UNIT 12 : SUSTAINABLE DEVELOPMENT

UNIT STRUCTURE

12.1 Learning Objectives

12.2 Introduction

12.3 Concept of Sustainable Development

12.4 Characteristics of Sustainable Development

12.5 Need of Sustainable Development

12.6 Education for Sustainable Development

12.7 Let Us Sum Up

12.8 Further Reading

12.9 Answers To Check Your Progress

12.10 Model Questions

12.1 LEARNING OBJECTIVES

After going through this unit, you will be able to -

- define the concept of sustainable development;
- list the characteristics of sustainable development;
- describe the importance of sustainable development; and
- explain the role of education on sustainable development.

12.2 INTRODUCTION

In the previous unit, you have gone through a lot about environment, its different components, different hazards that come to environmental security and the different provisions taken by organization of national and international importance, government. But you should be very clear that only protecting and conserving environment from the hazards is not enough, we have also protect it for future. With the excess use of technologies, the greenery of the earth is decreasing which may threaten our future generation. We earn money not only for present expenditure but also save it for future expenditure, so as with the environment. We have to be serious about future ecological balance. In this unit, we are going to discuss such a

topic related to use and conservation of environment for future under the heading of 'Sustainable Development'.

12.3 CONCEPT OF SUSTAINABLE DEVELOPMENT

The term "sustainable development" was used at the time of the Cocoyoc Declaration on environment and development in early 1970's. Since then it has become a trademark of international organizations which are dedicated to achieve the goal of "environmental beneficial development".

The concept of sustainable Development emerged only after the industrial revolution, followed by transport-revolution and urbanization, which are the cause of environmental degradation. This concept is a response to warnings that the world is facing environmental crisis, unless we become aware, there will be no resource left for future. The question of sustainable development has emerged due to overexploitation of resources as well as mismanagement of technology.Sustainable Development is considered as a process of improving the quality of human life while living within the carrying capacity of supporting ecosystems. It carries the premise of development that can be achieved without an undue exploitation of the natural resources. Eco-development is a concept of sustainable development in which all developmental activities are performed in such a way that regional ecological balance can be maintained.

In 1983 the United Nations Commission on Environment and Development was created and in the year 1987, the Commission issued the Brundtland Report. This report highlighted that equity, growth, and environmental maintenance are simultaneously possible as well as the report ensured that each country is capable of achieving its full economic potential while at the same time enhancing its resource base. It emphasized three fundamental components to sustainable development. These are-environmental protection, economic growth, and social equity. Living within our environmental limits is one of the central principles of sustainable development.

The most widely used and a common definition of sustainable development was given by-World commission on Environment -
"Sustainable Development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs"

Again, the World Conservation Strategy Report defined sustainable development as 'the integration of conservation and development to ensure that modifications to the planet do indeed secure the survival and wellbeing of all people'.

On the basis of the above definitions it can be marked that sustainable development means meeting four objectives at the same time:

- Social progress that recognizes the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high and stable levels of economic growth and employment.

12.4 CHARACTERISTICS OF SUSTAINABLE DEVELOPMENT

Sustainable development can be characterized as follows:

- **Interdependence:** understanding the connections and links between all aspects of our lives and those of other people and places at a local and global level, and that decision taken in one place will affect what happens elsewhere.
- **Citizenship and Stewardship:** recognizing that we have rights and responsibilities to participate in decision-making and that everyone should have a say in what happens in the future.
- **Needs and Rights of Future Generations:** learning how we can lead lives that consider the rights and needs of others, and that what we do now has implications for what life will be like in the future.
- **Diversity:** understanding the importance and value and diversity of lives- culturally, socially, economically and biologically- and that all our lives are impoverished without it.

- **Quality of Life:** recognizing that for any development to be sustainable it must benefit people in an equitable way, it is about improving everybody's lives.
- **Sustainable Change:** understanding that there is a limit to the way in which the world, particularly the richer countries, can develop and that the consequences of unmanaged and unsustainable growth are increased poverty and hardship, and the degradation of the environment, to the disadvantage of us all.
- **Uncertainty and Precaution:** realizing that as we are learning all the time and our actions may have unforeseen consequences we should adopt a cautious approach to the welfare of the planet.



LET US KNOW

- The concept of sustainable Development emerged only after the industrial revolution, followed by transport-revolution and urbanization, which are the cause of environmental degradation.
- The three fundamental components to sustainable development are-environmental protection, economic growth, and social equity.
- The most widely used and a common definition of sustainable development was given by-World commission on Environment - "Sustainable Development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs."



CHECK YOUR PROGRESS

Q 1: What is Eco-development?

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Q 2: In which year was World Commission of Environment formed?

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Q 3: Write two characteristics of Sustainable development.

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12.5 NEED OF SUSTAINABLE DEVELOPMENT

Increasing environmental degradation had depleted our planet Earth, which has affected not only the eco-system but also degraded the quality of living.Therefore to save the planet from this threat, sustainable development is the need of the hour.To maintain the eco-system, sustainable revolution will have to take place rapidly and consciously on many different levels and in many different spheres.

