

## \* Three Pillars of Sustainability :-

### 1. Social Sustainability:

- Focuses on well-being, equity, human rights, and social justice.
- Ensures access to basic needs, education, healthcare and inclusive communities.
- A social sustainable system maintains a stable level of social well-being indefinitely.
- Balances individual needs with group needs and aims to improve quality of life for present and future generations.

### 2. Environmental Sustainability:

- Protects and improves the natural environment, including ecosystem biodiversity and resources.
- Emphasizes responsible resource use, reducing pollution and waste, and addressing climate change.
- Means using renewable resources at a rate where they can replenish and managing non-renewables so they don't run out.
- In science, it includes:-
  1. Sustainability of resources,
  2. Sustainability of ecosystems.

### 3. Economic Sustainability:

- Builds a stable, resilient and fair economy that supports present and future needs.
- Focuses on innovation, responsible business and long term economic productivity.
- A system is economically sustainable if it can maintain economic output indefinitely.

How they work together →

- All three pillars must stay strong - if one weakens (e.g. war harming the social pillar), the other two suffer.
- The goal is a balanced system with long term environmental care, social well being and economic stability.

## ④ Sustainable Development Goals (SDGs) →

- The SDGs come from the global push for sustainable development, which was popularized after major environmental concerns like climate change, ozone depletion, deforestation and pollution became global issues.
- They follow the idea introduced in the Brundtland Report (1987) that development must meet present needs without compromising the ability of future generations to meet theirs.
- The SDGs appear in the context of the 2000s-Present environmental movement, where the UN is actively promoting them as global guidelines for balancing-

  - Environmental protection.
  - Economic stability.
  - Social well-being.

- The SDGs aim to create a world that is environmentally safe, socially fair, and economically stable. The slides emphasize the modern focus areas:
  - Climate change: reducing global warming and carbon emissions.
  - Renewable energy: shifting away from fossil fuels
  - Biodiversity protection: preventing species loss and ecosystem destruction

→ Plastic and Pollution reduction- addressing global contamination.

→ ~~Youth~~ Also →

- No poverty → Decent work & Eco growth
- zero Hunger → Industry innovation .
- Good Health → Reduce Inequalities .
- Quality Education → Sustainable consumption ensure .
- Gender Equality → Sustainable cities .
- Peace and Justice

These goals directly align with the core environmental and social themes of SDGs .

→ In short, SDGs serve as the world's current roadmap toward achieving the balance between the three pillars of sustainability - social, environment and economic - which the describe the foundation of a Sustainable World .

## Lec→07→ct & MDG and SDG

### Lec→08

SOC

02/12/2025

#### \* SDGs

↳ Explain the goal

↳ In Bangladesh Perspective  
& Examples

↳ Challenges

↳ Solution

→ Assign → 11th  
cls  
→ 13th Dec ↴

CT<sub>2</sub> → 13th Dec

→ SDG 17 Goals

→ Responsible con  
sumption  
& Production.

#### \* Sustainable Development Goals (SDGs [17]) in Details →

\* → MDG is not important (recommend to read once before exam)

→ SDG

→ Sustainable Development Goals.

→ Adopted by the UN in 2015.

→ Total 17 goals.

→ Applies to all countries (rich+poor).

→ Target year: 2030.

→ Why SDGs were created.

→ MDGs (2000-2015) were too narrow.

→ Missed many issues like inequality, Climate, Peace.

→ SDGs cover social, economic, environmental areas together.

→ Key idea of SDGs (core theme):-

→ leave no one behind.

→ Development must be inclusive and sustainable.

→ Structure of SDGs:

→ 17 goals.

→ 169 targets.

→ 232 indicators.

→ The 5 P's →

People: End poverty and hunger; ensure health, education.

Planet: Protect environment, climate, biodiversity.

Prosperity: Economic growth, jobs, innovation.

Peace: Reduce violence, corruption, ensure justice.

Partnership: Global cooperation, financing, technology.

