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# UNIT 13 GLOBAL CHALLENGES OF SUSTAINABLE DEVELOPMENT

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## 13.1 INTRODUCTION

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We need to ensure healthy survival and equal opportunities to the people across generations. This demands the current societal problems needs to be carefully ascertained and optimally addressed. The haphazard growth during the industrialization stage has affected these relationships, both positively and negatively. To one end, we have made tremendous progress in science and technology. On the other side, we face the severe consequences of excess intervention of these technologies into our lives. While making comfortable living conditions for self and the coming generation, unplanned, haphazard and unsustainable growth models have been adopted. Such development pathways have destroyed nature and increased the occurrence of natural disasters. This has created a sharp line between the rich and the poor. Therefore, we discuss sustainable development to promote equality and equity in society, making the earth a healthier and better place to live in.

In this Unit, you will be studying sustainable development issues, particularly related to population and the lifestyle of the people. In today's world, we are more connected and more technology-driven. The emerging crisis of climate change and environmental degradation has deteriorated the quality of life of the people. More so, the population's

health in rural and urban areas is affected as diseases, infections, and ailments arise from various sources. Some countries are struggling to bring down the population, while some others are incentivizing migration. The inequalities persist across the various segments of the population. The significant challenges confronting the world to achieve sustainable development are also discussed in the Unit.

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## 13.2 LEARNING OUTCOMES

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After studying this Unit, you would be able to:

- Illustrate the meaning of Sustainable Development;
- Compare the pros and cons of technology use;
- Explain the gendered aspect of sustainable development; and
- Relate the changing lifestyle with change in climatic conditions.

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## 13.3 MEANING OF SUSTAINABLE DEVELOPMENT

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The word ‘Sustainable Development’ was coined at the United Nations World Commission on Environment and Development in 1987. The term was defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Two key points have moved the idea of sustainable development to the present state:

**Legitimate Aspiration of a better life:** Human beings aspire for better living conditions. It is evident from man’s transition from a nomad to a settled farmer. There is no end to man’s desire to be rich or to enjoy a comfortable living. In an endeavour to achieve all this and more and more every day, the resources are blindfolded, extracted and used. Human needs are never fully satisfied. They always want more, and this desire never seems to end.

**Limited Stock of resources:** The availability of the resources on the planet is limited, but human desires keep on increasing. Due to income disparities, there is unequal access to scarce and valued resources.

Because of this, sustainable development remains at the crossroads where economic progress means goodwill and fortune to only a small percentage where the maximum are denied the fruits of development. Moreover, Sustainable Development also implies the pathway for enduring human security and happiness. To be sustainable, one must pay simultaneous attention to sustainability’s environmental, social, and economic aspects. The critical point is that sustainable development is a process, not an end in itself. It also implies that conversation must be established between community members, and equal participation is a prerequisite for sustainable development. All the sustainable development discourses and deliberations have to keep this central idea in mind. Thus, sustainable development requires democratic thinking and consensus-based participation of every individual. The basic idea is that the interests of the future generation should receive the same amount of attention and certainty as to the present generation.

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## 13.4 CHALLENGES OF SUSTAINABLE DEVELOPMENT

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The Challenges of Sustainable Development are enormous and difficult to ascertain. A range of stakeholders is involved, which play an essential role individually. The issues range from environmental to economic, which also includes social inequalities prevailing across the countries. On the one hand, the world is confronted with natural resource degradation and environmental pollution. On the other hand, there is an increase in population, poverty and health problems across all communities and sectors. Addressing each of the challenges individually will not bring desirable consequences. Similarly, fixing the problem and not the source is not a sustainable solution. We must understand that Sustainable development cannot be achieved with technological solutions, regulatory frameworks and financial instruments alone.

Let us discuss some common challenges of sustainable development.

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## 13.5 POPULATION GROWTH AND RELATED ISSUES

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The World took 124 years in 1927 to add a billion, and in 2011, we added 1 billion in just 12 years. It indicates that we are snowballing.

Consider the case of India, and its population is expected to cross that of China in 2031, making it the most populous country in the world. India's population was 1.21 billion as per the Census of 2011, and the projections now estimate that the population will grow by 311 million by 2036.

