

## Unit IV: Sustainability and Management

## 4.3 SUSTAINABILITY

It is defined as "meeting our own needs without compromising the ability of future generations to meet their own needs".

**Need of sustainability**

1. A Sustainability is key to preserving our planet.
2. Sustainability helps reduce pollution and conserve resources.
3. Sustainability creates jobs and stimulates the economy.
4. Sustainability improves public health.
5. It protects biodiversity.
6. It protects the natural environment.
7. It is the choice of non-toxic materials.
8. It reduces and reuses the resources.
9. It minimizes waste.
10. It is used for life-cycle analysis.

**4.3.2 Concept (or) Approaches (or) Significance of Sustainability**

To build up the sustainability development, the following approaches (or) methods are proposed.

1. **Developing appropriate technology:** It is the one, which is locally adaptable, eco-friendly, resource-efficient and culturally suitable. It uses local labours, less resources, and produces minimum waste.
2. **Reduce, Reuse, Recycle (3-R) approach:** It insists optimum use of natural resources, using it again and again instead of throwing it on the waste land (or) water and recycling the material into further products. It reduces pressure on our natural resources and reduces waste generation and pollution.
3. **Providing environmental education and awareness:** By providing environmental education and awareness, the thinking and attitude of people towards our earth and the environment can be changed.
4. **Consumption of Renewable Resources:** In order to attain sustainability, it is very important to consume the natural resources in such a way that the consumption should not exceed regeneration capacity.
5. **Conservation of non renewable resources:** Non-renewable resources should be conserved by recycling and reusing.
6. **Population Control:** By controlling population growth, we can make very good sustainability development.

**4.3.3 Economic and Social Challenges of Sustainability****I. Economic sustainability**

It refers to the organisation's ability to manage its resources and responsibly generate profits in the long term.

**Examples****1. A company uniliver**

It has followed a strategy to achieve a balance between sustainability and the company's economic performance. So, it implemented several measures like increasing package recycling, promoting the use of recycled materials and responsible consumption campaigns. awareness

**2. A company suez**

It has reduced its emissions, related to electricity consumption, by 95% by using renewable energy and conservation of natural habitats.

**Economic challenges**

- (i) High rates of unemployment (or) under employment.
- (ii) High rates of poverty and low growth.
- (iii) Increasing inequality, with many not being included in the growth process.
- (iv) Disruption of major economic activities due to pandemic situation like tourism.
- (v) Volatile growth dependent on one source.
- (vi) Low productivity due to poor human capital development.

- (vii) Skills mismatch between skills you have and the jobs you want to create.
- (viii) Lack of quality jobs.
- (ix) Macroeconomic instability and recurrent balance of payments shocks,

## II Social sustainability

It refers to strengthening the cohesion and stability of specific social groups. Examples

### 1. A Company CEMEX

It is working to contribute to the social development of communities. Thus, it offers decent housing through self-building programmes and loans with favourable access conditions.

### 2. A Gigante group

It contributes funds and resources to a range of social causes like school materials for collaborators and grants to improve visual health.

## Social Challenges

Though social impact, social sustainability challenges, issues are not easily measurable, they are easier to identify. Social sustainability performance challenges include

- (i) Human rights.
- (ii) Fair labour practices.
- (iii) Living conditions.
- (iv) Health and safety.
- (v) Wellness, diversity and equity.
- (vi) Work-life balance.
- (vii) Empowerment.
- (viii) Community engagement.

### 4.3.4 Aspects of sustainability

There are 4 aspects of sustainability, of them environmental sustainability is the fundamental and important aspect.

#### 1.Environmental aspect

Environmental aspect acknowledges the need to enhance and maintain the biophysical systems that sustain all the life on earth. It includes the structure and function of natural ecosystems and the interactions between them and people and calls for guardianship (or) kaitiakitanga of our environment.

#### 2. Social aspect

Social aspect acknowledges the need for equity

- (i) within and between generations, and
- (ii) within and between ethnic and social groups. It is inclusive of people's mental and physical well-being and the cohesion of their communities based on a fair distribution of resources.

#### 3. Cultural aspect

Cultural aspect acknowledges the need to nourish and share attitudes and values that represent diverse world views and the political need for all people to express their views freely and to participate in decision making. Addressing these needs can build resilience for the future.

