BLOCK 1:
IMPACT OF TOURISM ON SOCIO-ECONOMIC ENVIRONMENT OF THE DESTINATION
UNIT 1: GOOD, BAD AND UGLY FACES OF TOURISM

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1.1 INTRODUCTION:

Tourism has become the rapid growing field of modern India with the increasing statistics of foreign and domestic tourism. With the growth of information and communication technology such as internet, online travel agencies, mobile computing, computer based reservation systems, online banking etc it becomes really easy to manage all the tourism related activities like tour planning, ticketing, hotel booking or selecting a tourist destination. As tourists often travel in a group to the destination far from their locality, they generally affect most of the aspects of life belonging to that destination. India is a big country with a diversified geographical, economical and social structure, tourism really provides them the opportunity to come together and hence enabling the people to learn and share their experiences of life. Generally this interaction yields good results in the form of social, economic and cultural impacts. The social impacts come in the form of unity in diversity and as an opportunity to know one another’s way of life, which could be very interesting for both tourists and local community. Tourism has a great impact on the destination economy by providing various business and infrastructure development.
Tourism generates different types of income for a community: business income, wage earnings, share earnings, rates and levies. Direct spending by visitors has a positive impact on business profitability and employment growth. Tourism activities also initiate the preservation of cultural heritages, located at different geographical parts of the country. Besides all the positive advantages of tourism, we should not forget that tourism also brings some misbalance of cultural traditions of the local community. These cultural disadvantages come in various forms such as loss of original traditions and cultures, misinterpretation of foreign culture, modernization of local traditions etc. generally it is found that tourists don not respect/ follow local culture and hence they eventually damage it. As tourism activities are growing rapidly tourists cause environmental damage through forest fires, destruction of sand dunes and pollution. With increasing number of tourist governments have to provide various infrastructure services such as development of new roads, removal of trees, forest destruction, and environmental pollution caused by industries and vehicles. Although the rapid growth of tourism activities is dangerous for atmosphere but the tourist destinations can be protected by tree planting and enforcing strict laws.

**FIGURE 1: TOURIST ARRIVAL RATE IN INDIA**

With increasing rate of tourist arrival the overall tourism activities have an effective impact (positive and negative) on almost every aspect of modern life including social, cultural, economical, etc. tourism impacts are generally positive, as we can see some of the direct positive effects of tourism which are responsible for economical growth and development of the destination. Tourism creates the opportunity for diverse communities to come close and share/ experience the culture and traditions of one another. Tourism essentially increases group and individual communication among the people of different geographical, social and economical backgrounds. In addition to the above tourism also have many other
hidden positive effects e.g. indirect economic benefits of tourism, induced benefits, infrastructure development etc. Like everything, tourism also has some of the bad and ugly faces. Some of the main disadvantages (negative impacts) of tourism can be negative cultural impacts, modernization of traditions, inflation etc.

1.2 OBJECTIVES

After completing this unit you will be able to understand the following issues-

- What are the different positive effects and advantages of tourism
- How the growing rate of tourism can be dangerous in some aspects
- Understand the economical, social and cultural benefits of tourism
- What are the ugly faces of tourism: loss of culture, pollution, modernization of traditions etc?

1.3 GOOD IMPACTS OF TOURISM

During past decades, tourism has become an effective venture. Tourist arrival rate is growing year by year. With advancement in supporting tools and technologies e.g. computerized reservation system, online payment, fast transportation, infrastructures etc tourism started to affect all the aspects of destination including social, cultural, economical etc. some of the obvious advantages of tourism are foreign exchange income, sales of local products, employment etc. We will now discuss all these factors in detail.

1.3.1 ECONOMICAL ADVANTAGES OF TOURISM

This is really the brightest face of tourism activities. Economical effects of tourism are directly observable. Tourism generates different types of income for a community: business income, wage earnings, share earnings, rates and levies. Direct spending by visitors has a positive impact on business profitability and employment growth. The money that is then circulated and re-spent in the economy is often referred to as indirect spending or the multiplier effect. Because much of a region’s tourism patronage comes from metropolitan centers, it is an effective way to redistribute wealth from urban to rural areas. The expectations and needs of visitors can often lead to the creation of new businesses and commercial activities. This builds a more diverse economic base and reduces reliance on one or two traditional industries, which is often the case in rural communities. A thriving tourism industry supports growth in other sectors, such as transport, construction, agriculture and retailing. As tourism increases, there are more opportunities for small business to develop.

The main positive economic impacts of tourism relate to foreign exchange earnings, contributions to government revenues, generation of employment and
business opportunities. Tourism expenditures, the export and import of related goods and services generate income to the host economy. Tourism is a main source of foreign exchange earnings for at least 38% of all countries.

Government revenues from the tourism sector can be categorized as direct and indirect contributions. Direct contributions are generated by taxes on incomes from tourism employment, tourism businesses and by direct charges on tourists such as eco tax or departure taxes. Indirect contributions derive from taxes and duties on goods and services supplied to tourists, for example, taxes on souvenirs, alcohol, restaurants, etc.

The rapid expansion of international tourism has led to significant employment creation. For example, the hotel accommodation sector alone provided around 11.3 million jobs worldwide in 1995. Tourism can generate jobs directly through hotels, restaurants, taxis, souvenir sales and indirectly through the supply of goods and services needed by tourism-related businesses. According to the World Tourism Organization tourism represents around 7% of the world’s employees.

Tourism can induce the local government to improve the infrastructure by creating better water and sewage systems, roads, electricity, telephone and public transport networks. All this can improve the quality of life for residents as well as facilitate tourism.

Tourism can be a significant or even an essential part of the local economy. Because environment is a basic component of the tourism industry’s assets, tourism revenues are often used to measure the economic value of protected areas. There are other local revenues that are not easily quantified, as not all tourist expenditures are formally registered in the macro-economic statistics. Part of the tourism income comes from informal employment, such as street vendors and informal guides. The positive side of informal or unreported employment is that the money is returned to the local economy and has a great multiplier effect as it is spent over and over again. The World Travel and Tourism Council estimate that tourism generates an indirect contribution equal to 100% of direct tourism expenditures.

Tourism can contribute directly to the conservation of sensitive areas and habitats. Revenue from park-entrance fees and similar sources can be allocated specifically to pay for the protection and management of environmentally sensitive areas.

Some governments collect money in more far-reaching and indirect ways that are not linked to specific parks or conservation areas. User fees, income taxes, taxes on sales or rental of recreation equipment and license fees for activities such as hunting and fishing can provide governments with the funds needed to manage natural resources. Tourism operators can play a role in
highlighting the broad prosperity that tourism can bring to a community and will contribute to a greater understanding and respect for the value of tourism.

Figure 2: Different economic benefits from tourism

Economic diversification is, for many communities, an insurance policy against hard times. By offering an additional means of income, tourism can support a community when a traditional industry is under financial pressure, particularly where that community relies heavily on a single industry.

Economical impacts of tourism can really boost the overall revenues of a country as well as local destination economy. Different tourist spots that were unknown in the past, have now become developed economy with efficient tourism management activities. Economical development can be thought of one of the most important positive impact of tourism. In other words we can say that tourism helps in decentralization of money and distributes it among various distant geographical areas of the country. Without tourism activities, these distant communities/areas require much effort to develop and grow.

Figure 2: Direct, Indirect and Induced Economic Impacts
Various other positive economic effects of tourism can easily be seen around the popular tourist destinations across the country. Hotels, transportation, hospitals, rope ways, sell of local products etc are some hidden effects of tourism that can boost the destination economy. Many of the countries around the world have almost half of their gross income earned by tourism such as Switzerland, France, and Spain etc. many distant geographical areas of our own country have developed sufficiently with help of tourism activities e.g. shimla, Kashmir, Rajasthan etc. Eventually we can say that economical advantages are the strongest factor of the overall tourism impacts.

Different economical benefits of tourism can be tabulated as below-

**CHECK YOUR PROGRESS - 1**

1) What are the main reasons for growing tourism activities?

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2) List any four positive aspects of tourism

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3) How tourism boost destination economy

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4) What is foreign exchange?

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**1.3.2 POSITIVE SOCIAL IMPACTS OF TOURISM**

Tourism activities essentially involve many social benefits that can be seen as bright aspect of tourism. As we know India is a big country having a number of communities, cultures and traditions. Normally each tradition and culture is significantly different from another. Tourism can stimulate new and expanded community facilities and infrastructure initiatives, such as the improvement of retail, restaurant and entertainment options, transport services, education and sporting facilities. These increase the quality of life for the community, which may not otherwise warrant the improvement, based on the residential population alone. Tourism activity often prompts the conservation of cultural heritage, either as a result of increased awareness and pride, or because it can be justified on economic grounds as a tourist attraction. Tourism can encourage communities to widen their outlook and to embrace new ideas. It provides opportunities for residents to interact with other people, lifestyles and cultures. Attracting visitors to an area can heighten local awareness and interest, resulting in a greater sense of pride and ownership. The community takes stock of its assets and distinctive characteristics. This increase in pride can lead to
community celebration or the revival of cultural activities. Knowing that others have travelled across the state, country or world to visit can considerably boost a community’s collective ego. Some of the possible social benefits of tourism are listed below-

**POSITIVE EFFECTS OF TOURISM:**

- Developing positive attitudes towards each other
- Learning about each other’s culture and customs
- Reducing negative perceptions and stereotypes
- Developing friendships
- Developing pride, appreciation, understanding, respect, and tolerance for each other’s culture
- Increasing self-esteem of hosts and tourists
- Psychological satisfaction with interaction

Hence, social contacts between tourists and local people may result in mutual appreciation, understanding, awareness, learning, family bonding respect, and liking. Residents are educated about the outside world without leaving their homes, while their visitors significantly learn about a distinctive culture. Local communities are benefited through contribution by tourism to the improvement of the social infrastructure like schools, libraries, health care institutions, internet cafes, and so on. Besides, if local culture is the base for attracting tourists to the region, it helps to preserve the local traditions and handicrafts which maybe were on the link of the extinction. Tourism activities increase from person to person as well as community to community contacts which ultimately results better social behaviors.

*FIGURE 3: SOCIAL ADVANTAGES OF TOURISM*
Interaction with unknown community or people definitely increases the knowledge and understandings of the destination locality. Frequent interaction brings some of the bright qualities among the local community such as knowledge about external world, polite and controlled behavior, pride and satisfaction etc. all these factors eventually uplift the social awareness and development of the local community. Positive tourism activities are capable of transforming the overall social face of destination or country. The improved behavior of local community, in turn increases the overall rate of tourist arrival. Most highly developed western countries, such as Switzerland, Austria, and France have accumulated a big deal of their social and economic welfare on profits from tourism. Tourism has the power to affect cultural change. Successful development of a resource can lead to numerous negative impacts. Among these are Overdevelopment, assimilation, conflict, and artificial reconstruction. While presenting a culture to tourists may help preserve the culture, it can also dilute or even destroy it. The point is to promote tourism in the region so that it would both give incomes and create respect for the local tradition and culture. The improvements to infrastructure and new leisure amenities that result from tourism also benefit the local community. Tourism encourages the preservation of traditional customs, handicrafts and festivals that might otherwise have been allowed to wane, and it creates civic pride. Interchanges between hosts and guests create a better cultural understanding and can also help raise global awareness of issues such as poverty and human rights abuses.

To boost tourism huge money is invested to preserve the local heritage, to improve infrastructure, to provide better local facilities which in turn creates better education, better leisure facilities, organizing frequent social events and thus a better lifestyle for the locale people. They interact with the tourists; mix with people from diverse backgrounds which create a cosmopolitan culture in the region. Due to the demand for better services, varied employment opportunities are created within the region and therefore people do not feel the need to migrate to other cities to earn their living means. The overall social impact of tourism definitely increases various hidden positive factors such as national integration, social upliftment, communication and preservation of culture and heritage etc.

With the growing rate of foreign tourist arrival, the destination locality feels pride and honor which eventually leads them to social upliftment. Frequent communication with domestic and foreign tourists obviously improves the
Tourism has a very positive impact as a social group communication tool. If you ever visited a popular tourist spot you would have experience that the destination locality always treats in a very warm and attractive behaviour. All the positive social impacts of tourism are tabulated below –

<table>
<thead>
<tr>
<th>Tourism related activities</th>
<th>Social impact (positive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent interaction with local community</td>
<td>Communication</td>
</tr>
<tr>
<td>Group and personal communication with locality</td>
<td>Knowledge Education</td>
</tr>
<tr>
<td>Elite tourist arrival, interaction, host</td>
<td>Sense of pride</td>
</tr>
<tr>
<td>Positive and polite interaction with tourists</td>
<td>Improved behavior</td>
</tr>
<tr>
<td>Economical growth of destination locality</td>
<td>Infrastructure earning</td>
</tr>
<tr>
<td>Overall social benefits of tourism</td>
<td>Social upliftment</td>
</tr>
</tbody>
</table>

In short terms, we can say that tourism has a lot of positive social impacts on destination locality. Effective management of tourism activities will surely help in the social upliftment of destination population.

CHECK YOUR PROGRESS - 2

1) What are the main social benefits of tourism activities?

2) How tourism improves behavior of destination locality.

3) Find out some of the positive impacts of tourism on your nearest tourist destination.

4) How tourism appreciate pride and satisfaction among local population.

1.3.3 CULTURAL BENEFITS OF TOURISM

As we have discussed earlier India is a big country having various communities and cultures living together by justifying the saying “unity in diversity”. Each culture has its own traditions, religious thoughts, scriptures, language and living style. Tourism plays a key role to understand and experience these diverse cultures and community. One of the newly developed trends in tourism filed is cultural tourism which helps different cultures to come together. Frequent interaction between different cultures and communities powers the national integrity. Different types of socio cultural benefits are listed below-
1.3.3.1 PRESERVATION OF CULTURAL HERITAGES:

Tourism plays a very important role in the preservation of different types of cultural heritages like sculptures, architectural heritages, monuments, forts etc. every in India has its own culture, traditions, festivals, and handicrafts which have been treated as the heritage of local community. These local festivals and traditions always attract visitors from outside of the community. Many of the places in India are very popular among foreign and domestic tourists for their special festivals and cultural activities such as Himachal Pradesh, Kerala, Assam etc. Tourists often take active part in these cultural activities and enjoy the vibrant festivals during their tour schedule. Participation and interest of tourists into such cultural activities revives the local culture and traditions and eventually benefits the both. Some of the cultural heritages of local community could be listed as below –

- Oral traditions, local languages and expressions
- Performing arts
- Social and cultural practices
- knowledge and traditional craftsmanship
- festivals and cultural competitions (classical dance and music)
- preservation and maintenance of ancient monuments and sculptures

These cultural advantages of tourism play a very important role to increase the rate of Exchange between generations, Recreation and cultural development. The cultural preservation due to tourism supports and revives the cultural diversity of the country and hence increases the creativity among local community.

Tourism can make a valuable contribution to the preservation and revitalization of Intangible heritage. In addition to the preservation of cultural activities other cultural advantages of tourism are described below-
1.3.3.2 PRESERVATION OF MONUMENTS AND ARCHITECTURAL HERITAGES:

Most of the tour and travel related activities revolve around the famous ancient architectural wonders and monuments. These architectural wonders of ancient time are one of the most important reasons to attract and sustain foreign as well as domestic tourists and travelers. A study by the Travel Industry Association in 2003 shows that heritage travelers stay longer at their destinations and spend more money there than other types of travelers. A more recent State of the American Traveler Survey done in 2008 states that over 70% of travelers visited one or more of the following cultural heritage attractions: historic attraction; state, local, or national park; an art gallery or museum; concert, play, or musical; or an ethnic or ecological heritage site. India has been a central country in cultural tourism activities. Many of the wonderful architectures of ancient India are continuously attracting visitors around the world such as the Taj mahal, red fort, Kutub Minar, Hawa mahal etc. tourism activities keeps these places alive and government / organizational authorities continuously monitors and ensures the preservation of these historical places.

CHECK YOUR PROGRESS - 3

1) What are the cultural advantages of tourism?

2) How tourism helps in the preservation of architectural heritages.

3) List any four popular cultural festivals of India

1.4 BAD IMPACTS OF TOURISM:

Apart from the wonderful advantages of tourism that we discussed in earlier sections, there are a few bad impacts of tourism, also. Many of the negative impacts from tourism occur when the amount of visitors is greater than the environment's ability to cope with the visitor volume. These negative impacts of tourism includes negative economic impacts, negative cultural impact on local culture and traditions, negative social and environmental impacts etc. some of the negative impacts of tourism are really so bad that they eventually turn into the ugly faces of tourism such as cultural and environmental problems generated by tourism itself. Many of the ancient cultures and traditions are now becoming obsolete with the continuous contact with outer world in the form of tourist activities. Often tourists don’t respect and follow the local culture and values and
eventually exploit them. Many of the negative impacts from tourism occur when the amount of visitors is greater than the environment's ability to cope with the visitor volume. More tourist activities are generally the main reasons behind environmental damages due to tourism such as vehicles, Deforestation, air pollution etc. it could be more dangerous for a local economy to depend too much on tourism sector. We will now discuss each of these negative impacts of tourism in detail.

1.4.1 NEGATIVE SOCIAL AND ECONOMIC IMPACTS OF TOURISM:

As we have discussed various social and economic benefits of tourism the other side of coin has some noticeable disadvantages of tourism in both social and economic forms. Socially tourism has a great influence on the host societies. Tourism can be both a source of international amity, peace and understanding and a destroyer and corrupter of indigenous cultures, a source of ecological destruction, an assault of people’s privacy, dignity, and authenticity. Tourism in certain areas can destroy the culture of the tourist location, old traditions may be lost or certain skills may be forgotten due to modernization, for example, residents forgetting how to farm.

Many times increased tourism activities can dramatically increase number of vehicles on the local roads, consequently Congested roads become a nuisance for local residents who only want to travel short distance. Constant noise from traffic and tourists disturb local residents, destroying their peace and quiet. The exclusivity of the area makes it difficult to buy day to day items. Generally foreign tourists don’t understand and respect the local social ethics of the society, which can result in social misbalance and disturbance among local population.

The negative social impacts of tourism can be listed as below-
1. Destroyer and corrupter of indigenous culture and values of local society
2. Ecological destruction and disturbance
3. Assault of people’s privacy, dignity, and authenticity.
4. Modernization of old social ethics and values.
5. Increased and constant noise from traffic due to tourism in peak seasons
6. Social misbalance and disturbance of local population

Visitor behavior can have a detrimental effect on the quality of life of the host community. For example, crowding and congestion, drugs and alcohol problems, prostitution and increased crime levels can occur. Tourism can even infringe on human rights, with locals being displaced from their land to make way for new hotels or barred from beaches. Interaction with tourists can also lead to an erosion of traditional cultures and values.