The causes of this increase are many particularly custom of child marriage, poverty, social beliefs and lack of education. Most importantly, due to more people in the childbearing age, we are witnessing population momentum, which is mainly responsible for increasing the population even though the birth rates have fallen below the replacement level fertility in many states.

This increase presents many challenges, ranging from providing necessities like food and shelter to better healthcare and livelihood opportunities. Moreover, since 2018, India's working-age population (between 15 and 64 years of age) has grown larger than the dependent population. Studies have revealed that such periods are often marked by rapid economic growth. The bulge in the working-age population is going to last till 2055. We need to explore these opportunities and create a workforce that can adapt to the changing circumstances.

### 13.5.1 Increase in Urban Population

In the coming decades, 95 per cent of urban expansion will take place in the developing world. 3.5 billion people, half of the world's population, live in cities. By 2050, the urban population is expected to reach 6.5 billion.

According to the July 2020 Report of the technical Group, Census of India, It is projected that 70% of the population increase will be in urban areas. India's urban population will increase from 377 million in 2011 to 594 million in 2036 – a growth of 57% so, while 31% of Indians were living in urban India in 2011, which will grow to 39% by 2036.

The increase in the urban population is attributed to migration from rural areas to better facilities and income. Migration from rural areas puts stress on the already weakened infrastructure of the small towns and cities. Slum proliferation, disease outbreak and poor sanitation are the results of unplanned urbanization. Our urban spaces have to cater to the growing demands of infrastructure. Understanding the critical challenges of urbanization is crucial to meet Sustainable Development Goals (SDGs), particularly in low-income and middle-income countries. We need to build efficient infrastructure for housing, transportation, communication, energy, and health, education, and employment opportunities. Even though the Government emphasizes Smart Cities, we also need to make “smart citizens” capable enough to utilize the services smartly provided by the urban areas and contribute to sustainable living by “doing more with less”.

### **13.5.2 Ageing Population**

According to Economic Survey Report 2017-2018, the population of our country will substantially reduce in one or two decades as we have reached Total Fertility Rate (TFR) to Replacement level Fertility. India’s population growth rate is expected to decline to its lowest since the Independence in the 2011-2021 decade, with a decadal growth rate of 12.5%. It will decline further to 8.4% in the 2021-2031 decade.

With declining fertility level, reduced mortality, and improvement in life expectancy, our country’s ageing population is expected to increase. According to a 2017 report by the United Nations Population Fund (UNFPA), around 12.5% of India’s population will be 60 years and older by 2030; by 2050, this will increase to one-fifth of the population. The ageing population has its disadvantages and challenges. We need to invest a lot in the health care and insurance of the elderly members of the country. Institutional and social support is needed to fight back the physical ailments of the elderly and the social and neurological issues. The women are the most affected due to an increase in survival rates and longevity.

### **13.5.3 Public Health, Education and Livelihoods**

The importance of investing in public health is duly recognized and essentially felt. The population is a Human Resource that can serve helpful and productive if proper education, nutrition, medical facilities and employment opportunities are provided. Irrespective of any region, case, gender, it is of utmost importance to make provisions for quality education as the foundation years are significant in shaping the career of young minds.

In many states of India, it has been noticed that with an increase in the literacy rate, the birth rate declines substantially. Educating the girl child particularly is very important. Access to better family planning methods, information sharing and communication is vital. With changing times, women increasingly become aware of their rights and are demanding better health care services in rural and urban areas. Likewise, education is a powerful tool against sufferings and exploitation. We also have to skill our population base so that they can utilize these skills to earn a living for themselves. Once considered to be the only option in villages, agriculture is no longer practised by most young people, particularly males who often prefer migrating to urban areas in search of better employment opportunities. The skills of artisans, potters, weavers, artisans, etc., must be encouraged by giving them suitable opportunities.

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## 13.6 SOCIETY RELATED ISSUES

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The social issues also poise the challenges to sustainable development. Sustainable Development Goals (SDGs) are meant to foster peace and inclusive societies. The tagline of SDGs, “No one should be left behind”, clearly demonstrates that the objective is to create a socially just and inclusive development model. With a diverse culture and social systems in India, the obstacles to achieving sustainable societies are many. Let us discuss a few of these challenges.

