

# Exposure to Sustainable Development

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# What is environment?

The complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism / ecological community & ultimately determines its form and survival.

# In simple words Environment is

- We and everything surrounding us
- Includes air, water, land, natural resources, flora, fauna, humans and their interrelation

Before we understood 'environment' in true sense we rarely gave attention to its linkage with one very important component of the production and consumption process.

# Concept of Sustainable Development

“Development that **meets the needs of the present without compromising the ability of future** generations to meet their own needs”, *1987 Bruntland Commission Report, United Nations.*



# Sustainable Development

In broader perspective through sustainable development we not only aim to safeguard the interests of the future generations, but also try to address the concerns of our contemporaries and counterparts across the globe.

Sustainable development aims to attain a state of society where living conditions and resources are used to continue to meet human needs without undermining the integrity and stability of the environment.

# Sustainable Development

Bringing together multiple, interdependent dimensions



# Sustainable Development Goals (SDG) of the United Nations

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, **now and into the future.**

The SDGs also known as the Global Goals, adopted by the United Nations member states is a universal call to action to **end poverty, protect the planet,** and ensure that by 2030 all people enjoy **peace and prosperity.**

At its heart are the 17 Goals, which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that **ending poverty and other deprivations** must go hand-in-hand with strategies that **improve health and education, reduce inequality,** and **spur economic growth** – all while **tackling climate change** and working to **preserve our oceans and forests.**

The SDGs were built on the lessons learned during the implementation of the Millennium Development Goals (MDGs) of the United Nations.

In September 2000, leaders of 189 countries gathered at the United Nations headquarters and signed the historic Millennium Declaration, in which they committed to achieve a set of eight measurable goals (MDGs) that ranged from halving extreme poverty and hunger to promoting gender equality and reducing child mortality, by the target date of 2015.

Substantial progress was made regarding the MDGs. However, the achievements were uneven. The MDGs were set to expire in 2015 and the discussion of a post-2015 agenda continued. **The focus was now on building a sustainable world where environmental sustainability, social inclusion and economic development are equally valued.** This paved the path for SDGs.

# MDGs and SDGs

- MDGs adopted in 2000, focussed on social development and poverty eradication and concluded in 2015.
- MDGs provided a goal-oriented global results framework for development policies, articulated around 8 goals.
- SDGs are integrated, indivisible and has 3 dimensions: Economic, Social and Environmental.

# Transition from MDGs to SDGs

	Millennium Development Goals	Sustainable Development Goals
<b>Period</b>	2000-2015	2016-2030
<b>Coverage</b>	Developing countries	Universal
<b>Effective date</b>	08 <sup>th</sup> September, 2000 to 31 <sup>st</sup> December, 2015	1 <sup>st</sup> January, 2016
<b>Goals</b>	08	17
<b>Targets</b>	21	169
<b>Indicators</b>	60	231 unique indicators