The need of sustainable development can be discussed in the following ways-

- **Conservation of Resources:** The prime need of sustainable development is the conservation of natural resources. It is essential to sustain the resources both for present and future usage. Indeed, one of the key features of sustainable development to prevent environmental depletion and contribute towards new development.
- **Management of resources:** Only preservation of resources is not enough. If the resources are not managed properly, it is equivalent to depletion. For a worldwide sustainable growth, there is a need for efficient and effective management of available resources, which is the prime objective of sustainable development.
- **Sustainable Technology:** Sustainable development is essential because it ensures the involvement of sustainable technologies based upon the use of non-renewable resources by taking advantage of the renewable energies.
- **Sustain Biodiversity:** Unsustainable development and overconsumption practices often harm the biodiversity, creating imbalances. Sustainable development is essential as it encourage the use of renewable energy resources like organic farming practices that do not harm the biodiversity.

- **Financial Stability:** Development of renewable energy technologies not only helps in conserving the resources, but also helps in sustain financial stability of the country or a nation.
- **Managing Climate change:** Depletion of the earth impacts on the climate also. Global warming is the vivid example cause of the climate change. Sustainable development is important to mitigate this climate change as its practice can reduce the use of natural resources like oil, natural gas and coal.
- **Sustainable plantation:** Another importance of sustainable development lies on the sustainable plantation. Sustainable development focuses on sustainable agricultural methods such as- effective seeding techniques and crop rotation to promote high yield as well as it tries to maintain the integrity of the soil which produce food for a large population.
- **Ensure quality of life:** Sustainable development is essential to maximize human wellbeing or quality of life by fulfilling their life needs without compromising it.



ACTIVITY

Name some of the activities that are taken by the village farmers to sustain agriculture.



CHECK YOUR PROGRESS

Q 4: Discuss the importance of sustainable development.

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12.6 EDUCATION FOR SUSTAINABLE DEVELOPMENT

On the basis of the above discussion, it is clear to you that sustainable development is the practice of using guidelines for being environmentally responsible and saving energy to create new development

projects. It is essential for conservation of resources as well as ensuring the quality of life. But for developing new development project people must be made aware of the significance of the sustainable development and the way of sustaining the resources. There can be no powerful measure than education which can empower people with the knowledge of sustainability. Environmental education is the powerful tool of making people aware of the environmental threats and sustainable development. In the words of Mishra, "Environmental education appears to be a process that equips human beings with awareness, knowledge, skills, attitudes and commitments to improve environment".

Environmental Education and Sustainable Development:

As mentioned above, environmental education plays an important role in sustainable development. The role can be discussed in the following ways-

- Environmental education is important tool for achieving sustainable utilization resource.
- Environmental education can develop values and skills necessary for conservation and wise utilizations of natural resources leading sustainable development.
- It can bring about awareness and develop concern for the long term effect of development activities upon the environment.
- It can foster love towards the nature that help people to understand the essential harmony between man and nature.
- Environmental education can make people understand the problem of development as an international issue.
- Environmentally informed and educated citizens can understand their role at local and regional level as well as the role of government to make international environmental agreements to achieve sustainable development across the globe.
- Environmental education will make the people aware of all those factors that lead to depletion of the resources.
- Population education which is an important part of environmental education will help the common man to be aware of the danger of

overpopulation leading to reduction of resources. Thus, population education can help a lot in maintaining sustainability of the resources by minimizing the population.

- Environmental education can help the people living in earth to make intelligent and conscious utilization of the resources keeping in view their maximum limit.

On the basis of the above mentioned discussion, it can be said that environmental education is a tool which can make people understand the meaning and importance of sustainable development.



LET US KNOW

- According to Mishra, "Environmental education appears to be a process that equips human beings with awareness, knowledge, skills, attitudes and commitments to improve environment".
- Environmental education can develop values and skills necessary for conservation and wise utilizations of natural resources leading sustainable development.



12.7 LET US SUM UP

- The term "sustainable development" was used at the time of the Cocoyoc Declaration on environment and development in early 1970's.
- Sustainable Development is considered as a process of improving the quality of human life while living within the carrying capacity of supporting ecosystems.
- It carries the premise of development that can be achieved without an undue exploitation of the natural resources.
- Eco-development is a concept of sustainable development in which all developmental activities are performed in such a way that regional ecological balance can be maintained.

- The three fundamental components to sustainable development are- environmental protection, economic growth, and social equity
- The most widely used and a common definition of sustainable development was given by-World commission on Environment - "Sustainable Development is the development that meets the need of the present without compromising the ability of future generation to meet their own needs"
- Sustainable development is essential for Conservation of Resources, Management of resources, Sustainable Technology as well as Ensuring quality life.
- Environmental education is the powerful tool of making people aware of the environmental threats and sustainable development.
- In the words of Mishra, "Environmental education appears to be a process that equips human beings with awareness, knowledge, skills, attitudes and commitments to improve environment".
- Environmental education can make people understand the problem of development as an international issue.



12.8 FURTHER READING

1) Bhattacharya, K, Bhattacharya, R. and Sharma, S. (2012). Environmental Education. Guwahati: Assam Book Depot.
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