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# **SUSTAINABLE DEVELOPMENT**

**B.P.A.G.-174**

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*Based on*

**C.B.C.S. (Choice Based Credit System) Syllabus of**

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*By: Taruna Jain*



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E-mail : [info@neerajbooks.com](mailto:info@neerajbooks.com) Website : [www.neerajbooks.com](http://www.neerajbooks.com)

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# QUESTION PAPER

June – 2023

(Solved)

## SUSTAINABLE DEVELOPMENT

B.P.A.G.-174

Time: 3 Hours ]

[ Maximum Marks: 100

Note: Attempt any five of the following questions, selecting at least two questions each Section. All questions carry equal marks.

### SECTION – I

**Q. 1. Describe the economic dimensions of Sustainable Development.**

**Ans. Ref.:** See Chapter-2, Page No. 14, 'Economic Components of Sustainable Development'.

**Q. 2. Write a note on Earth Summit, 1992.**

**Ans. Ref.:** See Chapter-6, Page No. 64, 'Earth Summit, 1992'.

**Q. 3. Examine the concepts of Development and Sustainability.**

**Ans. Ref.:** See Chapter-7, Page No. 76, 'Concepts of Development and Sustainability'.

**Q. 4. Write short notes on each of the following:**  
**(a) Common Heritage of Mankind**

**Ans. Ref.:** See Chapter-5, Page No. 53, 'Common Heritage of Mankind'.

**(b) Tragedy of Commons**

**Ans. Ref.:** See Chapter-5, Page No. 52, 'Tragedy of Commons (ToC)'.

### SECTION – II

**Q. 5. Describe the concept of climate change and bring out the relationship between development sustainability and climate change.**

**Ans. Ref.:** See Chapter-7, Page No. 77, 'Climate Change: Meaning and Impact' and Page No. 79, 'Interrelationship Among Development, Sustainability and Climate Change'.

**Q. 6. Examine the relationship between sustainable development and food security.**

**Ans. Ref.:** See Chapter-8, Page No. 90, 'Relationship Between Sustainable Development and Food Security'.

**Q. 7. "Education plays a pertinent role in sustainable development." Elaborate.**

**Ans. Ref.:** See Chapter-10, Page No. 113, 'Role of Education in Sustainable Development'.

**Q. 8. Write short notes on each of the following:**

**(a) Relevance of Sustainable Choice**

**Ans. Ref.:** See Chapter-13, Page No. 145, 'Relevance of Sustainable Choices'.

**(b) Role of Universities in Sustainable Development**

**Ans. Ref.:** See Chapter-14, Page No. 156, 'Role of Universities in Sustainable Development'.



# QUESTION PAPER

December – 2022

(Solved)

## SUSTAINABLE DEVELOPMENT

B.P.A.G.-174

Time: 3 Hours ]

[ Maximum Marks: 100

**Note:** Attempt any **five** of the following questions, selecting at least **two** questions each Section. All questions carry **equal** marks.

### SECTION – I

**Q. 1. Examine the Integrated system and Industrial sector approaches to sustainable development.**

**Ans. Ref.:** See Chapter-3, Page No. 28, 'Integrated Systems Approach' and Page No. 27, 'Industrial Sector Growth'.

**Q. 2. Discuss the social components of sustainable development.**

**Ans. Ref.:** See Chapter-2, Page No. 13, 'Social Components of Sustainable Development'.

**Q. 3. Discuss the relationship among global commons, global governance and climate change.**

**Ans. Ref.:** See Chapter-5, Page No. 51, 'Concept of Global Commons' and Page No. 53, 'Global Governance of Climate Change'.

**Q. 4. Write short notes on each of the following:**

**(a) Concept of Food Security**

**Ans. Ref.:** See Chapter-8, Page No. 89, 'Meaning and Concept of Food Security'.

**(b) Status-quo Approach.**

**Ans. Ref.:** See Chapter-30, Page No. 30, Q. No. 2.

### SECTION – II

**Q. 5. Discuss the meaning and impact of climate change.**

**Ans. Ref.:** See Chapter-7, Page No. 77, 'Climate Change : Meaning and Impact'.

**Q. 6. Examine the relationship between sustainable development and food security.**

**Ans. Ref.:** See Chapter-8, Page No. 90, 'Relationship between Sustainable Development and Food Security'.

**Q. 7. Examine the role of green technologies in health and sanitation.**

**Ans. Ref.:** See Chapter-9, Page No. 103, 'Role of Green Technologies in Health and Sanitation'.

**Q. 8. Write short notes on each of the following:**  
**(a) Significance of indigenous people for environmental protection**

