rates of above 20 per cent. Likewise, the headcount ratio of Bangladesh and of the Lao People's Democratic Republic stands above the global average.
The percentage of people living in moderate poverty has decreased at a slower pace, notwithstanding progress in Bhutan, China, the Islamic Republic of Iran, Kazakhstan, Malaysia, Mongolia, and Thailand. In ten countries in the region over 40 per cent of the population still lives below $3.20 a day. Such is the case for Bangladesh, India, Indonesia, the Lao People’s Democratic Republic, Nepal, Pakistan, Papua New Guinea, Solomon Islands, Timor-Leste and Uzbekistan.

How the fruits of economic growth were invested and shared has clearly played a critical role in determining how effective a country has been in lifting people out of poverty. Despite having similar economic growth rates, Bhutan and Viet Nam were more successful in reducing poverty than India and the Lao People’s Democratic Republic, in part due to higher social spending. Both Bhutan and Viet Nam made considerable long-term investments along with major reform initiatives in health care, education, social protection and in access to water and sanitation.9, 10 Bhutan spends more than 7 per cent

of GDP on education alone and Viet Nam spends close to 6 per cent, a level almost 2.5 times that of the Lao People's Democratic Republic and twice the level in India. Both countries also spend three to four times more on public health care as compared with India and the Lao People's Democratic Republic. 11

Poverty remains mostly a rural phenomenon in Asia and the Pacific. Even though poverty fell faster in rural areas, the absolute number of poor is still much higher in rural areas than in the cities. This is particularly the case for China and India, which are the region's drivers of poverty reduction. For every urban poor person in India and China, there are four rural poor people. Indonesia is an exception, where poverty is equally split between urban and rural areas, as it has invested particularly in rural education, infrastructure and improvements in access to technology. 12

1.4 How poor are the poor?

Despite living on an extremely low income, poor people are not equally poor. The analysis of poverty should therefore also consider the poverty gap index. This measure captures not only the number of individuals living below the poverty line, but also

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11 See Annex Table 3.1.
how far from the poverty line they are (Figure 1.6). The poverty gap indices for different countries can also be interpreted as the amount of money required by a poor household to reach the poverty line. That amount is presented as a fraction of the poverty line that people are lacking, on average, to escape poverty.

Most countries have managed to significantly reduce the poverty gaps in the past three decades, lifting the average poor person closer to the poverty line. In the case of Myanmar, for example, the average shortfall dropped from 76 to 11 per cent of the $3.20 a day poverty line. In Bhutan, it fell from 49 per cent (corresponding to $1.60 per day) to just 0.5 per cent (or $3.18 per day).

Papua New Guinea, Solomon Islands and Timor-Leste have the highest gaps. In general, the depth of poverty remains high throughout the Pacific where the share of people considered extremely poor is also very high. The average poor person in many of the Pacific countries is still more than 15 per cent below the international poverty line.

Overall, those with better opportunities, either because of geographical advantage or higher human capital accumulation, have usually been the first to escape poverty. On the other hand, rural communities, but also women and vulnerable population groups such as religious or ethnic minorities, persons with disabilities, migrants, youth and older persons have often been unable to fully reap the benefits of growth. This unequal distribution of the benefits of growth undermines the principle of universality that encompasses the 2030 Agenda.

1.5 Inequality hinders poverty reduction

The extent to which economic growth can reduce poverty for all depends on how the benefits are shared. If the income gains of the poor are smaller than those of the rest of the population, then growth reinforces marginalization of those left behind and raises between-group inequality.

Theoretically, a reduction in poverty levels can either be achieved through: "distribution-neutral" economic growth, where the average income increases in proportion to the rest of the population; a reduction in inequality, when there is a transfer of income from richer to poorer people; or a combination of the two, where growth benefits everyone and redistributive policies additionally raise the income of the poorest, hence a double effect on poverty. Principles of such inclusiveness and redistribution are behind SDG Target 10.1, which

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**FIGURE 1.6 Poverty gap indices in Asia and the Pacific, 1990 and 2013**


Note: For clarity, the chart shows only countries with the Poverty Gap index of more than 10 per cent in 1990.
calls on countries to “progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average”.

In many countries, however, the mean income of the bottom 40 per cent is significantly lower than that for the overall population (Figure 1.7). In these countries, for the bottom 40 to see progress, their income growth must be substantially higher than the average. The reason is that a 10 per cent increase on an income of $2.00, is far lower than a 5 per cent increase on an income of $10.00. Hence, despite the growth rate being twice as high, absolute income gaps could continue widening for many years.

In Figure 1.7, the group on the left, consisting of Armenia, Bangladesh, Bhutan, Sri Lanka, Tajikistan and Turkey, is off track in achieving Target 10.1, as the bottom 40 per cent of the population had a lower growth rate compared to the overall population. In these countries, the income gap will not only continue to widen, but it will do so at a faster pace. The remaining countries are on track, because the mean income of the bottom 40 per cent of the population has been increasing faster than that of the total population. However, the story of the absolute income gap is different in these remaining countries.

The absolute income gaps of the bottom 40 from the average would also not fall. A simple projection based on recent income levels and income growth trends reveals that, in the middle group of countries, the absolute income gap is going to increase. Since the growth rate of the poorest 40 per cent is not sufficiently high, it could take generations for an average individual of the bottom 40 to see a reduction in the absolute income gap from the average of the population. Assuming that the growth rates remain constant, incomes of the bottom 40 would start to converge after 40 years in Thailand and the Philippines and would take more than 150 years in Indonesia and Pakistan. Hence, relying solely on economic growth will not be enough.

It is only the group on the right, consisting of Fiji, India, the Islamic Republic of Iran, Kyrgyzstan, Mongolia, the Russian Federation and Viet Nam that experience convergence both in absolute and relative income gaps. The reason is that in these countries the income growth rate for the total population was negative, while it was positive for the poorest 40 per cent.

However, many of the countries projected to achieve some convergence in the absolute income levels are also starting from higher gaps. In the Russian Federation, for example, the top 10 earn seven times as much as the bottom 40 and more than three times as much as the average. (Figure 1.7).

**FIGURE 1.7** Average income per day in $ for different groups (latest year)


Note: Numbers indicate percentage point (pp) difference between growth rate of income for the total population and growth rate of income for the bottom 40 per cent. For instance, in the case of Thailand, the value of 1.32 means that the growth rate of the bottom 40 per cent is 1.32 pp higher than for the total population, hence convergence or catching up.
1.6 Ending poverty through redistribution

Based on the values of poverty gaps, it is possible to calculate the levels of transfers needed to eradicate poverty. In other words, what is the amount needed to close the gaps and lift everyone out of extreme poverty ($1.90/day) as well as moderate poverty ($3.20/day). Assuming it would be possible to identify and target all the extremely poor, a total of $43 billion per year would be required to bring everyone in the Asia-Pacific region up to the $1.90 a day.\textsuperscript{13} This corresponds to 0.10 per cent of the region’s aggregate GDP, or less than half of Bill Gate’s net worth.

Bringing everyone up to $3.20 a day would require $419 billion, still only 0.94 per cent of the region’s total GDP, which, as a comparison, is $260 billion less than the military budget of the United States of America.\textsuperscript{14} The cost of closing the poverty gap at the country level, in terms of percentage of GDP, is highest in Timor-Leste, with 2.8 per cent and 17.3 per cent needed to bring its population up to $1.90 and $3.20, respectively (Figure 1.8). In terms of absolute values, India would need $27 billion and $680 billion per year to bring everyone up to the extreme and moderate poverty levels, respectively, followed by Bangladesh (3.5 per cent and $86 billion) and Indonesia (2.5 per cent and $90 billion).

Of course, this is a purely theoretical exercise because it assumes that all poor people under the poverty line can be identified and perfect transfers can be made, without inefficiencies and administrative costs. Nonetheless, it shows that ending poverty is within the region’s financial reach.

While transfers are essential, ending poverty will require more than covering the distance to the poverty line. Poverty also consists of non-monetary aspects; those capabilities that enable people to be productive and live with dignity. Without decent work or access to health care and education, but also to basic household services, including clean water, sanitation and clean fuels, the poor remain vulnerable, exposed to risks and disease, with inadequate disposable incomes and savings.

\textbf{FIGURE 1.8} The cost of closing poverty gaps in the Asia-Pacific region, as percentage of GDP

![Graph showing the cost of closing poverty gaps in the Asia-Pacific region, as percentage of GDP](source)

Note: The GDP measure used for calculation is 2013 GDP, PPP (constant).

\textsuperscript{13} International dollars are a helpful theoretical construct for cross-country comparisons, but they remain a hypothetical currency. The cost in market value dollars would be different.

Chapter 2

Lack of access to basic services undermines human development
While the monetary approach highlights the relevance of income and consumption to measuring poverty, the capability and social exclusion approaches stress the importance of other dimensions that characterize non-monetary poverty.

Non-monetary poverty, here referred to as deprivation, represents the lack of access to basic services and opportunities that have a direct impact on the well-being of an individual or family. Addressing deprivation is recognized as instrumental to ending poverty. SDG Target 1.4 explicitly mentions the importance of “ensuring that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.” This chapter focuses on deprivation of these services and opportunities.

2.1 Why deprivation matters

Millions of people across the Asia-Pacific region live in chronic deprivation of resources and opportunities necessary for the attainment of adequate standards of living. However, the most common deprivation as well as the extent of deprivation varies considerably across countries and call for different policy responses.

Inspired by the Alkire and Foster method of defining multidimensional poverty measures, this section introduces seven distinct dimensions of deprivation that belong to three main domains: economic (decent work and financial services), social (health, education and adequate nutrition) and environmental (clean water and basic sanitation, reliable and affordable energy).  

2.1.1 Access to decent work

Lacking access to decent work reinforces economic deprivation and leaves many people with low disposable income. The importance of this dimension of deprivation is recognized in SDG 8 that focuses on the achievement of inclusive and sustainable economic growth, full and productive employment and decent work for all. In particular, Targets 8.3, 8.5, 8.6 and 8.8 focus on decent jobs for all, including persons with disabilities, youth and migrant workers, regardless of their gender.

Persistent exclusion of certain groups from decent jobs undermines social justice and contributes to rising inequality. Young people face discrimination and exclusion, with consistently higher unemployment rates than their working-age counterparts of over 25 years of age. Women also have lower labour force participation rates and are overrepresented in both vulnerable and low paid jobs. This outcome is the result of widespread discouragement or cultural and institutional barriers to the labour market, which prevent young women from participating in either education or employment.

Informality, mirrored in vulnerable employment, is mainly characterized by the absence of work benefits, such as legal and social protection. While not all workers in the informal economy are poor, there is a frequent overlap; trapped in hazardous, low-paid jobs without any protection or security, workers have few opportunities to escape poverty.

2.1.2 Access to financial services

Financial inclusion is inextricably linked to the attainment of the SDGs. In particular, SDG Target 8.3 calls for the growth of micro-, small- and medium-sized enterprises through the access to financial services, and Target 8.10 stresses the strengthening of the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all. Increased access to financial services helps individuals attain higher standards of living and countries to achieve inclusive growth.

People included in the financial system can save, borrow and invest. Financial inclusion also prevents people from falling back into poverty, by cushioning the blow of unexpected events and by facilitating the habit of financial planning through saving products and insurance. Access to financial services helps farmers, but also small family enterprises, to hedge against financial risk and it facilitates their entrepreneurship efforts by reducing administrative

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and disbursement costs. Furthermore, access to financial services empowers women by vesting in them greater control over their finances and improving their bargaining position within and outside their households, thereby reducing gender inequality.

Finally, financial inclusion can facilitate investment in education and health, ultimately enhancing the quality of life. In this regard, access to financial services fosters the habit of saving and the uptake of medical insurance — both of which equip individuals with the resources to afford medical expenses, to sustain themselves during periods when they are unable to work, and tide them over from health shocks. Women, in particular, benefit from health insurance products due to common health risks stemming from pregnancy and childbirth, including greater susceptibility to infection. Financial inclusion also fosters educational attainment, empowering individuals to plan for and invest in educational opportunities.

2.1.3 Access to health care

Access to affordable, quality health care is an important dimension in the study of deprivation, as it is key to ensuring both healthy lives and poverty eradication. SDG 3 calls for countries to promote wellbeing for all at all ages. More specifically, in Target 3.8, governments commit to universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Moreover, deprivation of health-care services is closely linked to household wealth and income distribution. The World Bank and World Health Organization (WHO) estimate that the scale of impoverishments of households due to out-of-pocket spending on health in some low income countries account for up to four percentage points of the total poverty headcount. Among health-care services, providing access to reproductive care for all women equalizes women’s opportunities for long-term health and productivity benefits. Informed decision-making of the number, timing and spacing of children also improves both the health and earnings outcomes for both mothers and their children. Each birth has been estimated to reduce a reproductive woman's lifetime labour supply by approximately two years. Improvements in reproductive health services are also associated with reduced fertility rates among poorer women, which, in turn, increases their chances of survival. Finally, expanding the availability of oral contraception is linked with the increased number of women pursuing higher education and professional careers, both of which carry positive, long-term impacts on a household’s finances.

2.1.4 Access to education

Being able to access education often results in a better job with higher incomes and a chance to break patterns of poverty and vulnerability. Equal opportunities for education are central to the development agenda: SDG 4 commits to inclusive, equitable and lifelong quality learning opportunities for all. However, while Asia and the Pacific have made considerable achievements in primary education, with primary school net enrolment rates above 90 per cent in almost every country, gross enrolment rates for secondary education vary widely, being as low as 45 per cent in Cambodia and Pakistan.