### 13.6.1 Rising inequalities and social system

With the current rate of increase in population, the earth’s resources are used indiscriminately. With economic development springing, it is also true that society is divided into those who are bearing the fruits of development and others who are left behind. A large population of the world is struggling for basic needs like food, water, clothing and shelter. Over the past decade, the economy in the country has witnessed a paradigm shift and is on a robust growth trajectory. Still, we are confronted with upcoming challenges like poverty, unemployment, resource degradation and dithering public education. Experience has shown that addressing each of the challenges individually does not bring about long-term improvements. The corporates and governments can play a responsible role in breaking the vicious spiral between poverty and environmental degradation.

In Covid times, we have seen that the poor in the world, both in the rich or the emerging world are the worst sufferers; they live on the margins of survival in the best of times. The multiple crises happening together are making the world more insecure, and the governments have testing times to meet the needs of the people.

There are also socio-economic issues pertinent to rural and urban settings. Urban environmental issues (mainly pollution) are more likely to affect the residents’ quality of life immediately. Urban issues are different since many enterprise activities are unique to cities. Rural issues are more likely to involve natural resource sustainability directly.

A lot more needs to be done to eradicate poverty, hunger and nutritional inadequacy of millions of children, women and men, especially in the rural areas of developing countries. We are now entering a sustainability revolution that will compete with the agricultural and industrial revolutions. Innovation and creativity are needed to develop radical approaches which are less damaging to the environment and generate new avenues for development.

### 13.6.2 Rising materialism and resource-intensive lifestyle

In today’s world, you must have noticed spurge in buying, consuming and discarding. The short term use of the products and services is alarming and needs behavioural change among individuals and communities. We know that earth has limited capacity, and when the resources are consumed beyond this capacity, there is very little time left for the earth to regenerate these resources. This leads to problems, and hence sufficient time must be given to the vital resources like water, soil, etc., to regenerate them. The problem arises due to an increase in population and consumption at a greater rate, reducing the per capita availability of resources. This results in a scarcity of natural resources.

Sustainable living is all about finding alternative ways and living more sustainably with optimum utilisation of resources. This ensures a steady supply for future generations also. The misconception associated with living sustainably is that it means sacrificing the luxuries and facing challenges. However, it is being conscious of consumption and actions which deteriorate the planet's existing conditions. To bring about behavioural change in society, we need to look at individual beliefs, culture, attitudes and motivating factors.

Energy Crisis, Relying on Imported Food, Using single-use plastics and increase the volume of waste are some negative consequences of a materialistic lifestyle. Eating locally produced vegetables, fruits and grains is a step toward a sustainable way of living. Supermarkets present a culture of "many" and "imported" items to be used. Choosing eatables and products from distant places of the world increases the carbon footprint. The energy utilised in packing and transporting is enormous. Most of the municipal waste consists of food packaging, which can be avoided.

Ultimately we have to decide whether development means affluence or whether development means peace, prosperity and happiness. Mahatma Gandhi said: The difference between what we do and what we can do would suffice to solve most of the world's problems. We need to notice this message to realize our fullest potential. We need to understand that it is not necessarily green-versus-growth for India. It has to be growth plus green.

### **13.6.3 Gender Dimension of Sustainable Development**

Every day women make decisions that affect sustainable development, be it the use of water or energy. At the local level, women have contributed to sustainable solutions for current environmental, economic and social problems. For example, they use environmentally sound technologies and methods, such as rainwater collection cisterns, crop mulching and reforestation, and promoting education and accessing better health facilities for their children and self.

However, the impact of unmanaged development and unplanned means to economic growth has mainly been felt by women. The repercussions of unsustainable development cause miseries to the women both in the urban and the rural areas. When any calamity like floods occurs or an outbreak of disease occurs, women are the worst. Having their expertise, knowledge, and perspective been overlooked for years, women are now demanding that their voices be heard.

Principle 20 of The Rio Declaration states that Women have a vital role in environmental management and development. Their full participation is essential to achieving sustainable development. Similarly, Chapter 24 of Agenda 21 stated that Women should be fully involved in decision-making and implementing sustainable development activities and disseminating information. The Agenda recommended that national governments develop strategies to "eliminate constitutional, legal, administrative, cultural, behavioural, social and economic obstacles to women's full participation in sustainable development and in public life."

