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# FACULTY OF ENGINEERING AND TECHNOLOGY

# Lecture- 25

# Social issues and the Environment: From unsustainable to sustainable development

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Subject : Environmental Studies and Disaster Management Course: B.Sc. Ag. (I<sup>st</sup> year) Subject Code: PPY-211 Semester: II<sup>nd</sup> sem. To increase economic growth, developed countries exploited their natural resources at unprecedented high rates and also the natural resources of developing or under-developed countries. This lead to the depletion of resources and incurred negative environmental consequences affecting human health.

Unsustainable approaches has alarmingly increased social issues like poverty, inequality, inadequate access to basic requirements i.e., food and energy.

These negative social impacts raised global concern about unsustainable approaches and urged need for utilization of resources in a such a sustainable manner that both resources and environment continue their services for future generations.

# A look at the three pillars of SD:



#### economic

- opportunities for growth
- increased GDP and benefits
- system stability and security
- Green jobs and eradication of unemployment
- Prevention of practices which misuse resources
- Regulation of over-exploitation and harmful externalities



#### social

- Participation and inclusion of everyone
- eradication of poverty and exclusion
- food security
- equitable distribution of resources
- better life chances and opportunities
- protection from exploitative



#### environmental

- Protection of ecosystems and biosphere
- increased quality of air, land, water
- better management of waste and pollution
- respect and protection for all species - flora, fauna, marine species
- measures to ensure resource sustainability and harmony
- Protection of marine resources

Sources: https://images.app.goo.gl/BpcBRwZzTfpErYpVA

## Goals of Sustainable development: There are 17 sustainable development goals:

- 1) To eradicate poverty/ No poverty
- 2) Zero hunger
- 3) Good health and well-being
- 4) Quality Education
- 5) Gender equality
- 6) Clean water and Sanitation
- 7) Affordable and clean energy
- 8) Decent work and economic growth
- 9) Industry, innovation and infrastructure
- 10) Reduced inequality
- 11) Sustainable communities and cities
- 12) Responsible consumption and production
- 13) Climate action
- 14) Life below water
- 15) Life on land
- 16) Peace and Justice strong institutions
- 17) Partnerships to achieve goals



### Methods to achieve sustainable development

 Inter-generational equity: The exploitation of natural resources and negative impacts on environment should be minimize for the needs of the future generations. This can be achieved by discontinuing over exploitation of resources, reducing waste discharge and emissions, and maintaining ecological balance.

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- Intra-generational equity: The development process should involve reduction in the wealth gaps within and between nations to minimum. This should include solution to the problems of developing countries, such as producing vaccines for infectious diseases, use of less polluting energy resources, etc.
- This will facilitate the economic growth of poor countries, narrowing the wealth gap and lead to sustainable development.

## Measures for Sustainable development

- <u>Using appropriate technology</u> such as eco friendly, resource efficient, and culturally suitable and indigenous technologies.
- Adoping 3R's i.e., Reduce, Reuse, Recycle.

Reduce: It refers to reduce consumption of resource.

Reuse: It refers to again and again use of material, e.g., discarded rubber tubes can be used as rubber bands and

Recycling: It refers to generating new useful material from discarded materials e.g., recycling of paper.

- <u>Promoting environmental education & awareness</u> Proper education and awareness among masses will help in shaping their thinking and attitude towards protection of our environment.
- <u>Resources utilization as per carrying capacity</u>: Carrying capacity means that any system can sustain only limited number of organisms at a particular time that does not affect environmental quality and resources.

# Sustainable development

It could be defined as "development that meets the needs of present without compromising the ability of future generations to meet their own needs".

The concept of sustainable development was introduced by Brundtland report also known as Our Common Future, publication released in 1987 by the World Commission on Environment and Development (WCED) or Brundtland Commission, chaired by Gro Harlem Brundtland.

The three pillars of sustainable development are

- social equality,
- economic viability and
- environmental protection.