Access to education shapes the future outcomes of individuals from the earliest stages of their life, directly impacting their earning potential. Education is also a prerequisite for accessing critical knowledge on health and nutrition. Ongoing research finds that the lack of access to key opportunities, such as adequate child nutrition, access to water and sanitation, clean fuels and electricity, associates with lower overall educational attainment in the household.

Girls, in particular, are at risk of poverty due to deprivation of educational opportunities. Traditional gender roles often trap women in bearing the brunt of household work and caretaker tasks, thereby forcing girls to drop out of school. Educating women and girls also carries important health ramifications for children and contributes to strengthening gender equality by reducing unwanted or unplanned pregnancies.

2.1.5 Access to adequate nutrition

Deprivation of adequate nutrition breeds intergenerational poverty, as children of poorer households receive poorer nutrition and are therefore more likely to face the consequences of malnutrition in the long-term. The close link between nutrition and poverty is recognized in SDG Target 2.1, which calls for ending hunger and ensuring access by all people, in particular the poor and the vulnerable, including infants to safe, nutritious and sufficient food all year round. Target 2.2 commits to end all forms of malnutrition.

While income poverty has persistently decreased in recent decades, global hunger has increased from 777 million people in 2015 to 815 million people in 2016, largely as a result of conflicts and climate shocks.22 The Asia-Pacific region is currently home to around 520 million undernourished people.23 In the region, poverty is also associated with stunted growth in 14 out of 19 countries with comparable data.24

For young children, the impact of even short periods of undernutrition carries lifelong consequences for development. When children under 2 years of age are stunted, the impact lasts a lifetime, with inhibited educational outcomes and loss to future productivity and income. Insufficient nutrition, even for shorter periods, can cause slower cognitive, motor and language development among children. As a result, children who are malnourished often perform worse in school and may eventually, drop out of school all together. Deprivation of adequate nutrition therefore cements advantage or disadvantage among children, creating intergenerational cycles of poverty.

2.1.6 Access to clean water and basic sanitation

In the Asia-Pacific region, there are some 260 million people without basic access to clean water and over 1.5 billion people lacking access to basic sanitation.25 Through SDG 6, governments have pledged to “ensure availability and sustainable management of water and sanitation for all”.26

Deprivation of access can result in poor health and can force individuals out of the workforce, increase household healthcare expenditure, and push a family into poverty. For instance, deprivation of basic sanitation facilities is correlated with extreme poverty and countries with higher shares of the population living in extreme poverty also have higher percentages of people practicing open defecation.27

The lack of access to clean water and basic sanitation disproportionally impacts children and women.28 Water-related diseases and those derived from poor sanitation are among the main causes of mortality in children under 5 years of age, with globally more than 1,800 children dying every day due to diarrhoea or other preventable illnesses related to contaminated water, lack of sanitation, or inadequate hygiene.29 Access to water and sanitation is also a key factor for healthy early childhood development with positive long-term outcomes. Moreover, as women often bear the brunt of a household’s domestic work, time-consuming water collection restricts them from engaging in income-generating work or educational activities. Water collection responsibilities also place women at higher risk of suffering health injuries and sexual violence.

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26 In this chapter, the indicators are defined following the “basic” service definition, as was also reported in the MDGs, rather than the “safely managed” services defined in the SDGs. Basic drinking water sources include piped water, boreholes or tube wells, protected dug wells, protected springs, and packaged or delivered water. Basic sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs. The decision to use the less strict definition of “basic” access allows wider country coverage, given the questions asked in the available DHS and MICS surveys.


2.1.7 Access to reliable and affordable energy

Reliable and affordable energy services are also fundamental to everyday life. SDG 7.1 commits the global community to ensuring access to affordable, reliable, sustainable and modern energy for all, with the two related SDG indicators 7.1.1. and 7.1.2 covering access to electricity and primary reliance on clean fuels.30 Almost half of all people in the Asia-Pacific region still rely on traditional and inefficient fuels for cooking and heating, while one in ten still lack access to electricity.31 Most of these belong to the bottom 40 per cent of the population, who globally consume only 10 per cent of all energy.32

Access to clean energy benefits all household members by extending studying hours, cooling and heating homes, pumping water, as well as preserving food and medicine. It also enables individuals to engage in home-based, income-generating activities and use modern technology. Subsequently, poor families with limited access to clean energy are more likely to remain poor. Universal access to clean energy therefore increases productivity, reduces health disparities, and bolsters gender equality and the inclusion of marginalized people.

Reliance on solid fuels negatively affects air quality in homes and in surrounding communities. In low- and middle-income countries, for example, household air pollution is responsible for almost 10 per cent of total mortality, compared to only 0.2 per cent of all deaths in high-income countries.33 Indoor air pollution severely affects young children the most. In Afghanistan, 44 per cent of all deaths attributed to household air pollution in 2012, occurred among children between 0 and 4 years of age.34 As a result, deprivation of clean energy perpetuates disparities in health outcomes among and within countries.

Finally, the use of clean fuels has additional benefits for women in particular, whose health, productivity and educational opportunities are particularly put at risk through time consuming, dirty or dangerous fuel-collecting tasks.

A summary of the most common deprivations by country is presented in Figure 2.1. The data reveal the significant cross-country variations in the lack of access to basic services in Asia and the Pacific. Notwithstanding the heterogeneity in the region, the significant levels of deprivation that countries face in either one or multiple dimensions do have serious ramifications on the lives of millions of people.

2.2 Multiple deprivation

Measuring only the proportion of people deprived in relation to specific opportunities fails to capture deprivation in multiple dimensions that an individual or a household experience. For example, 75 per cent of all households in Afghanistan lack access to improved sanitation and 67 per cent of the households are deprived of clean fuels. However, reviewing each in isolation hides the proportion of households lacking access to both improved sanitation and clean fuel, as well as obscures the number of households that are deprived in additional areas.

Hence, it is important to look at the proportion of each country’s population that is multiply deprived, that is, deprived of two or more opportunities at the same time (Figure 2.2).

In Afghanistan, Cambodia, the Lao People's Democratic Republic and Myanmar, more than eight out of ten households are deprived of at least two opportunities. In the Lao People's Democratic Republic, for example, 16 per cent of all households lack access to two opportunities, almost half lack access to three or four opportunities, while one quarter are deprived in five or six.

In Afghanistan, Cambodia and the Lao People's Democratic Republic, one out of four households faces severe deprivation. Overall, in half of the countries, at least five per cent of households are severely deprived, lacking access to five or six opportunities. Levels of multiple deprivation are lower among households in North and Central Asian countries. Armenia, Kazakhstan, Kyrgyzstan

30 As per the World Health Organization (WHO), “WHO Guidelines for indoor air quality: household fuel combustion, Review 5: Population levels of household air pollution and exposures” (Geneva, 2014), clean fuels include electricity, liquid petroleum gas (LPG), natural gas and biogas, whereas dirty fuels burnt in open fires and leaky stoves include solids such as wood, crop wastes, charcoal, coal and dung.
31 ESCAP, Regional Cooperation for Sustainable Energy in Asia and the Pacific (United Nations publication, Sales No. E.17.II.F.10) (2017).
FIGURE 2.1  Most common deprivation by country

Percentage of households that lack access to clean fuel
- Lao People's Democratic Republic: 96%
- Timor-Leste: 91%
- Vanuatu: 87%
- Bangladesh: 83%
- Phillipines: 63%

Percentage of individuals that lack access to secondary education
- Maldives: 87%
- Bhutan: 83%
- India: 68%

Percentage of households that lack access to a bank account
- Kyrgyzstan: 98%
- Tajikistan: 98%
- Myanmar: 88%
- Cambodia: 88%
- Pakistan: 73%
- Turkmenistan: 63%

Percentage of individuals that lack access to full-time employment
- Afghanistan: 90%
- Nepal: 83%
- Viet Nam: 68%
- Armenia: 64%
- Thailand: 63%
- Kazakhstan: 36%

Percentage of individuals that lack access to professional help in childbirth
- Indonesia: 72%

Percentage of households that lack access to basic sanitation
- Mongolia: 74%

Source: ESCAP elaboration based on DHS and MICS household surveys.

FIGURE 2.2  Multiple deprivation in the Asia-Pacific region

Source: ESCAP elaboration based on DHS and MICS household surveys, latest year.
Note: The Figure includes deprivation in access to basic drinking water, basic sanitation, electricity, clean cooking fuels, financial services and education. A household is considered deprived in education if no household member has secondary or higher education.
and Turkmenistan rank significantly better than countries in other subregions, with no households deprived of five or all six opportunities.

Combining data about multiple deprivation with the income level of the countries considered, shows that higher economic development, generally goes hand in hand with lower levels of multiple deprivation (Figure 2.3). While upper-middle income countries, such as Kazakhstan and Maldives, display the smallest percentage of deprived households, 4 per cent and 13 per cent respectively, countries belonging to the lower-middle income group are more heterogeneous. For example, the percentage of deprived households ranges from 18 per cent in Turkmenistan to 63 per cent in Mongolia.

Variations in multiple deprivation increase further among low income countries. Afghanistan, Cambodia, the Lao People’s Democratic Republic and Myanmar all show more than 80 per cent of households lacking access to multiple opportunities. At the same time, India, Kyrgyzstan, Nepal and Tajikistan experience lower multiple deprivation levels than Indonesia and Mongolia, despite being poorer overall. In particular, around 30 per cent of households are deprived in Kyrgyzstan, a low income country, comparable to lower-middle income countries like the Philippines and Thailand.

The range of outcomes among low income and lower-middle income countries suggests that eliminating deprivations is also a matter of political choice. Investing in electricity and water supply networks, supporting the proliferation of improved sanitation facilities and markets for clean fuels, while lowering the cost and raising the quality of education and health care could be in the hands of governments.

The evidence in this chapter shows that the level of economic development does not determine the ability or political will to invest in meeting people’s basic needs. The following chapters will focus on two instrumental dimensions of deprivation, education and health care, as well as on social protection. Together, these sectors make up a country’s social spending.

The special emphasis on social protection is warranted because income transfers made through social protection schemes have multiple poverty reducing-impacts: they can lift people out of monetary poverty, but they can also buffer their income, so they can cover other basic needs and escape deprivation. It is also the sector where Asia-Pacific governments are investing the least.

**FIGURE 2.3 Multiple deprivation by country income groupings**

Source: ESCAP elaboration based on DHS and MICS household surveys and World Bank classification of countries, latest year.
Chapter 3

All countries can afford to spend more on people
Social spending, here defined as public spending on education, health care and social protection, is instrumental for accelerating poverty reduction. It empowers the poor and increases their chances to contribute to and benefit from the growth process, thus creating societies with greater cohesion. By strengthening human capacities, social spending also becomes an investment that increases productivity and promotes innovation, both of which boost economic growth.

Evidence has been accumulating in support of these claims. For example, a recent study of 19 OECD countries showed that public health and education expenditure contributed more to GDP growth than private expenditure. This argument is even stronger for developing countries. In the health sector an increase of 1 per cent in public health investments reduces child mortality rates by approximately 0.86 per cent. In the education sector, 1 dollar invested in schooling, particularly for girls, generates earnings and health benefits (benefit-cost ratio) of 10 dollars in low income countries and 4 dollars in lower-middle income countries. Overall, nearly one third of the reductions in adult mortality rate, since 1970, can be attributed to gains in educating girls and young women.

The positive impact of investment in people is evident in the Asia-Pacific region as well. Perhaps the most illustrous proof of the impact increased public social spending has on poverty alleviation in the Asia-Pacific region, and arguably globally, is that of the “East-Asian miracle”, whereby, Japan, followed by the “Asian tigers”, including Hong Kong, China, the Republic of Korea, Singapore, Taiwan, and later China, lifted millions out of poverty as a result of economic growth backed by high investments in human capital.

More countries in the region are slowly adopting these lessons. Since the early 2000s, public expenditure on education, health and social protection, as a share of total public expenditures has increased in most Asia-Pacific countries (Figure 3.1). The increase was more evident in countries with lower starting levels, particularly those spending less than 30 per cent of total public expenditures combined.

FIGURE 3.1 Changes in public spending on education, health and social protection, as percentage of total public spending


3.1 Is the region investing enough?

This increase is promising, but modest. The additional spending recorded over the past few years is not sufficient to meet the growing needs for investment in people. As the next chapter shows, a financing gap of $4.2 trillion or $281 billion per year remains, if the region is to meet the global spending average on education, health care and social protection, as a share of GDP. More than half of that amount is the gap for financing social protection.

The increase in public investment in people across Asia-Pacific countries has also not been commensurate with GDP growth. As a result, the region falls below global averages in public expenditure as a share of GDP. For example, at 3.7 per cent of GDP, the average public expenditure on social protection among developing countries in the region is about one-third of the global average of 11.2 per cent. OECD countries, on the other hand, spend an average of 21 per cent of GDP on social protection — excluding health care spending. The implication of this significant underinvestment in social protection is that 60 per cent of the region’s population is unprotected against risks such as sickness, disability and unemployment, or during pregnancy or old age.

Public expenditures on health and on education are closer to the global average levels of 4.2 and 4.7 per cent respectively. However, not all countries in the region are investing at the same level. For example, the average expenditure on education in the region’s middle-income countries is only 3.6 per cent of GDP.