Besides some wonderful economical benefits of tourism can be some serious drawbacks of tourism in economic terms. Tourism can cause the well
known problem of seasonal employment effect on the local population. Jobs involved in the industry of tourism are seasonal and not well paid; this can be very dangerous for countries that become dependent on tourism as their main source of revenue. Seasonal jobs such as these could then possibly lead to high rates of unemployment. Country can generally become dependent on the tourism industry. The various economical disadvantages of tourism are being described below-

(a) **Inflation:** In economics, inflation is a rise in the general level of prices of goods and services in an economy over a period of time. Increased tourism activities around a local destination can generate the problem of inflation in the local market. During the peak season the normal prices of goods and services can dramatically increase, which could be a problem for local population.

![Inflation of India, compared to Asian Growing Economies and BRICK countries](image)

(b) **Leakage:** Leakage is a situation in which capital, or income, exits an economy, or system, rather than remains within it. The direct income for an area is the amount of tourist expenditure that remains locally after taxes, profits, and wages are paid outside the area and after imports are purchased; these subtracted amounts are called leakage. In most all-inclusive package tours, about 80% of travelers’ expenditures go to the airlines, hotels and other international companies (who often have their headquarters in the travelers’ home countries), and not to local businesses or workers. In addition, significant amounts of income actually retained at destination level can leave again through leakage.

A study of tourism ‘leakage’ in Thailand estimated that 70% of all money spent by tourists ended up leaving Thailand (via foreign-owned tour operators,
airlines, hotels, imported drinks and food, etc.). Estimates for other Third World countries range from 80% in the Caribbean to 40% in India.

Import leakage commonly occurs when tourists demand standards of equipment, food, and other products that the host country cannot supply. Especially in less-developed countries, food and drinks must often be imported, since local products are not up to the hotel's (i.e. tourist's) standards or the country simply doesn't have a supplying industry. Much of the income from tourism expenditures leaves the country again to pay for these imports. The average import-related leakage for most developing countries today is between 40% and 50% of gross tourism earnings for small economies and between 10% and 20% for most advanced and diversified economies, according to UNCTAD.

An export leakage arises when overseas investors who finance the resorts and hotels take their profits back to their country of origin.

(c) Infrastructure and incidental cost: Tourism development can cost the local government and local taxpayers a great deal of money. Developers may want the government to improve the airport, roads and other infrastructure, and possibly to provide tax breaks and other financial advantages, which are costly activities for the government. Public resources spent on subsidized infrastructure or tax breaks may reduce government investment in other critical areas such as education and health.

(d) Economic dependence: Diversification in an economy is a sign of health, however if a country or region becomes dependent for its economic survival upon one industry, it can put major stress upon this industry as well as the people involved to perform well. Many countries, especially developing countries with little ability to explore other resources, have embraced tourism as a way to boost the economy.

For example Malta has only 380,000 residents, but received 1.2 million tourists in 1999. As 25% of GDP (and indirectly 40%), tourism generated more than $650 million in foreign exchange earnings. Malta's high dependence on tourism and a limited number of export products makes its trade performance vulnerable to shifts in international demand.
(e) **Seasonal employment:** The seasonal character of the tourism industry creates economic problems for destinations that are heavily dependent on it. Problems that seasonal workers face include job (and therefore income) insecurity, usually with no guarantee of employment from one season to the next, difficulties in getting training, employment-related medical benefits, and recognition of their experience, and unsatisfactory housing and working conditions. These seasonal jobs may include tour guide, local retail market of handicrafts, hotels restaurant etc.

(f) **Increase in prices:** Increasing demand for basic services and goods from tourists will often cause price hikes that negatively affect local residents whose income does not increase proportionately. A *San Francisco State University study of Belize* found that, as a consequence of tourism development, the prices for locals increased by 8%.

Tourism development and the related rise in real estate demand may dramatically increase building costs and land values. Not only does this make it more difficult for local people, especially in developing countries, to meet their basic daily needs, it can also result in a dominance by outsiders in land markets and in-migration that erodes economic opportunities for the locals, eventually disempowering residents. In Costa Rica, close to 65% of the hotels belong to foreigners. Long-term tourists living in second homes, and the so-called amenity migrants (wealthy or retired people and liberal professionals moving to attractive destinations in order to enjoy the atmosphere and peaceful rhythms of life) cause price hikes in their new homes if their numbers attain a certain critical mass.

### 1.4.2 UGLY FACES OF TOURISM (CULTURAL DISADVANTAGES):

We have discussed some of the negative impacts of tourism in social and economic terms. The field of tourism has many other serious negative impacts on society and environment itself these impacts can be categorized as ugly faces of the tourism. Tourism can be a real destroyer of the original and ancient culture and values of a society or community. Tourism can cause change or loss of local identity and values, brought about by several closely related influences:

**Commodification:** Often local communities want to attract and impress tourists by their cultural and social activities. Tourism can turn local cultures into commodities when religious rituals, traditional ethnic rites and festivals are reduced and sanitized to conform to tourist expectations, resulting in what has been called "reconstructed ethnicity." Once a destination is sold as a tourism product, and the tourism demand for souvenirs, arts, entertainment and other commodities begins to exert influence, basic changes in human values may occur. Sacred sites and objects may not be respected when they are perceived as goods to trade.
**Standardization:** Destinations risk standardization in the process of satisfying tourists' desires for familiar facilities. While landscape, accommodation, food and drinks, etc., must meet the tourists' desire for the new and unfamiliar, they must at the same time not be too new or strange because few tourists are actually looking for completely new things. Tourists often look for recognizable facilities in an unfamiliar environment, like well-known fast-food restaurants and hotel chains.

**Loss of authenticity and staged authenticity:** Adapting cultural expressions and manifestations to the tastes of tourists or even performing shows as if they were "real life" constitutes "staged authenticity". As long as tourists just want a glimpse of the local atmosphere, a quick glance at local life, without any knowledge or even interest, staging will be inevitable.

**Adaptation to tourist demands:** Tourists want souvenirs, arts, crafts, and cultural manifestations, and in many tourist destinations, craftsmen have responded to the growing demand, and have made changes in design of their products to bring them more in line with the new customers' tastes. While the interest shown by tourists also contributes to the sense of self-worth of the artists, and helps conserve a cultural tradition, cultural erosion may occur due to the Commodification of cultural goods.

Because tourism involves movement of people to different geographical locations, and establishment of social relations between people who would otherwise not meet, cultural clashes can take place as a result of differences in cultures, ethnic and religious groups, values and lifestyles, languages, and levels of prosperity.

The result can be an overexploitation of the social carrying capacity (limits of acceptable change in the social system inside or around the destination) and cultural carrying capacity (limits of acceptable change in the culture of the host population) of the local community.

The attitude of local residents towards tourism development may unfold through the stages of euphoria, where visitors are very welcome, through apathy, irritation and potentially antagonism, when anti-tourist attitudes begin growing among local people. Eventually we can say that increased tourism activities could turn into cultural destruction as the local community continue to loss its original language, values, traditions, religions, rituals etc.

**Ethical issues:** Partly due to the above impacts, tourism can create more serious situations where ethical and even criminal issues are involved.

**Crime generation:** Crime rates typically increase with the growth and urbanization of an area, and growth of mass tourism is often accompanied by increased crime. The presence of a large number of tourists with a lot of money to spend, and often carrying valuables such as cameras and jewelry, increases the
attraction for criminals and brings with it activities like robbery and drug dealing. Repression of these phenomena often exacerbates social tension. In Rio de Janeiro, Brazil, tourists staying in beachside five star resorts close to extremely poor communities in hillside "favelas" (shantytowns) are at risk of pickpockets and stick-ups. Security agents, often armed with machine guns, stand guard nearby in full sight, and face aggressive reactions from locals who are often their neighbors when they go home. Tourism can also drive the development of gambling, which may cause negative changes in social behavior.

**Child labour:** ILO studies show that many jobs in the tourism sector have working and employment conditions that leave much to be desired: long hours, unstable employment, low pay, little training and poor chances for qualification. In addition, recent developments in the travel and tourism trade (liberalization, competition, concentration, drop in travel fares, growth of subcontracting) and introduction of new technologies seem to reinforce the trend towards more precarious, flexible employment conditions. For many such jobs young children are recruited, as they are cheap and flexible employees.

An estimated 13-19 million children and young people below 18 years of age (10-15 per cent of all employees in tourism) are employed in the industry worldwide. However, these figures take no account of the number of children working in the informal sector in ancillary activities.

Child labour in tourism is common in both developing and in developed countries. Many boys and girls below 12 years of age are engaged in small business activities related to hotels and restaurants, the entertainment sector or the souvenir trade, often as porters or street or beach vendors. They are frequently subjected to harsh working and employment conditions.

**Prostitution and Sex Tourism:** The commercial sexual exploitation of children and young women has paralleled the growth of tourism in many parts of the world. Though tourism is not the cause of sexual exploitation, it provides easy access to it. Tourism also brings consumerism to many parts of the world previously denied access to luxury commodities and services. The lure of this easy money has caused many young people, including children, to trade their bodies in exchange for T-shirts, personal stereos, bikes and even air tickets out of the country. In other situations children are trafficked into the brothels on the margins of the tourist areas and sold into sex slavery, very rarely earning enough money to escape.

The United Nations has defined child sex tourism as "tourism organized with the primary purpose of facilitating the effecting of a commercial sexual relationship with a child". Certain tourism destinations have become centers for this illegal trade, frequented by pedophiles and supported by networks of pimps, taxi drivers, hotel staff, brothel owners, entertainment establishments, and tour
operators who organize package sex tours. At the international level, there are agents who provide information about particular resorts where such practices are commonplace.

CHECK YOUR PROGRESS - 4

1) List any five negative economical impacts of tourism.

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2) Explain import and export leakages.

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3) How tourism is responsible for seasonal employment?

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4) What are the ethical problems related to tourism?

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1.4.3 ENVIRONMENTAL PROBLEMS DUE TO TOURISM:

Environmental damages are one of the ugly faces of tourism activities. Tourism is continuously causing sufficient damages to the natural environment of popular tourist destination. Tourism can dramatically increase transportation services and deforestation which can result into air and water pollution. Infrastructure services are continuously growing around the popular tourist destinations in the form of hotels, restaurants, shops, stores and other related industries. This growing infrastructure eventually destroys the natural environment of the tourist spot, if not controlled by the rules and regulation in the form of environment protection act.

Many of the negative impacts from tourism occur when the amount of visitors is greater than the environment's ability to cope with the visitor volume. Some of the consequences of exceeding the environmental capacity include strain on already scarce resources such as water, energy, food and natural habitat areas. In addition, unchecked tourism development may lead to soil erosion, increased pollution and waste, discharges into the sea and waterways, increased pressure on endangered species of animals and plants, and heightened vulnerability to deforestation, as well as loss of biodiversity. It also causes increased pollution through traffic emissions, littering, increased sewage production and noise. Different types of environmental damages due to tourism are described below-

**Water Pollution:** hotels, restaurants and lodging services could result into sufficient damage to natural water resources. If a proper sewage disposal system
has not been installed for hotels, resorts and other tourist facilities, there may be pollution of ground water from the sewage, or if a sewage outfall has been construed into a nearby river, lake or coastal sea water and the sewage has not been adequately treated, the effluent will pollute that water area. This situation is common in beach resort areas where the hotels construct an outfall into the adjacent water area which can also be used for swimming by tourists or for fishing by locals. Recreational and tourist transportation motor boats in surface water result in pollution in river, lakes and sea water due to spilling oil and gas and cleaning their bilge in water. This is usually common in enclosed harbor and places where natural water circulation is slow.

**Air Pollution:** Tourism is generally considered a "smokeless industry." But it can also result in air pollution by tourist vehicles in a particular area, especially at major attraction sites, that are accessible only by road. This is due to improperly maintained exhaust systems of the vehicles. Also, pollution in the form of dust and dirt in the air may be generated from open, devegetated area if the tourism development is not properly planned, developed and landscaped or is in an interim state of construction.

**Noise Pollution:** Noise generated by a concentration of tourists road and certain types of tourist attractions such as amusement parks or car/motorcycle race tracks may reach uncomfortable and irritating levels for nearby residents and other tourists. Such loud noise can often result in ear damage and also a psychological stress.

**Waste Disposal Problems:** The most common problem in tourism areas is the littering of debris on the landscape. This is due to large number of people using the area of picnicking. Improper disposal of solid waste from hotel restaurants, and resorts generate both litter and environmental health problems from vermin, disease and pollution. It can also lead to the degradation of tourist sites.
1.5 SUMMARY:

Tourism may have many faces some of them are brightest such as economical advantages, some of them are just good such as cultural and social benefits but some of them are really bad even worse like destruction of culture, traditions, pollution etc. tourism generates various types of economical benefits to the local destination economy including employment generation, foreign exchange earnings, sales of local goods and services etc.

Social and cultural cost of tourism generally has more negative impact than positive. Visitors from distant locations and foreign countries often don’t understand and respect social ethics and values, and eventually harms the local culture and population.

With increase tourism activities especially in developed countries like India it can be even more dangerous e.g. crime generation, child labour etc. prostitution and environmental damage due to tourism can be thought of as the ugly faces of tourism activities in developing countries. Environmental pollutions come in various forms such as noise pollution, air and water pollution, eco system destruction etc that causes significant damages to the natural environment of the tourist destination. Deforestation and unplanned infrastructure development related to tourism are also negative impact of tourism. Development and growth of tourism must be planned by considering all the three faces of tourism i.e. good, bad and ugly faces of tourism.

1.6 GLOSSARY:

- **Foreign culture**: the culture of distant place or community
- **FTA**: foreign tourists’ arrival
- **Exchange**: mutual interchanging of things or money
- **Stimulation**: to motivate
- **UNCTAD**: United Nations Conference on Trade and Development
- **Landscape**: An expanse of scenery that can be seen in a single view
- **Rituals**: The prescribed order of a religious ceremony
- **Favela**: A Favela is the term for a shanty town in Brazil, most often within urban areas

1.7 CHECK YOUR PROGRESS:

**Check your progress-1:**
1- Modernization, infrastructure, globalization
2- Social advantages, economical advantages, employment, revenue,
3- Job creation, increased investment
4- The conversion of one country’s currency into another
Check your progress - 2:
1. Interaction, modernization, appreciation, improved behavior
2. In the process of attracting tourists
3. Communication, modernization
4. Feeling of satisfaction

Check your progress - 3:
1. Preservation of arts and monuments
2. By promoting their use in tourism activities
3. Diwali, Ganesh Chaturthi, Holi, Navaratri

Check your progress - 4:
1. Inflation, seasonal employment, economic dependence, import leakage
2. Import leakage: occurs when tourists command standards of equipment, food, and other products that the host country cannot supply
   Export leakage: arises when these overseas investors take their profits back to their country of origin
3. Seasonal nature of tourism activities
4. Increase in crime, theft etc

1.8 REFERENCES:
- Tourism and Economic Development: Case Studies from the Indian Ocean Region, R. N. Ghosh, Muhammad Abu B. Siddique, Rony Gabbay, 32-50
- Tourism in India and India's Economic: Development, Kartik Chandra Roy, Clement Allan Tisdell, 4-24
- Basics of Tourism Management, Mishra, 194-220
- Successful Tourism: Volume I: Fundamentals of Tourism, Pran Nath Seth
- Envisioning Tourism in India, Equitable Tourism Options (EQUATIONS),
- Domestic Tourism in India, Indus Publishing, 01-Jan-1998
- Tourism in India Planning & Development, Asif Iqbal Fazili, S. Husain Ashraf
- Rights of the Child in the Context of Tourism - A Compilation, Equitable Tourism Options (EQUATIONS).

1.9 SUGGESTED READINGS:
- Tourism in India and India's Economic: Development, Kartik Chandra Roy, Clement Allan Tisdell, 4-24
- Basics of Tourism Management, Mishra, 194-220
- Successful Tourism: Volume I: Fundamentals of Tourism, Pran Nath Seth
TOURISM IMPACTS

- Envisioning Tourism in India, Equitable Tourism Options (EQUATIONS),
- Domestic Tourism in India, Indus Publishing, 01-Jan-1998
- Tourism in India: An Overview (2 Vols.), Volume 1, Rabindra Seth

1.10 MODEL QUESTIONS:

SHORT ANSWER TYPE QUESTIONS:
1) What is foreign exchange? How tourism benefits from it?
2) Which tourism impact do you think the ugly face of tourism?
3) How the child labour is related to tourism sector?
4) What do you understand by import and export?
5) Discuss any two negative social impact of tourism sector on the local community.
6) Explain the term Commodification.
7) Write short notes on the followings-
   (a) Government revenues   (b) infrastructure
   (c) Noise pollution       (d) modernization

Long answer type questions:-
1) Discuss the positive effects of the tourism sector on the local economy.
2) What are the main social advantages of tourism in India?
3) Describe the ugly face of tourism in India.
UNIT 2: DIRECT, INDIRECT AND INDUCED ECONOMIC BENEFITS OF TOURISM TO DESTINATION ECONOMY

Structure:
2.1 Introduction
2.2 Objectives
2.3 direct economic benefits of tourism
   2.3.1 Foreign exchange earnings
   2.3.2 Employment generation
   2.3.3 Sales of local products and handicraft
   2.3.4 Contribution to government revenues
   2.3.5 Hotels and transportation and infrastructure development
2.4 Indirect economic benefits of tourism
   2.4.1 Indirect effect of tourism on employment
   2.4.2 Sectoral Indirect effect of tourism
   2.4.3 Business and infrastructure development
2.5 Induced economic benefits of tourism
2.6 Summary
2.7 Glossary
2.8 Check your progress
2.9 References
2.10 Suggested readings
2.11 Model questions

2.1 INTRODUCTION

Tourism has a very positive economic impact not only to destination economy but also to the whole country. Every successful country must have some good income from tourism industry to enhance its gross income. Effective tourism management can be proved like a powerful economic tool. Modern tourism has a very broad impact due to the advancement in tourism supporting technologies and tools such as e banking, online transaction, GPS and mobile computing etc. All the tourism management activities benefit the overall financial environment of the destination economy as well as state and country income. Different types of economic impacts of tourism can be broadly classified as direct, indirect and induced economic advantages of tourism. The latest trends of globalisation and technological advancements have really transformed the overall tourism field into a powerful economic tool. The main positive economic impacts of tourism relate
Tourism impacts

Tourism expenditures, the export and import of related goods and services generate income to the host economy. Tourism is a main source of foreign exchange earnings for at least 38% of all countries. Tourism generates different types of income for a community: business income, wage earnings, share earnings, rates and levies. Direct spending by visitors has a positive impact on business profitability and employment growth. The money that is then circulated and re-spent in the economy is often referred to as indirect spending or the multiplier effect. Because much of a region’s tourism patronage comes from metropolitan centers, it is an effective way to redistribute wealth from urban to rural areas. The expectations and needs of visitors can often lead to the creation of new businesses and commercial activities. This builds a more diverse economic base and reduces reliance on one or two traditional industries, which is often the case in rural communities. Tourism is a labor intensive industry and operates 24 hours a day, seven days a week. There are many opportunities for employment for young people and for people interested in part time or casual work. While some of the employment is skilled, there are also opportunities for people less skilled and who lack formal qualifications. Direct economic benefits are those economic benefits that are very obvious and directly connected with tourism field such as hotels, transportations, employment etc.