**Ans. Ref.:** See Chapter-12, Page No. 135, 'Significance of Indigenous People for Environmental Protection'.

**(b) Need for sustainable development**

**Ans. Ref.:** See Chapter-14, Page No. 153, 'Need for Sustainable Development'.

# Sample Preview of The Chapter

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# SUSTAINABLE DEVELOPMENT

## BLOCK-1 : CONCEPT OF SUSTAINABLE DEVELOPMENT

### Meaning, Nature and Scope of Sustainable Development



#### **INTRODUCTION**

An important role is played by sustainable development in the discourse on development. The topic is important for the development experts, environmentalists and for the national leaders. Many agencies and experts believe that degrading the resources of the earth in order to meet the current needs is short-sighted and potentially disastrous for the next generations. These resources are of lot of importance for the coming generations and not only to the present ones. The resources cannot be produced continuously and the population explosion, excessive cultivation, destruction of forests and filling up of wetlands are leading to the destruction of nature. Some important questions that need to be addressed are: “Will future generations are worse off as a result of the environmental degradation that results from economic decisions made today; and will the increase in the scale of activity be sustainable in the face of increasing pressure on natural resources”.

Sustainable development will help in ensuring that our children and future generations inherit an earth that is similar to the one we inherited. The environmental degradation is a matter of great concern and should be addressed urgently. The topic was a major focus of the United Nations Conference on Environment and Development (UNCED) that held in Brazil in June 1992. It was the greatest challenge to achieve sustainable development globally. The observation made on the World Commission on Environment and Development was that the sustainable development is being carried out amidst the additional pressure of such global difficulties as climate change, ozone depletion and species loss. The major areas of concern are the continued build-up in greenhouse gases, depletion of the ozone layer by chlorofluorocarbons (CFCs) and the

continuing extinction of species through habitat degradation. The terms ‘environmental refugee’ is given to the people who are deprived of a homeland because of environmental crises. The observers have warned that the social dislocations from environmental degradation may be one of the most alarming developments in the first quarter of 21st century. The advocates of sustainable development believe that it provides a context to improve overall sustainability, where cutting edge ‘green development’ is achievable. The sustainable development can be achieved with the help of inclusive green growth which can help in the reconciliation of the rapid growth that is needed to bring developing countries to the level of prosperity.

#### **CHAPTER AT A GLANCE**

##### **MEANING OF SUSTAINABLE DEVELOPMENT**

Barbara Ward, known as Lady Jackson coined the term sustainable development much before the Brundtland Report’s definition of sustainable development. She believed that sustainable development was mainly about people, their economic and social well-being and aspirations for equity in their relationships with each other. The Brundtland Report or the Report of the World Commission on Environment and Development entitled ‘Our Common Future’, defined the term as the development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.” Therefore, the sustainable development is the development that meets the needs of the present and future generations. The topic is of great importance for the development planning and resource management. Brundtland Report states that the idea of sustainable development reaches far beyond

environmental protection. It refers to a process of change in which exploitation of resources, direction of investments, orientation of technological development, and institutional changes are made consistent with future and as per the present needs. It can be defined as the balanced and adaptive process of change.

Sustainability can be called as the balance between the economic development that will help in improving the quality of an ecosystem and hence also have a positive impact on welfare. Sustainable development is therefore a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change, are all in harmony and enhance both current and future potential to meet human needs and aspirations. According to the definition given in the Brundtland Commission, it refers to meeting the needs of the present generations without compromising the needs of future generations. The idea of sustainable development rejects the traditional view that economic development is a necessity but environmental protection is a luxury. According to Dasgupta and Maler (1990), “environmental resources are of minor importance to poor countries and play a vital role in the process of economic development. These resources are luxury goods and are only a rich country’s preoccupations. These are the diversions created by economists and not sensitive to the true needs of poor in poor countries.” There is now a shift from a partial environmental analysis to a focus on the global effects of environmental decay which is reflected among other things in alarming phenomena such as flooding, acid rains, soil erosion, and desertification, destruction of the ozone layer, ocean pollution, and resource extraction. The conservation of resources is now understood as important to protect life-supporting natural systems and improve the living standards. The main objective of the policy makers now is that the socio-economic development must be sustainable and should be capable of meeting not only the current needs of this generation but also of the future generations as well.