Of the 26 Asia-Pacific countries analysed, none has reached the combined world average of 20.1 per cent spending of GDP on education, health and social protection (Figure 3.2). In fact, only five countries — the Islamic Republic of Iran, Kyrgyzstan, Mongolia, Timor-Leste and Turkey — are close to three quarters of the target, with Turkey spending the most at 18.3 per cent of its GDP. Bhutan, China, Thailand and Viet Nam spent about half the global average.

**FIGURE 3.2** Public spending on education, health and social protection as share of GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Education</th>
<th>Health</th>
<th>Social protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>18.3%</td>
<td>1.3%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Iran (Islamic Republic of)</td>
<td>16.9%</td>
<td>1.3%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>14.9%</td>
<td>1.3%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Bhutan</td>
<td>14.8%</td>
<td>1.3%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Nepal</td>
<td>14.7%</td>
<td>1.3%</td>
<td>4.0%</td>
</tr>
<tr>
<td>India</td>
<td>13.3%</td>
<td>1.3%</td>
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<tr>
<td>Sri Lanka</td>
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<td>Nepal</td>
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<td>India</td>
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<td>Bangladesh</td>
<td>12.6%</td>
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</tbody>
</table>

**Note:** The figure refers to “Public Social Protection Expenditure, Excluding Health, Latest Available Year (percentage of GDP)”. The definition includes 1) Public social protection expenditure for older persons (% of GDP, without health); 2) Public social protection expenditure for persons of active age (% of GDP, without health), including social benefits for persons of active age, unemployment benefits, labour market programmes, sickness, maternity, employment injury, disability, and general social assistance; and 3) Public social protection expenditure for children (% of GDP, without health).

40 ESCAP calculations according to CGE modelling, based on current and projected spending needed to reach the global average for education, health and social protection in 26 Asia-Pacific countries by 2030.
41 When including Australia, Japan, New Zealand and the Republic of Korea, the regional average increases to 6.6 per cent.
average in total. Bangladesh, which spends only 3.6 per cent of its GDP on these three social areas, will need to increase its investment by close to six times to meet the world average.

To reach the global average of public expenditure on education alone, Bangladesh, Sri Lanka, Cambodia, China, Myanmar and Georgia will need to more than double their share, while Myanmar needs to triple its share. In the health sector, except for Turkey that exceeds the global average, all other countries will need to increase expenditures.

As for social protection spending, apart from Azerbaijan, China, Georgia, Islamic Republic of Iran, Mongolia, Timor-Leste and Turkey, all other countries will have to at least double their percentage of public investments in the sector. Bangladesh, Cambodia and the Philippines will need to increase spending by more than 10 times, Fiji will need to increase by almost 30 times and the Lao People’s Democratic Republic by more than 50 times. The Islamic Republic of Iran fares the best, and only needs to increase its current social protection spending from 10.1 per cent of GDP to 11.2 per cent, while Mongolia comes in next, with a required increase of 1.6 percentage points.

This underinvestment has consequences for poverty reduction. In Figure 3.3, the combined share of GDP spent on education, health care and social protection is plotted against levels of moderate poverty at $3.20 per day.

The message is clear: spending levels matter. Countries that spend less than a quarter of the global average of 20.1 per cent of GDP also have the highest levels of moderate poverty. The range goes from 39 per cent in Myanmar to 56 per cent in Bangladesh. On the other end, those countries that invest more than three quarters of the global average also have the lowest levels of moderate poverty. Countries in between reveal quite a varied performance, alluding to the fact that, how well a country spends is also important (discussed in Chapter 5).

A second subtler message, is that the level of economic development does not have to determine the level of investment. Among the region’s lower middle-income countries (blue colour), some are investing more than others. Those that invest more, such as Azerbaijan, Bhutan, the Islamic Republic of Iran, Mongolia and Thailand have lower poverty than those that invest less, such as Indonesia and the Philippines. Similarly, some low income countries (red colour), such as Kyrgyzstan and Viet Nam invest

**FIGURE 3.3** Poverty rate ($3.20/day) and social spending as a share of GDP compared with the global average (20.1 per cent)

Source: ESCAP elaboration based on World Bank Development Indicators and social spending data as in Figure 3.2.

Note: The red colour represent low income countries, the blue colours represent lower-middle income countries, and the yellow colour represent upper-middle income countries.
a lot more than Bangladesh, Lao People’s Democratic Republic, Myanmar and Pakistan, with relatively better outcomes.

While a lower level of economic development is not a reason for low social spending, low spending is associated with persistent monetary poverty.

### 3.2 Income poverty, deprivation and social spending

The findings above invite a further exploration of how social spending levels relate to both monetary poverty and multiple deprivations. Chapter 2 already suggested that eliminating multiple deprivations is a matter of political choice, given the range of deprivation levels in low income and lower-middle income countries. This can be explored by grouping countries based on their levels of both monetary poverty and multiple deprivations (Figure 3.4).

Countries with below-average levels of both income poverty (at $3.20 per day) and multiple deprivations (defined as deprivation in two or more opportunities), including Armenia, Kazakhstan, Kyrgyzstan, Thailand and Turkmenistan, generally invest most in their people (lower left quadrant). These countries have all reduced poverty and deprivations to below the regional average. These countries also spend more than 15 per cent of their total public expenditures on social protection, representing around 4 per cent of GDP. Most of these best performing countries also spend above average on health care and education (see Annex Table 3.1). A notable exception is Armenia that spends as much as 30 per cent on social protection, but below average on education and healthcare. Overall, Armenia and Kyrgyzstan invest the most in people, with 45 per cent of their total public expenditure used on social protection, health care and education.

On the other end are countries such as Bangladesh, Indonesia, Lao People’s Democratic Republic, Myanmar, Nepal, Pakistan and Timor-Leste, with high income poverty and multiple deprivation (upper right quadrant). Data on the share of public investment are scarcer among this group of countries, but most invest far below the average.43 Timor-Leste also has the highest level of moderate poverty, with three quarters of the population living below $3.20 per day.

#### FIGURE 3.4 Relationship between monetary poverty and multiple deprivation

Source: ESCAP elaboration based on DHS and MICS household surveys, latest year.

Note 1: The average head count ratio of moderate poverty stands at 29 per cent of the population, while the average incidence of multiple household deprivation is 32 per cent. Both values represent the simple average of countries with data availability depicted in this graph.

Note 2: The red colour represents low income countries, blue colour represents lower-middle income countries, and the yellow colour represents upper-middle income countries.

43 As a share of GDP, Timor-Leste appears to be a positive outlier, spending around 15 per cent on education, health and social protection, but that figure is partly explained by its lower GDP.
The bottom-right quadrant includes Bhutan, Mongolia and Viet Nam, where the share of people living with multiple deprivation greatly exceeds those experiencing monetary poverty. Both Bhutan and Mongolia have almost eradicated monetary poverty but multiple deprivation remains high. In Mongolia, the most important driver of multiple deprivation is lack of basic sanitation. Lack of access to basic drinking water further exacerbates the vulnerability of rural populations engaged in semi-nomadic livestock herding, which is a primary source of livelihood for one third of its population.\(^{44}\) In Bhutan, where only 3 per cent of the population lives in poverty, more than 80 per cent of the population lack secondary education, and more than half do not have a bank account, explaining the high levels of multiple deprivation. All three countries have boosted investments in people, but with different focus areas. Bhutan and Viet Nam spend above the Asia-Pacific average on health and education, but less on social protection.\(^{45}\) Mongolia, on the other hand, spends 21 per cent of all its public expenditure on social protection, the highest share of all countries covered (Annex Table 3.1). While social spending among these countries is above average, the levels have either not been sufficient in one or several areas, or they have not been matched with critical infrastructure investments, including in sanitation and access to financial services.

India and the Philippines stand close to the margins of the upper left quadrant, with reversed poverty outcomes: higher than average monetary poverty and lower levels of multiple deprivation. These countries also spend above the Asia-Pacific average on education, but less on health care and social protection. India's progress in achieving almost universal access to financial services, by doubling the number of bank account holders in less than 10 years, explains its success in reducing levels of multiple deprivation. India has also seen improvements in educational attainment thanks to its above average spending on education, as well as access to clean drinking water and to professional help during childbirth.\(^{46}\) The Philippines also spends above average on education, which explains lower multiple deprivation levels, but below average on social protection, which is reflected in the higher than average levels of monetary poverty. The combined share of social spending in this group of countries is below the region's average, both as a share of public expenditure, and as a share of GDP (Annex Table 3.1).

Ultimately governments need to simultaneously address both monetary poverty and multiple deprivation. Access to basic services frees up time and resources for poor people to engage in productive activities and raise their income and consumption levels, all of which are critical for escaping poverty. This relationship goes both ways: when people have adequate income, they usually can afford to cover their basic needs, including those of education and health care. On the other hand, the experience of income poverty is significantly worsened if there is also lack of access to basic household services.

Higher or lower levels of social spending and differences in focus reflect political choices. India, Nepal and the Philippines have chosen to invest more in education, while Mongolia has emphasized social protection and Bhutan has focused on both education and health care. The most successful countries, however, are those who invest in all three.

To end poverty, irrespective of the country's level of development, all governments in the region should make efforts to increase spending to reach, at the minimum, the global averages.

The following chapter employs a computerized general equilibrium (CGE) model to project the impact of public investment in education, health care and social protection on poverty. The premise is that added investment in the social sector has the potential to make the transition out of poverty easier, faster and more sustainable.

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45 Viet Nam follows a similar pattern as Bhutan, although comparable data were only available as a share of GDP, not public expenditure.
46 ESCAP, 2018. Inequality in Asia and the Pacific in the era of the 2030 Agenda for Sustainable Development (United Nations publication, Sales No. E.18.II.F.13).
Chapter 4

Increased social spending will accelerate poverty reduction
Beyond the indisputable need for more effective investment in the social sector, discussed later in this report, this chapter shows that, all else being equal, higher levels of social spending could accelerate poverty reduction efforts in the Asia-Pacific region.

As this chapter will demonstrate, a financing gap of $4.2 trillion or $281 billion per year remains, if the region is to meet the global average investment in education, health care and social protection, as a share of GDP. More than two thirds of that amount is the gap for financing social protection, amounting to $2.8 trillion or $187 billion per year. The gap in education and health is lower, at $57 billion and $37 billion per year, respectively.

To project the impact that additional spending on these three social sectors could have on poverty reduction up to 2030, a comparative static computable general equilibrium (CGE) model is used (for an explanation of how the model works, please see Annex 4.1). The exercise seeks to uncover the extent to which poverty can be reduced and eventually eradicated in the Asia-Pacific region, should countries increase their public social spending levels, measured as a percentage of GDP, to match the global averages of the three sectors. In the model, these increases are being phased up to 2030.

Used as a benchmark, these global average levels are achievable and in line with recommendations of the UN entities mandated to lead and coordinate the sectors’ development. UNESCO, for example, recommends public education expenditure to be between 4 to 6 per cent of GDP and 16 to 20 per cent of total public expenditure.

4.1 The impact of social spending on extreme poverty

Without additional investments in the three social areas, it is estimated that at least half of the countries examined will miss achieving SDG Target 1.1 of eradicating extreme poverty. Among them will be Bangladesh, India, Nepal and the Philippines.

If governments boost their investment in social protection to reach the global average of 11.2 per cent of GDP, the added impact on extreme poverty reduction would be significant. At this higher rate of investment in social protection, five countries would have eradicated poverty by 2020, five more by 2025, and a total of 16 out of 19 countries would have successfully eradicated poverty by 2030, including Bangladesh, India, Nepal and the Philippines (Figure 4.1).

Overall, an additional 51 million women, men and children would be lifted out of poverty by 2030 if countries reach the global average of investment in social protection. The rate at which people will be lifted out of poverty will accelerate almost immediately.

Increasing investment in education to reach the global average of 4.7 per cent would also accelerate poverty reduction, although the boost would not be as strong as with social protection, because education expenditure is already closer to the global mean in most countries. Under this scenario, Armenia and Indonesia would have eradicated extreme poverty by 2025, and by 2030, Kyrgyzstan and Myanmar would also be successful in this respect. While not reaching full poverty eradication, India would have made significant progress, reducing its extreme poverty rates to just above 1 per cent.

The additional investment in education would also translate to lifting another 26 million people out of poverty by 2030. Of them, 17 million would be in India alone, while another 6 million would be in Bangladesh.

Gradually boosting public health care expenditure to reach the global average level of 4.2 per cent of GDP would eliminate poverty in Armenia, Indonesia, Kyrgyzstan and Sri Lanka by 2025 for the first three countries and by 2020 for the latter. Across the region, an additional 36 million people would be lifted out of poverty by 2030.

47 ESCAP calculations according to CGE modelling, based on current and projected spending needed to reach the global average for education, health and social protection in 26 Asia-Pacific countries by 2030.
49 A total of 26 countries were considered, 7 of which had almost zero poverty rate at $1.90 a day. Therefore, the results are presented out of 19 countries.
While focusing on each of the three interventions independently does yield quicker gains for countries, introducing the three investments simultaneously would provide the greatest benefits for individual countries and for the region as a whole.

By 2020, a total of seven countries, would have eliminated extreme poverty across the region, twice as many as in the business as usual (BAU) scenario. By 2025, an additional 11 countries would move out of poverty and, by 2030, all countries, except Papua New Guinea and Timor-Leste would have eradicated extreme poverty.

4.2 The impact of social spending on moderate poverty

While many countries in the region have the potential to eradicate extreme poverty by 2030, set at the international poverty line of $1.90 a day, many people would still live below the lower-middle income or moderate poverty line of $3.20 per day.\(^5\) Overcoming moderate poverty is tougher for all developing countries in the region.