Indirect and induced effects are sometimes collectively called secondary effects. The total economic impact of tourism is the sum of direct, indirect, and induced effects within a region. Direct effects are production changes associated with the immediate effects of changes in tourism expenditures. For example, an increase in the number of tourists staying overnight in hotels would directly yield increased sales in the hotel sector. The additional hotel sales and associated changes in hotel payments for wages and salaries, taxes, and supplies and services are direct effects of the tourist spending. Indirect effects are the production changes resulting from various rounds of re-spending of the hotel industry's receipts in other backward-linked industries (i.e., industries supplying products and services to hotels). Changes in sales, jobs, and income in the linen supply industry, for example, represent indirect effects of changes in hotel sales. Businesses supplying products and services to the linen supply industry represent another round of indirect effects, eventually linking hotels to varying degrees to many other economic sectors in the region. Induced effects are the changes in economic activity resulting from household spending of income earned directly or indirectly as a result of tourism spending. For example, hotel and linen supply employees supported directly or indirectly by tourism, spend their income in the local region for housing, food, transportation, and the usual array of household product and service needs. The sales, income, and jobs that result from household
spending of added wage, salary, or proprietor’s income are induced effects. By means of indirect and induced effects, changes in tourist spending can impact virtually every sector of the economy in one way or another. The magnitude of secondary effects depends on the propensity of businesses and households in the region to purchase goods and services from local suppliers. Induced effects are particularly noticed when a large employer in a region closes a plant. Not only are supporting industries (indirect effects) hurt, but the entire local economy suffers due to the reduction in household income within the region. Retail stores close and leakages of money from the region increase as consumers go outside the region for more and more goods and services. Similar effects in the opposite direction are observed when there is a significant increase in jobs and household income. We will now discuss all these economic benefits of tourism in upcoming section, in detail.

2.2 OBJECTIVES

After careful reading this unit, you will be able to understand the following issues:

- How tourism benefits the overall destination economy
- What are the direct economic advantages of tourism
- How indirect economic effects of tourism affects the tourist destination economy
- What is induced economic effect, and how it benefits the local economy.

2.3 DIRECT ECONOMIC BENEFITS OF TOURISM

The direct contribution is solely concerned with the immediate effect of expenditure made by visitors. For example, when a tourist uses a taxi service, the direct output effect includes only the service of the taxi driver and the direct employment effect includes the proportion of the driver’s employment that is spent driving tourists. Direct economic benefits of tourism are strongly connected with the tourism activities and have an immediate effect on the local economy. Foreign tourist arrival is directly connected with foreign exchange which is a very impressive factor to country’s GDP. Different types of direct economic benefits are described below

2.3.1 FOREIGN EXCHANGE

Direct economic benefits include provision of employment, income and (for international tourism) foreign exchange, which lead to improved living standards of the local community and overall national and regional economic development. In economically depressed areas, the employment and income provided by tourism especially to young people may help stem out migration from
those areas. Increased government revenues, through various types of taxation on tourism that can be used to develop community and infrastructural facilities and services to assist in general economic development are also a direct economic benefit. Tourism has a variety of economic impacts. Tourists contribute to a destination’s sales, profits, jobs, tax revenues, and income. Primary tourism sectors, such as lodging, dining, transportation, amusements, and retail trade, are affected directly: most other sectors are impacted by secondary effects.

<table>
<thead>
<tr>
<th>Year</th>
<th>Tourist arrivals to India (millions)</th>
<th>India’s share in world tourism (%)</th>
<th>Forex earnings through tourism (in US$ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2.12</td>
<td>0.39</td>
<td>2.58</td>
</tr>
<tr>
<td>1996</td>
<td>2.29</td>
<td>0.38</td>
<td>2.63</td>
</tr>
<tr>
<td>1997</td>
<td>2.37</td>
<td>0.38</td>
<td>2.58</td>
</tr>
<tr>
<td>1998</td>
<td>2.36</td>
<td>0.38</td>
<td>2.94</td>
</tr>
<tr>
<td>1999</td>
<td>2.48</td>
<td>0.38</td>
<td>3.00</td>
</tr>
<tr>
<td>2000</td>
<td>2.65</td>
<td>0.39</td>
<td>3.16</td>
</tr>
<tr>
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<td>3.04</td>
</tr>
<tr>
<td>2002</td>
<td>2.38</td>
<td>0.34</td>
<td>2.92</td>
</tr>
<tr>
<td>2003</td>
<td>2.73</td>
<td>0.39</td>
<td>4.46</td>
</tr>
<tr>
<td>2004</td>
<td>3.46</td>
<td>0.45</td>
<td>6.17</td>
</tr>
<tr>
<td>2005</td>
<td>3.92</td>
<td>0.49</td>
<td>7.49</td>
</tr>
<tr>
<td>2006</td>
<td>4.45</td>
<td>0.53</td>
<td>8.63</td>
</tr>
<tr>
<td>2007</td>
<td>5.08</td>
<td>0.56</td>
<td>10.79</td>
</tr>
<tr>
<td>2008</td>
<td>5.28</td>
<td>0.57</td>
<td>11.75</td>
</tr>
<tr>
<td>2009</td>
<td>5.17</td>
<td>0.58</td>
<td>11.39</td>
</tr>
<tr>
<td>2010</td>
<td>5.58</td>
<td>NA</td>
<td>14.19</td>
</tr>
</tbody>
</table>

Sources: Ministry of Tourism, GOI, (AC Nielsen ORG-MARG (2007, 2008); UNWTO (2011)

The tourism is a major foreign exchange earner of India. Foreign exchange earnings, contributions to government revenues, generation of employment and income, and stimulation to regional development. The first two effects take place at the macro or national level, whereas the other three impacts occur at sub-national levels. These effects are interrelated but for analytical purposes it useful to separate them. Before examining these impacts it should be noted that with the exception of earning foreign exchange the other economic impacts can also be gained from domestic tourism activity. However, encouragement of domestic tourism may save foreign currency which would otherwise be spent on foreign travel. It is now generally accepted that international tourism constitutes one of the most significant of global trade flows. As a conglomerate, multi-faceted activity it is difficult to be precise about the value of international tourism. It is probably the biggest sector in the world economy. It has been a noticeably resilient activity, less prone to economic fluctuations than other sectors. There are no grounds for suggesting that future global demand will decline. International tourism has two main impacts; first, in trade, and secondly, in its redistributive effects. The trade effect is a characteristic of tourism demand. As tourists travel to

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visit countries, the act of travelling itself stimulates trade. Most long-haul travelers travel by air. Most aero planes are manufactured in and then exported from the USA. At the destination the tourist might use accommodation owned and managed by non-residents and consume some food and drink not supplied domestically.

For example, a German tourist visiting Sri Lanka might arrive on Air Lanka using a DC10 aircraft (made in the USA), stay in a foreign owned and managed hotel (Taj Group India), drink French water and eat Australian beef. To the tourist receiving country these imports represent leakages. To the international economy they constitute trade opportunities and generate exports.

Foreign exchange earnings from tourism are the receipts of non-domestic currency earned by selling goods and services to foreign tourists. It is useful to classify earnings into hard, i.e. convertible currencies and soft, nonconvertible currencies. Hard currencies such as the US dollar, the deutschmark, the yen and the Swiss franc are freely convertible, internationally acceptable and can be exchanged without restriction. As these currencies are issued by the most economically advanced countries they are most used in international trade. On the other hand, soft currencies are those which are not freely convertible, and have severe limitations imposed on exchange outside their country of issue, such as the Indian rupee or the Thai baht. However, there is a discernible trend for more countries to make their currencies freely convertible.

Travel & Tourism visitor exports are expected to generate INR678.6bn (3.8% of total exports) in 2011, growing by 11.4%pa (in nominal terms) to INR1,344.7bn (2.1%) in 2021.
According to the World Tourism Organization:

- **698 million people** traveled to a foreign country in 2000, spending more US$ 478 billion.
- International tourism receipts combined with passenger transport currently total more than US$ 575 billion - making tourism the **world's number one export earner**, ahead of automotive products, chemicals, petroleum and food.

According to world travel and tourism council report foreign tourist arrival and visitor exports are given in the following figure:

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**FIGURE 1: FOREIGN TOURIST ARRIVAL IN INDIA**

2.3.2 EMPLOYMENT GENERATION:

One of the most effective economical advantages of tourism is employment generation itself. The growing tourism activities are directly proportional to the creation of new jobs in the destination locality such as shops, hotels and transportation related jobs. Tourism is not only a growth engine but also an export growth engine and employment generator. According to the Economic Survey 2011-12, the sector has capacity to create large-scale employment both direct and indirect, for diverse sections in society, from the most specialized to unskilled workforce. It provides 6-7 per cent of the world’s total jobs directly and millions more indirectly through the multiplier effect as per the UN’s World Tourism Organization. Tourism is a labor intensive industry and operates 24 hours a day, seven days a week. There are many opportunities for employment for young people and for people interested in part time or casual
work. While some of the employment is skilled, there are also opportunities for people less skilled and who lack formal qualifications. Since tourism does not fall under a single heading in India’s National Accounts Statistics, its contribution has to be estimated. Its contribution to GDP and employment in 2007-08 was 5.92 per cent respectively as per Tourist Satellite Account Data. As tourists visit to a local tourist destination geographically separated, different types of jobs starts to fulfill their requirements such as tour guide, catering, tea stall etc. often these jobs prove to be of great importance for local population. The employment impact of tourism goes beyond employment in sectors in which tourists directly spend their money, such as hotels, restaurants and airlines. The establishments which receive tourists also buy goods and services from other sectors that generate employment in those sectors through multiplier effect. The world tourism report says –

- Employment factor could be of any type’s i.e. direct employment, indirect employment and induced employment effect. The rapid expansion of international tourism has led to significant employment creation.
- For example, the hotel accommodation sector alone provided around 11.3 million jobs worldwide in 1995.
- Tourism can generate jobs directly through hotels, restaurants, nightclubs, taxis, and souvenir sales, and indirectly through the supply of goods and services needed by tourism-related businesses.
- Tourism supports some 7% of the world’s workers.

Money is earned from tourism through informal employment (e.g. street vendors, informal guides, rickshaw drivers) the positive side of informal employment is that the money is returned to the local economy, and has a great multiplier effect as it is spent over and over again. The WTO estimates that tourism generates an indirect contribution equal to 100% of direct tourism...
expenditures. The employment factor can be subdivided into following two categories –

2.3.2.1 Formal Employment:

The formal employment generated by tourism itself includes hotels, transportation travel agencies etc. A number of new jobs have been created with the rapid growth of tourism activities like tour and travel management, tour guide etc. special courses and training programs are continuously being designed by the various private and government institutions/ academics to fulfill the requirement of tourism field. The growth in tourism jobs certainly helps the local community and eventually supports the economic development of the tourist destination.

2.3.2.2 Informal employment:

Informal employment is also a very impressive factor of direct economic benefits of tourism. Various local stalls, street vendors, tour supporters are some example of informal employment. Whereas formal employment requires somewhat formal education while informal employment doesn’t need any formal education and directly befits the local population of the tourist destination.

Travel & Tourism is expected to support directly 24,931,000 jobs (5.0% of total employment) in 2011, rising by 2.0% pa to 30,439,000 jobs (5.2%) by 2021. The total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry, is forecast to rise by 2.3% pa from 37,655,000 jobs (7.5% of total employment) in 2011 to 47,480,000 jobs (8.1%) by 2021.

CHECK YOUR PROGRESS - 1:

1. List any two direct economic benefits of tourism.

2. What do you understand by the term ‘foreign exchange earnings?’

3. Write the name of three formal jobs created by tourism itself.

4. What is the percentage contribution of tourism earning to the total GDP of India in the year 2012?
2.3.3 SALES OF LOCAL PRODUCTS AND HANDICRAFT:

The sale of local products and handicrafts are directly related to the growth rate of foreign as well as domestic tourist arrival to the local tourist destination. Every local destination has its own specific range of local products such as art work, wooden work, stone work, metal work and embroidery etc that frequently attracts visitors from outside the locality.

Tourism’s economic benefits are touted by the industry for a variety of reasons. For one, claims of tourism’s economic significance lend the industry an air of increased respectability in the eyes of the business community, public officials, and the general public: this often translates into decisions or public policies favorable to tourism.

Also, community support is important for tourism; the industry affects and is affected by the entire community.

Tourists often buy famous handicrafts and other artwork related products of the local tourist spot. This helps in the economic development of the overall retail market of that region. These local products have a wide range from stone artwork to basket full of flowers. Retailers that sell to tourists are unique because their potential customer base is often much higher than the traditional trade area of local residents. Many retailers appreciate the importance and potential of the visitor market. Tourism market and local business are economically very close to each other.

For a variety of reasons, tourism continues to be an increasingly attractive alternative for improving the economies of small cities and towns. People travel more today than ever before. Along with an increase in the number of people moving from one place to another comes increased opportunities to serve the unique needs of the traveler. This provides an opportunity for communities to serve these needs and capture a share of traveler spending easily.

Developing the local tourism industry makes sense for many small communities that are experiencing drastic economic changes. Over the years many small towns have seen more and more of their dollars, and residents, migrate to larger metropolitan areas. The residents that do remain are more mobile, shopping and working in larger neighboring cities. As a result, many small town economies have fallen prey to economic isolation. With proper planning, tourism can be a part of the solution to the economic problems of small communities. Consider the following benefits of targeting the visitor market:

1. By bringing in outside dollars, a community can benefit from a larger and more diverse mix of retail. Residents of small cities and villages can enjoy shopping conveniences and selection such as those offered in larger, more distant places. (See the following section.)
2. Tourists bring in dollars from outside the community. Outside revenue stimulates the local economy and those dollars are often re-circulated within the community in the form of wages, purchases of goods, supplies and services, construction contracts, etc.

3. Tourism can provide new entrepreneurial opportunities for community residents. Tourism is an “export” industry in that it sells goods and services to consumers who reside outside the area.

4. For many rural communities, tourism brings customers with comparatively high disposable incomes. These visitors are more likely to buy retail goods that can yield high profits.

5. As an export, tourism brings in outside monies that increase tax revenues. Although some of the revenues will be needed to maintain the community infrastructure utilized by the visitor, residents will benefit from capital improvements as well as any surpluses.

6. In general, tourism enhances the infrastructure, viability, and visibility of the community, increasing its attractiveness as a place to visit, work, or call home.

In short we can say that tourism activities directly benefit the local community by purchasing their goods and services. With proper and effective management of local retail business can boost the local economy. Almost all tourist spots across India have something special to offer to tourists from outside the local community. These art work and handicrafts businesses don’t require special infrastructure, power or marketing strategies, but they are pure local products and directly benefit often the poor and backward locality of the tourist destination. These businesses operate solely and without the special support by the government organization, yet they are of great importance for the local population as well as for the whole country. These distinct local products always attract the visitors towards their manufacturer community.
2.3.4 CONTRIBUTION TO GOVERNMENT REVENUES:

Travel and tourism sector has always been an effective contributor to different types of government revenues. Government revenues generated by tourism can be of both type i.e. direct or indirect revenue. When tourists come, they spend money. The businesses that they spent money at earn revenue and they spend money which helps stimulate the local economy. Also, they have to pay taxes on everything, and that generates revenue for the state.

Governments at all levels (federal, provincial/territorial and municipal) raise tax revenues from the various activities of tourists. For instance, when a tourist pays for a hotel room, this generates federal goods and services tax, a provincial sales tax, and a room tax for the various levels of government. In addition, income taxes are collected from the earnings of hotel employees and from the profits of the business enterprise itself. Government revenues come from a variety of tourism related activities like tourist purchases, alcohol and tobacco, vehicle fuel, and camping equipment etc. Another important source of government revenues from tourism was tax on products. According to Indian government tourism statistics report -

<table>
<thead>
<tr>
<th>Month</th>
<th>Fee from tourism (in ₹ crore)</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009#</td>
<td>2010#</td>
</tr>
<tr>
<td>January</td>
<td>4530</td>
<td>5593</td>
</tr>
<tr>
<td>February</td>
<td>4610</td>
<td>6646</td>
</tr>
<tr>
<td>March</td>
<td>4160</td>
<td>5507</td>
</tr>
<tr>
<td>April</td>
<td>3373</td>
<td>4518</td>
</tr>
<tr>
<td>May</td>
<td>3401</td>
<td>4358</td>
</tr>
<tr>
<td>June</td>
<td>3926</td>
<td>4751</td>
</tr>
<tr>
<td>July</td>
<td>5042</td>
<td>5444</td>
</tr>
<tr>
<td>August</td>
<td>4306</td>
<td>4620</td>
</tr>
<tr>
<td>September</td>
<td>3852</td>
<td>4678</td>
</tr>
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<td>October</td>
<td>4543</td>
<td>5219</td>
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<tr>
<td>November</td>
<td>5361</td>
<td>6516</td>
</tr>
<tr>
<td>December</td>
<td>6096</td>
<td>7039</td>
</tr>
<tr>
<td>Total</td>
<td>53700</td>
<td>64889</td>
</tr>
</tbody>
</table>

In India, tourism industry holds special position as it not only have potential to grow at a high rate, but also stimulate other economic sectors through its backward and forward linkages and cross-sectional synergies with sectors like agriculture, horticulture, poultry, handicrafts, transport, construction, etc. That is, it can provide impetus to other industries in the country and generate enough wealth to help pay off the international debt. It is the third largest net earner of foreign exchange for the country. The travel and tourism sector contributes to the
national integration; preserves natural and cultural environments; as well as enriches social and cultural lives of the people. It has the capacity to create substantial job opportunities, particularly for unskilled and semi-skilled workers as well as to alleviate the poverty in the country. That's why; it has been regarded as the core sectors of the Indian economy.

