Abstract

Sustainable development is one of the most discussed and most significant societal challenges faced in today’s world. With increased environmental consciousness everybody is ensuring sustainability in their operations. Information Technology plays a major role in ensuring sustainable economic, social and environmental development. Amalgamation of Information Technology with sustainable development will helps in ensuring rapid and greener development. These two sectors are always considered to be complementary to each other.

IT sector plays an enormous role in implementation of techniques which ensure sustainability in operations. Information technology ensures reduction in consumption of scarce resources, reduction and elimination of poverty. Information technology is recognized as an all-purpose enabling tool for sustainable development. IT is made up of 4C’s i.e. computing, connectivity, content and capacity (human). Information technology does not only include computers and telephones, it is much more than that.

It is involved in almost everything. It plays major role in economic growth and development, information technology is considered to be the means as well as the end for the development. Economy’s social and economic growth and development in sustainable manner depends upon ICT.

Information technology ensures efficiency, provide competitiveness, new business models and opportunities and also ensure transparency and empowerment. Sustainability requires better technological, organizational, institutional and social changes which can be
achieved with the help of information technology. Information technology is one of the most powerful things in today’s scenario which ensures economic, social and environmental development by marinating sustainability. With the use of ICT process of sustainable development can be accelerated and can ensure easy implantation.

OBJECTIVE OF THE STUDY:

• To understand the needs and importance of sustainable development.

• To determine the role of information technology in achieving sustainable development.

• To understand the importance of green initiatives.

LITERATURE REVIEW:

While conducting this study lot of literature is being reviewed which show the role of information technology in achieving sustainable development. Since the inception of sustainable development lots of efforts have been made to link sustainable development with new and innovative technologies. Every researcher tried to explain the impact of information technology on sustainability.

A global trend with significant implications for sustainable development is the extraordinary rapid development and application of information technology, also referred as IT revolution.

By drastically reducing the cost of information and communication, IT advances have had tremendous economic effects. With globalization and development of economy it has leaded to the knowledge intensity growth in economic development (OECD, 1996). Sustainable development most often define as development that meets the needs of the present without compromising the ability of future generation to meet their own needs (Brundtland commission, 1987).

The field of sustainability is divided into three parts i.e. environmental sustainability, social sustainability and economical sustainability. According to Hanna Vancock (2007) sustainability is a process which involves development of all aspect of human life
effecting sustainance. It means resolving the conflict between various competing goals, and involve the simultaneous pursuit of economic prosperity, social equality and environmental quality which are three dimension of sustainability.

Desimane and popoff (1997) links business operations sustainable and modern technology and states that, ”Eco-efficiency can be achieved by delivering competitively priced goods and services which satisfy human needs and wants and brings quality of life while progressively reducing ecological impact and resource intensity throughout the life cycle to a level at least in line with carrying capacity of earth.

Caprotti, Federico(2012) states, ”Numerous organisation have taken the concept of sustainability very seriously and are engaging greater competition advertising and making huge profits.”

RESEARCH METHODOLOGY:

This research paper is solely based on secondary data, collected from numerous sources like text books, articles, journals, conference proceedings, periodicals, newspaper, magazines and internet. Findings and Results: This research work gives an opportunity to understand the concept of sustainable development and how we can achieve it by using information technology. Development opportunities provided by information technology are as follows:

- Improve social and economical conditions.
- Information technology helps in optimum utilisation of natural resources.
- IT helps in accelerating development.
- Information technology ensures better infrastructure facility which help in achieving sustainable development.
- It initiatives focuses on rural areas y providing better health, water, sanitation, education facility.
- Linking sustainable development with information technology will ensure better implementation of development schemes.
IT ENSURES COST EFFECTIVE SUSTAINABLE DEVELOPMENT. PROBLEMS AND CHALLENGES:

Information technology plays a major role in achieving sustainable development. But there are lots problems faced while linking sustainable development with information technology, which are as follows:

- One of the biggest problems is inappropriate quality of information.
- Information technologies often increase wastage of natural resources.
- Information technology requires more energy consumption.
- Information techniques increase pollution.
- Information technology leads to the over economic dependence.
- There are also several knowledge related barriers like lack of expertise, inaccessibility, etc.

SUGGESTIONS AND RECOMMENDATIONS:

People, organization, institutions are becoming more and more concerned about their environment. Following recommendation must be followed to ensure adoption of information technology in sustainable development:

- **Awareness:** Government must work hard to make people aware about the needs and importance of sustainable development and must understand the ways to include IT in sustainability.

- **Availability:** Better infrastructure facility must be made available to the people at reasonable rates. • **Accessibility:** IT tools and techniques must be made easily accessible to everyone

- **Affortabity:** IT tools and techniques must be made available at reasonable and affordable prices.

CONCLUSION:

After conducting this research work I have came to the conclusion that information technology and sustainable development are
inseparable and information technology plays a major role in achieving sustainable economic, social and environmental development. Information technology is recognized as an all-purpose enabling tool for sustainable development, IT is made up of 4C’s i.e. computing, connectivity, content and capacity (human). Information technology does not only include computers and telephones, it is much more than that. It is involved in almost everything. It plays major role in economic growth and development, information technology is considered to be the means as well as the end for the development.

Economy’s social and economic growth and development in sustainable manner depends upon ICT. Information technology ensures efficiency, provide competitiveness, new business models and opportunities and also ensure transparency and empowerment. Sustainability requires better technological, organizational, institutional and social changes which can be achieved with the help of information technology.

Information technology is one of the most powerful things in today’s scenario which ensures economic, social and environmental development by marinating sustainability. With the use if ICT process of sustainable development can be accelerated and can ensure easy implantation

REFERENCES