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\(^5\) In addition to the $1.90 international poverty line, the World Bank also reports a lower middle-income International Poverty Line, set at $3.20/day; and an upper middle-income International Poverty Line, set at $5.50/day.
In a growth-led, business as usual scenario, only 6 out of 24 countries would eradicate poverty at $3.20 per day (Figure 4.2). Among them, only China would begin from a relatively higher poverty rate of 8.7 per cent. The other successful countries would start from an initial moderate poverty rate of less than 2.5 per cent of their population. For the remaining 18 countries to record such achievements, significant additional investments in people would be needed.

Supplementing the growth-led, business-as-usual scenario with increased public spending on social protection would have the greatest impact on lifting people above the $3.20 a day line, in both the short term (by 2020) and the long term (by 2030). By 2020, three additional countries, Azerbaijan, Malaysia and Thailand, would eliminate moderate poverty. By 2030, Armenia, Fiji, Tajikistan and Viet Nam would also succeed in lifting all of their population above that threshold.

Altogether, if countries in the region increased their investments in public spending on social protection to meet the global average, at least an additional 233 million people would be lifted above the $3.20 per day poverty line. Given the higher number of total people living below that threshold today, the gains are a lot more impressive than those recorded for extreme poverty. These gains also would be made in all countries, whether they succeed in fully eliminating moderate poverty or not.

**FIGURE 4.2 Number of countries eliminating moderate poverty ($3.20/day) through more spending on education, health, social protection and all three combined**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SCENARIO</th>
<th>ADDITIONAL PEOPLE LIFTED OUT OF MODERATE POVERTY IN THE REGION</th>
<th>ADDITIONAL COUNTRIES LIFTED OUT OF MODERATE POVERTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>BUSINESS AS USUAL</td>
<td>+ EDUCATION 67 million</td>
<td>AZE, THA</td>
</tr>
<tr>
<td></td>
<td>NO COUNTRIES LIFTED OUT OF MODERATE POVERTY</td>
<td>+ HEALTH 88 million</td>
<td>AZE, THA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ SOCIAL PROTECTION 126 million</td>
<td>AZE, THA, MYS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>148 million PEOPLE IN THE REGION OUT OF POVERTY</td>
<td>+ EDUCATION, HEALTH, AND SOCIAL PROTECTION 201 million</td>
</tr>
<tr>
<td>2025</td>
<td>BUSINESS AS USUAL</td>
<td>+ EDUCATION 95 million</td>
<td>MYS</td>
</tr>
<tr>
<td></td>
<td>NEW COUNTRIES LIFTED OUT OF MODERATE POVERTY</td>
<td>+ HEALTH 110 million</td>
<td>MYS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ SOCIAL PROTECTION 167 million</td>
<td>MYS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>313 million PEOPLE IN THE REGION OUT OF POVERTY</td>
<td>+ EDUCATION, HEALTH, AND SOCIAL PROTECTION 245 million</td>
</tr>
<tr>
<td>2030</td>
<td>BUSINESS AS USUAL</td>
<td>+ EDUCATION 128 million</td>
<td>ARM, IRN</td>
</tr>
<tr>
<td></td>
<td>NEW COUNTRIES LIFTED OUT OF MODERATE POVERTY</td>
<td>+ HEALTH 147 million</td>
<td>ARM, IRN, VNM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ SOCIAL PROTECTION 233 million</td>
<td>ARM, TJK, VNM, FJI</td>
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<tr>
<td></td>
<td></td>
<td>427 million PEOPLE IN THE REGION OUT OF POVERTY</td>
<td>+ EDUCATION, HEALTH, AND SOCIAL PROTECTION 328 million</td>
</tr>
</tbody>
</table>

Source: ESCAP calculations from CGE modelling.

Note 1: In this calculation, the cut-off for a country to be considered as having eliminated moderate poverty is if the poverty headcount ratio falls below 0.5 per cent, meaning that less than 0.5 per cent of the population live with less than $3.20 a day. The CGE model considers a total of 25 countries, 24 of which have more than 0.5 per cent moderate poverty rate in 2016 (minus Kazakhstan).

Note 2: The numbers of people escaping poverty are calculated from across the 25 countries examined in this analysis and not just the countries listed as fully eliminating poverty.

A total of 25 countries were considered in the model for $3.20 a day, however, no data was available for Cambodia and only Kazakhstan had almost zero poverty rate at $3.20 a day. Therefore, these results are presented out of 24 countries.
Reaching global targets on education would eradicate moderate poverty in Armenia and the Islamic Republic of Iran, while Viet Nam would nearly join that group of successful countries, reducing its moderate poverty headcount ratio to less than 1 per cent. Overall, by 2030, the gains from all 25 countries would translate to an additional 128 million people lifted above $3.20 per day, of which 84 million would be in India alone.

The estimated impact of increasing public spending on health is very similar to that for education. However, by 2030, additional health expenditure would result in higher gains by also adding Viet Nam to the list of successful countries.

As expected, increasing spending across all three social sectors to reach the global standards would be the most effective path towards reducing moderate poverty. By 2020, this combined scenario would be mainly attributed to the increase in social protection spending and 200 million people would be lifted out of moderate poverty. The gains would continue in 2025 and by 2030, an additional 328.6 million people would be lifted out of poverty, compared with the BAU scenario. Armenia, Fiji, the Islamic Republic of Iran, Tajikistan and Viet Nam would all eliminate poverty at this level.

**BOX 4.1 Beyond the $5.50 per day poverty rate**

With several countries in the Asia-Pacific region having reached upper middle-income country status, a discussion of the impact of public social investments against the $5.50 per day poverty line is also relevant.

Projection results show that none of the 25 countries analysed lift their populations out of poverty at $5.50 per day should business continue as usual. In fact, in many countries, the number of people living below the $5.50 per day threshold would increase, because of population growth alone. By 2030, Bangladesh would count for 11 million more people living below $5.50 per day, while Pakistan, Papua New Guinea and the Philippines would all count for more than 1 million additional people.

Overall in the region, growth alone (BAU) would still successfully lift about 414 million people above that threshold, but a lot more could be achieved if governments reached the global average investment benchmarks in the social sectors. Compared with the BAU scenario, additional spending to reach the global average on:

- *social protection* would lift an additional 397 million additional people above $5.50 per day
- *education* would lift 206 million additional people above $5.50 per day
- *health* would lift 194 million more people above $5.50 per day.
4.3 The impact of social spending on economic growth and inequality

Additional investments in people are not only critical for poverty reduction efforts but also help in boosting economic growth and dampening inequality.

The effect of higher investments in health, education and social protection on productivity would also translate into an increase in GDP growth rates across the region. Over the period 2016–2030, growth would increase from 4.9 per cent in the BAU scenario to 6.0 per cent, a 20 per cent increase in the annualized growth rate. Nepal and Pakistan would record a 50 per cent increase in growth rates and Armenia, Kazakhstan, Papua New Guinea, Sri Lanka and Tajikistan would record around 40 per cent increases.

Increased spending on social protection alone, to reach the global average, would boost GDP growth rates by 0.7 percentage points to 5.6 per cent on average, with the highest impact in Cambodia, Nepal, Pakistan and Sri Lanka. Additional investment in education and health would result in an average of 0.3 percentage points, respectively.

Inequality would also inevitably fall as a result of productivity gains across the board, but also through the direct increase of people’s real income resulting from social protection transfers. The equalizing effect of boosting expenditures on social protection to meet the global average would reduce the unweighted Gini coefficient of 26 countries by 5 percentage points, from an average of 35.8 to one of 30.7. The impact would be greatest in Indonesia, Kazakhstan, Nepal and Sri Lanka. The equalizing effect of education would be greatest in Pakistan and Sri Lanka, where the Gini would fall by more than 2.2 percentage points.

4.4 Implications for policymaking and budgeting

The evidence for increasing the level of investment in people in the Asia-Pacific region is overwhelming: 328 million people would be lifted out of moderate poverty and 52 million people out of extreme poverty with more countries fully eradicating poverty by 2030. Countries would also see an increase in their GDP growth together with reduced inequalities. Such achievements are within the realistic goal of matching the global average level of investment in three core areas: social protection, education and health care.

In these sectors, public support is easy to summon across the spectrum of any society. They are also areas with additional positive externalities, such as environmental sustainability, innovation and social cohesion, aspects which are not captured in the CGE model. Investments in any one of the three areas would push economies towards the right direction, spearheading possibly further public and private investments toward the other two.

The financing need to reach the global averages on social protection, education and health care is estimated to a total annual amount of $281 billion for the region as a whole, of which more than half would be required by China ($154 billion) and India ($59 billion). Figure 4.3 depicts this financing gap for reaching the goals set out in this analysis.

For the region, the combined additional annual investments would be the lowest on health care at $37 billion, because health expenditures are closest to the target. This means that the added investment need in the majority of countries would be below $500 million per year. For education, the region’s annual total amount would reach $57 billion, but only around $1 to $2 billion a year in Bangladesh, Indonesia and the Philippines. For social protection, the cost would be higher and translate into approximately $187 billion per year, because countries are generally further from the target of 11.2 per cent of GDP. The bulk of this expenditure would take place in China ($95 billion) and in India ($43 billion).
While these amounts may appear high, many countries in the region spend more on the defence sector alone or on infrastructure projects.\textsuperscript{52} Among competing demands from various sectors how can policymakers and development practitioners focus their interventions to best reach the furthest behind? A mere increase in investment may not always be enough. Public expenditure in any area, including education, health and social protection, can be mired by inefficiency, misallocation of funds and corruption. While investing more is important, governments also need to invest smarter. The following chapter highlights that policymakers need to not only prioritize interventions and allocate scarce resources in an effective way, they also need to know which individual and institutional circumstances interact and keep people in poverty. They need to know who exactly the poor are.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{financing_gaps_fig4.png}
\caption{Financing gaps for reaching global social spending targets}
\end{figure}

Social policies need to reach those left behind
Higher spending does not always guarantee better outcomes. In practice, institutional and governance arrangements as well as policy design and implementation determine the extent to which these investments contribute to effective poverty reduction. Well designed and implemented social development policies are critical and effective mechanisms for breaking cycles of poverty. Knowing who the poor are is a cost-effective way for countries to better direct interventions toward population groups that need them the most.

5.1 Identifying the poor

Understanding the causes of monetary poverty and deprivation is a challenging task. Being able to identify common demographic characteristics and specific barriers facing the poor, can help policymakers concentrate poverty-reduction efforts to where they may have the greatest impact. The 2030 Agenda for Sustainable Development specifically calls for disaggregating poverty-related indicators by population group, to highlight those being left behind.

People may face an array of barriers that hamper their efforts to escape poverty, from lack of decent work, to low education, health problems, migrant or minority status or having young families to support. To analyse the circumstances that act as barriers to escaping poverty, the analysis below uses latent class analysis (LCA) and data from the Gallup World Poll. It presents individuals living on less than $3.20 per day in different profiles, which capture the relative incidence and intensity of each barrier.

The poverty profiles are then grouped by countries with similar income levels: low income, lower-middle income and upper-middle income. The most common barrier that poor people face across all income groupings in the region is not having a full-time job; being underemployed or unemployed. For many countries in the region, this usually means working in a vulnerable job in the informal sector (Figure 5.1).

In the region’s low income countries, the next most common shared barrier to escaping poverty is living in a rural area and lacking adequate and relevant skills. Among those living below the $3.20 per day
threshold, almost no one has completed tertiary education and only one third have completed secondary education. Almost eight out of ten poor people also have young children and two out of three people are below the age of 50.

In the region’s lower-middle income countries, half of the poor are above the age of 50, with one fifth over 65. About one quarter come from minority religions (compared with one in eight in low income countries) and two thirds face substantial health limitations. Poor people in this income group are also slightly better educated than those in low income countries, with half of them having finished secondary education. People in this group are also more equally spread between rural and urban areas, with almost 40 per cent living in urban centres.

In upper-middle income countries of the region, almost 90 per cent of the poor, are underemployed and unemployed and around 80 per cent live in rural areas with only primary education. Two-thirds of the poor are also above the age of 50.

Excluding China from the analysis of the upper-middle income countries alters the group characteristics of the poor significantly. Without China, the group consists of mostly ex-Soviet Union countries, with more developed labour markets and a history of higher educational attainment. As a result, the poor are more likely to be in full-time employment and almost all have secondary and even tertiary education. Without China, the group also becomes more strongly dominated by women (70 per cent), with two thirds living in urban areas. Over 70 per cent of the poor also report health limitations that prevent them from carrying out activities in the same way as other people in their age groups, suggesting some form of disability, despite being much younger. Furthermore, about one in five belongs to a minority religion and, compared with other income groupings, the poor are more likely to be immigrants.

A country-by-country analysis using LCA reveals the specific country barriers shared by those below $3.20 a day and is therefore more helpful for guiding national policymaking.

5.2 Country-specific characteristics and barriers faced by the poor

In many countries, there is a distinct group of poor, which holds the majority of those living in moderate poverty (Table 5.1). Knowledge of their demographic characteristics and the barriers they face can help policymakers concentrate their interventions in a cost-effective way where the impact is the greatest.

The composition of this largest group of poor varies by country. On average the group represents around half of all poor in the country, but ranges from only a quarter (in Georgia, India, the Philippines, Tajikistan and Thailand) to three quarters or more (in Armenia, Bangladesh, Bhutan, Cambodia, the Lao People’s Democratic Republic and Mongolia). Irrespective of the size of the group, the most common barrier is lack of full-time employment.

