## Chapter III

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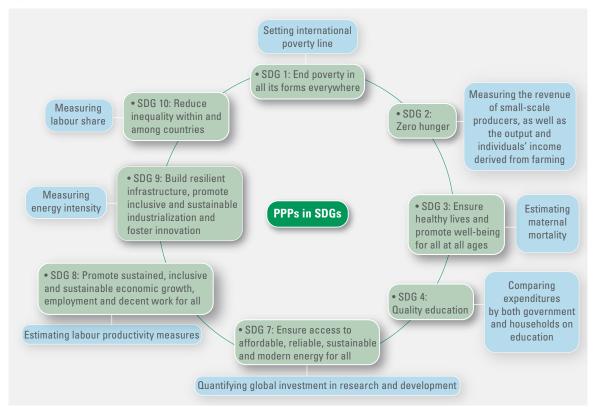
PPP Uses in Sustainable Development Goals

PPPs are used in monitoring progress in achieving the SDGs and the 2030 Agenda for Sustainable Development. They enter into the computation of indicators under several SDG targets. More specifically, they are currently used in measuring progress on eight goals: SDGs 1 to 4 and 7 to 10, as summarized in figure 3.1.



#### **SDG 1**: No poverty

The first SDG aims to end poverty in all its forms everywhere. While global extreme poverty is dropping, the pace of the decline has slowed, a challenge to achieving the Goal.



#### Figure 3.1. How PPPs help track progress on the SDGs

Target 1.1 is the eradication of extreme poverty. Reducing poverty requires focused attention to the national poverty line. To ensure a consistent measure of poverty in terms of consumption, the welfare of people in different countries is measured on a common scale by adjusting for differences in purchasing powers. The international poverty line holds the real value of poverty line constant across different countries. This is where PPPs are used. The proportion of the population in extreme poverty is defined as the percentage of the population living below the international poverty line where the average daily consumption (or income) per person is less than a certain amount of United States dollars, in PPP terms, across countries of the world.

This Goal was first established on an understanding of global poverty based on the 2005 PPPs. Significant corrections were made after the computation of the 2011 PPPs, which changed the poverty line from \$1.25 to \$1.90. A new poverty line shall be established after the release of the 2017 PPP results. The measure of global poverty trends over time requires a benchmark line that is consistent across all countries, as it needs to be held constant in real terms as relative prices change.

The use of PPPs ensures that the poverty line represents the same standard of living in every country, which usually reflects the amount of money needed to meet a person's minimum nutritional, clothing and shelter needs. This line is calculated as an average of the national poverty lines in the world's poorest countries expressed in international dollars. The average is then converted back to local currency to calculate each country's counts of those living below the poverty line. Furthermore, the poverty line attempts to hold the real value of the line constant over time, allowing assessments of progress towards extreme poverty eradication. The conversion of the poverty lines to international currency and the conversion of the global line back to local currencies are both done using PPPs.

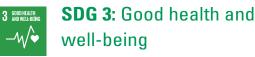


#### SDG 2: Zero hunger

This SDG aims to end hunger, achieve food security and improved nutrition

and promote sustainable agriculture. Most of the world's hungry people live in developing countries where undernutrition affects millions of children. Poor nutrition causes a large proportion of child deaths in these countries.

PPPs are used in target 2.3 which aims to double the agricultural productivity and incomes of small-scale food producers. PPPs are used in two indicators, 2.3.1, the volume of production per labour unit, by classes of farming/pastoral/forestry enterprise size, and 2.3.2, the average income of small-scale food producers, by sex and indigenous status. The Food and Agriculture Organization (FAO) uses PPPs to measure the revenue of small-scale producers, as well as the output and individual income derived from farming.



This SDG aims at ensuring healthy lives and promoting well-being for all at all ages. Although health has improved in the past decade, people around the world still suffer from preventable diseases. At least half of the global population still does not have access to health services.

PPPs are used in target 3.1, on reducing the global maternal mortality ratio to less than 70 per 100,000 live births, through the BMat model, which applies per capita GDP in PPP terms for estimating and projecting the maternal mortality ratio to ensure that the estimation approach is consistent across countries.

PPPs are also used in target 3.8, on achieving 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. In indicator 3.8.2, on the proportion of the population with large household expenditures on health as a share of total household expenditure or income, expenditures are assessed in PPP terms.



#### **SDG 4:** Quality education

SDG 4 aims at ensuring inclusive and equitable quality education and

promoting lifelong learning opportunities for all. In the past decade, despite major improvement in access to education, many countries still have not managed to achieve all targets of this Goal. Education has some of the greatest variations in price levels across countries.

PPPs are used in the computation of the indicator under target 4.5. It seeks to eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations by 2030. To monitor this target, the United Nations Educational, Scientific and Cultural Organization (UNESCO) tracks indicators with PPP-based expenditures on education by governments and households.



## **SDG 7:** Affordable and clean energy

This SDG aims at ensuring access to affordable, reliable, sustainable and modern energy for all. Some of the 2030 targets include ensuring universal access to affordable, reliable and modern energy services, and substantially increasing the share of renewable energy in the global energy mix.

PPPs are used in target 7.3, which entails doubling the global rate of improvement in energy efficiency. This target's progress is monitored by energy intensity, measured in terms of primary energy and GDP. Energy intensity reflects the energy supplied to an economy per unit value of economic output, which is represented by GDP, measured in PPP terms. Energy intensity is thus represented as the ratio of energy consumption to PPP-based GDP.



### **SDG 8:** Decent work and economic growth

The objective of this SDG is to promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all. Goal 8 encourages sustained economic growth by achieving higher levels of productivity, and increasing technological innovation through policies that help entrepreneurs reach their goals and create job opportunities.

Target 8.1 is to sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries. Target 8.2 is to achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labourintensive sectors. Both targets use PPP-based GDP in measuring the annual growth rates of real per capita GDP and real per employed person GDP to assess economic productivity.



## **SDG 9:** Industry, innovation and infrastructure

SDG 9 aims at building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation.

PPPs are used in the computation of indicators under two targets. Target 9.4 is, by 2030, to upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities. Target 9.5 is to enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.

The indicator measuring progress on target 9.4 is carbon dioxide emissions per unit of value added, which, when computed for the whole economy, is total emissions divided by GDP in PPP terms.

For target 9.5, PPPs are used in computing the first indicator, on research and development expenditure as a proportion of GDP. For regional and global aggregates, data are converted using PPPs, and research and development expenditure is divided by GDP in PPP terms.



### **SDG 10:** Reduced inequalities

The objective of SDG 10 is to reduce inequalities within and among countries. Goal

10 can be achieved by focusing on the following targets, among others: achieving and sustaining by 2030 the income growth of the bottom 40 per cent of the population at a rate higher than the national average, adopting policies to ensure greater equality, and ensuring enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions.

Target 10.1 is, by 2030, to progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average. PPPs are used in measuring the growth rates in per capita real consumption or real income of the bottom 40 per cent of the income distribution in a country from household surveys over a roughly five-year period, where per capita consumption or income is measured in PPP terms for comparison across countries.

## **Chapter IV**