



SUSTAINABLE DEVELOPMENT PRACTICES

Course Code: 21EEO306T

Year/Semester: III/V

Department: CSE/ AIML

Prepared By,

Mr. Karthikeyan S,

Assistant Professor (ECE),

Faculty of Engineering & Technology,

SRMIST, Trichy



Unit I: Introduction to Sustainable Development

What is Open Elective Course & Why Open Elective Courses

????????

Course Objective & Outcomes

Objective

- Gain a basic understanding on sustainable development
- Understand the necessity of social development towards sustainability
- Familiarize the integrated strategies of sustainable development

Outcome

- Familiarize the necessity of sustainable development by various stake holders
- Recognize the feasibility approaches techniques and outcomes of sustainable development
- Interpret various policies and integrated approaches for adoption of sustainable development

Mother Earth



Mother Earth Should be Revived



- **Sustain**

To make something continue for a long period of time without becoming less

- **Sustainable**

Involves the use of natural products & energy in a way that does not harm the environment

- **Sustainable Development**

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs

SDP: What it is???

- **Holistic approach** to growth and progress that aims to **meet the needs of the present** without compromising the ability of **future generations to meet their own needs** (1987 Bruntland Commission Report, United Nations)
- Sustainable development **ensuring a healthy planet** and a **prosperous society** for present and future generations



Need for Sustainable Development



OVEREXPLOITATION OF NATURAL RESOURCES

Extinction of Species,

Decline in world's
food production,

Decline in Marine
Fisheries



SCARCITY OF RESOURCES

Demand for a good or
service is greater than
the availability of the
good or service

Water Scarcity

Food production needs
double over next 40
years



CLIMATE CHANGE

Protecting the planet,
halting climate
change and
promoting social
development, without
endangering life on
Earth or leaving
anyone behind



ECONOMIC DEVELOPMENT

Equal economic
growth that
generates wealth for
all, without harming
the environment



SOCIAL EQUITY

Focusses on
Social Justice &
Fairness

Where We Lack



-
- An infographic featuring a stylized globe held in a large, orange, cartoonish hand. The globe is light blue and yellow. Overlaid on the globe is the text "SUSTAINABLE DEVELOPMENT GOALS" in bold, dark blue capital letters. The word "GOALS" is larger and has a circular icon with 17 colored segments (representing the 17 SDGs) in the letter 'O'. Surrounding the globe are 17 circular icons, each containing a white symbol representing a specific goal: a heart, an open book, a bar chart with an upward arrow, a factory, a lightbulb, a dove, a fish, a bowl of rice, a sun, a water drop, a family, a heart, an open book, a bar chart with an upward arrow, a factory, a lightbulb, a dove, and a fish.



Where TN stands in SDG??

SHOT NEWS
For Instant News Updates
WhatsApp 'Hi' to
90805 72585

EVERYTHING WORKS



Tamil Nadu Tops In Eradicating Poverty : SDG Index

Tamil Nadu has been classified as 'front runner' in 13 Sustainable Development Goals of the United Nations, according to the latest SDG India Index 2023-24, released by the Union government's think-tank NITI Aayog. Of several indices in which **Tamil Nadu has tops in the goal of eradicating poverty, compared with the other States and the Union Territories. In 'No Poverty' index, Tamil Nadu has scored 92 out of 100, while the national average stands at 72. TN has also scored 75 in 'zero hunger' in which national average is 52.**

Source : The Hindu

AD
FAST
ELECTRICAL PRODUCTS
www.kfastindia.com | 9543610164

K-Line
MINIATURE CIRCUIT
BREAKER MCB
ISOLATOR - ELCB


K
BE PERFECTLY
SECURE
WITH US

18.07.2024     For Advertisements Whatsapp 'AD' to 9080572585

Scope of SDG



Sustainable development believes that operating within the right economic, social and environmental boundaries will create a truly sustainable health system, one that is fit for the future.



The scope of sustainable development is very wide, as it deals with areas like social, economic, environmental, and institutional dimensions.

Scope of SDG

- **Environment Dimension**

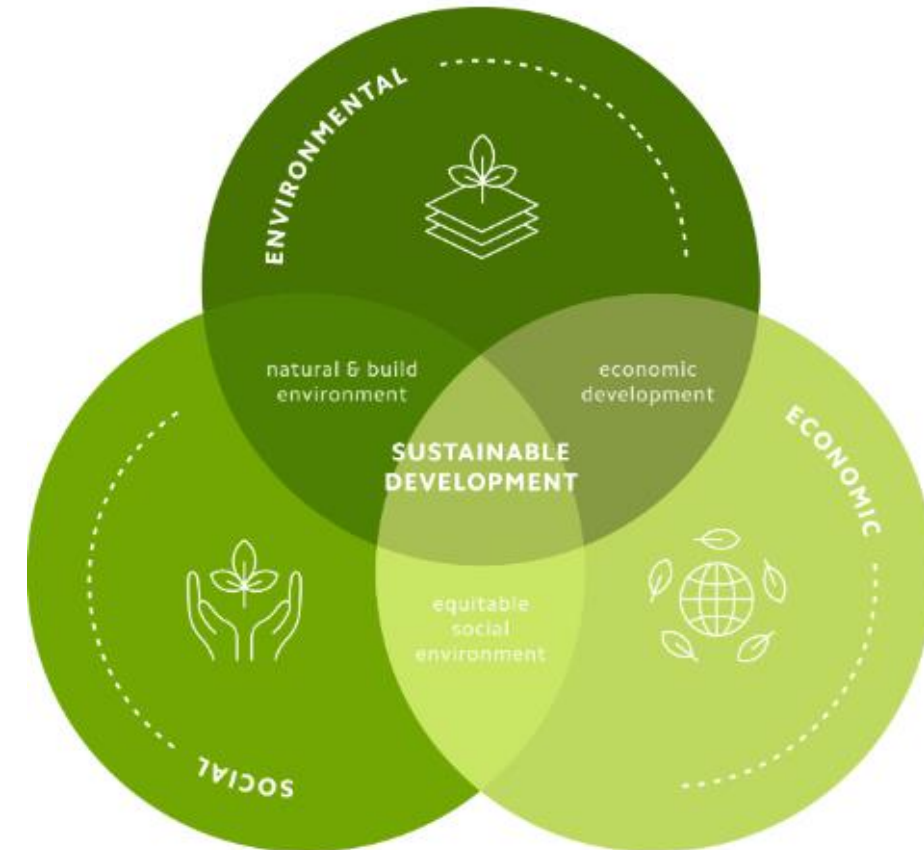
- Practices that conserve resources, reduce pollution, and preserve ecosystems in the long term
- Practices like renewable energy use, sustainable agriculture, and biodiversity protection.