There are some questions that are raised in order to achieve the objective of sustainable development like how to assess the well-being of present and future generations and what should we leave to our future generations in order to maximize the chances that they would be no worse off than ourselves. These issues are complicated as our children are entitled to benefit from investments in natural resources, improvement in soil fertility and reforestation. As per Ashish Kothari (1993),

the current definition of the sustainable development does not adequately address the perpetuation of intergenerational, inter-species inequity and is therefore, not acceptable from the point of view of the larger human goals of happiness, equality, justice and peace.

#### NATURE OF SUSTAINABLE DEVELOPMENT

We have to keep in mind the future of the next generation and hence must think of the full range of physical and human capital and the natural resources that will determine their welfare. The adoption of the idea of sustainable development would necessarily need a fundamental change in thinking and the data used for decision-making must reflect the true costs of resource depletion and pollution. These affect future generations rather than just the short-term costs of profits of depleting income-producing resources. The collected data must keep into mind the future needs on par with current needs, not ‘discounted’ in a way that carries decisions in favour of short-term effects. According to Ciriacy-Wantrup (1952), the stress is on the use of safe minimum standards for the conservation. This can be done by avoiding over-exploitation of critical zones of the environment by limiting human activities that make it uneconomical to halt or reverse environment degradation. The idea of sustainable development needs a careful consideration of sustainable threshold levels for both economic and environmental systems.

There are major developmental problems when a country experiences rapid population growth or dramatic urbanization and an increase in Gross National Product or GNP. Similar problems are faced when there is a demand for the raw resources from a country or a region rises in order to meet increasing global needs. In order to cope up with the growing problems of land pressures in India, it is important to check and control the population growth rate, ensure balanced livestock development and control land alienation. The World Commission propounded that the sustainable development requires that the adverse impacts on the quality of air, water, and other natural elements are minimized in order to sustain the overall integrity of the ecosystem. These problems were understood by the World Commission and various measures of success in sustainable development were considered in order to meet the social challenges. The sustainability aspect requires that environmental administrators aim at the following:

- (i) Sustaining the ecosystem and the related ecological processes which are important for the functioning of biosphere.

MEANING, NATURE AND SCOPE OF SUSTAINABLE DEVELOPMENT / 3

- (ii) The maintenance of the biological diversity by ensuring the survival and promoting the conservation in their natural habitats of all species of flora and fauna.
- (iii) The principle of optimum sustainable yield in the exploitation of living natural resources and ecosystems should be considered.
- (iv) Reducing the environmental pollution or harm.
- (v) Forming the adequate environmental protection standards.
- (vi) Some assessments or analysis in order to ensure that major law, policies, projects, and technologies contribute to sustainable development.
- (vii) The public should be informed without delay in all cases of harmful or potentially harmful releases of pollutants, especially radioactive releases.

The Rio Summit that was held in the year 1992 considered that the Brundtland Report (1989) lacked a clear definition of sustainability. A new definition is given by the World Bank's Environment Department which is in two parts as follows:

- **Output Guide:** Waste emissions should be within the assimilative capacity of the local environment without degradation.
- **Input Guide:** Harvest rates of renewable resources should be within the natural regenerative capacity; depletion rates of non-renewable resources should be equal to the rate at which renewable substitutes are developed.

**SCOPE OF SUSTAINABLE DEVELOPMENT**

From the study done in the previous section, we can infer that the development is sustainable, as it saves wastage in the national budget, fulfills the needs of people, helps in coordination between the natural resources and people and conserves natural resources for future generations. The objective behind the sustainable development is to meet the needs of today without compromising the needs of tomorrow which means that we cannot continue using the resources at the current rate. If we continue using the resources at this rate, then nothing would remain for future generations. It is important to reduce the carbon emission and to operate within the right economic, social and environmental boundaries. There is a wide scope of sustainable development as it deals with areas like social, economic, environmental, and institutional dimensions.

**Social Dimension**

The dimension of sustainable development which includes ensuring a strong, healthy and just society and the focus is on 'zero hunger', 'good health and wellbeing', 'quality education', 'population control' and 'gender equality' is the social dimension.

**Economic Dimension**

The dimension of sustainable development which includes economic wellbeing of the masses with the focus on 'no poverty', 'sustainable economy', 'employment opportunities', especially for women, 'decent work and economic growth', 'managing natural resources', and 'responsible consumption and production' is the economic dimension.

