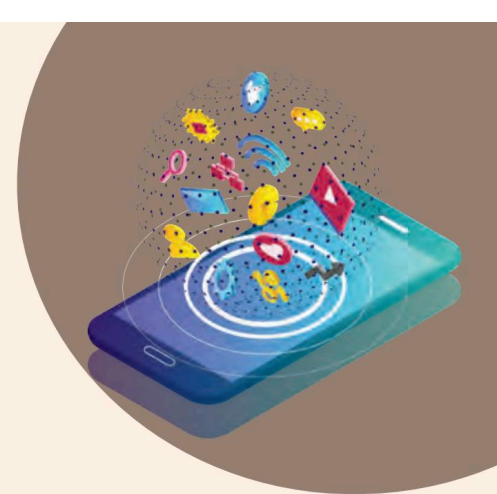


14



Green Economy

Earth is said to be the only known planet that can sustain life. This is because of its natural environment. But sadly, our environment is at great risk because of the growing population and the rapid consumption of natural resources. With increasing urbanisation, industrialisation, and commercialisation, natural resources are being severely depleted. Mankind has been ungrateful to nature in their usage of natural resources. Thus, various adverse effects have become prominent in the natural environment.

The environment and human activities are closely linked, as one impacts on the other. Human activities like the burning of fossil fuels, forest fires, and poor waste management affect the environment and cause climate change, which in turn causes serious threats to human life. Thus, it is highly important to foster the attitude of love and care for the environment, which can be achieved by developing **green skills**.

Green skills are the knowledge, abilities, values, and attitudes needed to live, flourish in, develop, and support a society that believes in preserving and conserving resources for the future through their optimal and efficient utilisation. The need to transition towards more environmentally sustainable modes of living has become a necessity for developed as well as for developing countries.

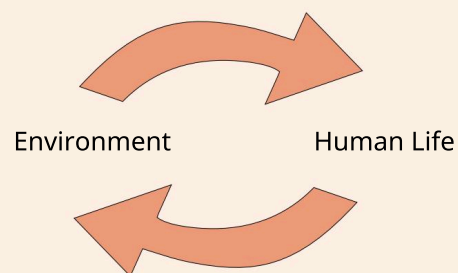
Due to the pace at which we are consuming and exploiting our resources, the world has begun to witness scarcity of many resources. Keeping in mind the lurking environmental threat, environmental scientists are advocating the need to make a shift towards **green economy**.

Green Economy

Green economy is a kind of economy that aims to establish a system that balances human well-being and economic growth while reducing environmental risks and replenishing our resources. The core objective is to promote a sustainable mode of production and consumption without causing any harm to the environment.

The United Nations Environment Program (UNEP), a global organisation that works under the United Nations, defines green economy as “one that results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive”. It aims at sustainable development.

The term “green” in green economy refers to the environmentally friendly and sustainable practices it promotes. Its principle is growth, balance, renewal, and sustainability. The emphasis is on reducing waste, conserving resources, and adopting clean technologies. In essence, it is all about finding innovative and sustainable ways to live, work, and produce goods and services that are kinder to our planet.