A WTTC study has estimated in 2010 that the contribution of travel and tourism to the world GDP was to the tune of 9%, whereas, its total employment effect was more than 235 million jobs, representing 8% of global employment-

<table>
<thead>
<tr>
<th>World</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel &amp; Tourism Direct Contribution to GDP</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>In US$ bn</td>
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<td>1647</td>
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</tr>
<tr>
<td>2011 Price (US$ bn)</td>
<td>1692.25</td>
<td>1732.33</td>
<td>1787.9</td>
<td>1763.93</td>
<td>1711.85</td>
<td>1768.77</td>
</tr>
<tr>
<td>Real growth (%)</td>
<td>0.4</td>
<td>2.4</td>
<td>2.8</td>
<td>-1.5</td>
<td>-3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>% share</td>
<td>3</td>
<td>2.9</td>
<td>2.9</td>
<td>2.8</td>
<td>2.8</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>World</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel &amp; Tourism Total Contribution to GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In US$ bn</td>
<td>4415.35</td>
<td>4766.24</td>
<td>5366.87</td>
<td>5807.13</td>
<td>5408.68</td>
<td>5701.95</td>
</tr>
<tr>
<td>2011 Price (US$ bn)</td>
<td>5424.19</td>
<td>5618.8</td>
<td>5853.46</td>
<td>5852.7</td>
<td>5652.89</td>
<td>5794.96</td>
</tr>
<tr>
<td>Real growth (%)</td>
<td>3.3</td>
<td>3.6</td>
<td>3.6</td>
<td>0</td>
<td>-3.9</td>
<td>1.7</td>
</tr>
<tr>
<td>% share</td>
<td>9.6</td>
<td>9.6</td>
<td>9.6</td>
<td>9.4</td>
<td>9.3</td>
<td>9.0</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>World</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel &amp; Tourism Direct Contribution to Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real growth (%)</td>
<td>1.1</td>
<td>3.3</td>
<td>-0.6</td>
<td>-0.2</td>
<td>-2.3</td>
<td>0.9</td>
</tr>
<tr>
<td>% share</td>
<td>3.5</td>
<td>3.5</td>
<td>3.4</td>
<td>3.4</td>
<td>3.3</td>
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</tr>
<tr>
<td>In thousands</td>
<td>95307.4</td>
<td>98473.9</td>
<td>97794</td>
<td>97527.6</td>
<td>95260.1</td>
<td>96130.5</td>
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<table>
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<tr>
<th>World</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel &amp; Tourism Total Contribution to Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real growth (%)</td>
<td>0.6</td>
<td>2.7</td>
<td>3.1</td>
<td>-4</td>
<td>-3.1</td>
<td>-0.8</td>
</tr>
<tr>
<td>% share</td>
<td>9.4</td>
<td>9.5</td>
<td>9.6</td>
<td>9.1</td>
<td>8.8</td>
<td>8.6</td>
</tr>
<tr>
<td>In thousands</td>
<td>256508</td>
<td>263553</td>
<td>271805</td>
<td>260838</td>
<td>252720</td>
<td>250565</td>
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</table>

The employment effect of international tourism appears to be optimistic in the medium to long-term. According to the UNWTO forecasts, the sector is expected to provide nearly 296 million jobs by 2019 given that there would be sustained growth of global tourist arrivals and the major economies maintain its momentum. In fact government revenues are the most explicit benefits of economical impact of tourism. Hotels, infrastructures, products, services, transportation are some of the major contributor to government revenues from tourism itself. The direct contribution of Travel & Tourism to GDP is expected to be INR1, 570.5bn (1.9% of total GDP) in 2011, rising by 8.1% pa to INR3, 414.8bn (2.0%) in 2021 (in constant 2011 prices).
2.3.5 **HOTELS, TRANSPORTATION AND INFRASTRUCTURE DEVELOPMENT:**

Hotels and transportation are one of the most obvious direct economic benefits of tourism industry. Every popular tourist destination has to have good hotels and transportation mediums to reach and stay with relax. Hotels and transportation development is directly related to the arrival rate of foreign as well as domestic tourist arrival rate. If a tourist visits a local destination, he will have to use the transportation services and lodging which immediately benefits the local community and economy. It is seen that destination spots with poor lodging and transportation services don’t attract sufficient customers but destination having excellent transportation and hotel services are easy to reach and sustain tourism activities. The development of hotels and resorts are economically developed with the number of tourists and their living standard, you can easily see hotels of various range (high, medium and low budget) around a popular destination. Infrastructure needs for the travel and tourism industry range from physical infrastructure such as ports of entry to modes of transport to urban infrastructure such as access roads, electricity, water supply, sewerage and telecommunication. The sectors related to the travel and tourism industry include airlines, surface transport, accommodation (hotels), and infrastructure and facilitation systems, among others.

Transportation is an integral part of the tourism industry. It is largely due to the improvement of transportation that tourism has expanded. The advent of flight has shrunk the world, and the motor vehicle has made travel to anywhere possible. Good connectivity of tourist destination with the major cities/ stations of the country lead to the enhanced tourist arrival rate. Hotel and transport services are directly beneficial to the local population by providing them employment in their own locality. Travel and transportation services are continuously affecting and improving the overall tourist arrival rate of the country. Many small companies and agencies are now working in the field of travel and tourism among the local population. Transportation system of a tourist destination has an impact on the tourism experience which explains how people travel and why they choose different forms of holiday, destination, and transport. The improvement in transportation modes plus low fares has increased the accessibility of areas once considered off-the-beaten-path. Accesses to tourist sites vary according to the nature of the site, the state of infrastructure, and the efficiency of the public transport system.

According to the Planning Commission, the sector creates more jobs per million rupees of investment than any other sector of the economy and is capable of providing employment to a wide spectrum of job seekers, from the unskilled to the specialized, even in the remote parts of the country. The sector’s employment-
generation potential has also been highlighted by the World Travel & Tourism Council (WTTC), which says India’s travel and tourism sector is expected to be the second-largest employer in the world, employing 40,37,000 people, directly or indirectly, by 2019.

Travel and tourism is a USD 32 billion business in India, according to industry estimates; in addition, the hospitality sector is sized at USD 23 billion and it is expected that this sector will witness an inflow of USD 12.17 billion in investments over the next two years, according to market research company Technopak Advisors. It is expected that the hospitality sector is expected to see an additional US$12.17 billion in inbound investments over the next two years, based on their estimates.

The size of the Indian hospitality industry is estimated as a sum of revenues of two segments — revenues generated from travel (business, leisure, visiting friends and relatives, religious, meetings and conferences) and revenue generated by consumers eating out at any form of outlet (restaurants, fine dining, quick service restaurants (QSRs), takeaways, or any other form of unorganized eateries). The Indian tourism and hospitality industry experienced a growth of 24.6% during 2009–2010 timeframe. The industry is the third-largest foreign exchange earner, accounting for 6.2% of India’s GDP and 8.8% of India’s total employment, according to a report by the Planning Commission. It has significant linkages with other sectors such as agriculture, horticulture, transportation, handicrafts and construction. The tourism industry includes travel agencies, tour operating agencies and tourist transport operating agencies; units providing facilities for cultural, adventure and wildlife tourism; surface, air and water transport facilities for tourists; and convention/seminar units and organizations.

Hotels and travel industry not only provides the economical support to the local population but it also responsible for the overall growth of the industry. As this sector is directly related with the rate of tourist arrivals, every country state must manage it according to the needs and comfort of the traveler.
CHECK YOUR PROGRESS - 2:

1. Name any three popular local products of Rajasthan handicraft industry.

2. What do you understand by government revenues from tourism industry?

3. Differentiate between formal and informal employment.

2.4 INDIRECT ECONOMIC BENEFITS OF TOURISM:

Indirect impacts of tourism are intermediary effects. Indirect economic benefits are related to intermediate consumption for the production of goods and services in the tourism sector. These are goods and services that tourism companies purchase from their suppliers, forming the tourism supply chain. Indirect effects can be particularly important for the production of local products. So-called frontline companies take the initial purchasing decisions that determine what visitors can consume.

For example, if a frontline accommodation provider decides to buy local products wherever possible, the tourist will be the originator of the purchase and of the production of goods and services in the host country.

According to information and forecasts produced by the World Travel and Tourism Council (WTTC), using a methodology based on applying coefficients to estimated tourism statistics in 2011, the indirect effects of tourism are particularly high in several countries, reaching as much as 6% of total GDP. This means that a high degree of specialization in tourism can represent a very significant proportion of total national output, provided that support policies can be implemented to develop the indirect effects of tourism. This is the case where there is a particularly strong link between tourism demand and the agrifood sector, which also stimulates agrifood exports to international tourists' home countries.

The particularly high indirect contribution of tourism to GDP suggests that tourism has the Potential to make a substantial contribution to growth in all countries. However, the extent and effectiveness of that contribution, especially where it is indirect, depends on the policies to promote tourism implemented in each country. Substantial investment is required in order to develop tourism, which often leads to tourism being compared to heavy industry in terms of public and private investment in infrastructure such as road and transport networks,
drinking water distribution, waste treatment, access to the electricity network and access to new communication systems.

Table 1: Comparison of tourism's indirect contribution to GDP in the T20 countries (%)

<table>
<thead>
<tr>
<th>T20 country</th>
<th>Direct contribution of tourism (2011 estimate)</th>
<th>Indirect contribution of tourism (2011 estimate)</th>
<th>Total contribution of tourism (2011 estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3.3</td>
<td>6.9</td>
<td>13.0</td>
</tr>
<tr>
<td>Spain</td>
<td>5.1</td>
<td>6.3</td>
<td>14.4</td>
</tr>
<tr>
<td>Argentina</td>
<td>4.0</td>
<td>4.7</td>
<td>11.0</td>
</tr>
<tr>
<td>United States</td>
<td>2.6</td>
<td>4.2</td>
<td>8.8</td>
</tr>
<tr>
<td>China</td>
<td>2.5</td>
<td>4.2</td>
<td>8.6</td>
</tr>
<tr>
<td>South Africa</td>
<td>5.0</td>
<td>4.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.2</td>
<td>4.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>4.1</td>
<td>3.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.3</td>
<td>3.7</td>
<td>9.1</td>
</tr>
<tr>
<td>Italy</td>
<td>3.2</td>
<td>3.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>6.2</td>
<td>3.5</td>
<td>13.0</td>
</tr>
<tr>
<td>France</td>
<td>3.9</td>
<td>3.4</td>
<td>9.1</td>
</tr>
<tr>
<td>Japan</td>
<td>2.2</td>
<td>3.2</td>
<td>6.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.4</td>
<td>3.1</td>
<td>6.9</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>1.4</td>
<td>3.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Canada</td>
<td>1.4</td>
<td>2.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>1.8</td>
<td>2.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>3.0</td>
<td>2.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Germany</td>
<td>1.7</td>
<td>2.0</td>
<td>4.6</td>
</tr>
<tr>
<td>India</td>
<td>1.9</td>
<td>1.6</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: WTTC 2011

2.4.1 INDIRECT EFFECT OF TOURISM ON EMPLOYMENT:

Tourism has an effective indirect contribution to employment. The International Labor Organization (ILO) estimates that tourism generated 253 million jobs worldwide in 2010. The same applies to the T20 countries. Tourism's indirect contribution to job creation confirms its importance for employment in the tourism supply chain. However, this indirect contribution remains lower than that of direct employment in a certain number of T20 countries. The indirect benefits of tourism are greater where the tourism supply chain is directed towards the production of locally produced goods and services. Tourism also has qualitative impacts by encouraging the creation of jobs for young people. In many countries, however, especially in Europe, a large proportion of these are seasonal jobs that can be secured in the long term only by improving the level of qualifications so that young people can become multi-skilled. The tourism industry therefore generates a huge need for training, for which the T20 countries have very considerable capacity. Consequently, one of the indirect impacts generated by tourism jobs is to enable T20 countries, especially in Europe and
North America, to export their tourism, hotel and catering training courses to new tourism countries, generating employment in the education sector.

The following table shows the indirect impact of tourism on employment factor in top 20 countries:

<table>
<thead>
<tr>
<th>T20 country</th>
<th>Total contribution of tourism to total employment in 2011 (%)</th>
<th>Indirect contribution of tourism to total employment in 2011 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>16.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Spain</td>
<td>12.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>14.8</td>
<td>4.9</td>
</tr>
<tr>
<td>United States</td>
<td>10.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Italy</td>
<td>9.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Argentina</td>
<td>10.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>8.1</td>
<td>3.9</td>
</tr>
<tr>
<td>France</td>
<td>10.2</td>
<td>3.9</td>
</tr>
<tr>
<td>China</td>
<td>8.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8.1</td>
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</tr>
<tr>
<td>Brazil</td>
<td>8.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Japan</td>
<td>7.1</td>
<td>3.3</td>
</tr>
<tr>
<td>South Africa</td>
<td>10.1</td>
<td>3.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>7.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Russian Federation</td>
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<tr>
<td>Canada</td>
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<td>2.8</td>
</tr>
<tr>
<td>Republic of Korea</td>
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<tr>
<td>Germany</td>
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<td>2.2</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>6.8</td>
<td>2.2</td>
</tr>
<tr>
<td>India</td>
<td>7.5</td>
<td>1.6</td>
</tr>
</tbody>
</table>

The majority of the jobs created in the tourism industry are for young people under the age of 25, who account for about half of all tourism jobs (Goldin, 2010). In addition, most of them are jobs for women. This feature of employment in the tourism sector underlines the importance of Continuous vocational training programmes for young people in order to secure long-term jobs.

### 2.4.2 SECTORAL INDIRECT EFFECT OF TOURISM:

The sectoral approach concerns the central role of tourism in the production chain of the main sectors both upstream and downstream and in the provision and operation of public service infrastructure, including transport. It also shows the role of tourism in the development of high value-added sectors and new technologies like Global Distribution System (GDS) and Computer Reservations System (CRS) the indirect effects of tourism concern all sectors of the economy, especially agrifood industries and all tourism-related services such as air transport. The contribution to the indirect effects of tourism may be broken down into three sub-sectors:

- Output of suppliers of goods and services,
- Capital expenditure,
- Public spending etc
The following WTTC report explains different positive sectoral indirect impact of tourism:

<table>
<thead>
<tr>
<th>T20 country</th>
<th>Supply of goods and services (%)</th>
<th>Capital expenditure (%)</th>
<th>Central and local government spending (%)</th>
<th>Total indirect effects (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3.6</td>
<td>2.1</td>
<td>1.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Spain</td>
<td>4.2</td>
<td>1.0</td>
<td>1.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Argentina</td>
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<td>1.3</td>
<td>0.3</td>
<td>4.7</td>
</tr>
<tr>
<td>United States</td>
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<td>0.6</td>
<td>0.8</td>
<td>4.2</td>
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<tr>
<td>China</td>
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<td>4.2</td>
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<tr>
<td>Indonesia</td>
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<td>0.7</td>
<td>4.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.9</td>
<td>1.1</td>
<td>0.1</td>
<td>4.1</td>
</tr>
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<td>0.9</td>
<td>0.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Brazil</td>
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<td>0.9</td>
<td>0.5</td>
<td>3.7</td>
</tr>
<tr>
<td>Italy</td>
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<td>0.7</td>
<td>0.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.2</td>
<td>0.8</td>
<td>0.4</td>
<td>3.5</td>
</tr>
<tr>
<td>France</td>
<td>2.4</td>
<td>0.5</td>
<td>0.5</td>
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<td>Japan</td>
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<td>0.5</td>
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<td>3.2</td>
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<tr>
<td>United Kingdom</td>
<td>2.3</td>
<td>0.3</td>
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<tr>
<td>Russian Fed.</td>
<td>2.2</td>
<td>0.5</td>
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<td>Canada</td>
<td>1.6</td>
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<td>0.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>1.9</td>
<td>0.3</td>
<td>0.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1.7</td>
<td>0.6</td>
<td>0.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Germany</td>
<td>1.6</td>
<td>0.1</td>
<td>0.3</td>
<td>2.0</td>
</tr>
<tr>
<td>India</td>
<td>1.0</td>
<td>0.6</td>
<td>0.1</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: WTTC 2011

2.4.3 BUSINESS AND INFRASTRUCTURE DEVELOPMENT:

Various tourism related business such as online on demand services, virtual tourism, online hotel and tour booking services etc are now developing parallel with tourism sector. These businesses can range from local to global service providers. The growth and development of these businesses not only benefits the tourists but it also contribute to the local as well as national economy. Every popular tourist destination has its specific range of small industries related to fine art work, metal work, stone work or any other local business. Hotels, taxi, hospitals, internet cafes, picnic spots, restaurants etc are directly related with tourism activities. Tourism involves activities of persons traveling to and staying in places outside their usual environment for leisure, business and other purposes. Tourism Infrastructure demands for goods and services, and the establishments which provide such services are considered as part of the tourism industry. Further, the Tourism Infrastructure also includes establishments whose products are mainly sold to visitors, though they do not form a major share of tourist consumption. Several infrastructure sectors like power, telecommunication, water supply, roads and some production sectors like travel items, sports equipment;
photographic materials, medicines and cosmetics are included in this category along with Tourism Infrastructure.

Infrastructure development is the most important factor of any successful country that wants to attract tourist. Good and well managed infrastructure can boost the overall contribution of the tourism sector to the national GDP. Primarily, a good infrastructure related to tourism includes hotels, restaurants, strong road, rail and air network etc. The potential and benefits of the tourism sector become more relevant especially for developing economies like India, where capital availability is scarce and need for economic and employment generation activity is high. With a mere 0.4% share of international tourist arrivals and a large volume of domestic travelers – mainly in the religion/pilgrimage segment – the sector still accounts for 5.6% of GDP while providing direct employment to 20 million people. However, compared to global averages, the industry has not scaled up to its full potential. Geographical smaller countries have managed successfully to generate much higher levels of revenue from this industry. This is borne out by the fact that globally, the industry contributes approximately 11.6% to the GDP.