We must consider women as agents of change. Gender equality contributes to economic and social development. As consumers and producers, caretakers of their families and educators, women play an essential role in promoting sustainable development through their concern for the quality and sustainability of life present and future generations. Women are more likely than men to buy recyclable, eco-labelled and energy-efficient

products. In India, in the wake of the tsunami, a network of women's self-help groups provided for the local population's practical needs, including water and sanitation, health care, and credit.

They have developed mutual trust, social security, skills and access to technology and credit through their Self Help Groups and various People's Organisations. The women groups have motivated the entire community to take up hygiene, sanitation, family planning and health care activities with the community. Several groups have established their grain banks to ensure food security for their members.

Women from around the world have begun promoting their role in sustaining the environment worldwide. It is accepted that women's crucial role in achieving socially, economically and environmentally sustainable development. It is necessary to provide training and support for women to enable and encourage them to seize access to credit, technology and innovations. Subsequently, the building of capabilities to create awareness, improve their skills, develop leadership and link with technologies, trade, financial institutions, and local governments can empower them to participate in socio-economic development at par with others.

Women's empowerment is a process. We need to empower them, which means changing policies and laws to protect their rights and expand equal opportunities. Rural women have been hard hit by export-oriented agriculture, climate change, and volatility in food and energy prices. They lack equal access to technology and infrastructure, clean water, and national and international markets. And they need to participate in decision-making. Infrastructure developments in transportation and urban planning, which consider the safety and mobility needs of women, are essential factors enabling women to move around freely.

Women are the primary caregivers for children, disabled and elderly family members. They spend fewer hours in paid employment than men and often have interrupted employment records due to years taken out of the labour force to care for young children. It is essential to Gather and Disseminate Gender-Sensitive Information for the active involvement of women. It is required to establish appropriate information-gathering mechanisms to encompass the complexity of women's experiences and concerns, simultaneously identifying problems, constraints, and opportunities to enhance gender equality in access to resources and decision-making.

To achieve Sustainable Development, it is time to move from the current economic system to one that embraces the 'Care Economy' and, from there, ultimately to sustainable and equitable economies based on gender equality.

**Check your Progress Exercise 1**

**Note:** a) Use the space below for your answer.

b) Compare your answers with those given at the end of the unit

1. Explain the objectives of sustainable development

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2. How does our lifestyle contribute to increasing carbon emissions?

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3. What does an eco-friendly lifestyle mean?

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## 13.7 ENVIRONMENT RELATED ISSUES

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Environment-related issues know no boundaries, and it is evident that the entire world is interconnected and interrelated. The industrial era was followed by excessive resource consumption and the addition of harmful chemicals and gases into the atmosphere, hydrosphere, and biosphere.

Protection of the Environment and maintaining its pristine state, and moving on the development path is a daunting task. The key environment-related issues which come in the way of sustainable development are discussed below:

### 13.7.1 Climate change

India is the world’s third-largest emitter of greenhouse gases (GHGs), after China and the US. Becoming carbon-neutral requires that the greenhouse gas emissions are reduced. To achieve good air quality and environment, sustainable solutions for traffic control, emissions from industries, managing construction work, and burning activities must be controlled all over the country.

Climate change is not a thing of the future but has already been arrived. We cannot be in a state of denial any more. It is one of the significant change factors affecting the quality of life the world over. Glaciers are melting at a much faster rate than before, leading to an increase in the level of seas and oceans. Climate change has disrupted the weather cycle at several places, and the result is a disturbance in agriculture, runoff, monsoon patterns, fishing, and livelihoods of the people and so on.

**Impact on Water Bodies:** Many water systems that keep ecosystems thriving and feed a growing human population have become stressed. Rivers, lakes and aquifers are drying up or becoming too polluted to use.

**Impact on Agriculture:** More than half the world’s wetlands have disappeared. Agriculture consumes more water than any other source and wastes much of that through inefficiencies.

**Impact on weather and climate:** Climate change is altering weather and water patterns around the world, causing shortages and droughts in some areas and floods in others. Extreme events like intense rainfall, flooding, water shortages, drought, etc., have become very common.



People should have more choices of low-emission methods of transport such as electric cars, public transport, cycling facilities, etc.