→ SDG Goals:

SDG 1 → No Poverty:

→ End of extreme poverty.

→ Provide social protection, jobs and basic services.

→ Focus on vulnerable groups.

SDG 2 → Zero Hunger:

→ End hunger and malnutrition.

→ Improve agriculture, food security, nutrition programs.

SDG 3: Good Health and Well-being:-

- Reduce child/maternal deaths.
- Prevent diseases, ensure healthcare access for all.

SDG 4: Quality Education:-

- Free, inclusive, quality education.
- Focus on literacy, skills, gender equality in education.

SDG 5: Gender Equality:-

- End discrimination and violence against women.
- Ensure equal rights, political participation and opportunities.

SDG 6: Clean Water & Sanitation:-

- Safe drinking water for all.
- Proper sanitation and waste management.

SDG 7: Affordable & Clean Energy:-

- Access to reliable electricity.
- Promote renewable energy like, solar, wind.

SDG 8: Decent Work & Economic Growth:-

- Create jobs, especially for youth.
- Protect workers' rights and promote sustainable eco growth.

SDG 9: Industry, innovation & infrastructure:-

- Develop good roads, transport, ICT.

→ Support innovation, technology and sustainable industries.

#### SDG 10: Reduced Inequalities:-

→ Reduce income and social inequality.

→ Support marginalized people and fair policies.

#### SDG 11: Sustainable Cities & Communities:

→ Safe housing, transport and urban planning.

→ Reduce pollution and disaster risks.

#### SDG 12: Responsible Consumption & Production:

→ Reduce waste.

→ Promote recycling, efficient use of resources.

#### SDG 13: Climate Action:-

→ Reduce emissions.

→ Strengthen disaster preparedness and climate adaptation.

#### SDG 14: Life below water:-

→ Protect oceans, marine life, coral reefs.

→ Reduce plastic pollution and overfishing.

#### SDG 15: Life on Land:-

→ Protect forests, wildlife and biodiversity.

→ Prevent deforestation and land degradation.

## SDG 16: Peace Justice & Strong Institutions

- Reduce corruption, violence and crime.
- Promote justice and accountable institutions.

## SDG 17: Partnerships for the Goals.

- Global cooperation.
- Finance, technology sharing, capacity building.

### ⇒ Why SDGs matter for Bangladesh:-

- Climate risk (cyclones, floods).
- Poverty & inequality still exist.
- Need jobs, education, clean water.
- SDGs help plan national development.

### → Challenges:-

- Lack of funding.
- Weak data/ indicators.
- Climate vulnerability.
- Rapid urbanization.

### → What SDGs try to achieve overall:

- A world with less poverty, better health, clean environment, and stable societies by 2030.

## ▣ MDG vs SDG

### ▣ MDG → (Millennium Development Goals)

- Introduced in 2000, ended in 2015
- 8 goals, mainly focused on poverty, health, and education.
- Applied mostly to developing countries.
- More narrow, didn't cover environment, inequality, or peace deeply.
- Targets and indicators were fewer and sometimes unclear.
- Progress was uneven, some goals achieved, some not.

### ▣ SDG → Sustainable Development Goals

- Introduced in 2015, target year 2030.
- 17 goals, covering social, economic and environmental issues.
- Applies to all countries (developed + developing)
- More inclusive and comprehensive (poverty, climate, inequality, peace etc)
- clear targets (169) and indicators (232).
- Focuses on sustainability and leave no one behind.

## ④ Bangladesh Perspective of SDGs →

- Why SDGs matter for Bangladesh.
- Country is highly vulnerable to climate change.  
(cyclones, floods, sea-level rise)
- Issues like poverty, hunger, inequality and job creation still need strong work.
- SDGs align well with national plans (vision 2041, Delta plan 2100).
- Progress Bangladesh has made
  - Poverty rate is decreasing.
  - Improvements in child and maternal health.
  - Better access to electricity (especially solar home system).
  - Increased school enrollment and literacy.
- Key Challenges →
  - Climate risks → frequent disasters damage agriculture, homes and infrastructure.
  - Urban pressure → Dhaka congestion housing issues, waste management
  - Financial limitation → SDGs require large investment.
  - Data gaps → not all indicators are measured properly.
  - Inequality → Still rising between rural-urban and rich poor.