# Key Themes (5 Ps)

❖ PEOPLE

❖ PLANET

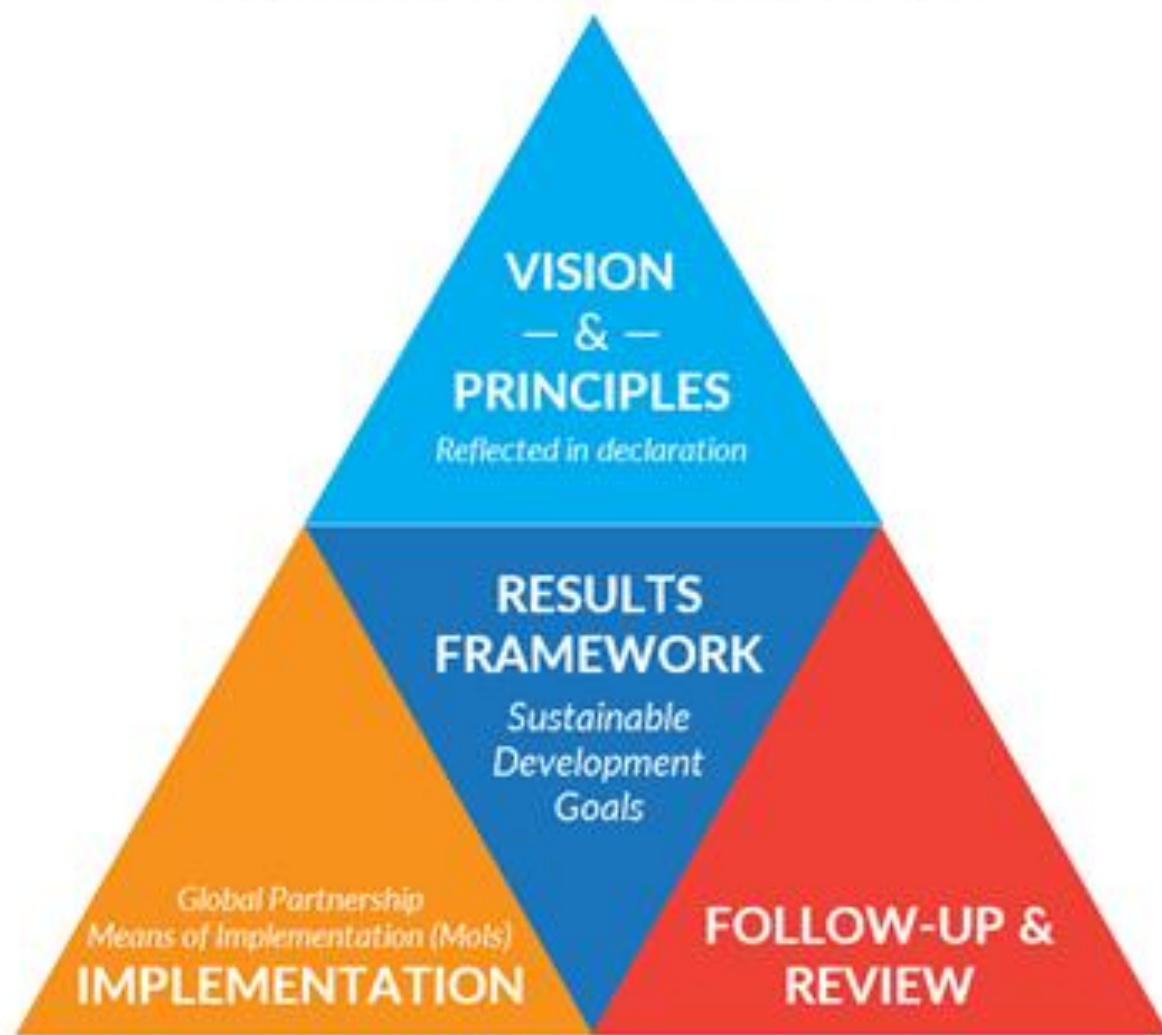
❖ PROSPERITY

❖ PEACE

❖ PARTNERSHIP

Mentioned In Preamble to the Resolution adopted by UN General Assembly in Sept 2015 called Agenda 2030 since SDGs to be achieved till 2030.

# THE 2030 AGENDA





# SUSTAINABLE DEVELOPMENT GOALS

**1** NO POVERTY



**2** ZERO HUNGER



**3** GOOD HEALTH AND WELL-BEING



**4** QUALITY EDUCATION



**5** GENDER EQUALITY



**6** CLEAN WATER AND SANITATION



**7** AFFORDABLE AND CLEAN ENERGY



**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**10** REDUCED INEQUALITIES



**11** SUSTAINABLE CITIES AND COMMUNITIES



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



**14** LIFE BELOW WATER



**15** LIFE ON LAND



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**17** PARTNERSHIPS FOR THE GOALS



SUSTAINABLE DEVELOPMENT GOALS

# SDGs Architecture

- **Goals : 17**
  - Reflect global vision / ambition
- **Targets : 169**
  - Reflect action points
- **Indicators : 247 (231 unique indicators as some indicators repeat under 2 to 3 targets)**
  - Reflect measurement criteria
  - Can be customized to national priorities

# Linkages between Environment and SDGs

- SDGs with **direct environmental focus**
  - Water (SDG 6),
  - Clean energy (SDG 7)
  - Climate (SDG 13),
  - Oceans (SDG 14) and
  - Land and biodiversity (SDG 15).
- Other goals are **indirectly related** to the physical environment
  - natural disasters (SDGs 1 and 11),
  - food, hunger and agriculture (SDG 2),
  - human health (SDG 3),
  - economic growth and employment (SDG 8),
  - industry (SDG 9) and
  - cities (SDG 11)

## Goal 1: No Poverty



Eradicating extreme poverty for all people everywhere by 2030 is a pivotal aim of the Sustainable Development Goals. **Extreme poverty, defined as surviving on less than US\$3.00 per person per day at 2021 purchasing power parity,** has witnessed remarkable declines over recent decades.