Despite the distinct differences in the composition of these groups, some common threads are worth highlighting, because they reveal important gaps in social protection along the life course, as well as broader development challenges, which often reflect the unbalanced favouring for development in urban centres.

A common trait amongst the poor is having children, with the largest group of poor consisting of mothers or fathers without full-time jobs. Often, these families receive no child benefits and without affordable child-care facilities, many young parents are forced to accept part-time or irregular and informal jobs that do not provide sufficient income to cover their families’ basic needs. Often, the largest group also consists of individuals with primary education only.

Health limitations and disability is also a common concern for respondents in the largest group of poor in Armenia, Cambodia, Georgia, India, the Lao People’s Democratic Republic and Thailand. Absence or inadequacy of disability benefits means that persons with disabilities are not able to cover the additional cost of living they face, particularly with respect to completing education and finding and keeping full-time work.

57 The share of those living below $3.20 per day in most countries differs from the officially reported data on poverty for each of the countries. For an explanation on the gaps, see Annex 5.3.

58 For the full list of barriers and demographic characteristics used in the analysis please see Annex Table 5.2.
### TABLE 5.1 Description of the largest group of poor by country (percentage)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>SIZE</th>
<th>GROUP DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>78</td>
<td>Working-age, educated minorities, without full-time jobs and health limitations</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>73</td>
<td>Younger parents, without full-time jobs, in rural areas</td>
</tr>
<tr>
<td>Bhutan</td>
<td>87</td>
<td>Working-age, minorities in rural-areas, without full-time jobs</td>
</tr>
<tr>
<td>Cambodia</td>
<td>85</td>
<td>Rural mothers, without full-time jobs</td>
</tr>
<tr>
<td>China</td>
<td>39</td>
<td>Older, uneducated, rural residents, without full-time jobs</td>
</tr>
<tr>
<td>Georgia</td>
<td>25</td>
<td>High-school educated fathers, without full-time jobs and health limitations</td>
</tr>
<tr>
<td>India</td>
<td>25</td>
<td>Working-age, rural residents, without full-time jobs and health limitations</td>
</tr>
<tr>
<td>Indonesia</td>
<td>28</td>
<td>Younger, rural mothers, without full-time jobs</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>71</td>
<td>Rural, high-school educated, middle-aged parents, without full-time jobs</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>82</td>
<td>Younger parents, without full-time jobs, in rural areas</td>
</tr>
<tr>
<td>Mongolia</td>
<td>74</td>
<td>Working-age, rural parents, without full-time jobs</td>
</tr>
<tr>
<td>Myanmar</td>
<td>65</td>
<td>Working-age, uneducated rural fathers, without full-time jobs</td>
</tr>
<tr>
<td>Nepal</td>
<td>52</td>
<td>Uneducated parents, without full-time jobs</td>
</tr>
<tr>
<td>Pakistan</td>
<td>36</td>
<td>Rural, uneducated parents, without full-time jobs</td>
</tr>
<tr>
<td>Philippines</td>
<td>24</td>
<td>Older, high-school educated parents, without full-time jobs</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>50</td>
<td>Older, high-school educated parents, without full-time jobs</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>21</td>
<td>Rural, high-school educated mothers, without full-time jobs</td>
</tr>
<tr>
<td>Thailand</td>
<td>24</td>
<td>Rural, 50-65 year-olds with health limitations, without full-time jobs</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>44</td>
<td>High-school educated younger rural mothers, without full-time jobs</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>33</td>
<td>Working-age, rural and high-school educated residents</td>
</tr>
</tbody>
</table>

Source: ESCAP calculations, based on the Gallup World Poll.

The demographic characteristics of the groups that hold the largest share of the poor also add to the picture. For example, in Bangladesh and the Lao People’s Democratic Republic, the majority are young. Improving the quality of education and the school-to-work transition is therefore critical to eliminating poverty in these countries, including through training and active labour market programmes.

In some countries, including China, the Philippines and Sri Lanka, the largest group of poor consists of older people, not receiving sufficient old-age pensions to cover living expenses. In others, poverty is much more gendered. For example, in Cambodia, Indonesia, Tajikistan and Uzbekistan, women have a much higher probability of being in the poorest group, whereas men have a much higher probability in Georgia and Myanmar.

These poverty profiles highlight the pivotal role that social protection, health care and education play in reducing poverty and building more productive, equal, inclusive and cohesive societies. While all countries provide some extent of public services in these areas, programmes are often designed, implemented and delivered in a fragmented way, limiting the positive outcomes for the poor and most vulnerable groups of society.

### 5.3 Making investments in social protection more effective

Social protection — policies and programmes designed to reduce and prevent poverty, vulnerability and social exclusion across the life cycle of an individual — empowers women, men and children to reach or maintain an adequate standard of living and good health throughout their life.  

Building inclusive social protection systems requires that programmes reach everyone in need with benefit levels that are adequate for meeting basic needs. An effective starting point, is to build a social protection floor, defined as a set of social security guarantees that ensure, as a minimum, that everyone has access to essential health care and to basic income security throughout their life.  

Building a social protection floor necessitates a sector-wide approach to social protection, where contributory and non-contributory (tax-financed) schemes form a universal, all-inclusive social protection system in accordance to life circumstances. Non-contributory schemes are especially pertinent for the Asia-Pacific region, where approximately 60 per cent of the labour force is engaged in informal employment, making regular contributions to social insurance impossible for many.
Countries that have successfully built their social protection floors often begin by guaranteeing that all people have access to an old age pension, and progressively offer other schemes, including disability benefits, child benefits and unemployment benefits. Many high-income countries have taken this path, as have some low- and middle-income countries from the Asia-Pacific region, such as Georgia, Kyrgyzstan, Mongolia, Nepal and Uzbekistan.62

The most effective way of ensuring that social protection reaches the poor and those most vulnerable to falling into poverty, is a universal approach where benefits are extended to everyone within, for example, an age group, without conditions. Yet, most countries in the region rely on poverty-targeting, with the well-intended aim of directing limited resources to those furthest behind. Such programmes are in most cases not effective in reaching the poor or moving and keeping people out of poverty, because the methods used for identifying the poor, for example proxy means testing, often fail.63 Moreover, the incomes of people change over time. As a result, targeting often leads to high inclusion or exclusion errors. Evidence from a sample of social protection schemes around the world illustrates how poverty targeting often results in higher exclusion errors (Figure 5.3). The more narrowly targeted the scheme, the greater the risk is of excluding intended beneficiaries.

Another complication with many existing social protection programmes in developing countries is that benefits often are conditional upon compliance with, for example, school attendance or health check-ups. Such conditions risk excluding the most vulnerable who are unable to fulfil the conditions, and who may need the benefits the most. Conditionality may also have negative gender-implications, adding burdens on mothers and perpetuating traditional gender stereotypes. Alternative strategies, such as raising awareness or making childcare services accessible, serve as more effective nudges towards behavioural changes.

A third challenge that impacts the effectiveness of a social protection programme is the common lack of knowledge about the programme among those who need it the most. In addition to information and outreach, registration and payment of benefits need to be accessible to all potential beneficiaries. For instance, registration needs to be available online or located within easy distance of applicants, and accessible for persons with disabilities.

In many countries in Asia and the Pacific however, benefit levels are so low that the impact of them is limited. To have a significant impact on poverty reduction, social protection benefits must also be adequate in both amount and duration.64

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Footnotes:
63 Proxy means testing is a method that, in the absence of actual household income data through reliable mechanisms such as tax registries, estimates household consumption by observing household characteristics, e.g. the ownership of durable goods, the demographic structure of the household, the education and possibly, the occupations of adult members. For more, see World Bank Group, “Measuring income and poverty using Proxy Means Tests”, Dhaka, Bangladesh 2018. Available at: https://olc.worldbank.org/sites/default/files/1.pdf, accessed on 15 October 2018.
Social protection programmes in the Asia-Pacific region are often small and fragmented, with limited coordination among actors. A strong institutional underpinning is paramount to ensuring that the right to social protection is safeguarded and realized. Three instruments are particularly crucial to fostering institutional commitment: comprehensive legal frameworks, sector-wide approaches and nationally owned budgets.

### 5.3.1 Ensuring inclusive social protection for children — the case of Mongolia

In 2005, the Government of Mongolia launched the Child Money Programme (CMP), with the aim of reducing poverty and inequality while also promoting population growth. The Ministry of Population Development and Social Protection is responsible for overall management of the CMP.

The CMP — Mongolia’s largest social assistance scheme — was originally launched as a conditional cash transfer, using proxy means testing to identify those living in poverty. In 2010 the scheme was made universal for all children under 18 years of age and conditional upon school enrolment. Two years later, all conditions were removed. This corrected the pitfalls of its previously poverty-targeted approach, which was characterized by high leakage: more than half of the beneficiaries were non-poor (inclusion error), and 16 per cent of poor children, whom the scheme intended to reach, were excluded (exclusion error).

By the end of 2015, more than one million children, or nearly 100 per cent of all children in Mongolia, received the monthly benefit, making it the most inclusive child benefit programme in the Asia-Pacific region. At the same time, the level of benefits increased by almost seven times from 2005 to 2010. The current level of benefit is considered adequate to raise children up to the national poverty line.

In 2013, the CMP accounted for approximately 50 per cent of total expenditures on social assistance transfers and 3 per cent of the overall budget. While the CMP was funded through general tax revenues until 2007, the programme has since been funded

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**FIGURE 5.3 Relationship between poverty-targeted social protection and exclusion errors**


Note: The figure above highlights an assortment of poverty-targeted social protection programmes from various countries with available data on exclusion errors. The full names of these programmes can be found in Annex Table 5.4.

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by the Human Development Fund, which holds the
country’s mineral resource tax revenues. In addition
to the CMP, the Fund supports an array of benefits
such as Mongolia’s universal maternity benefit.67

With children under 18 years of age making up
approximately one third of the population of
Mongolia, the programme is estimated to be
responsible for a 12 per cent reduction in the overall
poverty headcount ratio.68

Forthcoming changes to the CMP reported in 2018,
are expected to redesign the scheme to exclude
children in the richest quintile. Despite this set-back,
the Government of Mongolia is a leading example in
the Asia-Pacific region of financing and building an
inclusive social protection programme for its children.

5.4 Making health care
accessible and affordable
for all

Universal health coverage, a core component of the
social protection floor, is defined by the World Health
Organization (WHO) as ensuring that all people have
access to quality essential health services, pertaining
to maternal and child health as well as communicable
and non-communicable diseases, without suffering
from financial hardship associated with paying
for care.69 It includes the full spectrum of essential
services, from health promotion to prevention,
treatment, rehabilitation and palliative care, and is
achieved with the progressive expansion of health
service coverage and financial protection as more
resources become available.

While the Asia-Pacific region has made significant
progress towards achieving universal health
coverage, as measured against the SDG Target 3.8
indicators, more needs to be done, especially for
reducing out-of-pocket expenditures for populations
(Figure 5.4).70 Medicines represent the highest driver
of out-of-pocket expenditures in the region. Reducing
the incidence of catastrophic health expenditure
therefore has a direct effect on poverty reduction.71

Disadvantaged groups typically face multiple barriers
to accessing health-care services. Even if health care
is available, geographical, language and cultural
barriers may prevent access. There could also be lack
of knowledge, information and awareness.72 All these
barriers influence the capacity and willingness of
individuals, families or communities to seek health-
care services.

FIGURE 5.4 Universal health coverage in the Asia-Pacific region, 2010–2015

Note: The x-axis shows the proportion of population with out-of-pocket health spending exceeding 10% of total household consumption or income (%),
2002–2010. The y-axis is defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and
child health, infectious diseases, NCDs and service capacity and access, 2010–2015. Lines represent global medians.

70 World Health Organization (WHO) and International Bank for Reconstruction and Development/The World Bank, “Tracking universal health coverage:
71 Catastrophic health expenditure measures the proportion of the population with large household expenditures on health as a share of total household
consumption expenditure. The threshold for large household expenditures, as defined by SDG 3.8.2, is 10 per cent.
72 B. Jacobs and others, ”Addressing access barriers to health services: an analytical framework for selecting appropriate interventions in low-income Asian
There are several countries in the region that have introduced broader strategies to promote health-care services in an equitably way. Bhutan, Malaysia and Thailand, for example, have made strong progress towards universal health coverage by building extensive public health care networks. Generally, these countries have prioritized investments that address the needs of the poorest and most vulnerable, while also reaching larger populations than countries with relatively fewer public health-care facilities or those that rely on high utilization of private facilities.73

Recruitment and retention of clinical staff remains a challenge in countries throughout the Asia-Pacific region -- with only 14 out of 35 countries having reached the SDG threshold of 4.4 doctors, nurses and midwives per 1,000 people.74 Some countries, including India, Myanmar and Thailand, have addressed the absence of health workers in underserved areas by introducing compulsory public service periods, recruiting health workers locally, and through targeted admissions into pre-service training for students from rural and hard-to-reach areas.75

Limited availability of medicines in public facilities also constitutes a major challenge for the poor. The problem stems from both the absence of public health-care services in areas that are difficult to reach, but also from the lack of continuous supply of medicines. Systems where medicines are mostly bought in private pharmacies and mainly funded through out-of-pocket expenditures provide significantly lower access to medicines, especially for the poor. It is therefore crucial to build a strong and efficient network that ensures the availability of medicines in underserved areas.

As lack of affordability is the main reason for not seeking health care in many countries, removing financial barriers for the poor is essential. Effective ways to do so includes increasing government subsidies to health care and introducing compulsory health insurance. Pooling of resources and reducing fragmentation of financing schemes and benefit packages can also address health-care inequities.