#### 4. Economic aspect

Economic aspect acknowledges the interactions of humans with the natural environment in using resources to create goods and services which add value to their lives. It acknowledges the resource use and waste disposal must occur within the capacity of our planet. It encourages a fair trading system that equitably distributes benefits and costs. It further encourages innovation and creativity in developments that lead to a sustainable future.

## Relationship between these aspects

### Strong sustainability aspects

This model shows how our economy is a subset of our society. It also shows that everything in our economy and everything in our society entirely dependent on our environment.

This relationship means that any impact (or) change to our environment will impact on society and the economy. Therefore any sustainability related issue must be considered interdependence.

#### **4.4 FROM UNSUSTAINABILITY TO SUSTAINABILITY**

##### **4.4.1 Unsustainability**

Our ancestors have left a lot of resources for us. They used their resources sensibly and not for their greed. But we are exploiting limited resources. Instead of using it for our needs, we are exploiting it for our greeds.

##### **Characteristics of Unsustainability**

- (i) Unsustainability is one in which we forget our responsibility towards the environment.
- (ii) In unsustainability, we degrade the available resources.
- (iii) It not at all cares about the needs of future generations.
- (iv) Unsystematic planning can lead to damage to natural as well as human-made resources.
- (v) Unsustainability leads to extreme degradation of the environment as well as the living organism.

##### **Causes for unsustainability**

- (i) Developing countries are responsible for the degradation.
- (ii) The rate of increase of National pollution. In this regard, developed countries contribute much more than developing countries.
- (iii) Raising population.
- (iv) People should look at environment as not only reserve of man but of all living organism.
- (v) People built so many buildings, roads and dams for a luxurious life-style. We neglected the needs of animals and destroy their habitats.
- (vi) We extract a lot of material from the lithosphere than what we need.
- (vii) We create a lot of chemical compounds, which break down in the environment and becomes problematic.
- (viii) We cut trees at a faster rate than they can grow, which causes global warming.
- (ix) Purchasing and using polythene bags contribute to growth of pollution.

##### **4.4.2 Characteristics of Sustainability**

1. It reduces emission of greenhouse gases, which will reduce global warming and helps in preserving the environment.
2. It uses natural and biodegradable materials for reducing the impact on the environment. It emphasis on using renewable energy sources such as wind and solar energy.
3. It follows non-polluting construction practices
4. . It protects the natural habitats.
5. It improves the quality of human life.
6. It minimises the depletion of natural resources.
7. It teaches us to respect and care for all the life forms.
8. It makes arrangements, so that the future generations are able to meet their own demands.

#### **4.5 MILLENNIUM DEVELOPMENT GOALS**

The Millennium Development Goals (MDGs) were

8 international development goals.

1. To eradicate extreme poverty and hunger.
2. To achieve universal primary education.
3. To promote gender equality and empower women.
4. To reduce child mortality.
5. To improve maternal health.
6. To combat HIV/AIDS, malaria, and other diseases.

7.To ensure environmental sustainability.

8. To develop a global partnership for development.

#### 4.6 SUSTAINABILITY PROTOCOLS

Sustainability protocols are sustainability standards and certifications. These are voluntary guidelines used by producers, manufacturers, traders, retailers and service providers to demonstrate their commitment to good environmental, social, ethical and food safety practices.

There are over 400 such standards across the world. The sustainability protocols listed below are important because they build awareness and policy support, create clear guideline and goals. They have third-party verification and maintain consistency within a portfolio while developing Green economy.

##### Few sustainability protocols

1. LEED
2. WELL
3. Fitwel
4. Living building challenge
5. BREAM
6. Passive house
7. National Green Building Standard
8. Built green
9. Evergreen sustainable development standard (ESDS)

(a) Introduction of eco-labels and standards for organic food and other food products.

(b) Triple bottom line, it includes a set of practices (or) criteria for how a crop should be sustainably grown (or) a resource should be ethically harvested.

(c) It includes, responsible fishing practices that do not endanger marine biodiversity (or) respect for human rights and the payment of fair wages on a coffee (or) tea plantation.

(d) Sustainability protocols are accompanied by a verification process (certification) to evaluate that an enterprise complies with a standard as well as a traceability process for certified products to be sold along the supply chain, often resulting in a consumer-facing label.

(e) It also focus on capacity building and working with partners and other organizations to support small holders (or) disadvantages producers to make the social and environmental improvements needed to meet the standard.

OBSERVE OPTIMIZE OUTSPREAD