However, in 2025, 808 million people – or 1 in 10 people worldwide – were living in extreme poverty, an upward revision from earlier estimates because of the updated poverty line. If current trends continue, 8.9 per cent of the world's population will still live in extreme poverty by 2030.

A shocking revelation is the resurgence of hunger levels to those last observed in 2005. Equally concerning is the persistent increase in food prices across a larger number of countries compared to the period from 2015 to 2019. This dual challenge of poverty and food security poses a critical global concern.

## Goal 2: Zero Hunger



**Goal 2 is about creating a world free of hunger by 2030.** The global issue of hunger and food insecurity has shown an alarming increase since 2015, a trend exacerbated by a combination of factors including the pandemic, conflict, climate change, and deepening inequalities.

**In 2024, an estimated 8.2 per cent – or 1 of 12 people – of the global population faced hunger and about 28 per cent – nearly 2.3 billion people – were moderately or severely food insecure.** Global hunger levels, measured by the prevalence of undernourishment, remained at the same level for three consecutive years after a sharp rise during the pandemic. This data underscores the severity of the situation, revealing a growing crisis.

In addition, an estimated 2.33 billion people faced moderate to severe food insecurity in 2023. This classification signifies their lack of access to sufficient nourishment. This number escalated by an alarming 383 million people compared to 2019.

## Goal 3: Good Health and Well-Being



**Great strides have been made in improving people's health in recent years.** As of 2023, 133 countries have already met the SDG target on under-5 mortality. Effective HIV treatment has cut global AIDS-related deaths by half since 2010 and at least one neglected tropical disease has been eliminated in 54 countries by the end of 2024.

However, inequalities in health care access persist. The COVID-19 pandemic and other ongoing crises have impeded progress towards Goal 3. Childhood vaccination rates have experienced a significant decline, and tuberculosis and malaria cases have increased. compared with pre-pandemic levels.

The Sustainable Development Goals make a bold commitment to end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases by 2030. The aim is to achieve universal health coverage and provide access to safe and affordable medicines and vaccines for all.

## Goal 4: Quality Education



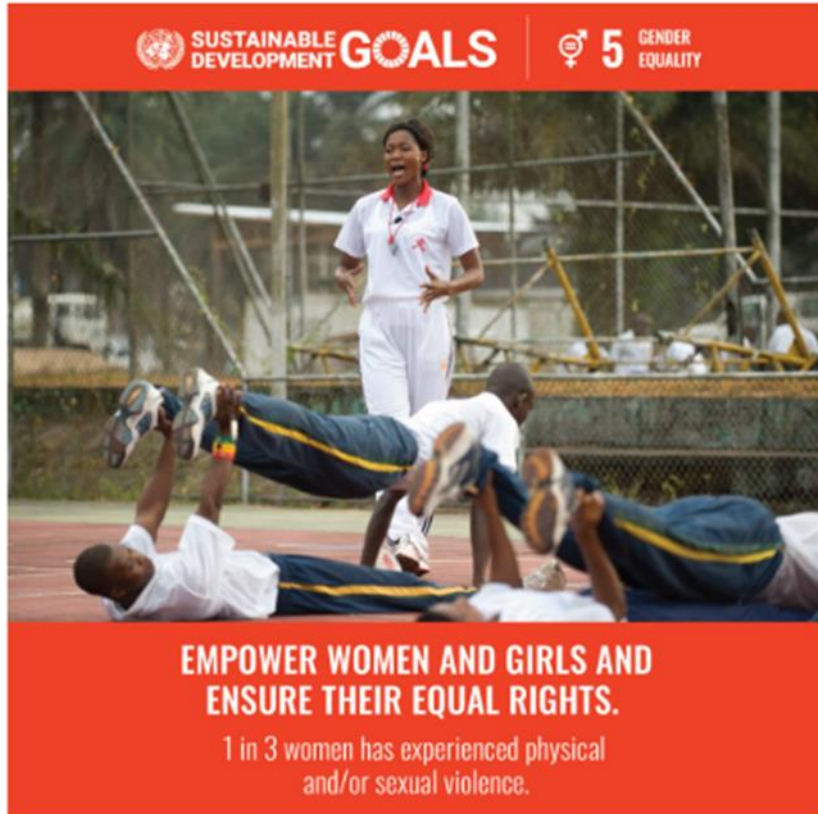
As of 2023, 272 million children and youth were out of school, up 3 per cent since 2015 and disproportionately concentrated in low-income countries.

In addition to free primary and secondary schooling for all boys and girls by 2030, the aim is to provide equal access to affordable vocational training, eliminate gender and wealth disparities, and achieve universal access to quality higher education.