→ What Bangladesh is focusing on →

↳ Renewable energy (solar, wind).

→ Digital services and innovation.

→ Sustainable agriculture and food security.

→ Disaster preparedness and early warning systems.

→ Women empowerment and education.

Bangladesh is committed to achieving SDGs but faces serious challenges → especially climate change, urbanization and funding.

**Q11 • What is “Sustainable Development”. Write down the Sustainable Development Goals?**

**Sustainable Development** is a concept that emphasizes achieving economic, social, and environmental goals in a balanced and integrated manner to ensure that present and future generations can meet their needs and live in a healthy, prosperous, and equitable world. Sustainable development seeks to address the challenges of poverty, inequality, environmental degradation, and economic stability through a holistic approach.

The **Sustainable Development Goals (SDGs)**, also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet, and ensure prosperity for all by 2030. There are 17 SDGs:

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1. **No Poverty:** End poverty in all its forms everywhere.
2. **Zero Hunger:** End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
3. **Good Health and Well-being:** Ensure healthy lives and promote well-being for all at all ages.
4. **Quality Education:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. **Gender Equality:** Achieve gender equality and empower all women and girls.
6. **Clean Water and Sanitation:** Ensure availability and sustainable management of water and sanitation for all.
7. **Affordable and Clean Energy:** Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. **Decent Work and Economic Growth:** Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. **Industry, Innovation, and Infrastructure:** Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
10. **Reduced Inequality:** Reduce inequality within and among countries.
11. **Sustainable Cities and Communities:** Make cities and human settlements inclusive, safe, resilient, and sustainable.
12. **Responsible Consumption and Production:** Ensure sustainable consumption and production patterns.
13. **Climate Action:** Take urgent action to combat climate change and its impacts.
14. **Life Below Water:** Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
15. **Life on Land:** Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests,

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combat desertification, and halt and reverse land degradation and halt biodiversity loss.

16. **Peace, Justice, and Strong Institutions:** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.
17. **Partnerships for the Goals:** Strengthen the means of implementation and revitalize the global partnership for sustainable development.

These goals serve as a global blueprint for achieving a better and more sustainable future for all and address various aspects of development, including social, economic, and environmental challenges.

#### **Q12 • What is your understanding about sustainability. and why the world needs Sustainable?**

**Sustainability** refers to the ability to maintain or continue a particular state or system over an extended period without causing undue harm to the environment, society, or future generations. It involves meeting the needs of the present without compromising the ability of future generations to meet their needs. Sustainability encompasses economic, social, and environmental dimensions and strives for a harmonious and balanced coexistence of these aspects.

#### **Why the World Needs Sustainability:**

1. **Environmental Preservation:** Sustainability is essential to preserve the planet's ecosystems, including its air, water, forests, and biodiversity. It addresses critical issues like climate change, deforestation, and habitat destruction, which threaten the health of our planet.

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2. **Resource Conservation:** Sustainable practices help conserve finite resources such as fossil fuels, minerals, and water, ensuring their availability for future generations.
3. **Mitigating Climate Change:** Sustainable actions, like transitioning to renewable energy sources and reducing greenhouse gas emissions, are vital to combat climate change, which poses a significant global threat.
4. **Poverty Reduction:** Sustainable development aims to reduce poverty and promote social equity, ensuring that economic growth benefits all, especially those in vulnerable communities.
5. **Improved Quality of Life:** Sustainability leads to better living standards, access to clean water, quality education, and healthcare. It helps enhance the well-being of people around the world.
6. **Economic Stability:** Sustainable economic practices promote long-term stability and resilience, reducing economic vulnerabilities and risks.
7. **Social Equity:** Sustainability is closely tied to social justice and aims to reduce inequalities in access to resources, opportunities, and decision-making power.
8. **Human Health:** Sustainable practices reduce exposure to pollution and toxins, leading to improved public health and well-being.