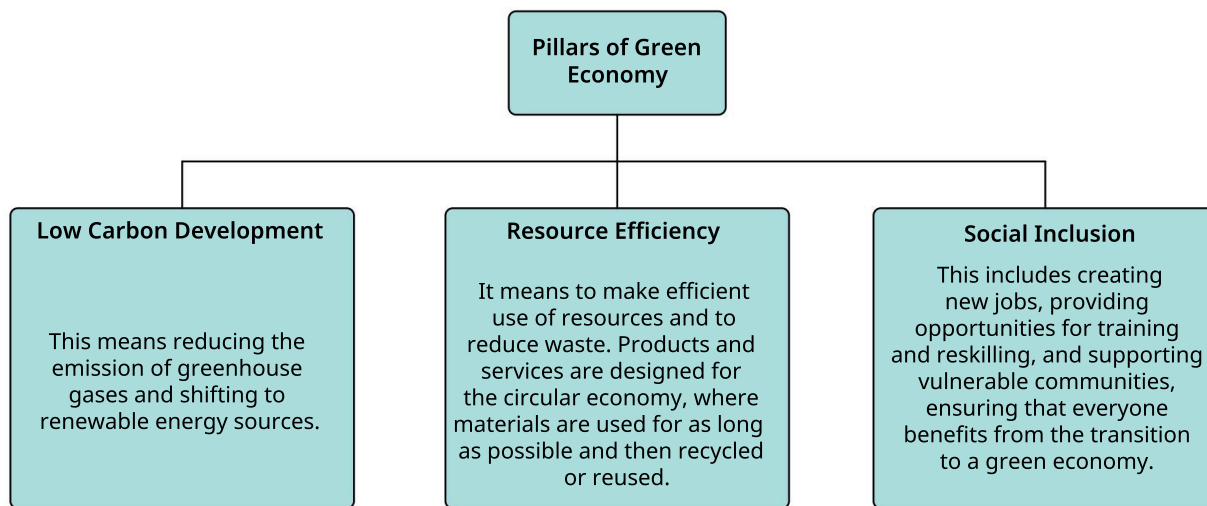




Remember

Sustainable means meeting the needs of the present without compromising the ability of future generations to meet their own needs.

There are three pillars of a green economy:



These three pillars are interconnected. For example, low-carbon development can lead to efficient utilisation of resources and their circulation in the economy, since the enterprises invest in innovative technologies and processes to reduce their emissions. This will enable new training and creation of new jobs and thereby, inclusion of the people in society.



Did You Know?

There is another intriguing concept gaining momentum worldwide—the Blue Economy. It focuses on promoting sustainable approaches in relation to our oceans, seas, and coastal areas. Its goal is to safeguard marine ecosystems and leverage their potential for economic growth.

Importance of Green Economy

The green economy is important for a number of reasons:

1. **Mitigating Climate Change:** Climate change is one of the most pressing concerns being faced by humanity today. A green economy can help to reduce greenhouse gas emissions that would impact on climate change.
2. **Protecting the Environment:** The green economy aids the sustainable use of natural resources and the protection of biodiversity. This is crucial for ensuring the well-being of our planet.
3. **Creating Job Opportunities:** The transition to a green economy is expected to create myriads of new jobs in various sectors, like waste management, renewable energy, and resource management. This, in turn, will boost economic growth.
4. **Improving Public Health:** Air pollution caused through burning of fossil fuels is a major cause of respiratory and other health problems. A green economy can help to reduce air pollution and improve the quality of life on Earth.
5. **Reducing Poverty and Inequality:** A green economy can create new opportunities for people in marginalised communities. It can also help to reduce the cost of living for everyone by making energy and transportation more affordable.
6. **Ensuring Economic Stability:** Green economy can lead to more stable economic conditions by reducing the exploitation of resources and price fluctuations. This will also reduce the cost of living associated with environmental degradation.
7. **Innovation and Technological Advancement:** Striving towards green economy encourages innovation in technology and sustainable practices, leading to economic growth and competitiveness in a fast-evolving global market.
8. **Consideration of Moral Ethics:** Adopting sustainable and responsible ways of producing and consuming aligns with ethical values and responsibility towards future generations.
9. **Better Resilience to Challenges:** As the world faces challenges like climate change, resource scarcity, and biodiversity loss, a green economy provides a proactive approach to adapt to and curb these challenges effectively.



Did You Know?

A study by the International Labour Organization found that the transition to a green economy could create up to 24 million new jobs globally by 2030.



Think and Tell

Could there be any drawbacks in the shift towards green economy? In your opinion, do the benefits of green economy outweigh these drawbacks?

Green Economy and India

In India, there is a growing emphasis on embracing the principles of a green economy, placing significant importance on achieving sustainable development and transitioning towards cleaner energy sources.