Finally, a legal framework that ensures non-discrimination on the basis of health or socioeconomic status is vital for ensuring those that need health care receive it.

5.4.1 Implementing universal health coverage — the case of Thailand

Thailand achieved universal health coverage in 2002, with all citizens covered by one of three insurance schemes managed by different agencies, with the Ministry of Public Health being the main service provider. Between 2001 and 2015, health expenditures in Thailand rose from 3.1 to 3.8 per cent of GDP, with public expenditures gradually increasing from 56 per cent to 77 per cent of total health expenditures.76 Over the same period out-of-pocket expenditure fell from 27.2 per cent to 12 per cent. Major funding sources for health care are general taxation followed by direct out-of-pocket expenditures, social health insurance and private insurance premiums.77 Since achieving universal health coverage in 2002, Thailand has managed to keep health costs at relatively low levels.

Since the 1970s, Thailand has focused its investment in health delivery infrastructure at the district level and below, with three quarters of the country’s total hospital beds being public.78 An important factor has been the well-functioning primary health-care system which acts as the main interface with patients and links health centres with community health workers. At the same time, using primary level services as gatekeepers, it is possible to control service utilization.

However, many challenges still exist. Thailand is fast becoming an ageing society with many villages becoming bereft of working age populations. As the burden of non-communicable diseases rise, health promotion and prevention activities become more prominent. Service integration can still be improved as can retention of healthcare workers in rural areas. Finally, with over 2 million migrants working primarily

74 World Health Organization (WHO), The Decade for Health Workforce Strengthening in the SEA Region 2015–2024: Second review of progress, challenges, capacities and opportunities (New Delhi, World Health Organization Regional Office for South East Asia, 2018).
75 Ibid.
77 Ibid.
in the informal sector, it is important to devise systems that provide improved access to health for these populations.

Thailand is working on several avenues to tackle these issues. A premium-based, government-run voluntary health insurance scheme is being offered to migrant workers from the neighbouring countries, although it is still too early to assess how successful this insurance scheme has been. The Government of Thailand is also updating its practice and support services for retention of rural health workers through projects such as the Collaborative Project to Increase Production of Rural Doctors. Finally, to improve cooperation between health and social services especially for the elderly, local governments and the National Health Security Office managing the Universal Coverage Scheme have created a 50–50 funding mechanism to support better linkages between health and social services in selected districts.

5.5 Making education reach those furthest behind

Education promotes social inclusion while also driving economic growth. Education can also mitigate inequality, as more equal educational opportunities help reduce gender and socioeconomic disparities. It makes countries better prepared and less vulnerable to climate change as well as less prone to conflict.

While increased access to education has been considered a key achievement for the Asia-Pacific region in recent decades, evidence has shown that what children learn is not always sufficient or relevant, nor that quality education is equitably accessible to all. In this respect, transversal skills or competencies are crucial in preparing students for the world of work and accelerate the school-to-work transition. In addition to providing relevant academic content, education should equip learners with skills such as empathy, tolerance, critical thinking and creativity.

Teachers with relevant training and experience are at the core of any educational system. In many countries within the Asia-Pacific region there is a significant shortage of trained and experienced teachers, particularly in rural and disadvantaged areas. Furthermore, in some countries, only one in five primary level teachers have had adequate training.

While the Asia-Pacific region has seen significant achievements in terms of increased access to education, it remains home to over half of the world’s out of school children and youth. The majority come from vulnerable households and marginalized population groups.

A rapid increase in migration, both regular and irregular, within and across borders in the region, combined with the region’s linguistic diversity, with more than half the world’s total living languages, add to the proliferation of marginalized and vulnerable learners.

The large number of vulnerable learners, which may include female, minority or migrant learners, learners with disabilities, learners in remote areas or the urban poor, calls for more inclusive education policies. In addition to facing many barriers, vulnerable learners also have worse educational outcomes.

Among the challenges faced by female learners, in particular in rural areas, are child-marriages, gender-based violence in schools, and inadequate infrastructure, including lack of appropriate sanitation facilities at schools. Addressing these multiple barriers requires laws and policies as well as community awareness to protect girls in schools and ensure equal access to education.

Minority and migrant learners are often discriminated against in school, and at times, denied access to education. Policies against discrimination, together with an adapted inclusive curriculum with linguistically, culturally and developmentally appropriate teaching and learning materials, would increase access to education for minorities and migrants.

79 Ibid.
81 Ibid.
85 Ethnologue, Languages of the World. Available at: https://www.ethnologue.com/region/Asia (accessed on 18 August 2018).
Learners with disabilities face barriers in terms of physical access to adequate infrastructure. Furthermore, teaching methodologies often do not cater to their specific needs. Developing barrier-free infrastructure, promoting assistive technology and adapting curricula, pedagogy, teaching and learning materials to suit the needs of these learners will enhance the quality and universality of any education programme. These interventions will also increase the chances of persons with disabilities to secure decent work and escape poverty later in life.

5.5.1 Implementing an effective education system — the case of Viet Nam

When the Programme for International Student Assessment (PISA) results started showing Viet Nam’s exceptional performance, discussions began on what had led this lower-middle income country to perform so well amongst the highest scoring countries in the world. The answer lies in the broad reform package put in place by the Ministry of Education and Training over two decades earlier.

The reform package is based on the following five broad principles of: policy coherence; sufficient budgetary allocation; partnership between parents and schools; quality of teaching and equity.86

The Government of Viet Nam has for long perceived education as a national priority and devotes at least 20 per cent of total public spending for this purpose.87 To enhance the quality and relevance of teaching, it raised the standard of teachers’ qualification and made schools ready to take on board children at the age of five.

School principals are held accountable for monitoring the quality of teaching and learning at the school level through planned and impromptu lesson observations. As administrative leaders and instructional managers, they are obliged to inform authorities, both at the local and national levels, on school performance and have to continue teaching two periods per week. Teachers are held accountable through regular self- and peer-assessment as part of an in-school monitoring system. Parents also form part of the accountability system. Through a formal requirement they are held accountable for their child’s behaviour and performance in school.

Parents are also required to be actively involved in their children’s education through participation and feedback on a Parent Board, but also to contribute to the school financially or in-kind (depending on available means) by running school services. Teachers have a responsibility to work in partnership with parents to ensure learning progress.

Despite receiving a relatively low salary, teachers are committed to what it perceived as a highly respected and admirable profession promoted through both cultural norms and government policies. Professional development is a requirement for teachers through an annual personal professional development plan which is monitored by the school principal. Teachers are also given the responsibility to decide on their own teaching style, which is encouraged to include mixed pedagogical methods that combine traditional and student-centred approaches to stimulate higher order thinking.

The equitable nature of Viet Nam’s education system, whereby all children — whether from different geographical locations or ethnicities, have access to the same quality of education, has been perceived as crucial to making quality schooling accessible for poorer children. The PISA results from 2015 also showed that 17 per cent of Viet Nam’s poorest students performed among the top 25 per cent overall.88 Indeed, data collected as part of the University of Oxford’s Young Lives study showed that both children from disadvantaged and privileged backgrounds were able to progress in their learning and were taught by equally qualified and motivated teachers.89
5.6 Policy coherence and political commitment helps maximize benefits for all

National policymakers need to be customized to a country’s political economy, priorities, capacities and resources. Yet, as evinced in this chapter, common factors, such as political commitment, policy coherence, and stakeholder coordination, determine the outcomes of interventions across the social protection, health, and education sectors. This is also the reason why countries with similar allocations of public social budgets sometimes end up with vastly disparate outcomes.

Identifying the common characteristics of the largest groups of the poor can increase the cost-effectiveness of programmes. Following a universal approach for social protection, health care, and educational services, can also have positive spill-overs on smaller groups with similar characteristics or that face the same barriers.

The message of this analysis therefore, is the need to coordinate actions across a range of sectors and to remove institutional and structural barriers for the largest groups of poor. If the interventions are universal in nature, the benefits are then likely to positively affect other disadvantaged groups as well. Eventually, responsible actors should also gradually act to remove barriers faced by all groups, including those representing smaller shares and group-specific circumstances, for example, availability of education for minority groups or childcare for young parents.

Determining key barriers to escaping poverty year after year would allow policymakers to become more agile and responsive, continuously adjusting their focus to the most pressing areas. Focusing on removing barriers would also help governments to ensure breaking the intergenerational poverty cycle permanently.

Strong political will and determination is required for the development of any new policy, from ideas to implementation. Furthermore, as policies that call for the reform of usual practices will inevitably face resistance, commitment at all levels of government is central for building national ownership.

5.6.1 Translating political commitment into action — Cambodia’s national social protection framework

More than half of Cambodia’s population is highly vulnerable to minor shocks and 60 per cent of all workers are informally employed. Moreover, only 17 per cent of all workers are covered by social insurance and non-contributory benefit coverage is extremely low, partly because the programmes are means-tested. A single, nationwide cash transfer does not exist for any group.

Until recently, the country’s social protection system was regarded as fragmented and donor-driven. The 2011–2015 National Social Protection Strategy for the Poor and Vulnerable mirrored this perception as it focused exclusively on social assistance and, while it gathered considerable support from development partners, it had little national ownership from line ministries.


The NSPPF is a ten-year roadmap which aims to harmonize, integrate, and strengthen existing schemes and expand the social protection floor to respond to contingencies throughout the life cycle. The system envisioned rests on two main pillars: social insurance and social assistance. In terms of coverage, the non-contributory benefits will be expanded to include protection for children, older persons, persons with disabilities, and pregnant women. The main priority is to ensure that “every Cambodian citizen receives two main sorts of protection (1) a pension at the age of retirement, and (2) health insurance when they fall sick.”

The NSPPF foresees major legal, institutional and financial reforms to support a gradual expansion of coverage. To this end, the Government has established a National Social Protection Council (NSPC), composed of members of line ministries and chaired by the MEF. At the implementation level, the policy calls for the integration of diverse operators, starting with a joint social security fund for private and public sectors and a single payer for health protection. On a day-to-day basis the policy is coordinated by the NSPC Secretariat, based in the MEF and operating independently from social protection managers/operators.

The NSPPF has started yielding results already. The National Social Security Fund begun to serve civil servants through a new Social Health Insurance branch in January 2018, and in 2019 the Government is expected to launch a General Pension Scheme, which will accommodate both private sector and new civil servants under equal benefits and responsibilities. In mid-2018 the Prime Minister also announced the launch of a national cash grant for children.

The political leadership has been pivotal to the successful development of the NSPPF and is attributed to the leadership of the MEF, which led the framework drafting process. The MEF’s involvement in this process was also a unique opportunity to ensure the policy received financing from the state’s budget and resulted in high participation of all relevant line ministries. The result was strengthened policy coherence throughout government ministries and institutions.

The case of Cambodia shows that it is possible to leverage on the priorities of several ministries to expand the policy discussion towards comprehensive, integrated and multi-tiered social protection systems.
Conclusions
Between 1990 and 2015, 80 per cent of the region’s extremely poor moved out of poverty. Despite this tremendous success, 1.2 billion people in the Asia-Pacific region still live on less than $3.20 a day, out of which 400 million are estimated to live in extreme poverty, on less than $1.90 a day.

Monetary poverty is often accompanied by other deprivations. One and a half billion people lack improved sanitation and less than four in ten have access to affordable health care. About one billion people also work in hazardous and low-paid jobs with insecure employment contracts and little, if any, social protection, with women holding the greater proportion of such jobs. In many countries, more than eight out of ten households are deprived of several of these basic opportunities.

The persistence of poverty in all its dimensions does not come as a surprise. No country analysed in this report meets the world averages of investments in social protection, education and health care. Most countries in Asia and the Pacific spend, on average, less than one-third of the global average of 11.2 per cent of GDP on social protection. Expenditures on education and health care are closer, but still below, the global averages.

This report has shown that, overall, the region needs additional investments of $281 billion per year to match the global spending levels as a share of GDP on education, health and social protection. Expenditures on education and health care are closer, but still below, the global averages.

A closer examination of poverty and social spending throughout this report produces four broad groupings of countries, which display marked similarities.

1 Countries on the right track

Countries with below-average levels of both income poverty and multiple deprivation are generally those that also invest most in their people. For example, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Thailand and Turkmenistan have all reduced poverty and multiple deprivations to below the regional average. While these countries need to spend more on social protection to reach the global average, they already spend more than the regional average. Approximately 15 per cent of their total public expenditure is spent on social protection, representing around 4 per cent of GDP. They also spend above regional average on education and health. Many are low income or lower-middle income countries, proving that a lower level of economic development is not a reason for low social spending.

The challenge for these countries will be to go the ‘last mile’ and reach the furthest behind. While extreme poverty is low in these countries, many people still live in moderate poverty. Bringing those who are living on less than $3.20 per day into mainstream development will be the challenge if these countries are to build a solid middle class and lift the standards of living for everyone.

To further improve outcomes, these countries should focus on the quality of spending, by ensuring that services are of high quality and reach the furthest behind. Studying the profiles of the poor and the barriers the poor face in their respective countries will also be instrumental for designing interventions to reach those who are left behind.

2 Countries with higher monetary poverty and higher levels of deprivation

Countries with high income poverty and multiple deprivation are those that spend the least on social protection, education and health care. This group includes, for example, Bangladesh, Indonesia, the Lao People’s Democratic Republic, Nepal, Pakistan and Timor-Leste. With the exception of Timor-Leste, all other countries in this grouping spend around 5 per cent of their GDP on the three social sectors, below the regional average of 9 per cent of GDP.