- long-term stability and resilience, reducing economic vulnerabilities and risks.
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  8. **Human Health:** Sustainable practices reduce exposure to pollution and toxins, leading to improved public health and well-being.
  9. **Global Cooperation:** Addressing global challenges, such as climate change and resource depletion, requires international cooperation and agreements. Sustainability fosters partnerships and shared responsibility among nations.
  10. **Future Generations:** Sustainable development ensures that the choices made today do not compromise the ability of future generations to meet their needs and enjoy a high quality of life.

In summary, sustainability is crucial for addressing the pressing challenges facing our world, including environmental degradation,

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climate change, resource scarcity, social inequalities, and global health. It provides a framework for responsible and forward-thinking decision-making that seeks to create a more equitable, prosperous, and harmonious world for present and future generations.

**Q13: What is your understanding about sustainability. and why the world needs Sustainable Development Goals? / Propose solutions to ensure a more sustainable future?**

**Understanding of Sustainability:** Sustainability, in a broad sense, refers to the capacity to maintain balance and harmony among environmental, social, and economic systems over the long term. It entails responsible resource management, environmental protection, social equity, and economic stability, all aimed at ensuring that the needs of the present generation are met without compromising the ability of future generations to meet their own needs. Sustainability recognizes the interdependence of these three dimensions and seeks to strike a harmonious equilibrium that fosters well-being for all while respecting planetary boundaries.

**Why the World Needs Sustainable Development Goals (SDGs):** The world needs the Sustainable Development Goals (SDGs) for several compelling reasons:

1. **Global Challenges:** The world faces complex and interconnected challenges, including climate change, poverty, inequality, and environmental degradation. The SDGs provide a universal framework to address these issues comprehensively.
2. **Guidance and Focus:** The SDGs set clear targets and indicators, offering guidance for governments, organizations, and individuals to prioritize actions and resources effectively.

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3. **Shared Responsibility:** The SDGs promote shared responsibility among nations and encourage international cooperation to tackle global issues collectively.
4. **Inclusivity:** The SDGs aim to leave no one behind, emphasizing the importance of inclusivity and addressing disparities, making it a universal agenda for all countries and communities.
5. **Long-Term Vision:** By setting a 2030 deadline for achievement, the SDGs provide a long-term vision that encourages sustainable development as an ongoing commitment rather than a short-term fix.
6. **Accountability:** The SDGs create accountability mechanisms for tracking progress and holding governments and organizations responsible for their commitments.

**Solutions for a More Sustainable Future:** To ensure a more sustainable future, we need a combination of individual actions, policy changes, and global cooperation. Here are some solutions:

1. **Transition to Clean Energy:** Accelerate the shift to renewable energy sources like wind, solar, and hydroelectric power to reduce reliance on fossil fuels and combat climate change.
2. **Promote Sustainable Agriculture:** Implement practices like organic farming, crop rotation, and reduced pesticide use to protect soil, water, and biodiversity.
3. **Efficient Resource Management:** Practice responsible consumption and production by reducing waste, recycling, and conserving resources.
4. **Conservation and Biodiversity Protection:** Preserve and restore natural ecosystems, protect endangered species, and promote biodiversity conservation.
5. **Empower Women and Promote Gender Equality:** Gender equality is crucial for sustainable development. Promote

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- women's rights, access to education, and economic opportunities.
6. **Inclusive Economic Growth:** Ensure that economic growth benefits all by reducing income inequality and providing access to decent jobs and economic opportunities.
7. **Climate Action:** Mitigate climate change by reducing emissions and adapting to its impacts, as outlined in the Paris Agreement.
8. **Invest in Education and Healthcare:** Provide universal access to quality education and healthcare to foster human development and well-being.
9. **Global Partnerships:** Encourage international cooperation and partnerships to address global challenges collectively.
10. **Innovative Technologies:** Develop and implement



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  8. **Invest in Education and Healthcare:** Provide universal access to quality education and healthcare to foster human development and well-being.
  9. **Global Partnerships:** Encourage international cooperation and partnerships to address global challenges collectively.
  10. **Innovative Technologies:** Develop and implement sustainable technologies, such as clean energy solutions, smart agriculture, and eco-friendly transportation.
  11. **Public Awareness:** Raise awareness about sustainability and encourage individual and collective action at all levels of society.