1. **Renewable Energy:** India has set ambitious targets for renewable energy deployment, and has made significant progress in recent years. The country is now one of the leading markets for solar and wind power.

2. **Energy Efficiency:** India is also investing in energy efficiency measures to reduce its energy consumption. This includes programs to promote energy-efficient appliances and buildings.
3. **Sustainable Transportation:** India is promoting electric vehicles and other sustainable modes of transportation. The country is also investing in public transportation and infrastructure for pedestrians and cyclists.
4. **Sustainable Cities:** India is developing sustainable cities that are more energy-efficient, less polluted, and more livable. This includes initiatives to promote green buildings, waste management, and public transportation.
5. **Sustainable Agriculture:** India is promoting sustainable agricultural practices to reduce its environmental impact. This includes initiatives to reduce pesticide use, improve water management, and promote organic farming. Programmes like PM KUSUM Yojana and Gobardhan Yojna are supporting green farming and sustainable practices in villages.

The transition to a green economy is creating new jobs and opportunities in India. The Indian government has estimated that the green economy could create up to 50 million new jobs by 2030.

Error Alert!

Green Economy is Expensive

There is a misconception that shifting to a green economy is excessively expensive. Though some initial investments may be required, the long-term economic benefits, such as reduced healthcare costs and increased energy efficiency, often outweigh the upfront costs.

Green Skill Advocate

As a young learner and future professional, you have a unique opportunity to learn green skills and contribute to the green economy.

1. **Embrace Lifelong Learning:** Stay curious and open to learning about sustainability and green practices. The more you know, the better equipped you are to make a difference.
2. **Be an Agent of Change:** Encourage sustainability in your workplace or community. Small actions, like reducing waste or promoting energy efficiency, can have a big impact.
3. **Pursue Green Careers:** Consider careers that directly align with the green economy, such as renewable energy, environmental conservation, or sustainable agriculture. But remember, green skills are relevant across all professions.
4. **Advocate for Education:** Promote the integration of green skills and sustainability into educational curricula. Advocate for more educational opportunities that focus on sustainability and its applications.
5. **Embody Sustainability:** Live a sustainable lifestyle by making conscious choices in your daily routines, from reducing plastic use to conserving energy.

Activity Time

Activity 1: Promoting Green Economy

(Pair Work)

Work with your partner to prepare a poster that communicates the significance of the green economy. Use newspaper and magazine cuttings to make your poster appear informative and creative.

Activity 2: Group Discussions

(Group Work)

Get into groups of 4–5 students and discuss the importance and benefits of green economy. Take turns to present your point of view. On an A3 size sheet of paper, summarise the points discussed by the group.

Chapter Checkup

A Select the correct option.

- 1 What is the primary aim of a green economy?
 - a To maximise economic growth at any cost
 - b To strike a balance between human well-being and economic growth while reducing environmental risks
 - c To focus solely on environmental protection without considering economic factors
 - d To minimise social equity for the sake of environmental preservation
- 2 The three pillars of a green economy are _____, _____, and _____.
 - a low carbon, resource deficiency, and social inclusion
 - b high carbon, resource efficiency, and social inclusion
 - c low carbon, resource efficiency, and social inclusion
 - d low carbon, resource efficiency, and social exclusion
- 3 What does the term “green” in the green economy refer to?
 - a A colour representing waste and pollution
 - b Sustainable and environmentally friendly practices
 - c Economic growth without any regard for the environment
 - d Lack of growth and innovation

B Fill in the blanks with the most suitable words.

- 1 The United Nations Environment Program (UNEP) defines the green economy as one that results in improved _____ and social equity.
- 2 The _____ emphasises using finite resources wisely.
- 3 Green skills encompass the _____, _____, _____ and attitudes needed to thrive in, contribute to, and promote a sustainable and resource-efficient society.
- 4 The transition to a green economy is expected to create more _____ in varied sectors.