Education helps to reduce inequalities and to reach gender equality. It also empowers people everywhere to live more healthy and sustainable lives. Education is also crucial to fostering tolerance between people and contributes to more peaceful societies.

To deliver on Goal 4, education financing must become a national investment priority. Furthermore, measures such as making education free and compulsory, increasing the number of teachers, improving basic school infrastructure and embracing digital transformation are essential.

## Goal 5: Gender Equality



Goal 5 focuses on closing the gender gap and ensuring equal opportunities for all.

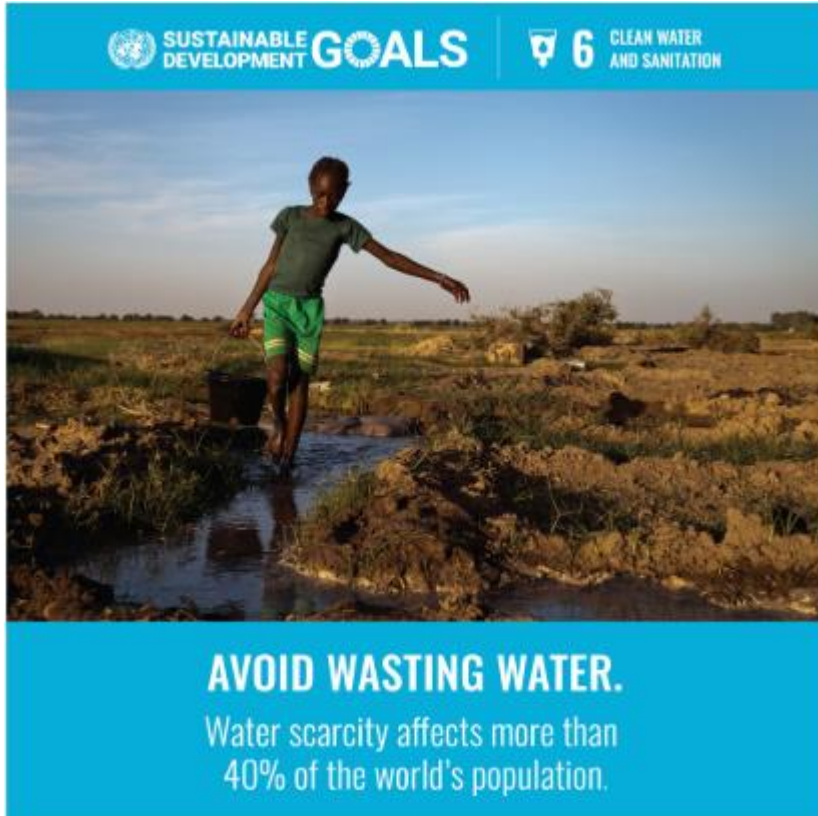
Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

Women and girls represent half of the world's population and therefore also half of its potential. But gender inequality persists everywhere and stagnates social progress. Sexual violence and exploitation, the unequal division of unpaid care and domestic work, and discrimination in public office, all remain huge barriers.

On average, women in the labor market still occupy only 30 per cent of managerial positions globally and women spend about two and a half times as many hours in unpaid domestic and care work as men.

At the rate of progress as of 2023, it would take an estimated 300 years to end child marriage, 286 years to close gaps in legal protection and remove discriminatory laws, 140 years for women to be represented equally in positions of power and leadership in the workplace, and 47 years to achieve equal representation in national parliaments.

## Goal 6: Clean Water and Sanitation



Access to safe water, sanitation and hygiene is the most basic human need for health and well-being.

The demand for water has outpaced population growth. Water scarcity is projected to increase with the rise of global temperatures as a result of climate change.

Investments in infrastructure and sanitation facilities; protection and restoration of water-related ecosystems; and hygiene education are among the steps necessary to ensure universal access to safe and affordable drinking water for all by 2030, and improving water-use efficiency is one key to reducing water stress.

There has been positive progress. Between 2015 and 2024, the proportion of the world's population with access to safely managed drinking water increased from 68 per cent to 74 per cent.

## Goal 7: Affordable and Clean Energy



Goal 7 is about ensuring access to clean and affordable energy which is key to the development of agriculture, business, communications, education, healthcare and transportation.

The world continues to advance towards sustainable energy targets – but not fast enough. At the current pace, about 645 million people will still lack access to electricity and 1.8 billion people will still rely on polluting fuels and technologies for cooking by 2030.

From 2010 to 2023, the proportion of the global population with access to electricity has increased from 84 per cent to 92 per cent.