CHECK YOUR PROGRESS - 3:

1. List any three *indirect* economic benefits of tourism.

2. Differentiate between direct and indirect employment benefit of tourism.

3. How many jobs are generated globally by tourism in the year 2012?

4. What is GDP?

2.5 INDUCED ECONOMIC BENEFITS OF TOURISM:

Induced economic benefits of tourism are related to expenditure by employees from wages paid by companies in direct contact with tourists. Induced effects also include the consumption of companies that have benefited directly or indirectly from initial expenditure in the tourism sector. An example of such induced effects would be purchases of consumer goods such as food, clothing and electronic goods by people employed in the hotel sector. For companies, this would be purchases of capital goods or expenditure related to the reinvestment of profits. Induced economic benefits generally includes the direct and indirect expenditure of tourism beneficiary industries, which are listed below:

1. Food and drink industry
2. Leisure services/products
3. Transport services
4. Clothing services
5. Home equipment
6. Growth of other tourism related industries / services

If you have ever visited a popular tourist destination, you might have realized that the above mentioned supporting industries used to develop parallel with tourism sector itself. A growing rate of famous hotels and restaurant chains can be easily seen around a popular destination. Various five stars, three star hotel series is continuously developing along with the increasing travel and tourism activities across the globe. Tourists frequently need these food, drink and leisure services in order to enjoy their tour holidays. Growth and development of transport services is indirectly affected by the tourism sector. Clothing and home equipment services such as phones, laundry services, electricity, entertainment etc are beneficial to the local community as well as tourism sector itself. Induced benefits of tourism can essentially cover all the public / private investment towards the supporting industries of tourism sector.

The overall scenario of induced benefits of tourism can be described as the following figure:
2.6 SUMMARY:

Economic advantages of tourism sector are one of the most important factors to the tourist destination economy as well as national economy of a country. Tourism activities have various types of economic advantages which can be further divided into three different categories namely direct economic benefits, indirect economic benefits and induced economic benefits of tourism. Direct economic benefits are those benefits of tourism that are directly related to tourism activities such as foreign exchange earnings, government revenues, hotel and transportation development and increase in employment sectors related to tourism. Direct economic effects of tourism have an effective contribution to the national GDP. Indirect economic advantages of tourism are related to those sectors which are indirectly benefitted by tourism activities such as indirect employment factor, business and infrastructure development and growth of economy of various sectors related to tourism like online services, travel and tourism agencies etc. Indirect economic effects of tourism are much broader than the direct effects themselves. The third economic benefit of tourism are induced economic advantages of tourism on the local economy such as food and clothing industry, leisure services, home equipment supplies, and transport service supported by public investment. Induced economic benefits are related to the indirect public investment to various tourism supporting industries which proved services to tourist in one or another form. Induced effects have a very strong positive and long effect on the overall local economy of tourist destination.

2.7 GLOSSARY:

- **Induced**: course of action, by influence or persuasion
- **Exchange**: economic change of rates of monetary transactions.
- **GDP**: Gross domestic product (GDP) is the market value of all officially recognized final goods and services produced within a country in a given period of time.
- **Revenue**: revenue or turnover is income that a company/country receive from its normal business activities.
- **WTTC**: World Travel & Tourism Council established in 1990
- **Export**: to ship the goods and services out of the port of a country
- **Share**: part of any individual/organization of a joint business
- **Sectoral**: term describing various sectors of economy.
- **Leisure**: free time, is time spent away from business, work, and domestic chores.
- **Infrastructure**: Infrastructure is basic physical and organizational structures needed for the operation of a business such as tourism.
2.8 ANSWERS TO CHECK YOUR PROGRESS

Check your progress-1:
1- Foreign exchange, Employment
2- Earnings generated by exchange of money
3- Hotel jobs, transportation jobs, tour agent
4- Around 5%

Check your progress-2:
1- Silver jewellery, marbles, and stone arts
2- Income from tourism activities
3- Indirect employment like street vendors etc.

Check your progress-3:
1- Increased employment, local jobs, money distribution
2- Jobs for educated, jobs for all
3- Gross domestic products

2.9 REFERENCES:
- Tourism in India and India's Economic: Development, Kartik Chandra Roy, Clement Allan Tisdell, 188
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- Tourism and the Economy: Understanding the Economics of Tourism, James Mak
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2.10 SUGGESTED READINGS
- Tourism in India and India's Economic: Development, Kartik Chandra Roy, Clement Allan Tisdell, 188
- Tourism in India and India's Economic: Development, Kartik Chandra Roy, Clement Allan Tisdell, 4-50
- Tourism In India Planning & Development, Asif Iqbal Fazili, S. Husain Ashraf,
2.11 MODEL QUESTIONS:

Short answer type questions:
1) List any four direct economic benefits of tourism.
2) What is indirect economic benefits of tourism, explain with example?
3) How tourism promotes the sales of local products and handicrafts?
4) Name any two sectors, which benefits from the induced economic advantage of tourism.
5) What is the direct and indirect contribution of tourism in the employment sector?
6) What is sectoral indirect effect of tourism?
7) How tourism increases foreign exchange?
8) Explain the following terms in brief –
   (a) FTA          (b) Induced effects
   (c) Leisure services (d) GDP

Long answer type questions:
1) What are the main direct economic benefits of tourism in India? Discuss in detail.
2) How tourism increases induced economic benefits? Describe in detail.
3) Explain all the indirect economic effects of tourism sector in India.
3.1 INTRODUCTION:

Tourism sector has a great impact on economy. You have already read about various economic impacts of tourism such as direct, indirect and induced effects. This chapter will explain you the different multiplier effects of tourism industry. Multiplier effects are those effects on economy which are related to production, sales and employment on secondary industries that are directly related to tourism activities. Tourism not only creates jobs in the tertiary sector, it also encourages growth in the primary and secondary sectors of industry. This is known as the multiplier effect which in its simplest form is how many times money spent by a tourist circulates through a country's economy. Money spent in a hotel helps to create jobs directly in the hotel, but it also creates jobs indirectly elsewhere in the economy. The hotel, for example, has to buy food from local farmers, who may spend some of this money on fertilizer or clothes. The demand for local products increases as tourists often buy souvenirs, which increases secondary employment.
The multiplier effect continues until the money eventually 'leaks' from the economy through imports - the purchase of goods from other countries.

Multiplier effects refer to an economic concept that was conceived in the nineteenth century and developed throughout the early period of the twentieth century, but not formalized until the work of John Maynard Keynes in the 1930s. The concept is now universally accepted amongst economists and applies to changes in exogenous demand for any industry's output, and is thus not solely related to tourism activity. Within the context of tourism multiplier effects are those economic impacts brought about by a change in the level or pattern of tourism expenditure. The term 'multiplier' is derived from the fact that the value of expenditure is multiplied by some estimated factor in order to determine the total economic impact. The multiplier effect can be estimated by using ratios that reflect either the direct plus indirect effects or the direct plus indirect plus induced economic effects of tourism spending. The multiplier effect refers to the sum of direct, indirect, and induced economic impacts. They can be positive, such as when the level of tourism spending increases, or they can be negative, such as when the level declines. However, it is important to note that the volume of tourism spending can remain unchanged but its distribution amongst the different economic sectors may change, and this can bring about a change in the economic impacts of tourism spending. It should also be noted that changes in tourism spending also create predictable changes in the volume of imported goods and services. These can be estimated in the same way as any of the other economic indicators noted earlier. The multiplier concept is an invaluable tool for use by those involved in the policy formulation and planning of tourism development. Multiplier values will provide information relating to human resource requirements, government revenue, imports and income level changes that are essential if tourism is going to be developed and maintained in an optimal fashion.

The Multiplier measures the impact of extra expenditure introduced into an economy. It is therefore concerned with the marginal rather than average changes. In the case of tourism this extra expenditure in an area can take many forms, including the following:

- spending on goods and services by tourists visiting the area;
- investment by external sources;
- government spending (e.g. domestic government spending on infrastructure in a region or foreign government aid);
- exports of goods stimulated by tourism.

Multiplier effects are essentially those economic effects of tourism activities that can stimulate the overall local economy of the tourist destination. The multiplier effect continues until the money eventually 'leaks' from the economy through imports - the purchase of goods from other countries.
3.2 OBJECTIVES:

After reading this unit carefully you will be able to understand:

- what are the different types of multiplier effect of tourism
- what are the sales multiplier of tourism
- what is income multiplier and its effect on tourism
- understand the relation between tourism and employment growth
- how tourism is supported by output multiplier

3.3 MULTIPLIER EFFECTS OF TOURISM:

As we have discussed above the multiplier effects can boost the local economy by supporting the tourism activities in various forms. The economic benefits of tourism can be broadly categorized in three different types namely direct, indirect and induced economic benefits. Multiplier effects are mainly concerned with the indirect and induced economic impacts supported by the indirect expenditure in or by tourism industry. The following figure explains the multiplier effect of tourism -

![Multiplier Effects of Tourism Diagram]
3.3.1 TRANSACTION OR SALES MULTIPLIER OF TOURISM:

Sales multiplier is generally related to the concept that an increase in tourist expenditure will generate additional business revenues. This multiplier measures the ratio between the two changes. The Multiplier measures the impact of extra expenditure introduced into an economy. It is therefore concerned with the marginal rather than average changes. Sales multipliers show a change in total sales for one industry will change total sales in other industries. EMSI advises caution when using sales multipliers, since there is some double-counting involved. Instead, we prefer to express impacts in terms of jobs or earnings. The Type I multipliers capture only the indirect effects, while the Type II multipliers include both indirect and induced effects (Richardson, 1972-p 23; Minnesota IMPLAN Group, 2000). Multipliers may be expressed in terms of sales; income, value added or jobs, the most frequently used measures of economic impacts (Bull, 1995; Miller and Blair, 1985).

Economic multipliers are expressed as a ratio of the total effects relative to the direct effects. For instance, an income multiplier is the ratio of total income effects (direct, indirect, and induced) to the direct income effects. This type of multiplier has been called a "ratio multiplier" (Baaijens, et al., 1998; Archer, 1984), "direct-effect multiplier" (U. S. Department of Commerce Bureau of Economic Analysis [USDC BEA], 1997; 1992), or simply "multiplier" (Minnesota IMPLAN Group, 2000). Ratio multipliers, like these, should be used as indicators of a region's economic self-sufficiency and should not be applied to visitor spending (or direct sales effects) without proper justification (Propst, 1991). Ratio type multipliers do not directly convert sales from visitor spending into income or jobs in the region and can be confusing to people who are not familiar with multipliers (Archer, 1984; Frechtling and Horvath, 1999). In the case of tourism this extra expenditure in an area can take many forms, including the following:

- spending on goods and services by tourists visiting the area;
- Investment by external sources;
- Government (domestic or foreign) spending (e.g. domestic government Spending on infrastructure in a region or foreign government aid);
- Exports of goods stimulated by tourism.

The expenditure can be analyzed as follows:

- **Direct Expenditure** – in the case of tourism this is expenditure made by tourists on goods and services in hotels, restaurants, shops, other tourist facilities, and for tourism generated exports, or by tourism related investment in the area.
- **Indirect Expenditure** – this covers successive rounds of inter-business transactions which result from the direct expenditure, such as purchases of goods
by hoteliers from local suppliers and purchases by local suppliers from wholesalers.

- **Induced Expenditure** – this is the increasing consumer spending resulting from the additional personal income generated by the direct expenditure, e.g. hotel workers using their wages for the purchase of goods and services. Indirect and induced expenditure together are called secondary expenditure.

- **Sales (Transaction) Multiplier** – this measures the extra business turnover created (direct and secondary) by an extra unit of tourist expenditure.

  Multipliers are used to capture the secondary effects of visitor spending in a region. There are two basic kinds of secondary effects:

  Indirect effects are the changes in sales, jobs and income within backward-linked industries in the region, i.e., businesses that supply goods and services to tourism-related firms. For example, hotels purchase a variety of goods and services in the local area in order to produce a night of lodging. Each business that provides goods or services to hotels benefits indirectly from visitor spending in hotels. These indirect effects are captured by Type I multipliers.

  \[
  \text{Type I sales multiplier} = \frac{\text{direct sales} + \text{indirect sales}}{\text{direct sales}}
  \]

  Induced effects are the changes in sales, jobs and income in the region resulting from household spending of income earned either directly or indirectly from visitor spending. Employees in tourism firms and backward linked industries spend their income in the local region creating additional sales and economic activity. These impacts are most readily seen when there is a significant drop in tourism activity. Reduced income in the area results in reduced spending that will affect retail stores and other businesses that depend on household spending. Type II multipliers capture both indirect and induced effects.

  \[
  \text{Type II sales multiplier} = \frac{\text{direct sales} + \text{indirect sales} + \text{induced sales}}{\text{direct sales}}
  \]

  Example: If a region reports a Type I sales multiplier of 1.4 and a Type II sales multiplier of 1.9, then for each dollar of direct sales, there is $.40 in indirect sales and $.50 in induced sales.

  Total sales = Direct Sales + Multiplier effects = Direct sales + Indirect Sales + Induced Sales

  \[
  2.0 = 1.0 + .9 = 1.0 + .40 + .50
  \]

  $200 in direct sales would yield a total sales effect of $200 * 1.9 = $380.

- **Inflated tourism sales multipliers**

  Secondary effects have frequently been exaggerated in recreation and tourism studies due to misuse and misunderstanding of multipliers. State and national multipliers, which are more readily available, have frequently been misapplied to estimate impacts on local regions. Many studies have not properly accounted for visitor purchases of goods that are not locally made (see margining discussion below). Also, early versions of IMPLAN produced a "Type III" multiplier which significantly overestimated induced effects of tourism spending.
Hence, many tourism analysts are accustomed to multipliers of 2.0 or greater, when the reality is that tourism spending multipliers for local regions are more likely to fall somewhere between 1.0 and 1.5.

High tourism multipliers are often a result of exaggerated estimates of the induced effects. Induced effects are computed by re-circulating the income earned through direct and indirect effects using a typical household spending pattern. Several common assumptions lead to the inflated estimates. For example:

Most models are linear and assume that household spending increases directly with income. But higher incomes usually lead to more saving and investment as well as different kinds of purchases such as travel and luxury items that may not accrue to the local area.

Not all income is immediately re-spent in the local area. Contributions to social security and other retirement programs are included as income, but not re-spent immediately or even in the local area.

Models often assume that people live in the same region where they work. Workers who commute from outside the region will spend most of their income where they live not where the income is earned. Students and seasonal employees in parks and tourist regions will generally spend less of their income in the region where it is earned. For regions with substantial numbers of commuting workers, induced effects will be exaggerated if commuting patterns are not taken into account.

**Size of Multipliers**

The size of the multipliers depends on four basic factors:

1. **The overall size and economic diversity of the region's economy.** Regions with large, diversified economies producing many higher order goods and services will have high multipliers as households and business can find most of the goods and services they need locally.

2. **The geographic extent of the region and its role within the broader region.** Regions of a large geographic extent will have higher multipliers, all other things equal, than small areas as transportation costs will tend to inhibit imports. Regions that serve as central places for the surrounding area will also have higher multipliers than more isolated areas.

3. **The nature of the economic sectors under consideration.** Multipliers vary across different sectors of the economy based on the mix of labor and other inputs and the propensity of each sector to buy goods and services from within the region. Tourism-related businesses tend to be labor intensive. They therefore tend to have larger induced rather than indirect effects. When a single multiplier is reported for a region, it represents an average or aggregate value across many sectors. More precise and accurate estimates of secondary effects are
possible if sector-specific multipliers are used. A sector-specific multiplier estimates the secondary effects of sales within a given sector. (See Table M below for sample sector-specific multipliers).

(4) The year. A multiplier represents the characteristics of the economy at a single point in time. Multipliers for a given region may change over time in response to changes in the economic structure as well as price changes. When using regional economic models or multipliers, spending changes are usually price adjusted to the model year. Employment multipliers and ratios are more likely to change over time than sales or income multipliers, as they are more sensitive to general price inflation. For example, if it takes 30 jobs to produce $1 million in lodging sales in 1990, and lodging prices increase by 20% through 2000, then the same 30 jobs produces $1.2 million in sales in 2000. The job to sales ratio therefore drops to 25 jobs per million in 2000. Wages and salaries may have also increased by 20% due to inflation, leaving the income to sales ratio constant.

Regions with limited economic development will have small tourism multiplier effects (Type I sales multipliers of 1.1 to 1.2 and Type II sales multipliers less than 1.5). Larger regions with extensive economic development will have larger tourism multipliers (Type I sales multipliers in 1.3 - 1.5 range and Type II sales multipliers approaching 2.0).

CHECK YOUR PROGRESS - 1

1) How many variant a sales multiplier can have?

2) Name any type two sales multipliers.

3) Name any two indirect expenditure of tourism sector.

3.3.2 INCOME MULTIPLIER OF TOURISM:

Income multiplier of tourism measures the income generated by an extra unit of tourist expenditure. Confusion arises over the definition of income. Many researchers define income as disposable income accruing to households within the area, which is available for them to spend. However, although salaries paid to overseas residents are often excluded, a proportion of these salaries may be spent in the local area and should therefore be included. In considering national economies some studies include revenue accruing to the government in income.
Income multipliers can be expressed in one of two ways: the ratio method, which expresses the direct and indirect incomes (or the direct and secondary incomes) generated per unit of direct income; or the normal method, which expresses total income (direct and secondary) generated in the study area per unit increase in final demand created within a particular sector. Ratio multipliers indicate the internal linkages which exist between various sectors of the economy, but do not relate income generated to extra sales. Hence, on their own, ratio multipliers are valueless as a planning tool.

Multiplier analysis has been widely used as a method for regional impact assessment of tourism. Especially regional input-output models, from which multipliers can be derived, provide very detailed and relevant information on the consequences of tourist expenditure on regional economies. In the past decades, tourist multipliers have been calculated for several countries and regions, for example for Singapore, Turkey, Alonnisos and Okanagan (Khan et al., 1990; Liu et al., 1984; Pepping and De Bruijn, 1991; Var and Quayson, 1985). Tourist multipliers can not only be used to assess impacts of changes in tourist expenditure, they serve also as indicators of the performance of tourism from the perspective of the local population. A high income multiplier is associated with relatively large benefits for the local population. Until now researchers using multiplier analysis have mainly focused on the economic impact of tourism. Since a few years the potential of this method has also been recognized for assessing environmental impacts. Input-output modeling and multiplier analysis are still seen as useful methods for policy impact assessment. The first part of this article is devoted to the research question why multiplier values found by different researchers for different regions differ from each other. In contrast with the traditional approach of a literature review in which the results of different studies are compared by means of verbal arguments, the approach followed here is a statistical one. Relationships between the regional multiplier and different background characteristics of the tourist area are investigated by regression analysis. An important advantage of a statistical analysis is that its objectivity is expected to be more guaranteed than that of a traditional literature review.