C State whether the following are *True* or *False*. Correct the statements that are false.

- 1 The green economy focuses solely on economic growth without considering environmental risks.
- 2 Green skills are only relevant in specific “green” job sectors.
- 3 Pursuing a green career is one way to contribute to the green economy.
- 4 India is promoting sustainable agricultural practices to reduce its environmental impact.

D Answer the following questions. (Solved)

Q1. Explain the three pillars of green economy.

A1. The three pillars of green economy are:

- **Low Carbon Development**

This means to reduce the emission of greenhouse gases and shifting to renewable energy sources

- **Resource Efficiency**

It means to make efficient use of resources and to reduce waste. Products and services are designed for the circular economy, where materials are used for as long as possible and then recycled or reused.

- **Social Inclusion**

This includes creating new jobs, providing opportunities for training and reskilling, and supporting vulnerable communities, ensuring that everyone benefits from the transition to a green economy.

Q2. Define the term green skills.

A2. Green skills are the knowledge, abilities, values, and attitudes needed to live and flourish in, develop, and support a society that believes in preserving and conserving resources for the future through their optimal and efficient utilisation. The need to transition towards more environmentally sustainable modes of living has become a necessity, for developed as well as for developing countries.

Q3. Rohan wants to contribute to the Green Economy and promote green skills in his future career. What can he do?

A3. As a young learner and future professional, Rohan has a unique opportunity to learn green skills and contribute to the green economy.

- **Embrace Lifelong Learning:** Stay curious and open to learning about sustainability and green practices. The more you know, the better equipped you are to make a difference.
- **Be an Agent of Change:** Encourage sustainability in your workplace or community. Small actions, like reducing waste or promoting energy efficiency, can have a big impact.
- **Pursue Green Careers:** Consider careers that directly align with the green economy, such as renewable energy, environmental conservation, or sustainable agriculture. But remember, green skills are relevant across all professions.
- **Advocate for Education:** Promote the integration of green skills and sustainability into educational curricula. Advocate for more educational opportunities that focus on sustainability and its applications.
- **Embody Sustainability:** Live a sustainable lifestyle by making conscious choices in your daily routines, from reducing plastic use to conserving energy.

Answer Key

A 1. b 2. c 3. b

B 1. human well-being 2. green economy 3. knowledge, values, abilities 4. job opportunities

C 1. False. The Green Economy focuses on promoting economic growth with consideration of reducing environmental risks.
2. False. Green skills are relevant in a wide range of job sectors.
3. True.
4. True.

Unit Reflection

Key Terms

Ecosystem: An ecosystem is formed when living (plants, animals, and other organisms) and non-living components (air, water, sunlight, soil, weather, temperature etc.) interact and co-exist with each other in a physical environment.

Environment: Environment includes the surroundings or conditions in which all the living organisms exist.

Green economy: It is a kind of economy that aims to establish a system that balances human well-being and economic growth while reducing environmental risks and replenishing our resources.

Green skills: It is the knowledge, abilities, values, and attitudes needed to live and flourish in, develop, and support a society that believes in preserving and conserving the resources for the future through their optimal and efficient utilisation.

- **Natural environment:** It includes all the living (biotic) components like plants, animals, birds, and insects, and non-living (abiotic) components like water, air, soil, and sunlight, which occur naturally on Earth.
- **Man-made environment:** It includes the components and structures created by humans to satisfy their needs and requirements like buildings, houses, schools, parks, markets, roads, factories etc.

Conservation of natural resources: It is an act of protecting and managing natural resources so that everyone can benefit from them including current and future generations.

Natural resources: They are the resources drawn from nature like water, land, soil, rocks, forests, animals, fossil fuels, or minerals which are used by humans to meet their needs and requirements.