Ensuring universal access to affordable electricity by 2030 means investing in clean energy sources such as solar, wind and thermal. Expanding infrastructure and upgrading technology to provide clean energy in all developing countries is a crucial goal that can both encourage growth and help the environment.

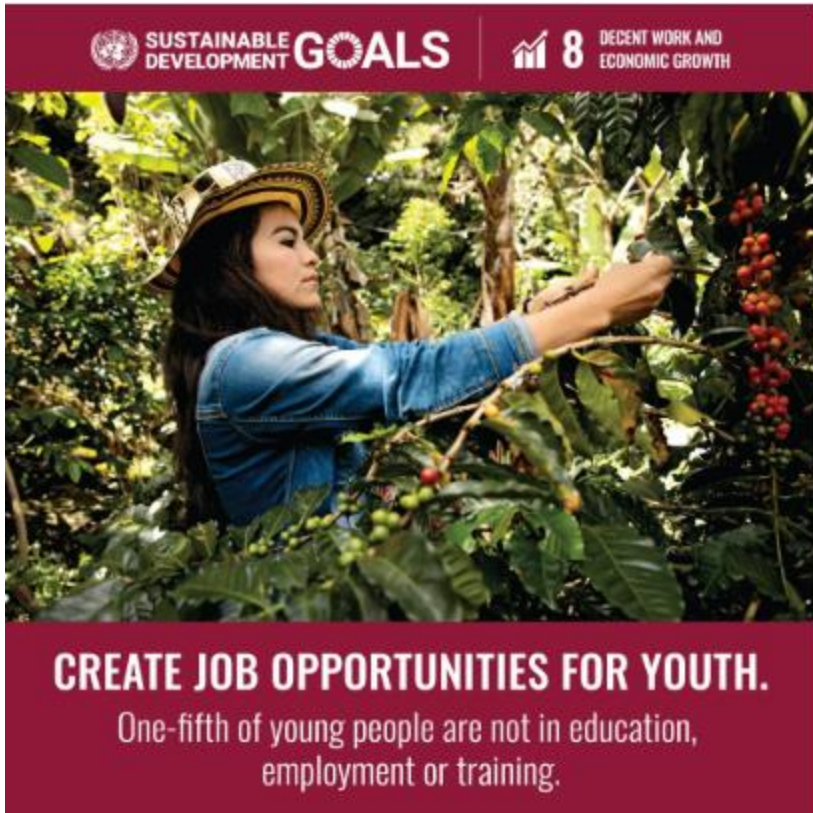
## Goal 8: Decent Work and Economic Growth

Goal 8 focuses on creating quality jobs, promoting entrepreneurship, and fostering economic growth that benefits everyone.

The journey towards achieving Goal 8 faces significant challenges due to the aftermath of COVID-19, trade tensions, rising debt in developing countries and geopolitical conflicts. These factors collectively threaten global economic growth. Although global real GDP per capita saw a rebound in 2021, it experienced a slowdown in 2022 and is projected to slow to just 1.5 per cent in 2025 due to heightened trade tensions and policy uncertainty.

While the unemployment rate fell to a record low of 5.0 per cent in 2024, nearly 58 per cent of workers remained informally employed, with persistently high rates in LDCs and sub-Saharan Africa. However, significant disparities across gender and age persist.

More progress is needed to increase employment opportunities, especially for young people, reduce informal employment and labour market inequality (particularly in terms of the gender pay gap), promote safe and secure working environments, and improve access to financial services to ensure sustained and inclusive economic growth.