Traditionally, the most important motive to develop an area as a tourist destination is the expected economic benefit from this development. From a national perspective, tourism is particularly of importance for the balance of payments (Pearce, 1989). Foreign tourists spend money in tourist areas and in this way a country earns foreign currencies which leads to an improvement of the balance of payments. Apart from a tool of national economic policy, tourism development is also a tool of regional economic policy. Regional economic policy aims at decreasing regional disparities in life expectations, unemployment and income per capita. These regional disparities are conflicting with national policy.
objectives such as full employment, balanced economic growth, and a balanced income distribution (Armstrong and Taylor, 1985).

Tourist (Tourism) Income Multiplier Model:

This income multiplier model is expressed with the next formula, and there are nine stages on the Occasion of its computation. Incidentally, according to Ohakweh, as forth personal model, composite tourist multiplier model that was developed by Glenn D. Weaver et al. in 1978 (this can measure the direct and indirect impacts that sightseer’s expenditure exerts on the big city economy concerned) was used.

\[ Y_m \left( \frac{1}{1 - ZV} \right) = \text{tourist income multiplier}, \]

where

\[ Y_m = \text{percent of tourist spending that directly increased metropolitan income}, \]
\[ Z = \text{percent of metropolitan income spent in the metropolitan area}, \]
\[ V = \text{percent of metropolitan goods and services produced locally and sold locally} \]

Some multiplier models add the unit 1 to the upper formula. —for example, B. H. Archer and Christine B. Owen (1971). The next type is that.

\[ 1 + Y_m \left( \frac{1}{1 - ZV} \right) \]

Tourism generates different types of income for a community: business income, wage earnings, share earnings, rates and levies. Direct spending by visitors has a positive impact on business profitability and employment growth. The money that is then circulated and re-spent in the economy is often referred to as indirect spending or the multiplier effect. Because much of a region’s tourism patronage comes from metropolitan centers, it is an effective way to redistribute wealth from urban to rural areas.

**Type III Income multiplier = Total direct, indirect, and induced income / direct sales**

The economic impacts of tourism are typically estimated by some variation of the following simple formula:

\[ \text{Economic Impact of Tourism} = \text{Number of Tourists} \times \text{Average Spending per Visitor} \times \text{Multiplier} \]

### 3.3.3 Tourism and Employment Growth (Employment Multiplier):

Tourism creates jobs, both through direct employment within the tourism industry and indirectly in sectors such as retail and transportation. When these people spend their wages on goods and services, it leads to what is known as the "multiplier effect," creating more jobs. The tourism industry also provides opportunities for small-scale business enterprises, which is especially important in rural communities, and generates extra tax revenues, such as airport and hotel taxes, which can be used for schools, housing and hospitals.
The employment multiplier is the ratio of direct plus indirect (plus induced if Type II multipliers are used) employment changes to the direct employment change. The World Travel and Tourism Council estimate that in 2008, employment in the travel and tourism economy was 238,277,000 jobs or 8.4 percent of total employment which is 1 in every 11.9 jobs.

**Type III Employment multiplier = Total direct, indirect, and induced employment / direct sales**

The following model considered the same pattern-type as the model concerned, except for that Employment is being substituted for the value of dollar used in the income multiplier model. Therefore, the multiplier in the employment multiplier model equals to the multiplier value (1.1024) led on the occasion of the statement of the income multiplier model. As for being so same value, it becomes so equal because the process, methods led of each former numerical value depend on the process, methods led of each latter numerical value. The employment multiplier model can show with the next formula.

\[
Ye \left\{ \frac{1}{1 - ZV} \right\} = \text{tourist employment multiplier}
\]

Where,

- \(Ye\) = percent of tourist expenditure that directly increased metropolitan employment,
- \(Z\) = percent of metropolitan income spent in the metropolitan area,
- \(V\) = percent of metropolitan goods and services produced locally and sold locally

Employment multiplier can be expressed in one of two ways: as a ratio of the combination of direct and secondary employment generated per additional unit of tourist expenditure to direct employment generated, or as the employment created by tourism per unit of tourist expenditure.

**MODELS FOR MULTIPLIERS:**

Multiplier evaluation necessitates the use of models. The degree of sophistication of these models varies. However, there are three elemental forms:

(i) **Base Model** – this is very simplistic and rarely used in practical research. It assumes that one can divide the economy under research into export activities and local (non-export) activities, and that a stable relationship exists between the export and local sectors, with these sectors linked by linear relationships. It further assumes that unemployed resources are Available within the economy and that the scale of the export activities is the sole determinant of the level of income and employment within the area.

(ii) **Keynesian Model** – this is based on identifying streams of income and employment which are generated in “rounds”, which diminish in geometric progression because of leakages at each round.
(iii) **Input-Output Model** – the input-output concept analyses the economy into its sectors and expresses a relationship of these sectors in matrix form, based on the results of research into the effects of tourist expenditure.

Most multipliers in common use incorporate the general principle of the Keynesian model. Keynesian multipliers have been developed into modified forms of input output analysis with separate formulae being utilized for each principal business activity – one for businesses which are not primarily dependent upon tourism expenditure and will continue to exist without it, and the second for businesses which are dependent on tourism for their existence.

Fundamental to multiplier research is the concept of “leakages” from the economy. It is such leakages which result in rounds of income and employment, identified in Keynesian models, diminishing. The exact nature of these leakages will depend on the characteristics of the particular study. Some examples of leakages are as follows:

- payment for goods and services produced outside, and imported into, the study area;
- remittance of incomes outside the study area, for example, by foreign workers
- indirect and direct taxation where the tax proceeds are not present in the study area; and
- Savings out of income received by workers in the study area (i.e. where there is a low propensity to consume).

### CHECK YOUR PROGRESS - 2

1) When did Glenn D. Weaver develop the income multiplier model of tourism? 

2) Type three employment multiplier model also depends on …………………………………………………………………………………………………………………………………………………

3) Keynesian Model is based on identifying streams of income and employment which are generated in………………………………………………………………………………………………

### 3.3.4 OUTPUT EFFECTS (OUTPUT MULTIPLIER):

Output is similar to the Sales Multiplier but it also takes into account inventory changes, such as the increase in stock levels by hotels, restaurants and shops because of increased trading activity. It should be noted that few researchers specify whether or not inventory changes have been taken into account.
Multipliers were compared across sectors and regions. The Coefficients of Variation for most multipliers were between 5 and 20 percent across the 114 regions. All tourism multipliers are positively correlated with the natural log of population except for job multipliers, which are negatively correlated. The natural log of population was identified as the best predictor of tourism multipliers, explaining 50 to 80 percent of the variation. Regions were formed into four groups with distinct multipliers. A multiplier lookup table was developed with guidance for choosing sector-specific multipliers for a given type of region.

Tourist expenditure generates additional demand for goods and services in the economy, i.e. output effect. Three types of output effects or output multipliers of tourist demand are estimated: O1, OPI and OPIPI multipliers. Of the various selected economies, the highest DPI output multiplier coefficient was recorded for Sri Lanka. The DPI output multiplier coefficient of India, the Republic of Korea and Sri Lanka exceeded 2. This implies that one unit of tourist expenditure, directly and indirectly, generated more than two units of output in the three economies. This indicates that the economies with relatively advanced technology, such the Republic of Korea and those with import restrictions (India and Sri Lanka) have higher levels of DPI output multipliers. The OPI output multiplier coefficient in other economies was less than 2. A relatively lower level of the OPI output multiplier coefficient is explained by the weak linkages between the industrial sectors and easy access to foreign inputs for tourism. In such
situations the import content in the production process is high. This has resulted in low levels of OPI output multipliers. Although the economies have made efforts for the development of import substituting industries, the multiplier coefficient does not show encouraging results.

Any economic data, which is readily available, does not usually analyze the economy in sufficient detail.

The existing accommodation units may not be sufficient for the targeted number of FTAS and DTVs in 2016. The availability of number of rooms in 2010 and requirement of additional rooms in 2016 for the targeted growth of tourism during the 12th Five Year Plan are given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>43.84</td>
</tr>
<tr>
<td>2012-13</td>
<td>47.26</td>
</tr>
<tr>
<td>2016-17</td>
<td>63.79</td>
</tr>
</tbody>
</table>

Linkages between the tourism sector and other sectors of the economy are indicators of the performance and importance of tourism to economies. Country studies reported two types of linkages: forward and backward linkages. The forward linkage, or the degree of sensitivity, measures the extent to which the tourism sector can expand for a given unit of expansion in each of the remaining sectors, backward linkages or the power of dispersion.
On the other hand, shows the extent to which the economy develops with a given unit of expansion of the tourism sector. Linkages are used to rank the importance of the sector in the economy. A sector with linkages greater than 1 is assumed to be strongly related to other sectors of the economy. The backward linkages in the selected economies of the ESCAP countries appeared to be much stronger than the forward linkages. This implies that the expansion of the tourism sector has greater impact on the economies when compared to how much the expansion of national economies changes the tourism sector.

Tourism sector contributes significantly to the national economy as well as the creation of jobs in the country. Based on the Tourism Satellite Account for the year 2002-03 prepared by Ministry of Tourism, the contribution (direct and indirect) of tourism in the GDP and the total jobs in the country in 2007-08 is estimated to be 5.92 % and 9.24 % respectively. Domestic Tourism contributes to three-fourths of the Tourism economy.

Tourism has the potential to stimulate other economic factors through its forward and backward linkages with a host of sectors like agriculture, manufacturing, transport, hospitality, education, health, banking, etc. Expenditure on tourism induces a chain of transactions requiring supply of goods and services from these related sectors. The consumption demand, emanating from tourist expenditure also creates more employment and generates a multiplier effect on the economy.

As a result, additional incomes and employment opportunities are generated through such linkages. Thus, the expansion of the tourism sector can lead to large scale employment generation and poverty alleviation. The economic benefits that flow into the economy through growth of tourism in form of increased national and State revenues, business receipts, employment, wages and salary income, buoyancy in Central, State and local tax receipts can contribute towards overall socio-economic improvement and accelerated growth of the economy. India needs to tap reap the full potential of a vibrant tourism sector.

As per the study commissioned by Ministry of Tourism, the total employment in Hospitality Sector (Hotels- classified and unclassified, eating outlets, Tour Operators, Travel Agents and Medical & Wellness units) in selected years are estimated to be as follows:

<table>
<thead>
<tr>
<th>Availability of Hotel Rooms 2010</th>
<th>Classified</th>
<th>128771</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2712290</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Requirement of Hotel Rooms 2016</th>
<th>Classified</th>
<th>310523</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4972330</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional requirement in 2016</th>
<th>Classified</th>
<th>181752</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2260040</td>
<td></td>
</tr>
</tbody>
</table>
WEAKNESSES AND LIMITATIONS OF TOURISM MULTIPLIERS:

Tourism multiplier research suffers the following limitations:

**Data Deficiency**: Multiplier analysis requires a detailed database. In many cases researchers generate their own data. However, this takes considerable time and money. In general terms the smaller the research area the less likely it is to have data available in a suitable format. This situation is compounded by the fact that tourism is a multi-product industry, covering a broad spread of economic sectors. This situation is compounded by the fact that tourism is a multi-product industry, covering a broad spread of economic sectors. Any economic data, which is readily available, does not usually analyze the economy in sufficient detail.

**Restrictive Assumptions and Limitations**: Many of the weaknesses and limitations of multiplier analysis result from restrictive basic assumptions, which are made in constructing the models. The more sophisticated models eliminate or reduce some of these weaknesses.

- Base theory models and the simpler Keynesian-type models do not take into consideration the different effects of expenditure in different sectors of the economy. For example, they treat a unit of expenditure by a tourist for hotel accommodation in the same way as that of a tourist purchasing consumable goods from a supermarket.

- Models may be of static form. This assumes that production and consumption functions are directly proportional, i.e. that further production undertaken by each sector of the economy will require purchases of inputs in the same proportions as previously. This has the following limitations:
  - It ignores the possibilities of economies or diseconomies of scale;
  - It uses average rather than marginal relationships between production and consumption;
  - It assumes that trading patterns remain stable, i.e. that a particular sector will continue to import and to purchase from other sectors within the local economy in the same proportions as previously. This takes no account of supply constraints.

**Existence of Supply Constraints**: Most multiplier studies assume that supply is “elastic” in all sectors of the economy, i.e. that the increase in output required to meet the increased demand resulting from tourism will be met by purchases from the same sources. This may not be possible because of technical constraints. Supply constraints cited in research include the following:

- lack of available resources (capital, land, labour etc) in the local economy, thus limiting local production;
- lack of foreign exchange to enable the purchase of capital goods and other necessary imports, thus limiting local production;
• The inability of sectors of the local economy to respond to increased demand for their product. For example, the inability of domestic agriculture to meet increased demand, which results from a significant increase in tourism, for its produce. Such an increase in demand may also lead to price increases, which in turn result in imports becoming price competitive and hence replacing domestic produce.

**Use of Homogeneous Consumption Functions:** Most multiplier models assume that as household incomes raise these incomes will be spent on the same products as previously. Clearly in practice it is likely that such rises in incomes will result in changes in the type of goods purchased. Research indicates that allowance for changes in consumption patterns increases leakages and reduces the multiplier effect, particularly in developing countries, which tend to have higher propensity to import.

**Repercussive Feedback Mechanism:** Few multiplier models take into account the effects of increased incomes outside the study area which result from exports to the study area. This may in turn generate tourism and expenditure in the study area. Research, which has only been conducted on small economies, indicates that this has only a minimal effect.

**Speed of Transactions within the Economy:** Static multiplier models take no account of the length of time the multiplier effect takes to work its way through the economy. However, research indicates that different multiplier values can result from different estimates of the speed with which the resultant transactions occur in the economy. Little is known about the way in which a multiplier works its way through economy. However, it has been suggested that direct tourist expenditure is likely to “turnover” five to six times in a 12 month period.

**Multiplier Values:** The size of a tourism multiplier depends on the specific circumstances of the case under study, including the nature of the local economy and particularly the degree to which its various sectors are inter-linked in their trading patterns. It should be noted that, whilst a considerable number of tourism multiplier studies have been carried out in recent years, some of these studies have been conducted with a lack of expertise and have given misleading results. The following sub-sections give values of tourism multipliers indicated from past research.

The multiplier can be found by applying the formula: Multiplier = 1/Proportion of leakages, So in an economy with a high proportion of leakages, such as high tax rates (although we must remember that the government may choose to reinvest this tax money in the local economy, so much of it may not be lost for all time), or where many of the goods demanded by consumers are imported, TIM may be quite low, and the economy will not benefit greatly from tourism Multiplier Effect.
CHECK YOUR PROGRESS - 3:

1) What is TSA?

2) Name any two tourism connected services.

3.4 SUMMARY:

Tourism not only creates jobs in the tertiary sector, it also encourages growth in the primary and secondary sectors of industry. This is known as the multiplier effect which in its simplest form is how many times money spent by a tourist circulates through a country's economy. Money spent in a hotel helps to create jobs directly in the hotel, but it also creates jobs indirectly elsewhere in the economy. The hotel, for example, has to buy food from local farmers, who may spend some of this money on fertilizer or clothes. The demand for local products increases as tourists often buy souvenirs, which increases secondary employment. The multiplier effect continues until the money eventually 'leaks' from the economy through imports - the purchase of goods from other countries. Tourism sector can have a number of multipliers like income multiplier, sales or transaction multiplier, employment multiplier and the output multiplier. Tourism in an area will create jobs in an area, therefore the employees of the tourism industry will have some extra money to spend on other services, and therefore improving these other services in that area, allowing further employment in the area.

3.5 GLOSSARY:

- **John Maynard Keynes**: British economist whose ideas have fundamentally affected the theory and practice of modern macroeconomics
- **Infrastructure**: is basic physical and organizational structures needed for the operation of a society or enterprise
- **Leakage**: A situation in which capital, or income, exits an economy, or system, rather than remains within it
- **Propensity**: a natural inclination or tendency
- **Capital**: money used by entrepreneurs and businesses to buy what they need to make their products
- **ESCAP**: Economic and Social Commission for Asia and the Pacific
3.6 CHECK YOUR PROGRESS:

Check your progress-1:
1) 1
2) induced sales
3) Fooding and logging services

Check your progress-2:
1) 1978
2) Induced employment
3) Rounds

Check your progress-3:
1) Tourism satellite account
2) Alcohol and processed foods

3.7 REFERENCES:
- Tourism in India and India's Economic Development, Kartik Chandra Roy, and Clement Allan Tisdell
- Encyclopedia of Tourism, Jafar Jafari, 398-399
- Tourism and the Economy: Understanding the Economics of Tourism, James Mak, 127
- Risk, Vulnerability and Tourism in Developing Countries: The Case of Nepal, Martina Shakya, 92
- Estimating the Multiplier Effects of Tourism Expenditures on a Local Economy through a Regional Input-Output Model, y Endre Horváth and Douglas C. Frechtling
- Explanatory meta-analysis of tourist income multipliers, Sef R. Baaijens Peter Nijkamp

3.8 SUGGESTED READINGS:
- Encyclopedia of Tourism, Jafar Jafari, 398-399
- Estimating the Multiplier Effects of Tourism Expenditures on a Local Economy through a Regional Input-Output Model, y Endre Horváth and Douglas C. Frechtling
- Tourism and the Economy: Understanding the Economics of Tourism, James Mak, 127
- Tourism in India and India's Economic Development, Kartik Chandra Roy, and Clement Allan Tisdell
3.9 MODEL QUESTIONS:

Short Answer Type Questions:
1) What do you understand by ‘multiplier effects of tourism? ’
2) What is transaction multiplier?
3) Explain the term leakage in the context of tourism economy
4) Discuss the direct and indirect expenditure of tourism sector
5) Briefly describe the term income multiplier
6) Give the formula for type two sales multiplier of tourism
7) What is output multiplier of tourism?
8) Explain the following terms in the context of tourism
   (a) ESCAP  (b) employment multiplier
   (c) Leakage  (d) supply chain

Long Answer Type Questions:
1) Explain the concept of tourism multipliers; also describe the income multiplier
   of tourism sector in India.
2) Differentiate between the concept of multiplier and leakage in destination
   economy with the help of a suitable example.
3) How the multiplier effects can boost the local economy with the increase in
   employment and sales around the tourist destination, give example to justify your
   answer.
4.1 INTRODUCTION:

Humans are social beings. The living standards, ethics, values, communication and infrastructure together make the society of local population. Every community around the world has their unique society. All the tourist destinations along with their local population form different types of society. As group of tourists visit the local destination they directly or indirectly affect the local society. These affect may be positive or negative and collectively called social impact of tourism.