Things to Remember

- We rely heavily on the community of plants (flora) and animals (fauna) to provide us with food and other resources necessary for our survival.
- There is a strong relationship between our society and the environment. They interact and influence each other in multiple ways.
- Modifications in the environment caused by human beings have impacted our natural environment significantly.
- Industrial development and the exploitation of natural resources like extensive use of fossil fuels, deforestation etc. have created an imbalance in the environment.
- Organisms perform the diverse roles of producers, consumers, decomposers, detritivores, predators, herbivores, pollinators, and so on.
- The imbalance in the environment is caused by multiple factors like: overexploitation of resources, deforestation, pollution, overpopulation, global warming, climate change, water scarcity, and loss of biodiversity.
- The three Rs to conserve natural resources are reduce, reuse, and recycle.
- The three pillars of green economy are: low carbon, resource efficiency, and social inclusion.

- A green economy would help to mitigate climate change, reduce poverty and inequality, bring innovative technologies and advancements, ensure economic stability, create more job opportunities, and protect the environment.
- The Indian government has estimated that the green economy could create up to 50 million new jobs by 2030.
- In order to become a green skill advocate, one should embrace lifelong learning, be an agent of change, pursue green careers, advocate for education, embody sustainability.

Test Your Knowledge

A. Select the correct option.

- Which of the following is not one of the 3Rs of conservation of natural resources?
a. Reduce ☐ b. Refund ☐
c. Reuse ☐ d. Recycle ☐
- Which organisation defines a green economy as “one that results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcities”?
a. United Nations Environment Program (UNEP) ☐
b. United Nations Industrial Development Organization (UNIDO) ☐
c. United Nations Economic and Social Council (ECOSOC) ☐
d. United Nations Development Programme (UNDP) ☐
- Which organisms break down organic matter in the soil and recycle nutrients?
a. Producers ☐ b. Consumers ☐
c. Decomposers ☐ d. Predators ☐
- As a green skill advocate, you should
a. never embrace lifelong learning ☐
b. not be an agent of change ☐
c. not embody sustainability ☐
d. pursue green career ☐
- Which of the following items cannot be recycled?
a. cans ☐ b. paper products ☐
c. vegetable peels ☐ d. glass ☐

B. Fill in the blanks with the most suitable words.

- The of species due to habitat loss, pollution, climate change, and other factors can disrupt ecosystem dynamics.
- The term “green” in green economy refers to the environmentally friendly and practices it promotes.
- are the resources drawn from nature like water, land, soil, rocks, forests, animals, fossil fuels, or minerals.
- are the knowledge, abilities, values, and attitudes needed to live, flourish in, develop, and support a society that believes in preserving and conserving the resources for the future.
- There is a strong relation between our and the environment.

C. State whether the following is *True* or *False*. Correct the statements that are false.

- Trees are called life-savers as they convert the excess oxygen in the air to carbon dioxide.
- Mankind has been ungrateful to nature in its usage of natural resources.
- Red economy focuses on promoting sustainable approaches in relation to our oceans, seas, and coastal areas.
- The word “environment” comes from the French word “environ” which means “to surround”.
- The green economy creates hurdles in the sustainable use of natural resources and the protection of biodiversity.

D. Short answer-type questions.

1. Define environmental conservation. Write any two steps to conserve our environment.
2. What do you mean by green economy?
3. How is an ecosystem formed?

E. Long answer-type questions.

1. Describe a few factors which cause an imbalance in our environment.
2. List a few steps taken by India towards a green economy and achieving sustainable development.
3. How are society and the environment dependent on each other?

F. Competency-based questions.

1. Kanika is devastated by mankind's overexploitation of natural resources. She wishes to make a difference and take a step towards conservation of the natural resources. What reforms and transitions should she practise in her life to conserve natural resources?
2. Vipin doesn't understand why the government has been promoting the transition towards the green economy. He continues to operate his fabric manufacturing company using chemical dyes and deposits the contaminated water in the water bodies. His friend, Yogesh decides to explain to him the importance of the green economy. What should Yogesh tell him?