### 13.7.2 Environment Pollution and Resource Degradation

The world is heading for an environmental disaster, and like the three wise monkeys, we do not want to see, hear or talk about it and then go about our business as if the environment and our lives are pretty separate. The Idea of Progress has taken control of our minds, and we believe that continuous economic growth is the only way to solve our problems, including poverty and unemployment. The theory says that only economic growth can make all the sections of the society equally happy. Economists argue that environmental conservation practices lead to increased costs, reduced growth and an increase in poverty. Therefore, environmental laws are posited as being against growth and prosperity.

Today's growth-oriented development model is unsustainable since it leads to the use of natural resources much faster than they can be regenerated. We may say that a polluting industry needs to be closed down to safeguard the environment, but this may deprive its workers of their livelihood. Similarly, forest areas may be leased out for logging to promote the export of timber and timber products. But logging results in the loss of forests and biodiversity.

The environment is both a source and sink of developmental activity. E.g. inland water bodies are a source of fish, water for irrigation, etc. They also act as a sink for excess fertilizers and pesticides that may runoff from agricultural fields. This is why we cannot look at development in isolation from the environment that supports it.

The challenge is to conserve the environment and at the same time increase employment and income levels. In other words, we need to move from unsustainable to sustainable development. Development meant only for increasing economic profits and in isolation with human and environmental well-being can have undesirable consequences.

To make matters worse, the haphazard model of development makes air and water polluted and unfit for use. Take, for example, water. It covers 70 % of our planet, but the freshwater is just 3 %. The rest is locked in frozen glaciers in an unusable form. As a result, around 1.1 billion people worldwide lack access to clean water. Inadequate sanitation is also a problem that exposes people to several diseases.

At the current consumption rate, this situation will only get worse. By 2025, two-thirds of the world's population may face water shortages. And ecosystems around the world will suffer even more.

Similarly, environmental issues like pollution are more likely to affect people's quality of life immediately. Urban issues are different since many enterprise activities are unique to cities, but the rural issues directly involve natural resource sustainability in cattle and crop agriculture. These have apparent effects on crucial matters of ecology. We are now going through a sustainability revolution that will rival the agricultural and industrial revolutions to transform society.

Likewise, the situation of water and water bodies in India are in terrible condition. The country has lost over 70% of water bodies like marshes and lakes in just the Gangetic Plains located in the Northern parts. In many places, even rain-fed lakes are dying at an alarming rate. At times, when 600 million people are severely water-stressed, the disappearance of water bodies becomes disturbing. This becomes an essential aspect

in sustainable development, as due to rampant development, the stormwater runoff coefficient is high. With the original catchment areas as ponds and lakes, flooding of cities and towns used to be under control. Development of all these water bodies in and around the towns and cities adds to a choice for entertainment. Population growth, urban development and global warming are already putting pressure on water quality and availability. By utilizing water-saving devices and suitable irrigation methods, we can conserve water and minimise wastage.

The existing land use needs to be redesigned with both large-scale and small-scale potential. This includes mixed-use planning with green architecture and locating workplaces close to where the people live. The need is to create green spaces to provide recreation and habitat for biodiversity. When behaviours change at the lifestyle level and choices at the higher are sustainable, the impacts can be validated.

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### 13.8 THE PROS AND CONS OF TECHNOLOGY USE

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Technology can be an ally and enemy at the same time when not appropriately used. With advancements in Science and technology, many of the world's problems related to food, medicines, water can be addressed. However, there are numerous examples where technology has done more harm than good. Take the case of agriculture or waste management, and you will realise that technology-aided methods serve a good purpose in the short term but are not equally good in the long term. With the help of better technology, pollution can be reduced, emissions can be absorbed, and better methods of waste treatment are followed. It ensures the good quality of the resources.

Similarly, technology has helped in a great deal to extract minerals, land use planning and weather forecasting, pollution control, resource extraction, disaster management, etc. Even technology has transformed our teaching-learning processes and other service-based industries. The deployment of technology is essential to meet SDGs. Innovation has been placed at SDG 9: Industry, Innovation and Infrastructure.

We must adopt sustainable technology that is environmentally friendly and does not cause problems in the long run.