- **Economic Dimension**

- Aims to create inclusive communities with fair access to basic needs, quality healthcare and education, promoting social equity while emphasizing the importance of justice, fairness, and equality for all individuals

- **Social Dimension**

- Prioritizes long-term planning, equitable wealth distribution, and stable growth through responsible business practices, encouraging innovation, and investment in sustainable industries



Scope of SDG

- **Institutional Dimension**
 - Industry, Innovation and Infrastructure
 - Sound financial resources
 - Peace, justice and strong institutions
 - Sustainable cities and communities
- **SRM University Initiatives**
 - Water and Air Research Initiatives: A Climate Change Perspective
 - Sustainable Technology Development
 - Consultancy and Outreach Programs
 - Capacity Building
- **SRM University aims to**
 - Install Biogas plants
 - Install Solar panels
 - Installing LED based lighting
 - Reduce e-waste
 - Reduce average wastewater generation
 - Rainwater harvesting

Elements of SDG : 5 P's



Eco-conscious Consumers

Individuals can make sustainable choices in their daily lives, such as reducing waste, conserving energy, and supporting eco-friendly businesses.

Community Advocates

Local communities can organize and participate in initiatives that promote sustainable practices, like urban gardening and renewable energy projects.

Responsible Citizens

Citizens can engage in the political process to support policies and leaders that prioritize environmental protection and social equity.

People: Roles & Responsibilities

Legislation

Governments can enact laws and regulations that incentivize sustainable practices, such as carbon pricing, renewable energy targets, and waste management standards

Funding

Governments can provide financial support for research, development, and implementation of sustainable technologies and initiatives

Enforcement

Governments can enforce environmental laws and hold polluters accountable, ensuring compliance with sustainable development goals.

Government: Policies & Regulations

**Investors:
Initiatives**

Financing

Sustainable

Green Bonds

Investors can finance green infrastructure, renewable energy projects, and other sustainable initiatives through the issuance of green bonds.

ESG Funds

Investors can allocate capital to funds that prioritize environmental, social, and governance (ESG) factors, supporting companies with sustainable practices.

Impact Investing

Investors can directly invest in businesses and organizations that have a positive social and environmental impact.

Shareholder Advocacy

Investors can use their shareholder influence to push for more sustainable policies and practices at companies they invest in.

Elements of SDG

Industry: Sustainable Practices and Innovation

Renewable Energy

Businesses can adopt renewable energy sources, such as solar, wind, and geothermal, to reduce their carbon footprint

Circular Economy

Industries can implement circular economy principles, reusing, recycling, and repurposing materials to minimize waste

Sustainable Supply Chains

Companies can work with their suppliers to ensure sustainable practices throughout their supply chain, from sourcing to distribution

Judiciary: Enforcing Environmental Laws

Adjudication

The judiciary plays a crucial role in interpreting and applying environmental laws, ensuring compliance and accountability

Balancing Interests

Courts must weigh the competing interests of economic development and environmental protection, upholding the principles of sustainable development

Enforcement

The judiciary can impose penalties and take enforcement actions against individuals and organizations that violate environmental regulations

Stakeholders of SDB





Conclusion: Collaborative Efforts for a Sustainable Future

Stakeholder	Key Role
People	Eco-conscious consumers, community advocates, responsible citizens
Government	Enacting policies, providing funding, enforcing regulations
Investors	Financing sustainable initiatives, advocating for change
Industry	Adopting sustainable practices, driving innovation
Judiciary	Interpreting laws, balancing interests, enforcing compliance
International Organizations	Establishing global frameworks, providing funding, building capacity

Sustainable development requires the collective efforts of all stakeholders, working together to address environmental, social, and economic challenges. By aligning their roles and responsibilities, we can create a more sustainable future for generations to come.

Polycymaking

International organizations, such as the United Nations, can establish global frameworks and agreements that guide national policies on sustainable development

Capacity Building

They can also help build the capacity of local governments and communities to address environmental and social challenges

Funding

These organizations can provide financial assistance and technical support to developing countries for implementing sustainable initiatives