## Goal 9: Industry, Innovation, and Infrastructure



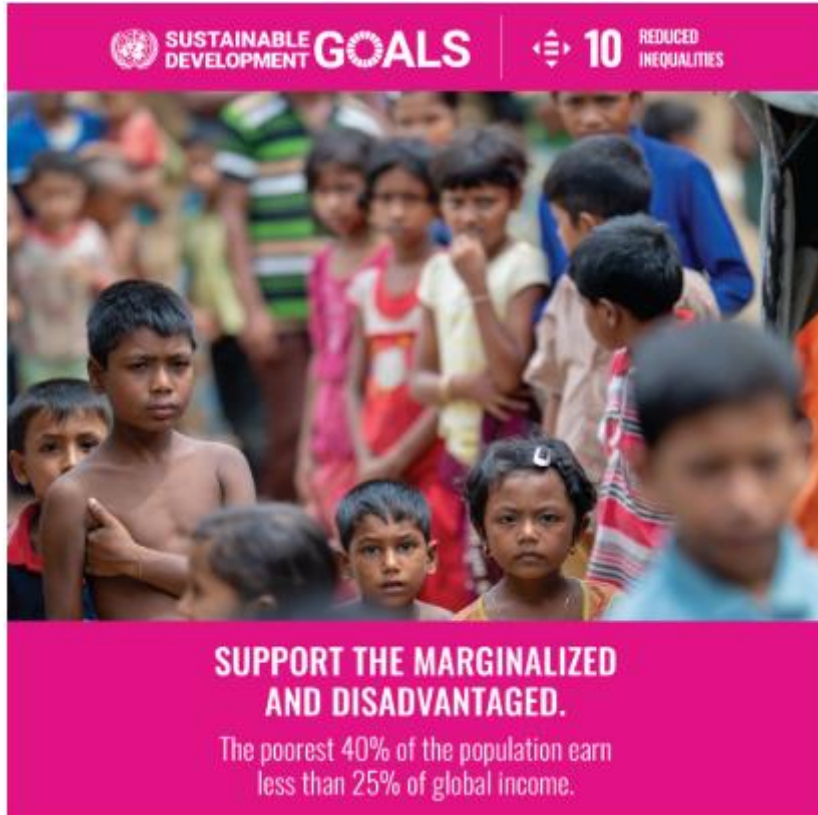
Goal 9 seeks to build resilient infrastructure, promote sustainable industrialization and foster innovation.

Economic growth, social development and climate action are heavily dependent on investments in infrastructure, sustainable industrial development and technological progress. In the face of a rapidly changing global economic landscape and increasing inequalities, sustained growth must include industrialization that first of all, makes opportunities accessible to all people, and second, is supported by innovation and resilient infrastructure.

The manufacturing decline caused by the pandemic has further caused serious impacts on the global economy. This is primarily due to high inflation, energy price shocks, persistent disruptions in the supply of raw materials and intermediate goods, and global economic deceleration.

While LDCs in Asia have made considerable progress, African LDCs would need to change the current trajectory and accelerate progress significantly to attain the target by 2030. However, medium-high and high-technology industries demonstrated robust growth rates.

## Goal 10: Reduced Inequalities



Inequality threatens long-term social and economic development, harms poverty reduction and destroys people's sense of fulfillment and self-worth.

The incomes of the poorest 40 per cent of the population had been growing faster than the national average in most countries.

The global refugee population has surged to 37.8 million – primarily from Afghanistan, the Bolivarian Republic of Venezuela, the Syrian Arab Republic and Ukraine – intensifying humanitarian pressures.

Globally, 1 in 5 people report experiencing discrimination on grounds prohibited by international law within the past year, with rates highest in Least Developed Countries, averaging 24.3%.

Youth (15–29 years) more often report discrimination based on migration status, ethnicity and sexual orientation, while older adults (60+ years) encounter age, disability and health-related discrimination.

## Goal 11: Sustainable Cities and Communities



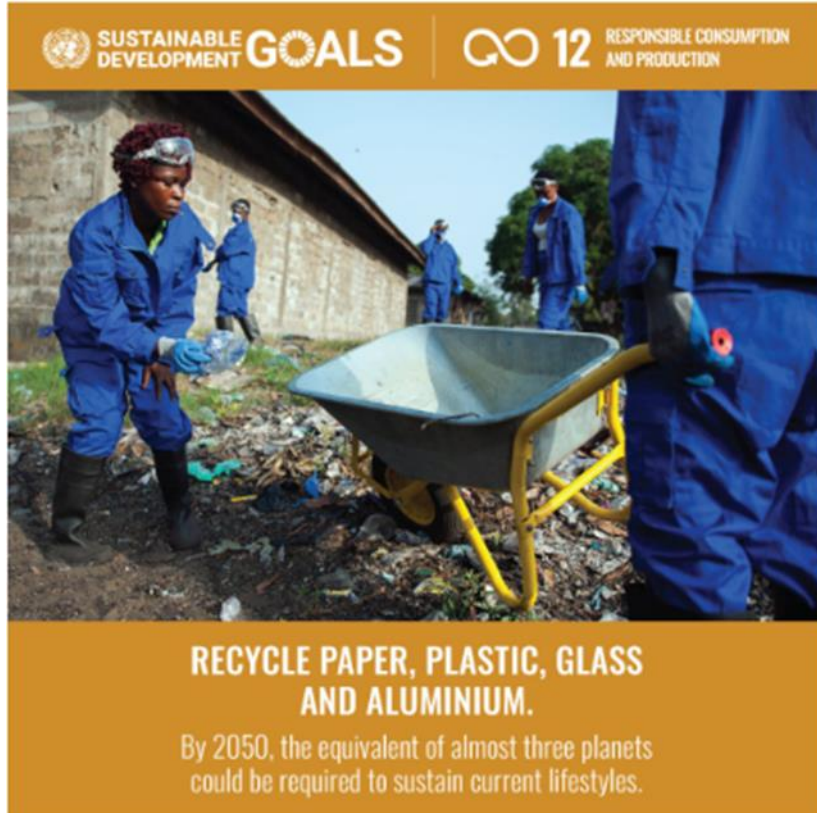
Cities are centers of innovation and economic growth, but they also face challenges like poverty, inequality and environmental degradation. Goal 11 promotes sustainable urban development to create inclusive, safe, and resilient cities.