**Check your Progress Exercise 2**

**Note:** a) Use the space below for your answer.

b) Compare your answers with those given at the end of the unit

1. What are the pros and cons of technology?

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2. How climate change influences water availability?

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3. What are the gendered impacts of climate change?

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## 13.9 LET US SUM UP

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In this Unit, you have studied sustainable development. The word sustainable development has several connotations and meanings. The term got recognition in 1987 when the world started experiencing environmental pollution and the unequal world where the divide between the rich and the poor was deepening. You have come across terms like intergenerational equity, consumerism, and materialistic culture and so on. These are the consequences of haphazard development. The ways and means to live a sustainable lifestyle are also explained in the unit. The unit also throws light on the challenges of sustainable development and also provides long term and short term solutions to the same. The use of technology has created issues of its kind. In this unit, you have studied the pitfalls of technology use in achieving long term sustainability.

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## 13.10 UNIT END QUESTIONS

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1. Define Sustainable Development.
2. Discuss the pros and cons of technology use in detail with suitable examples.
3. What do you mean by the gendered aspect of sustainable development? Explain.
4. Do you agree that the need to change the lifestyle of human beings to change climatic conditions? Justify your arguments with suitable examples.

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## 13.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

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### Check Your Progress Exercise 1

1. The critical point is that sustainable development is a process, not an end in itself. It also implies that conversation must be established between community members, and equal participation is a prerequisite for sustainable development. All the sustainable development discourses and deliberations have to keep this central idea in mind. Thus, sustainable development requires democratic thinking and consensus-based participation of every individual. The basic idea is that the interests of the future generation should receive the same amount of attention and certainty as to the present generation.
2. In today's world, you must have noticed spurge in buying, consuming and discarding. The short term use of the products and services is alarming and needs behavioural change among individuals and communities. We know that earth has limited capacity, and when the resources are consumed beyond this capacity, there is very little time left for the earth to regenerate these resources. This leads to

problems, and hence sufficient time must be given to the vital resources like water, soil, etc., to regenerate them. The problem arises due to an increase in population and consumption at a greater rate, reducing the per capita availability of resources. This results in a scarcity of natural resources.

3. Sustainable living is all about finding alternative ways and living more sustainably with optimum utilisation of resources. This ensures a steady supply for future generations also. The misconception associated with living sustainably is that it means sacrificing the luxuries and facing challenges. However, it is being conscious of consumption and actions which deteriorate the planet's existing conditions.

### Check Your Progress Exercise 2

1. Technology can be an ally and enemy at the same time when not appropriately used. With advancements in Science and technology, many of the world's problems related to food, medicines, water can be addressed. However, there are numerous examples where technology has done more harm than good. Take the case of agriculture or waste management, and you will realise that technology-aided methods serve a good purpose in the short term but are not equally good in the long term. With the help of better technology, pollution can be reduced, emissions can be absorbed, and better methods of waste treatment are followed. It ensures the good quality of the resources. Similarly, technology has helped in a great deal to extract minerals, land use planning and weather forecasting, pollution control, resource extraction, disaster management, etc. Even technology has transformed our teaching-learning processes and other service-based industries. The deployment of technology is essential to meet SDGs. Innovation has been placed at SDG 9: Industry, Innovation and Infrastructure. The pitfalls of technology are that when they are discriminately utilised to get benefits, they are not long-lasting. We must adopt sustainable technology that is environmentally friendly and does not cause problems in the long run.
2. Many water systems that keep ecosystems thriving and feed a growing human population have become stressed. Rivers, lakes and aquifers are drying up or becoming too polluted to use.
3. The impact of unmanaged development and unplanned means to economic growth has mainly been felt by women. The repercussions of unsustainable development cause miseries to the women both in the urban and the rural areas. When any calamity like floods occurs or an outbreak of disease occurs, women are the worst. Having their expertise, knowledge, and perspective been overlooked for years, women are now demanding that their voices be heard.

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## 13.12 REFERENCES AND SUGGESTED READINGS

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<https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs>

Visaria, A., & Dommaraju, P. (2019). Productive aging in India. *Social Science & Medicine*, 229, 14-21.

Lele, S. (2012). 15 Climate change and the Indian environmental movement. *Handbook of climate change and India: development, politics and governance*, 208.