Most of these countries are also all low income countries, many of which have seen their human and other resources depleted by conflicts and natural disasters.

The main challenge for this country grouping is to gather political will and public support for significantly boosting investments in people.

Currently furthest behind from global levels of social spending, any increase will be beneficial and will yield results quickly. Universal social protection programmes, in particular child benefits, as well as school-to-work transitions, combined with universal health care and a rethink of education policies will be instrumental for unlocking the human potential.

Timor-Leste appears to spend more because its GDP is lower, making the social spending/GDP ratio higher. If the share of total public expenditure is considered, then Timor-Leste drops below average as well (see Annex Table 3.1).
3 Countries with higher monetary poverty and lower levels of deprivation

A third group of countries, including India and the Philippines, has higher than average monetary poverty and below-average levels of multiple deprivation. These countries spend more, on average, on education, but less on health care and social protection. The total share of social spending in this group of countries is below the region's average, both as a share of public expenditure and as a share of GDP.

The main challenge for these countries is the relatively low spending on social protection, as well as health care. To reduce monetary poverty, these countries need to boost their investments in people, particularly by focusing their interventions on the largest groups of poor.

4 Countries with lower levels of monetary poverty and higher levels of deprivation

Bhutan, Mongolia and Viet Nam, have achieved important reductions in monetary poverty, but still have a majority of their population deprived of certain key opportunities and services. All three countries spend above the region’s average on the social sector. Mongolia, a lower-middle income country, spends 21 per cent of its total public expenditure on social protection, the highest share of all Asia-Pacific countries analysed. Bhutan and Viet Nam, both low income countries, spend more on health and education, but less on social protection.

The challenges these countries face correspond to their geographic and socioeconomic specificities. Mongolia’s rural nomadic tribes lack access to basic sanitation. Bhutan’s mountainous terrain makes school attendance challenging. In all three countries, economic growth has been rapid but the quality of jobs created has been low for the vast majority.

To achieve poverty eradication, these countries need to better balance social spending with critical infrastructure investments and pay closer attention to the quality of growth, particularly the creation of decent jobs.

To bring all countries on track, political will is paramount. Governments with higher political commitment to investments in the social sectors spend a higher share of their budget on their people's development, and they do so more effectively with better outcomes as a result. With political will and determination in place, policymakers should focus their efforts around the following three broad recommendations:

**RECOMMENDATION 1**

**Accelerate poverty reduction by boosting investment in people**

Boosting the amount of public spending on social protection, education and health care to reach the global averages, at a minimum, has been shown to significantly accelerate poverty eradication, at both the $1.90 and the $3.20 levels. Increasing investment in people would also support economic growth and reduce inequality. The evidence for increasing the level of investment in people in the Asia-Pacific region is overwhelming: around 328 million people would be lifted out of moderate poverty and 52 million people out of extreme poverty with more countries fully eradicating poverty by 2030.

**RECOMMENDATION 2**

**Reap maximum benefits by focusing on social protection investment**

The majority of countries in the region need to step up investments in inclusive social protection to reach the global average and close social protection gaps. The report estimates that increased investments in social protection alone could be a game changer for poverty reduction by lifting at least 233 million people out of moderate poverty in the Asia-Pacific region. Through increased social protection investments, extreme poverty would also be fully eliminated by 2030 in Bangladesh, India, Nepal and the Philippines, countries that would otherwise miss this target. To leave no one behind, however, social protection must be inclusive and adequate.

**RECOMMENDATION 3**

**Ensure that social protection investment reaches those left behind**

Countries with the highest success rates of reducing poverty through social protection, such as Mongolia, have designed and implemented inclusive and universal programmes. On the contrary, the region’s best performing poverty-targeted programmes record exclusion rates of more than 40 per cent. In these countries, benefits are also often very low, with limited impact for those lucky enough to receive the benefits. Countries that rely on poverty-targeting, with the well-intended aim of directing limited resources to those furthest behind, should therefore consider more inclusive approaches in reaching the poor.
Measuring poverty

The simplest way to measure poverty is to set a poverty line and then count the number of people living below that poverty line. This is the poverty headcount \( H \). Because countries vary in terms of population, a more meaningful measure is obtained by dividing the number of poor people by the entire population \( N \). This is the poverty headcount ratio*, or often simply denoted as the poverty rate.

Measuring poverty in this way provides information about the percentage of the population that lives on an income below the set poverty line.

\[
\text{Poverty Headcount Ratio} = \frac{H}{N}
\]

However, the poverty headcount ratio fails to capture the intensity or depth of poverty, because all individuals living below the poverty line are not equally poor. Instead, a poverty gap index is often used as an alternative way of measuring poverty that also considers the depth of poverty.

Poverty gap is the shortfall in income \( (y_i) \) from the poverty line \( (z) \), counting the non-poor as having zero shortfall. By summing all such shortfalls across the entire population in a country, we can calculate the mean shortfall from the poverty line is then calculated.

Two countries can have similar headcount ratios (the same percentage of population that is considered poor), but differing poverty gap indices, meaning that the average poor person in country A is further from the poverty line than an average poor person in country B.

The poverty gap index takes the mean shortfall from the poverty line, and divides it by the value of the poverty line. It gives us the fraction of the poverty line that people are missing, on average, in order to escape poverty.

The poverty gap index is widely used in policy discussions because it has an intuitive unit and allows for meaningful comparisons regarding the relative depth of poverty.

\[
\text{Poverty Gap Index} = \frac{1}{N} \sum_{i=1}^{H} \left( \frac{z - y_i}{z} \right)
\]

*Both measures are part of a family of Foster–Greer–Thorbecke (FGT) poverty indices, introduced in a 1984 paper "A class of decomposable poverty measures" by James Foster; Joel Greer; and Erik Thorbecke and are often labelled \( FGT_0 \) and \( FGT_1 \).

ANNEX TABLE 2.1

ESCAP country income groupings

<table>
<thead>
<tr>
<th>ESCAP LOW INCOME</th>
<th>Afghanistan, Bangladesh, Bhutan, Cambodia, India, Democratic People's Republic of Korea, Kyrgyzstan, Lao People's Democratic Republic, Myanmar, Nepal, Pakistan, Papua New Guinea, Solomon Islands, Tajikistan, Timor-Leste, Uzbekistan, Vanuatu, Viet Nam.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCAP LOWER-MIDDLE INCOME</td>
<td>Armenia, Azerbaijan, Fiji, Georgia, Indonesia, Iran (Islamic Republic of), Kiribati, Marshall Islands Micronesia (Federated States of), Mongolia, Philippines, Samoa, Sri Lanka, Thailand, Tonga, Turkmenistan, Tuvalu.</td>
</tr>
<tr>
<td>ESCAP UPPER-MIDDLE INCOME</td>
<td>China, Cook Islands, French Polynesia, Kazakhstan, Malaysia, Maldives, Nauru, Niue, Northern Mariana Islands, Palau, Russian Federation, Samoa, Turkey.</td>
</tr>
<tr>
<td>ESCAP HIGH INCOME (NOT CONSIDERED IN THIS ANALYSIS)</td>
<td>Australia, Brunei Darussalam, China, Guam, Hong Kong, Japan, Democratic People's Republic of Korea, Macao China, New Caledonia, New Zealand, Singapore.</td>
</tr>
</tbody>
</table>

## Synthesis of poverty levels, public expenditure in people and a description for the largest groups of the poor

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>$3.20 POVERTY RATE (%)</th>
<th>MULTIPLE DEPRIVATION (%)</th>
<th>LARGEST DEPRIVATION</th>
<th>INVESTING IN PEOPLE AS PERCENTAGE OF PUBLIC EXPENDITURE</th>
<th>INVESTING IN PEOPLE AS PERCENTAGE OF GDP</th>
<th>WHO ARE THE POOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>16</td>
<td>21</td>
<td>Full-time employment</td>
<td>9 6 30 45</td>
<td>3 2 5 10</td>
<td>Working-age educated minorities, with health limitations and no full-time jobs</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>0</td>
<td>43</td>
<td></td>
<td>10 4 15 29</td>
<td>3 1 6 10</td>
<td>Younger parents, without full-time jobs, in rural areas</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>56</td>
<td>77</td>
<td>Clean fuel</td>
<td>17 5 6 28</td>
<td>2 1 1 4</td>
<td>Working-age minorities in rural-areas, without full-time jobs</td>
</tr>
<tr>
<td>Bhutan</td>
<td>3</td>
<td>67</td>
<td>Secondary education</td>
<td>19 9 10 37</td>
<td>7 3 0 10</td>
<td>Working-age minorities in rural-areas, without full-time jobs</td>
</tr>
<tr>
<td>Cambodia</td>
<td>-</td>
<td>85</td>
<td>Bank account</td>
<td>17 10 6 33</td>
<td>2 1 1 4</td>
<td>Rural mothers, without full-time jobs</td>
</tr>
<tr>
<td>India</td>
<td>54</td>
<td>48</td>
<td>Secondary education</td>
<td>17 5 7 29</td>
<td>4 1 1 7</td>
<td>Working-age rural residents, without full-time jobs and health limitations</td>
</tr>
<tr>
<td>Indonesia</td>
<td>41</td>
<td>55</td>
<td>Professional help during childbirth</td>
<td>- - - -</td>
<td>4 1 1 6</td>
<td>Younger rural mothers, without full-time jobs</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>0</td>
<td>4</td>
<td>Full-time employment</td>
<td>- - - -</td>
<td>3 2 4 9</td>
<td></td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>26</td>
<td>33</td>
<td>Bank account</td>
<td>20 9 16 45</td>
<td>6 4 5 15</td>
<td>Rural, high-school educated middle-aged parents, without full-time jobs</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>55</td>
<td>88</td>
<td>Clean fuel</td>
<td>- - - -</td>
<td>3 1 0 4</td>
<td>Younger parents, without full-time jobs, in rural areas</td>
</tr>
<tr>
<td>Maldives</td>
<td>24</td>
<td>13</td>
<td>Secondary education</td>
<td>14 10 16 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>3</td>
<td>63</td>
<td>Basic sanitation</td>
<td>9 7 21 37</td>
<td>5 3 10 17</td>
<td>Working-age rural parents, without full-time jobs</td>
</tr>
<tr>
<td>Myanmar</td>
<td>39</td>
<td>84</td>
<td>Bank account</td>
<td>- - - -</td>
<td>1 1 3 5</td>
<td>Working-age uneducated rural fathers, without full-time jobs</td>
</tr>
<tr>
<td>Nepal</td>
<td>40</td>
<td>52</td>
<td>Full-time employment</td>
<td>18 7 4 29</td>
<td>4 2 2 8</td>
<td>Uneducated parents, without full-time jobs</td>
</tr>
<tr>
<td>Pakistan</td>
<td>43</td>
<td>64</td>
<td>Bank account</td>
<td>- - - -</td>
<td>3 1 1 5</td>
<td>Rural uneducated parents, without full-time jobs</td>
</tr>
<tr>
<td>Philippines</td>
<td>35</td>
<td>34</td>
<td>Clean fuel</td>
<td>18 5 4 27</td>
<td>3 2 1 5</td>
<td>Older, high-school educated parents, without full-time jobs</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>25</td>
<td>44</td>
<td>Bank account</td>
<td>17 6 15 38</td>
<td>5 2 1 8</td>
<td>Rural, high-school educated parents, without full-time jobs</td>
</tr>
<tr>
<td>Thailand</td>
<td>1</td>
<td>29</td>
<td>Full-time employment</td>
<td>19 6 12 37</td>
<td>4 3 4 11</td>
<td>Rural 50-65 year olds with health limitations, without full-time jobs</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>75</td>
<td>76</td>
<td>Clean fuel</td>
<td>9 4 12 25</td>
<td>8 1 6 15</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>12</td>
<td>59</td>
<td>Full-time employment</td>
<td>- - - -</td>
<td>6 4 2 11</td>
<td>Working-age, rural and high-school educated residents</td>
</tr>
<tr>
<td>Regional average</td>
<td>29</td>
<td>52</td>
<td></td>
<td>16 7 12 34</td>
<td>4 2 3 9</td>
<td></td>
</tr>
</tbody>
</table>

Sources: World Bank PovcalNet: the on-line tool for poverty measurement, available at: http://iresearch.worldbank.org/PovcalNet/home.aspx (accessed on 1 April 2018); Poverty data are from World Bank PovcalNet, see Chapter 1, and multiple deprivation data are based on ESCAP calculations from the latest Demographic and Health Surveys and Multiple Indicator Cluster Surveys of the countries in question, see Chapter 2. Investment in people as percentage of public expenditure data are from the Asian Development Bank, ‘Key Indicators for Asia and the Pacific’, see Chapter 3. Investing in people as percentage of GDP is from the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Institute for Statistics (for education expenditure), World Bank (for health) and International Labour Organization (ILO) (2017), see Chapter 3. Data on who are the poor are based on ESCAP calculations using the Gallup World Poll, data analyzed with the help of ILO, see Chapter 5.
About the CGE model

Over the past three decades, computable general equilibrium (CGE) models have become a commonly used tool for empirical economic analysis. CGE models offer a simple way of modelling the overall impact of policy changes on an economy, or a region, by considering relevant production activities, factors and institutions. The CGE models include markets and various macroeconomic components: investment and savings, balance of payments and government budget. CGE models have become popular because they are able to incorporate multiple economic linkages or “transmission mechanisms” that often come handy when explaining trends and structural responses to changes in development policy.