Cities represent the future of global living. The world's population reached 8 billion in 2022 with over half living in urban areas. This figure is only expected to rise, with 70 per cent of people expected to live in cities by 2050.

Good progress has been made since the implementation of the SDGs in 2015, and now the number of countries with national and local disaster risk reduction strategies has doubled. But issues still remain and in 2022, only half of the urban population had convenient access to public transport.

Efforts must focus on implementing inclusive, resilient and sustainable urban development policies and practices that prioritize access to basic services, affordable housing, efficient transportation and green spaces for all.

## Goal 12: Responsible Consumption and Production



Goal 12 is about ensuring sustainable consumption and production patterns, which is key to sustain the livelihoods of current and future generations.

If the global population reaches 9.8 billion by 2050, the equivalent of almost three planets will be required to provide the natural resources needed to sustain current lifestyles.

We need to change our consumption habits, and shifting our energy supplies to more sustainable ones is one of the main changes we must make if we are going to reduce our consumption levels.

Global fossil fuel subsidies fell by 34.5 per cent in 2023 – from a record high of \$1.68 trillion in 2022 to an estimated \$1.10 trillion. Despite the drop, fossil fuel subsidies remain nearly three times 2020 levels and well above historical averages.

Food waste is another sign of over consumption, and tackling food loss is urgent and requires dedicated policies, informed by data, as well as investments in technologies, infrastructure, education and monitoring. A staggering 931 million tons of food is wasted a year, despite a huge number of the global population going hungry.

## Goal 13: Climate Action



Every person, in every country in every continent is impacted in some shape or form by climate change. Climate change is caused by human activities – primarily the burning of fossil fuels like oil, coal and gas – and threatens life on Earth as we know it. With rising greenhouse gas emissions, the impacts of climate change are intensifying and accelerating, including more frequent extreme weather events like droughts, floods and storms, and rising sea levels.

Currently, our planet is already about 1.2°C warmer than it was in the late 1800s, and emissions continue to rise. To keep global warming to no more than 1.5°C – as called for in the Paris Agreement – greenhouse gas emissions must be cut by almost half by 2030 compared to 2019.

The World Meteorological Organization (WMO) confirmed 2024 to be the hottest year on record, at approximately 1.55°C above pre-industrial levels. The WMO estimates an 80 per cent chance that at least one of the next five years will surpass 2024 as the hottest on record.

## Goal 14: Life Below Water



Goal 14 is about conserving and sustainably using the oceans, seas and marine resources. A healthy ocean and seas are essential to human existence and life on Earth.

The Ocean is intrinsic to our life on earth. Covering three-quarters of the Earth's surface, contain 97 percent of the Earth's water, and represent 99 percent of the living space on the planet by volume.

Worryingly, marine pollution is reaching extreme levels, with over 17 million metric tons clogging the ocean in 2021, a figure set to double or triple by 2040. Plastic is the most harmful type of ocean pollution.

Despite increased conservation efforts, only 8.4% of the ocean is currently designated as marine protected areas—well below the 30% target set for 2030.

Currently, the ocean's average pH is 8.1 which is about 30 per cent more acidic than in pre- industrial times. Ocean acidification threatens the survival of marine life, disrupts the food web, and undermines vital services provided by the ocean and our own food security.

## Goal 15: Life on Land



Goal 15 is about conserving life on land. It is to protect and restore terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and stop biodiversity loss.

However, the world is facing a triple crisis of climate change, pollution and biodiversity loss.

Forests covered about 4.1 billion hectares (31 per cent) of the world's land surface in 2020. From 2000 to 2020, forest coverage shrank by about 100 million hectares.