In conclusion, a sustainable future requires a collective effort that integrates environmental, social, and economic considerations. The Sustainable Development Goals provide a roadmap for these efforts, but it is up to governments, organizations, and individuals to take meaningful actions and make the necessary changes to ensure a more sustainable and prosperous world for current and future generations.

**Q14: How do the three pillars of sustainable development relate to one another? Why are the three pillars of sustainable development important?**

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The three pillars of sustainable development, often referred to as the "triple bottom line," are economic, social, and environmental sustainability. These pillars are interrelated and interdependent, and their relationships are essential for achieving long-term well-being and a balanced, sustainable future. Here's how they relate to each other and why they are important:

1. **Economic Sustainability:**
  - **Relationship with Social and Environmental Pillars:** Economic sustainability encompasses financial stability, growth, and efficiency. It is closely linked to social sustainability through job creation, income distribution, and poverty reduction. Additionally, economic sustainability can impact the environment positively or negatively, depending on resource use, innovation, and consumption patterns.
  - **Importance:** Economic sustainability is crucial because it provides the resources and means to support social well-being and invest in environmental conservation. A strong economy can fund social programs, infrastructure development, and environmental initiatives.
2. **Social Sustainability:**
  - **Relationship with Economic and Environmental**

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##### **2. Social Sustainability:**

- **Relationship with Economic and Environmental Pillars:** Social sustainability focuses on human well-being, social equity, and community development. It is interconnected with economic sustainability as economic growth can lead to improved living standards and access to education and healthcare. Social sustainability also has a strong relationship with environmental sustainability, as a healthy and equitable society can contribute to more responsible resource use and conservation.
- **Importance:** Social sustainability is vital because it ensures that development benefits all members of society, reduces inequalities, and fosters a sense of community. A

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well-functioning society is more likely to support sustainable economic and environmental practices.

##### **3. Environmental Sustainability:**

- **Relationship with Economic and Social Pillars:** Environmental sustainability involves responsible resource management, reducing pollution, and conserving ecosystems. It is closely tied to economic sustainability as a healthy environment can provide resources for economic activities. It also relates to social sustainability because a degraded environment can harm human health and well-being, particularly in vulnerable communities.

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### 3. Environmental Sustainability:

- **Relationship with Economic and Social Pillars:** Environmental sustainability involves responsible resource management, reducing pollution, and conserving ecosystems. It is closely tied to economic sustainability as a healthy environment can provide resources for economic activities. It also relates to social sustainability because a degraded environment can harm human health and well-being, particularly in vulnerable communities.
- **Importance:** Environmental sustainability is critical because it maintains the planet's health and ensures the availability of natural resources for current and future generations. It also safeguards human health and the well-being of all species.

The importance of these three pillars lies in their interconnectedness and interdependence. Neglecting one pillar can lead to adverse consequences for the others. For example:

- Focusing solely on economic sustainability without considering social and environmental factors can lead to social disparities, environmental degradation, and long-term economic instability.
- Prioritizing social sustainability while ignoring economic and environmental concerns can strain resources and hinder economic growth.
- Neglecting environmental sustainability can lead to resource depletion, pollution, and adverse effects on human well-being and economic stability.

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In summary, the three pillars of sustainable development are essential because they form a comprehensive approach to human well-being, economic stability, and the protection of the environment. Recognizing their interrelationships is vital for achieving a balanced and sustainable future that benefits both current and future generations.

### Q15: What do you understand about Renewable Energy Resources?



Renewable energy resources are sources of energy that are