To be effective, policymakers need to explore the possible implications that different policy options may have as accurately as possible. It is therefore useful and often imperative for researchers and policymakers to conduct ex-ante analyses of alternative policy scenarios. CGE models have emerged as a tool to carry out such ex-ante analysis in policy formulation.

In this report, the CGE model has been used to explore the efficacy of government social spending on poverty alleviation. Through this model it is possible to explore how different types of government spending can affect different poverty indicators, in particular, poverty at the $1.90 and $3.20 a day levels. In the model, the level of exogenous economic growth, that is, growth that is not caused by the increase in public social investments, is kept constant. This is in accordance with the rate recorded in the baseline year, in order to better measure the impact of public social investments on both poverty and on economic growth. The impacts of social investments on poverty reduction is transmitted through the following mechanisms:

<table>
<thead>
<tr>
<th>SOCIAL SECTOR</th>
<th>SUPPLY SIDE</th>
<th>DEMAND SIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and health</td>
<td>Government expenditure on education and health improves human capital and increases total factor productivity, which in turn generates sectoral growth, thereby increasing real household income and consumption.</td>
<td>The increase in real household consumption also stimulates demand for education and health services, thereby stimulating growth in those sectors and leading to a virtuous cycle on supply-side mechanisms as well. Government expenditure on education and health is likely to reduce the out-of-pocket cost of education and health services, thereby increasing real household income and consumption.</td>
</tr>
<tr>
<td>Social protection</td>
<td>Social protection transfers increase productivity and generates sectoral growth, thereby increasing real household income and household consumption.</td>
<td>Social protection transfers increase real household incomes, thereby increasing demand for goods and services. The increased demand then stimulates sectoral growth, which in turn increases real household income and consumption.</td>
</tr>
</tbody>
</table>

CGE models have plenty of limitations, as they impose major simplifications to the economy in order to reach conclusions. Despite their limitations, however, they remain useful tools for exploring the potential socioeconomic impacts of various policies and interventions.
## ANNEX TABLE 5.1
### Types of groups produced by the LCA for three income groupings

<table>
<thead>
<tr>
<th>GROUP NUMBER</th>
<th>GROUP/CLASS CHARACTERISTICS</th>
<th>SHARE OF POOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW INCOME COUNTRY GROUPING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rural, uneducated, younger persons in precarious work</td>
<td>38%</td>
</tr>
<tr>
<td>2</td>
<td>Older, rural, high-school graduates with families</td>
<td>24%</td>
</tr>
<tr>
<td>3</td>
<td>Minority, rural, working-age, uneducated but healthy individuals</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Rural, educated parents, unemployed or in poor jobs</td>
<td>9%</td>
</tr>
<tr>
<td>5</td>
<td>High-school graduated women without children, in precarious jobs</td>
<td>6%</td>
</tr>
<tr>
<td>6</td>
<td>Uneducated, unemployed urban mothers with health limitations</td>
<td>6%</td>
</tr>
<tr>
<td>7</td>
<td>Uneducated, working-age men with health limitations</td>
<td>4%</td>
</tr>
<tr>
<td>8</td>
<td>Urban parents in part-time jobs, low education, often from minor religion</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

| **LOWER MIDDLE-INCOME COUNTRY GROUPING**                                                                 |               |
| 1            | Rural, older residents, with health problems, often from minority religion                   | 24%           |
| 2            | Urban mothers with high-school education, not in full-time employment                         | 19%           |
| 3            | Older, uneducated, rural, minority caretakers, with health limitations                        | 19%           |
| 4            | Working-age men in part-time work, without children                                           | 14%           |
| 5            | Rural, young high-school graduates, in full-time employment, but with health limitation       | 11%           |
| 6            | Minority, high-school educated women in vulnerable work                                       | 8%            |
| 7            | Rural, uneducated and unemployed working-age women without children                           | 6%            |
| **Total**    |                                                                                             | **100%**      |

| **UPPER MIDDLE-INCOME COUNTRY GROUPING**                                                                 |               |
| 1            | Older, uneducated, rural residents without full-time jobs                                     | 73%           |
| 2            | Working-age urban mothers with some education and jobs                                         | 12%           |
| 3            | Male, rural, working-age fathers with health limitations                                       | 9%            |
| 4            | Urban, high-school educated, working-age women without full-time jobs                          | 3%            |
| 5            | Rural, older, educated women, from minority, single or widowed                                | 3%            |
| **Total**    |                                                                                             | **100%**      |

| **UPPER MIDDLE-INCOME COUNTRY GROUPING EXCL. CHINA**                                                                 |               |
| 1            | High-school graduated urban women with health limitations and without full-time jobs           | 25%           |
| 2            | Rural, migrant women with health limitation and no full-time jobs                              | 20%           |
| 3            | University-educated women, often single, with full-time jobs, but health limitations            | 18%           |
| 4            | Rural, working-age residents, often widows, without full-time jobs                             | 17%           |
| 5            | Educated, urban mothers without full-time jobs                                                | 16%           |
| 6            | Working-age, high-school educated urban mothers from minority groups                           | 4%            |
| **Total**    |                                                                                             | **100%**      |

Source: ESCAP calculations based on the Gallup World Poll, analysed with the help of the International Labour Organization.
### ANNEX TABLE 5.2

Barriers faced by group with highest proportion of moderate poor

<table>
<thead>
<tr>
<th>Group Characteristics</th>
<th>15-24</th>
<th>25-49</th>
<th>50-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>78%</td>
<td>59%</td>
<td>74%</td>
<td>100%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>73%</td>
<td>87%</td>
<td>72%</td>
<td>100%</td>
</tr>
<tr>
<td>Bhutan</td>
<td>87%</td>
<td>84%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>85%</td>
<td>81%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>China</td>
<td>39%</td>
<td>55%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Georgia</td>
<td>25%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>75%</td>
<td>0%</td>
<td>58%</td>
<td>11%</td>
</tr>
<tr>
<td>India</td>
<td>25%</td>
<td>33%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>28%</td>
<td>100%</td>
<td>46%</td>
<td>0%</td>
</tr>
<tr>
<td>Islamic Republic of Iran</td>
<td>64%</td>
<td>57%</td>
<td>39%</td>
<td>0%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>68%</td>
<td>100%</td>
<td>81%</td>
<td>7%</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>71%</td>
<td>93%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>82%</td>
<td>83%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>51%</td>
<td>13%</td>
<td>75%</td>
<td>6%</td>
</tr>
<tr>
<td>Mongolia</td>
<td>74%</td>
<td>86%</td>
<td>27%</td>
<td>4%</td>
</tr>
<tr>
<td>Myanmar</td>
<td>65%</td>
<td>83%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>Nepal</td>
<td>52%</td>
<td>75%</td>
<td>13%</td>
<td>0%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>36%</td>
<td>98%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Philippines</td>
<td>24%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>61%</td>
<td>64%</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Singapore</td>
<td>54%</td>
<td>2%</td>
<td>26%</td>
<td>0%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>50%</td>
<td>65%</td>
<td>64%</td>
<td>3%</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>21%</td>
<td>95%</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Thailand</td>
<td>24%</td>
<td>0%</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td>Turkey</td>
<td>88%</td>
<td>67%</td>
<td>57%</td>
<td>5%</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>44%</td>
<td>83%</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>33%</td>
<td>52%</td>
<td>33%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: ESCAP analysis based on Gallup World Poll, 2016.
ANNEX 5.3

LCA methodology and data sources

Latent class analysis represents the phenomenon of poverty (living below $3.20 per day) in a model in which there are distinct types of individuals. Similar to factor analysis, latent class analysis is a latent variable model, whereby the researcher postulates the existence of an error-free latent variable. This variable cannot be measured directly, but indirectly, through the use of two or more observed variables.

In the case of this analysis on poverty, the latent variable is the motivation or cause of poverty (unmeasurable variable) or, alternatively, the barrier to escaping poverty. Since that barrier is difficult to pinpoint, the latent class analysis examines other variables through various indicators (referred to in this text as circumstances) that are measurable through the available datasets (Gallup World Poll).

LCA is a person-oriented approach, meaning that it studies individual characteristics or behaviours to look for subtypes of individuals that exhibit similar patterns. The researcher therefore uses an array of variables (circumstances) that are easily observed (in this case education level, employment, health issues, minority status etc.) as a basis for organizing people into homogeneous groups. Once these groups are set, it becomes easier to consider policies that could address the complex conditions faced by these groups and act as barriers to escaping poverty.

The main advantage of the LCA over other “clustering” methods is that it uses common statistical methods (goodness-of-fit and classification error statistics) to select the optimal number of groups. In the example of low income countries, Annex Table 5.1, the Bayesian Information Criterion (BIC) is minimized for a model with eight classes — and that is the optimal number of groups. LCA is also not deterministic but instead provides estimates of “probabilities” of group membership.


Caveats for using the Gallup World Poll data in undertaking Latent Class Analysis

According to Alkire and Samman (2015), opinion surveys, like the Gallup World Poll, are inferior in capturing official poverty data to national household surveys. In a comparison of Gallup with national surveys in Latin America, incomes recorded by Gallup were lower than in national household surveys (except in Venezuela). On average the mean (median) income was 66 per cent (77 per cent) of the value in the household surveys. As a result, poverty in the Gallup World Poll was 16 percentage points higher than in national household surveys when using the $2 per day line. Income inequality was also lower in Gallup possibly due to the omission of some relevant income sources for non-poor groups. Additional criticism centers around the interviewing process, (e.g. who answers the questionnaire, psychological factors, the role of question sequencing). In the case of Asia and the Pacific, the 2016 Gallup World Poll reports poverty rates that are systematically higher than those reported by the World Bank. As an example, please see table in Annex 5.3.
Poverty at $3.20 comparison, Gallup World Poll and World Development Indicators (WDI)

<table>
<thead>
<tr>
<th></th>
<th>GALLUP WORLD POLL</th>
<th>WDI*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>56%</td>
<td>52.9%</td>
</tr>
<tr>
<td>India</td>
<td>64%</td>
<td>60.4%</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>71%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>42%</td>
<td>n/a</td>
</tr>
<tr>
<td>Indonesia</td>
<td>59%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>59%</td>
<td>39.7%</td>
</tr>
</tbody>
</table>

However, the use of Gallup World Poll data in the calculation of the latent class analysis is justified for various reasons:

- The aim is to determine the profile of those who are poor and not to calculate the prevalence or level of poverty.
- The explanatory and exploratory added value of important variables, such as income, employment, religion etc. to a certain extent justifies the compromise in accuracy of poverty prevalence rates.
- Income poverty estimates reported in the Gallup World Poll are highly correlated with those of the World Bank and other official sources, for example, a correlation of 0.92 between its estimate of $2.00 per day poverty and that of the World Bank.

**ANNEX TABLE 5.4**

Full names of social protection schemes and programmes in Figure 5.3

<table>
<thead>
<tr>
<th>Country</th>
<th>Scheme Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>Renta Universal de Vejez (Renta Dignidad)</td>
</tr>
<tr>
<td>Brazil</td>
<td>Bolsa Familia</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Productive Safety Net Programme</td>
</tr>
<tr>
<td>Georgia 1</td>
<td>Old Age Pension</td>
</tr>
<tr>
<td>Georgia 2</td>
<td>Targeted Social Assistance</td>
</tr>
<tr>
<td>India</td>
<td>Indira Gandhi National Old Age Pension</td>
</tr>
<tr>
<td>Indonesia 1</td>
<td>Bantuan Langsung Tunai (unconditional cash transfer)</td>
</tr>
<tr>
<td>Indonesia 2</td>
<td>Program Keluarga Harapan (conditional cash transfer)</td>
</tr>
<tr>
<td>Indonesia 3</td>
<td>Proxy Means Testing Pilot;</td>
</tr>
<tr>
<td>Kenya</td>
<td>Hunger Safety Net Programme</td>
</tr>
<tr>
<td>Mauritius</td>
<td>Basic Retirement Pension</td>
</tr>
<tr>
<td>Mexico</td>
<td>Oportunidades (renamed Prospera in 2014)</td>
</tr>
<tr>
<td>Philippines</td>
<td>Pantawid Pamilyang Pilipino Programme</td>
</tr>
<tr>
<td>Rwanda 1</td>
<td>Vision 2020 Umurenge Programme</td>
</tr>
<tr>
<td>Rwanda 2</td>
<td>Ubudehe programme</td>
</tr>
<tr>
<td>South Africa 1</td>
<td>Child Support Grant</td>
</tr>
<tr>
<td>South Africa 2</td>
<td>Older Persons Grant</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Poor List</td>
</tr>
</tbody>
</table>

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Fax: 66 2 288-1000
This report lays out new arguments and evidence for the critical and urgent need to increase investment in people, particularly in social protection.

Developing countries in Asia and the Pacific only spend about 3.7 per cent of GDP on social protection, compared to the world average of 11.2 per cent. This underinvestment is the reason why 60 per cent of the population in the Asia-Pacific region has no protection if they fall ill, have a disability, become unemployed, pregnant or old.

With 1.2 billion people living on less than $3.20 per day, of which 400 million live on less than $1.90 per day, social protection is an essential strategy to tackle poverty and deprivation.

The evidence for increasing the level of investment in people in Asia and the Pacific is overwhelming: around 328 million people would be lifted out of moderate poverty and 52 million would move out of extreme poverty, if countries in the region matched the global averages of spending on education, health and social protection.

Countries in the region do not have to wait to become rich to start investing in people. Even low income and lower-middle income countries can boost social spending, as evidenced by some first movers across the region.