Agricultural expansion is the direct driver of almost 90 per cent of deforestation. This is in direct relation to our food systems, and oil palm harvesting accounted for 7 per cent of global deforestation from 2000 to 2018.

Global and regional efforts to sustain forest ecosystems as well as their social, economic and environmental functions are essential, in particular for developing countries and the tropics.

## Goal 16: Peace, Justice and Strong Institutions



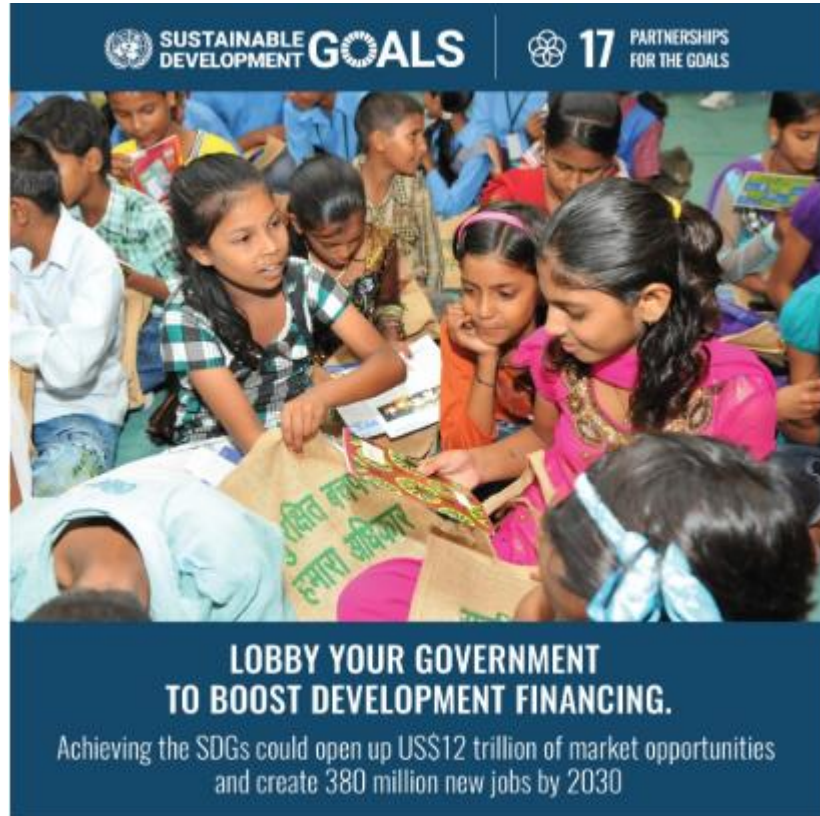
Goal 16 is about promoting peaceful and inclusive societies, providing access to justice for all and building effective, accountable and inclusive institutions at all levels. People everywhere should be free of fear from all forms of violence and feel safe as they go about their lives whatever their ethnicity, faith or sexual orientation.

In 2024, loss of lives amid armed conflicts surged 40 per cent from 2023, marking the third consecutive annual rise. About four times more children and women were killed in 2023–2024 than in the previous biennium; of these, 8 in 10 child deaths and 7 in 10 female deaths occurred in Gaza.

High levels of armed violence and insecurity have a destructive impact on a country's development, while sexual violence, crime, exploitation and torture are prevalent where there is conflict or no rule of law, and countries must take measures to protect those who are most at risk.

Governments, civil society and communities need to work together to find lasting solutions to conflict and insecurity. Strengthening the rule of law and promoting human rights is key to this process, as is reducing the flow of illicit arms, combating corruption, and ensuring inclusive participation at all times.

## Goal 17: Partnerships



Goal 17 is about revitalizing the global partnership for sustainable development. The 2030 Agenda is universal and calls for action by all countries – developed and developing – to ensure no one is left behind. It requires partnerships between governments, the private sector, and civil society.

Low- and middle-income countries (LMICs) faced record-high \$1.4 trillion debt-servicing costs in 2023, compounded by a \$4 trillion annual investment gap to achieve the SDGs.

In 2024, (ODA) from Development Assistance Committee members reached a total of \$212.2 billion, accounting for 0.33% of their combined gross national income. This marked a 7.1 per cent decline in real terms from 2023, marking the first drop after five years of consecutive growth, largely driven by reduced contributions to international organizations, lower aid for Ukraine, decreased humanitarian aid and reduced spending on hosting refugees in donor countries.

To be successful, everyone will need to mobilize both existing and additional resources, and developed countries will need to fulfill their official development assistance commitments.