**Environmental Dimension**

The dimension of sustainable development which includes promoting environment- friendly and biodegradable products with the focus on 'clean water and sanitation', 'affordable and clean energy', 'reducing emissions from industry, transport and energy' and minimising the release of greenhouse gases, which leads to global warming and air pollution, 'encouraging use of renewable sources like solar, wind and water energies', 'climate action' and 'preservation of natural resources' is achieved keeping in mind the protection of the natural habitats. This dimension is called the environmental dimension.

**Institutional Dimension**

The dimension of sustainable development which includes 'industry, innovation and infrastructure', 'sound financial resources', 'peace, justice and strong institutions', 'sustainable cities and communities', 'partnerships for the Sustainable Development Goals (SDGs)', and 'international cooperation' is referred to as the institutional dimension.

**SDGs of the United Nations**

There were some goals that were set by the United Nations in order to guide the global development between 2015 and 2030. There are 169 set of targets in the goals along with the 232 subsets of indicators in total. The UN member states adopted the global goals in the year 2015 as a universal call to action to end poverty and to protect the planet and also to ensure that people enjoy peace and prosperity by 2030. Following are the 17 SDGs:

- No Poverty
- Zero Hunger
- Good Health and Wellbeing
- Quality Education
- Gender Equality

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- Clean Water and Sanitation
- Affordable and Clean Energy
- Decent Work and Economic Growth
- Industry, Innovation and Infrastructure
- Reducing Inequality
- Sustainable Cities and Communities
- Responsible Consumption and Production
- Climate Action
- Life Below Water
- Life on Land
- Peace, Justice and Strong Institutions
- Partnerships for the Goals.

The UN Resolution was adopted by the General Assembly on July 6, 2017 which identified the specific targets for each goal along with the indicators that are being used in order to measure progress towards each target. In order to achieve the SDGs, the conducive partnership of government, private-sector, civil society and citizens is needed to make sure we leave a better planet for the future generations. Some important areas in which the attention is paid includes the cutting issues, like gender equity education, and culture cut across all the SDGs. The requirement is that the sectors should come together to achieve sustainable development. It is important that the economic, social, political and environmental sectors come together for all critically important and interdependent development decisions. The government support is of utmost importance to attain the objective of sustainable development. UN states that the target is to reach out to the community as widely as possible. The data or information must adjust for vulnerable groups such as children, elderly, and people with disabilities, indigenous people, migrants, and internally displaced persons.

**IMPORTANT PRINCIPLES AND FEATURES OF SUSTAINABLE DEVELOPMENT**  
**PRINCIPLES**

Some of the important components of sustainable development are as follows:

**Conservation of Ecosystem**

The conservation of the resources of the earth is the main objective of sustainable development which in turn will make the ecological system steady. The preservation of ecosystem including aquatic ecosystem is significant to achieve this objective.

**Sustainable Development of Society**

With the growth in the population, there is a demand for goods and services. The sustainability of society is dependent upon the availability of decent abode, balanced diet, adequate health services,

employment and quality education. The people should have a direct access to health and education.

**Conservation of Biodiversity**

The conservation of all the living species in the world is very important and the people should learn to conserve the natural resources in order to protect them. The Global Biodiversity Outlook in September 2020 and Living Planet Index (LPI) of World Wildlife Fund (WWF) in September 2020 focused on the drastic and urgent action in order to halt the biodiversity loss and restore ecosystem services.

**Population Control**

The growth in the population at a rapid rate requires the demand for goods and services and if this is not controlled then there will be increased environmental damage. The rapid growth in the population exacerbates the mutually reinforcing effects of poverty and environment decay. The environmental degradation can also increase population growth. According to Dasgupta (Op. cit.), the children are produced not only for earning money, securing old age, but also for increasing workforce. Hence, the population control and management of the population is important for sustainable development.

**Conservation of Human Resources**

The human resources can be developed by providing education, healthcare and training as it contributes immensely to sustainable development. The efficient HR refers to the effective decision making on environmental protection.

**Encouraging Citizens' Participation**

The participation of the citizens is also very important to attain the sustainable development. We have learnt from the Covid-19 Pandemic that environmental balance is of utmost importance especially as we endeavour to build more resilient economies and communities.

**Promotion of International Coordination and Cooperation**

The need is to adopt more strategic international action in order to protect biological diversity. The solutions provided to the international environment issues must be based upon common principles and rules of collaboration among independent nations. The need is the international efforts to provide funding and technological assistance to developing countries. On 31st July 2020, the Union Environment Minister (India) called for sharing of best practices among BRICS (Brazil, Russia, India, China, and South Africa) Nations towards the sustainable development goals.