In this chapter we will only discuss positive social impact i.e. social benefits of tourism. Tourism can stimulate new and expanded community facilities and infrastructure initiatives, such as the improvement of retail, restaurant and entertainment options, transport services, education and sporting facilities. These increase the quality of life for the community, which may not otherwise warrant the improvement, based on the residential population alone. Tourism can encourage communities to widen their outlook and to embrace new ideas. It provides opportunities for residents to interact with other people, lifestyles and cultures. Attracting visitors to an area can heighten local awareness and interest, resulting in a greater sense of pride and ownership. The community
takes stock of its assets and distinctive characteristics. This increase in pride can lead to community celebration or the revival of cultural activities. Knowing that others have travelled across the state, country or world to visit can considerably boost a community’s collective ego. Increased communication and interaction with foreign tourist eventually increase the education and knowledge factor of local population and helps to uplift their living standard.

Various infrastructures related development due to tourism directly benefits the local community such as hotels and restaurants, roads, transportation services, colonies; residential growth etc. for big countries like India the tourism factor could be of great importance in national awareness and integration by verifying the term unity in diversity.

Enhanced and frequent communication between tourists and local community benefits, both in terms of knowing the culture of each other; and taking the advantage of each other’s thoughts.

In fact a positive tourism activity benefits the local society in all the aspects of life including living standards, income, knowledge, communication and social and global awareness.

4.2 OBJECTIVES:

After reading this unit carefully you should be able to explain that-
- How tourism can be beneficial in social growth development
- What are the main contributions of tourism in improving living standards
- How tourism support social awareness and integration
- Understand the increased social communication with outside world due to tourism
- How tourism helps in modernization of infrastructure

4.3 SOCIAL BENEFITS OF TOURISM:

Tourism is obviously a social activity. Individual and group of tourists often visit tourist destinations for a short or long period of time by leaving the destination community affected with their presence. Often tourists have to travel long distances so they just spent sufficient time around the tourist spot. His bring the effective interaction between tourists and local society.

For large countries such as India this effect of tourism could be really sufficient to mould and change the destination society in some aspects. People around the tourist spot are generally very energetic in welcoming the foreign as well domestic tourists. As they frequently interact with outsider people they get affected by their habits, knowledge, communication and social ethics and values. All these aspects of tourism works like a catalyst and promoter in the process of social upliftment of the local community.
These positive impacts of tourism benefits almost all the communities around a famous tourist spot and the tourists themselves. We will now discuss each of these positive social effects of tourism in detail.

4.3.1 IMPROVEMENT IN LIVING STANDARD:

Visit any distant place across the country that does not have any famous tourist spot and carefully observe the social status/level of these distant communities. Now in turn visit any distant popular tourist destination across the country and also watch their social status. We are almost sure that you will find significant differences between these two communities. What makes them so different? The answer should be easy: Tourism.

Standard of living refers to the level of wealth, comfort, material goods and necessities available to a certain socioeconomic class in a certain geographic area. The standard of living includes factors such as income, quality and availability of employment, class disparity, poverty rate, quality and affordability of housing, hours of work required to purchase necessities, gross domestic product, inflation rate, number of vacation days per year, affordable (or free) access to quality healthcare, quality and availability of education, life expectancy, incidence of disease, cost of goods and services, infrastructure, national economic growth, economic and political stability, political and religious freedom, environmental quality, climate and safety. The standard of living is closely related to quality of life. With the growing rate of foreign and domestic tourist arrival, tourism started to affect the target society. Individuals are group of tourists directly interact with local community of tourist destination. This interaction and communication significantly benefits the local community as they learn and understand various new and impressive ways of living. Often group of tourists are from better social and economical background, and they directly or indirectly motivate the target community to improve their behavior and living standards. As long as the local people continuously observe the living standard of tourist groups such as their food, thoughts, drinks, behavior, knowledge, education etc they try to follow them in order to attract or pleas them so that they can spent some more time with their community. Although this effort is mainly concerned with economic advantages yet they get changed in social and ethical aspects indirectly. The frequent contacts with foreign tourists improve all the aspects of life like knowledge, communication and income. The increased income of social community motivates them to follow and adapt the improved living standards similarly as of group of tourists. Living standard is a broad term and includes the following factors-

1- Level of wealth / income of the target community
2- Quality of goods and services available for the local population
3- Opportunity for employment and jobs.
4- Low poverty rate and class disparity.
5- Easy availability of education and health services
6- Good infrastructure and transportation services
7- Religious freedom and environmental safety etc.

Standard of living is generally measured by standards such as real (i.e. inflation adjusted) income per person and poverty rate. Other measures such as access and quality of health care, income growth inequality, Disposable Energy (people's disposable income's ability to buy energy) and educational standards are also used. Examples are access to certain goods (such as number of refrigerators per 1000 people), or measures of health such as life expectancy. It is the ease by which people living in a time or place are able to satisfy their needs and/or wants. Positive and effective tourism management can boost and improve all the above described factors that constitute living standards. Various tools and techniques are discovered to measure the living standards of a community such as human development index, gini coefficient, quality of life index etc.

Tourism have some wonderful economic advantages which are responsible for increasing personnel income and employment rate of local population. This increased economic growth eventually improves all the aspects of life and decreases the poverty rate. As tourists often come to the tourist destination for spending their leaves with leisure and relax they often brings sufficient money with them in order to enjoy their travel holidays. They frequently demands best of quality goods and services from the local community, which in turn benefits the local population and motivates them to use the quality goods and services in their daily needs.
The economic advancements of tourist destination due to tourism ultimately create a lot of jobs (directly and indirectly) for local community. Various sector starts to grow around the tourist spot such as hotels, travel agencies, restaurants and tourism related industries. This leads to sustainable economic and social development. Tourism can improve the quality of life in an area by increasing the number of attractions, recreational opportunities, and services. Tourism offers residents’ opportunities to meet interesting people, make friendships, learn about the world, and expose themselves to new perspectives.

![Diagram of Human Development Index (HDI)](image)

**Figure 2: Human development index (HDI)**

The economical advantages of tourism itself are able to reduce the overall poverty rate of distant tourist destination and lessen the class disparity among local population. Tourism has the power to distribute the money in different popular locations across the country. Interaction between tourism and local community essentially demands knowledge and information from local people which encourages them to improve their educational and knowledge factors. This scenario generates the quality educational services and modern information infrastructures like internet cafes, online shopping and banking etc. with the longer stay period tourists can significantly improve all these factors in a steady way.
One of the immediate effect of growing tourism activities around a distant tourist spot is that the local community gains good infrastructure services in terms of living societies and colonization, roads, train, and air network etc so that the destination become easily reachable from rest of the country. This in turn brings improved transportation services around the spot. Travel and tourism is a transport related sector, improved transportation enables the local community to make contact easily with the outside world. The rapid growth of tourism and its supporting industries such as hotels and restaurants, food suppliers, transportation, infrastructures etc has damaged the destination environment. The environmental pollution caused the government/territory authorities to take care of natural environment, this came in the form of various environment protection act, so that the people around a popular tourist destination spot must be surrounded by natural environment.

Increased tourism can push a community to adopt a Different moral conduct such as improved understanding between sexes (positive) or increased illicit drug use (negative). Safety and health facilities and staffing tend to increase at the same time safety problems such as crime and accidents increase. Traditional ceremonies may be renewed and revived by tourist interest or lost in alternative activities. Tourism has affected and improved almost all the aspects of local community. The economic support provided by tourism is one of the fundamental factors for improvement in social and living standards.

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**CHECK YOUR PROGRESS -1**

1) What two important factors constitute living standards?

2) Who developed “Human Development Index”.

3) How tourism supports education, health and infrastructure services

4) How tourism is related to ‘living standards’

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**4.3.2 SOCIAL AWARENESS AND INTEGRATION:**

Social awareness means whether we are aware about the things, events and current affairs around us. Social awareness is the active process of seeking out information about what is happening in the communities around you. A
greater awareness of social norms and problems leads to better understanding and better solutions. Developing social awareness involves learning about the dynamics of social relationships between individuals, groups and communities. A socially aware individual values human rights and acknowledges the importance of harmonious social interaction for the developmental progress of human beings.

Social awareness spans a wide spectrum, beginning with social skills development in early childhood and encompassing the level of social consciousness that leads to social activism and societal transformation. Here are some strategies for developing social awareness. Tourism can be the most effective tool for social awareness among the communities and cultures around the country or globe.

Social integration means reducing the disparity and misbalance among the different groups or communities of the country. If we think from the perspective of our country (India) there is no good social integration as we can see the differences in terms of income, education and living standards. Social integration is the movement of immigrants or minorities into the mainstream of society so they can get to be integrated into the mainstream of the society in which they belong. A current example would be a family that has immigrated from Mexico to the US. They learn English, get jobs and education, get assimilated into the society. Eventually they are mainstreamed. Social integration, in sociology and other social sciences, is the movement of minority groups such as ethnic minorities, refugees and underprivileged sections of a society into the mainstream of society. Members of the minority groups thus gain full access to the opportunities, rights and services available to the members of the mainstream.

4.3.2.1 Role of tourism in social awareness:

Tourism activities can play a wonderful role in social awareness as we know that tourism is a social activity. While the individuals or group of tourists travel to a distant tourist destination they frequently interact with a variety of people like transporters, travel agents, people at hotels and restaurants, peoples providing goods and services and the destination community itself. As we have discussed above social awareness mean to what extent we know or understand the social problems around the world. These social issues can be political, educational, social movements, national or international issues, views about a person place or event etc.

Group of tourists, visiting a tourist destination often stay a significant period of time among the people of local community. They frequently need to interact with these people using direct or indirect conversation sometimes formally and sometimes informally both. As the result of direct conversation they often discuss the different types of issues depending on their interest and the
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educational level of local community. Encompassing an increasing number of new destinations, the tourism sector currently focuses on development, and these dynamics have transformed tourism into a key driver towards initiating socio-economic progress on a global basis. Tourism has always been like a good facilitator of social awareness. The relation of tourism and social awareness can be listed through the following points-

1) Tourism enables the interaction between two different groups of people, community and society across the country as well as world.

2) Tourism activities like (interaction with guide), interaction with local people, hotel employees, local transporters etc creates the opportunity for tourists to share and discuss the different social issues depending on the time, situation and interest.

3) The exchange of thoughts and views gives the tourists as well as local people time to think and understand the critical current social issues and events.

4) The mutual discussion between tourists and other people helps to understand the problem better and hence eventually support to draw some useful and effective conclusions and ideas.

Many of the tourist destinations essentially have something special and interesting to offer for rest of the world. Without tourism activities these distant places don’t have enough resources to share and discuss their inherent problem and issues. Tourism itself can be a very effective tool for social awareness and discussion on the current critical topics which eventually provides the better and effective solution for the various local, national and international problems and topics. Various new forms of tourism like cultural tourism, medical tourism and educational tourism works like the promoter and demonstrator of social awareness. The rapidly growing sector of adventure tourism is increasingly getting aligned with community - based programmes across the country. With the rapid growth of tourism related services, technologies and infrastructure the tourism is now turning into a global industry and has now a global effect on social issues.

4.3.2.2 Tourism and social Integration:

Social integration is the movement of immigrants or minorities into the mainstream of society so they can get to be integrated into the mainstream of the society in which they belong. Tourism can play a significant role in the process of social integration. Tourism activities provide the opportunity to establish long term relationship between group of tourists and the local community. Generally tourist destinations are situated various distant parts of the country, community around these destinations generally does not aware about the social integration and awareness.
The World Summit for Social Development in Copenhagen in 1995 defined an inclusive society as “a society for all”, in which every individual, each with rights and responsibilities, has an active role to play. Such an inclusive society is equipped with mechanisms which accommodate diversity, and facilitate / enable people’s active participation in their political, economic and social lives. As such, it over-rides differences of race, gender, class, generation, and geography, and ensures equal opportunities for all to achieve full potential in life, regardless of origin. Such a society fosters, at the same time, emanates from well-being of each individual, mutual trust, sense of belonging and interconnectedness. “Social Integration can be seen as a dynamic and principled process where all members participate in dialogue to achieve and maintain peaceful social relations. Social integration does not mean coerced assimilation or forced integration.”

Tourism is the most important factor in developing the long term and peaceful steady relations between two different groups of people. The local person always tries to establish and maintain healthy relations with foreign tourists for their economic benefits and means. On the other side the tourists also want to establish good relations with the destination community for their own reasons such as for their routine services, daily needs etc. these mutual requirements eventually turns into a long term and good relations between tourists and local people.

Tourism can not only aware the local community about critical current affairs of the nation and world but it also increases the feelings about national pride and prestige. The social satisfaction brought by tourism indirectly boosts the national social integration. Social and cultural tourism are good motivator factor towards national and social integration.

**CHECK YOUR PROGRESS - 2**

1) How tourism helps in increasing social awareness

2) How tourism supports social integration

3) When did united nation pass a universal declaration of ‘human rights?’
4.3.3 GREATER COMMUNICATION WITH OUTSIDE WORLD:

Communication means “exchange of ideas between two or more people, groups or communities”. One definition of communication is “any act by which one person gives to or receives from person information about that person's needs, desires, perceptions, knowledge, or affective states.

Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or nonlinguistic forms, and may occur through spoken or other modes.” Communication is the fundamental quality of human beings. We can’t imagine modern life without proper communication with others and outside world. The current global age requires a sufficient and easy communication in order to succeed as a person, community or nation. One of the clear advantages of tourism is that it provides opportunity and time to make effective communication with outside world. The overall tourism management activities from booking of tour to interaction with local tourist destination community inherently involve the mutual communication at every stage. Hence tourism can be thought of as an effective tool in social and interpersonal communication. The social communication and discussions benefit in all the aspects of modern life to both local community and tourists.

All the tourism related activities implicitly involves all types of communication at every stage. Tourism is an industry that sells intangible experiences. Communication is vital to the success of tourism businesses since it is only through the effective use of communication that tourism marketers can offer to customers tangible cues about those intangible experiences. Also, while communication is an essential component in the conduct of any service business, it has got an overarching role in tourism. Tourists are individuals who want to escape from the routines of the mundane world. They want to experience 'the other' aspect of their selves not allowed to be expressed in the ordinary life settings. Such a conceptualization of the tourism phenomenon gives us clues about the type of communication that will be appreciated by tourists.

The following tourism related activities involve effective and proper communication with the outside world-

1) As individuals or group of tourists start to plan their tour they need to know certain things like wages, fairs, and some knowledge about the destination culture.
2) Tourists often need a local support mostly in the form of a tour guide, which establishes an effective communication between local and outsider people.
3) Different group of people generally come across during their tours, and they start to communicate with each other in order to pass the time or increasing their knowledge base.
4) A tourists are not supposed to have good and in-depth knowledge about the destination; they have to communicate with the local community to understand all the related issues about popular tourist destination spot.

5) Group of tourists often spend a significant amount of time around the destination, this situation creates good environment for proper communication with local people.

6) The distant tourist destinations generally don’t have enough resources and mediums for communication with outside world, in such destinations tourism could be the only effective medium of real person to person communication.

Some of the tourist destinations are so far from the developed region / cities that they find it very difficult to establish the proper and effective communication with the outside world. Modern Communication tools and mediums rarely make their reach to such distant and difficult to reach places. All the countries generally have some of their tourist destinations in such regions in India for example the distant tourist spots of mountains, destinations in dense forests or deserts etc. for these hard to reach places tourism is the only medium for communication with the rest of the country or world.

Different types of communication can take place during the tourism activities such as person to person communication, group to group communication and local community to foreign tourists’ communication. With the increase in tourism activities around a distant destination spot various modern tools and techniques of communication start to establish by private or government sectors such as telephone, cell phones, internet etc. These modern and powerful means of communication eventually boost the communicating power of local people so that they can easily share their issues with the rest of the world. The success and effectiveness of tour and travel activities depends heavily on the proper communication at every stage.

Many of the isolated tourist destinations come under the category of places that don’t have effective mediums for communication with outside world. Tourism can dramatically increase the reach of communication to these isolated tourist destinations. Tourists are now using the latest mediums of communications such as laptops, tablets, smart phones and mobile phones. These latest tools are very effective in order to establish communication across the very long distances. In modern tourism activities these latest tools and mediums are proving of great advantage for local community as well as foreign tourists.
Different cultural and social activities related to tourism play a very important role in the process of establishing effective communication with the outside world. Various cultural festival and meets around the tourist destination makes it possible to exchange the ideas and arts between local people and tourists groups. During these cultural and social activities tourist often come very close to the local community, by observing and understanding their local arts and cultures. This creates a very impressive medium for communication with outside world in the form of foreign and domestic group of tourists. These activities are also responsible to increase the communication skills of local community so that they can attract more and more tourists towards their local tourist destination. Tourism is often portrayed as a rite of passage.

Tourists go through various stages, each with different communication needs. A potential tourist is an information seeker. That means, they expect communication to be full of relevant information, say, on attractions, accessibility, and amenities available as part of a vacation. It is crucial to offer all the relevant information but at the same time steer clear of information overload. Most tourists are busy individuals in their routine lives and do not have the time or resources to swim through an ocean of information. Given the international nature of the industry, especially if you are dealing with international tourists, it is imperative that you employ foreign languages for communication. However, mechanically translating words and phrases into a foreign language has its own dangers: such translations often turn out to be offensive and culturally unacceptable.

CHECK YOUR PROGRESS - 3
1) What is the role of communication in tourism activities?

2) How tourism enhances the communication with outside world?

3) What do you understand by the term ‘inter personal ‘and’ inter community ‘communication’?

4) How tourism motivates the local people to learn foreign languages?
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4.3.4 MODERNIZATION OF INFRASTRUCTURE:

Tourism is one of the fastest growing industries, and it has proven that it is one of the most effective economic sectors in various countries. Infrastructure is basic physical and organizational structures needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. It can be generally defined as the set of interconnected structural elements that provide framework supporting an entire structure of development. It is an important term for judging a country or region's development. Infrastructure facilitates the production of goods and services, and also the distribution of finished products to markets, as well as basic social services such as schools and hospitals; for example, roads enable the transport of raw materials to a factory. In fact infrastructure is a very broad term that includes the following things inherently –

- The development of transportation mediums such as roads, train and air network etc.
- Physical development around a destination such as hotels, schools, factories etc.
- The development in the delivery of goods and services like communication services.
- The various modern engineering constructions such as bridges, large buildings and residential colonies.
- Social, energy and publics creations
- Civil defense and economic development

The good and developed infrastructure around a tourist destination increases the rate of foreign and domestic tourist arrival as infrastructure is directly related with the overall tourism industry. Modern infrastructure is essential when trying to attract tourists from abroad. The growing tourism activities around a destination make the government / private authorities to upgrade or develop the entire infrastructure around the destination. Expansion and modernization of infrastructure is perhaps the single most important challenge to travel and tourism in reaching its potential for wealth and employment generation. In order for them to attract consumer, they must provide a service that will comply and surpass the demand of the consumer. Income from tourism is an important source for expansion and modernization of infrastructure in a country. Many regions in the world are not in a position to reap the benefits of tourism simply because of the lack of infrastructure. In fact, if we look at the countries and the regions within the countries, the ones having adequate infrastructure are the greatest beneficiaries. The top 40 tourist generating and receiving countries all have excellent infrastructure.
The consistent increase in domestic and foreign tourism is an important reason for the development and modernization of basic infrastructure services around the popular destinations. Tourism Infrastructure demands for goods and services, and the establishments which provide such services are considered as part of the tourism industry. Further, the Tourism Infrastructure also includes establishments whose products are mainly sold to visitors, though they do not form a major share of tourist consumption. Several infrastructure sectors like power, telecommunication, water supply, roads and some production sectors like travel items, sports equipment; photographic materials, medicines and cosmetics are included in this category along with Tourism Infrastructure. The impact of tourism on the different infrastructure services is described below-

1) Modernization of transportation infrastructure: The tourism sector is growing day to day, parallel with the development of all related industries like transportation services. The modern transportation services are much faster and safe than the older ones. Higher tourism arrival rate is the only most important reason for the modernization of transport infrastructure. The infrastructure for tourism thus includes basic infrastructure components like airports, railways, roads, waterways, electricity, water supply, drainage, sewerage, solid waste disposal systems and services. Moreover, facilities like accommodation, restaurants, recreational facilities and shopping facilities also comes under the ambit of Tourism Infrastructure. Planning for sustainable development of Tourism Infrastructure, therefore, involves the integrated development of basic infrastructure and amenities along with all the tourism facilities in a balanced manner. The modern transport infrastructure makes it really easy and fast to reach even a longer destination in time and with safety. Modern transport infrastructure includes the following –

- Improved and strong road network across the country
- New and luxury transport mediums such as luxury buses, palace on wheels, etc.
- Availability of modern means like airplanes, private jets, new air bases etc.
- Increase in luxury tourist ships, cruise, special tourist trains, mini buses etc.
Modernization of transportation services is directly related to the growth of tourist activities around a tourist destination. If the destination is easy to reach there will be more tourists. Many of the distant destinations are now under the reach only because of increased tourist activities around it.

The modernization of tourism infrastructure has made it simple, easy to reach and economical for all destinations across the country. This eventually boosts the tourist arrival rate of almost every destination across the country or globe.

2) Modernization of accommodation infrastructure: Accommodation is the second important infrastructure service directly related to tourism activities. Good and improved infrastructure services attract the visitor to come and stay with comfort. The need for accommodation in different classes of hotels suiting the varying requirements of tourists is no less an important part of tourism infrastructure. Accommodation facilities in the host country have become such an important part of tourist industry that it is now known as hotel industry by itself. Best possible room and restaurant services are in great demand for allure the tourists. Chair stores supplying fast food for locally prized items of art and craft work also exist either within hotel complexes or in collaboration with outside selling outlets. Such hotels earn 50% of foreign exchange reaching us from international tourists during their stay in India. The growing rate of tourist arrival is continuously improving various accommodation infrastructures across the country such as-

- Forest lodges
- Five star and three star series of hotels
- Tourist complexes / tourist lodges
- Wayside amenities
- Motels, cafes and modern restaurants
- Tourist reception centers
- Pilgrim sheds / dormitories, etc. at pilgrimage centers
- Public conveniences

The accommodation infrastructure has the power to attract and keep stay foreign as well as domestic tourists. Other than the three to five star hotels, the hotels are further graded into different categories on the basis of comforts provided. These are named as motels, tourist bungalows and tents or lodges for seasonal, shorter or longer stays. Lodging arrangements are also made in guest houses or in people’s homes as paying guests. The sites for lodges are chosen carefully in forests, now spring grounds, close to camping grounds for putting up tents or water bodies for floating houseboats. All such sites are considered as tourist friendly in tourist resorts. Many centers of tourist interest have small hotels
with fewer luxuries inside but provide for a great number of recreations and sports outside in their vicinity. These are the examples of closer relationship between organization of suitable accommodation and various tourist activities possible for a particular duration at a tourist place.

**Exhibit 1.1 Structure of the hotel industry**

![Diagram of hotel industry structure](image_url)

3) **Communication and other infrastructure development:** Modernization of many other infrastructures such as communication, emergency services, hospitals, development of new bridges etc have been taking place due to increased tourism activities. Various new communication tools and techniques are installed around the popular tourist destination in order to satisfy tourists and make them stay connected with the outside world. Modern internet and mobile phone services across the distant tourist spot are the good examples of this modern communication infrastructure. A number of emergency services are now growing due to tourism such as taxi service on call, on demand ambulance etc. these on demand modern services are of vital importance for the development and growth of tourism itself. Tourism has upgraded many other infrastructure services like bridges and tunnels across the difficult mountain areas. Tourist Destinations in such areas are now well connected with rest of the country due to modernization of these infrastructures.

Tourism has developed and upgraded various infrastructure services across the country. The modernization of these entire infrastructures is beneficial to tourists as well as local community. This also brings the economic growth around the tourist destination.
CHECK YOUR PROGRESS - 4

1) What do you understand by tourism infrastructure?

2) How the tourism is related with the modernization of the transport infrastructure.

3) List any 3 modern accommodation infrastructures due to tourism

4) What do you understand by ‘tent accommodation?’

4.4 SUMMARY:

Tourism provides a number of social benefits to both tourists and the local community around the destination. The economic and cultural impacts of tourism improve the living standard of the local people. With greater income and employment the local people can uplift their life style, goods and services, education etc. all these impacts of tourism eventually improves the life styles of the local community. The frequent interaction with the foreign and domestic tourists is one of the most important reasons behind social awareness and integration. This interaction also helps in sharing, understanding and solution of the critical current social issues which results in increased social awareness and integration across the country. Tourism provides a good and effective opportunity for community to community communication to exchange mutual thoughts and problems. Infrastructure development is very important social advantage of tourism because it is directly related with the growth and development of tourism itself. Good infrastructure services can boost the tourist arrival rate to a tourist destination.

4.5 GLOSSARY:

- Community: group of people living around the same place
- Infrastructure: basic physical services, necessary for the growth of a country
- HDI: Human development index (a standard index used to measure the living standard of a society or community)
- Immigration: the movement of people into another country or region to which they are not native in order to settle there
- Modernization: to make modern / to upgrade
4.6 CHECK YOUR PROGRESS:

**Check your progress - 1**
1) Lower poverty rate, availability of education
2) Pak economist Mahhub ul haq and Indian economist Amritya Sen 1990
3) By attracting investment
4) Increasing the income of local community

**Check your progress - 2**
1) Interaction, communication
2) Interdependence of tourist and destination people
3) 1948

**Check your progress - 3**
1) Interaction with local people
2) By sharing problems at a global level
3) Person to person, community to community
4) To make better communication with tourists

**Check your progress - 4**
1) Physical facilities to carry out tourism activities
2) Growing trend of mass tourism
3) Cruise, five star hotels, suites
4) Temporary outdoor accommodation

4.7 REFERENCES:

- Building Community Capacity for Tourism Development, Gianna Moscardo
- Tourism Destination Marketing and Management: Collaborative Stratagies, Youcheng Wang, Abraham Pizam
- Social Tourism in Europe: Theory and Practice, Scott McCabe, Lynn Minnaert, Anya Diekmann
- Tourism in India and India's Economic: Development, Kartik Chandra Roy, Clement Allan Tisdell
- Tourism and Inequality: Problems and Prospects, Stroma Cole, Nigel Morgan
- The Economic and Social Impact of Tourism, Batir Mirbabayev, Malika Shagazatova
4.8 SUGGESTED READINGS:

- Pro-poor Tourism: Who Benefits?: Perspectives on Tourism and Poverty Reduction, Colin Michael Hall
- Building Community Capacity for Tourism Development, Gianna Moscardo
- Tourism Destination Marketing and Management: Collaborative Strategies, Youcheng Wang, Abraham Pizam
- Social Tourism in Europe: Theory and Practice, Scott McCabe, Lynn Minnaert, Anya Diekmann
- www.haroldgoodwin.info/shval/Ken%20Robinson.ppt

4.9 MODEL QUESTIONS:

**Short answer type questions:**
1) Differentiate between foreign and domestic tourists
2) How tourism affects the local society
3) What do you understand by the term ‘modernization’ in the context of local community?
4) How tourism increases the communication between local people and outside world
5) Explain the term social awareness
6) What is quality life?
7) Write short notes on the followings-
   (a) Social integration
   (b) modernization
   (c) HDI
   (d) religious freedom

**Long answer type questions:**
1) Discuss the concept of society, how tourism affects the local society and people
2) Explain the relationship between tourism and the modernization of infrastructure
3) Briefly describe the role of tourism in social awareness and integration in India
Unit 5: NEGATIVE IMPLICATIONS OF TOURISM

Structure:
5.1 Introduction
5.2 Objectives
5.3 Negative implications of tourism
   5.3.1 Neo colonization due to tourism
   5.3.2 Inflation and tourism
   5.3.3 Conspicuous consumption patterns
   5.3.4 Withdrawal of labour from other sectors
   5.3.5 Over dependence on tourism
5.4 Summary
5.5 Glossary
5.6 Check your progress
5.7 References
5.8 Suggested readings
5.9 Model questions

5.1 INTRODUCTION:

Apart from wonderful economic, social and cultural advantages of tourism, it can have many negative impacts on the destination community. The growing rate of mass tourism can generate many serious social problems such as neo colonization, inflation, conspicuous consumption patterns and withdrawal of labour from other regions/sectors. The mass tourism is a form of tourism when large group of tourists visit the tourist destination for a sufficient long period of time. Mass tourism generates the problem of neo-colonization means these tourists directly or indirectly dominate the local economy and their social and cultural behaviors. Neo colonization can stop the local community to develop by their own efforts or create their own means of economic growth or employment. Eventually this scenario can give birth to another serious problem known as ‘over dependence on tourism’. If a popular tourist destination attracts enough tourists, then the overall economic scenario of the destination bounds to the only tourism sector. In such destinations all the business, activities and investments are tourism-centric. This overdependence on tourism can really destroy the local economy if the tourist arrival rate decreases due to some natural or artificial disaster or issue. It can never be good for any destination to be over dependant on tourism.
In developing countries such as India increased tourism activities can create the problem of conspicuous consumption (CC). Conspicuous consumption occurs when the wealthy class of consumers (tourists are generally rich) start to consume the valuable resources at a very fast rate. This could be very fatal for local community around the destination. The poor people around a destination may be unable to buy and use these valuable (sometimes limited) resources. The consumption at a very fast rate can really cause a significant problem for local people and society. The sustainable tourism is the new concept that can bring balance in this situation. The increased consumption of goods and services again generate the another problem of inflation. Inflation is a rise in the general level of prices of goods and services in an economy over a period of time. The rate at which the general level of prices for goods and services is rising, and, subsequently, purchasing power is falling is known as inflation. Inflation's effects on an economy are various and can be simultaneously positive and negative. Negative effects of inflation include an increase in the opportunity cost of holding money, uncertainty over future inflation which may discourage investment and savings, and if inflation is rapid enough, shortages of goods as consumers begin hoarding out of concern that prices will increase in the future.

The exponential growth of tourism sector around a tourist destination can cause to start the withdrawal of labour from other sectors and industries towards tourism sector. This rapid withdrawal of labour from other industries can result into effective damage for other sectors. If tourism industry falls down for some reason; then this situation can generate a good amount of unemployed population which is again a problem for local community.

All these issues are negative social implications of tourism that can destroy the local economy or society in the absence of proper tourism management plan. The new concept of sustainable tourism takes into account all these issues and turn the tourism beneficial to both tourists and the local community which we will read in the upcoming chapters. We will now discuss each of these problems of tourism in detail in the following sections-

5.3 NEGATIVE IMPLICATIONS OF TOURISM:

Tourism could be significantly harmful for local economy and community. It can destroy or misbalance the destination economy in various ways like inflation, over dependence on tourism and consumption at a very high rate. Rapid boom in tourism activities around a popular tourist destination can cause the migration of labour from other sectors / industries to tourism sector. This is the negative social effect of tourism known as withdrawal of labour from tourism. A large amount of labour with drawl can significantly damage all the other industries inside the destination economy. If an economy has a great contribution
of tourism in its development and growth, then it can be very dangerous for local economy and people. Over dependence on tourism occurs when the destination economy collects most of its earnings from the tourism sector itself. If the tourism sector falls down for some reason, it can destroy the overall local economy of that destination. We will now discuss all these negative implications in detail-

### 5.3.1 NEO COLONIZATION DUE TO TOURISM

In the olden days nations would conquer other nations and call it colonizing. In this day and age it refers to dominating and takes over a country not just through force but mainly through economic and cultural ways this process is known as neo colonization.

The efficacy of tourism in making a positive economic contribution cannot be overestimated, particularly when viewed in the light of the relative speed and cost-effectiveness of tourism capacity building compared to that of many other industries. Neither can the attractiveness of tourism be overestimated for those countries whose geography, climate, culture and/or history seem to compose an endogenous product ready for exploitation. However, for all its inherent desirability as a tool for rapid economic gain, experience tells us that tourism development is also fraught with danger. Its apparent success in underpinning development strategies, particularly in less developed countries, is now considered as less than convincing. Economic, socio-cultural, and environmental concerns currently surround tourism development and consumption and cast doubt on its long-term sustainability. These concerns have led tourism planners to seek strategies that embrace the doctrine of sustainability; that tourism should balance environmental, social, and economic considerations such that it meets the needs of the current generation without sacrificing the ability of future generations to meet their own needs. This paper uses The Gambia as a case study to propose that sustainable tourism is, an oxymoron, particularly in developing countries where the imperative for rapid national economic development would seem to be in direct contradiction with decentralized, community-led ‘sustainable’ tourism strategies. It will also argue that there are as many shades of sustainability as there are differences in socio-cultural, economic, and environmental context around the globe, and that whilst ‘sustainability’ may be the goal of any country hoping to reap the undoubted benefits of tourism in the longer term, we should not impose the aspirations of the developed world on those whose needs are more immediate.

**Neo-colonialism** (also Neocolonialism) is the geopolitical practice of using capitalism, business globalization, and cultural imperialism to control a country, in lieu of either direct military control or indirect political control, i.e. imperialism and hegemony. The term *neo-colonialism* was coined by Ghanaian
president Kwame Nkrumah, to describe the socio-economic and political control that can be exercised economically, linguistically, and culturally, whereby promotion of the culture of the neo-colonist country facilitates the cultural assimilation of the colonized people and thus opens the national economy to the multinational corporations of the neo-colonial country.

It's exactly what sounds are: new colonialism. Instead of physically occupying a territory, a stronger nation dominates it in economic and cultural ways, especially, in the economic sense in regards to their trades and imports. This is what many political scientists believe keeps many third world countries poor. Check out the history of Jamaica and you will find many good arguments for why it's in a deplorable situation. It's all over and is widely practiced because the colonized countries have become in a way dependent on their "masters" (for lack of a better term). The masters in turn take over every economic aspect (how it's run, trade deals, and what companies invest in there). It's basically a powerful country dominating a weak country.

The development of mass tourism in the western world was linked to the economic development of society. The impact made by tourism depends upon the volume and characteristics of the tourists (length of stay, activity, mode of transport, travel arrangement, etc.). Tourism is the phenomenon of modern masses that has opened up the land market, tourism is introduced and allows the invaders to take control of land, that means invasions without army but invasions that colonize and destroy the economic, political and above all the cultural structures of the communities that suffer directly from the effect of tourism.

Many development countries have turned to tourism and are depending upon it as a means of securing profits and to achieve the goal of increase foreign exchange earnings. Their success depends, in part, on their enthusiasm to lodge fully the needs of tourists. Usually in these areas the political organization and economic priorities are directed towards the satisfaction of the demands of tourists. There is a one-way transfer of capital that go together with the development of tourism, from the destination area to points of tourist generation because a huge amount of expenditures and profits flow back to foreign investors.
The employment of non-locals in professional and executive positions, have also provoked charges of neo-colonialism. “Tourism means work for most locals, leisure for the visitors, and this situation creates misunderstandings and conflicts of interest”.

Neo colonization of the local destinations can leave them in the external (foreign country) control.

Culture homogenization plays into neo-colonialism, and a striking example of this would be the people of Ladakh. There are many pressures that a small society faces in the way of modernizing. Some of these pressures are tourism, the globalizing of world economy, and the Americanizing of the world. How does tourism play a role in the pressures facing a society with traditional values? Well, when tourists come through lesser advanced cultures, western cultures come with them. Imagine this: you are living in a society that has never had any contact with outside forces, and your society wears handmade clothes, has no toys (or no mass produced toys) and you have to work all day to produce for the community. Then imagine that you are this person seeing tourists trickle in with their blue jeans, nice shirts, toys, backpacks, etc. and they stare at you as if there is something wrong with you. They want to consume what you have made (clothing etc.) but you have no system in place to put monetary value on what you produce (never having seen money before) and engineers are building roads through your village, and cars are rolling through. You see how simplistic it is to get from point a to point b using modern technology, and that these people don't have to do work to produce what they wear and use. This puts pressure on the community to try and create an infrastructure to cater to these tourists, therefore adopting money, and western ways of doing things to appease the tourists. The pressures put on the culture to modernize are set in motion because the people see that outside of the community there is more to be had, more opportunity and greater objects to be had. How does the globalizing of a world economy affect small cultures and put pressure on them to modernize? As we saw in the Ladakh essay characterized by this quoted, "Until 1962, Ladakh remained almost totally isolated from the forces of modernization. In that year, however, in response to the conflict in Tibet, a road was built by the Indian Army to link the region with the rest of the country. With it came not only new consumer items and a government bureaucracy, but a first misleading impression of the world outside. Then, in 1975, the region was opened up to foreign tourists, and the process of 'development' began in earnest." A society that had been self sufficient and isolated for years had been affected rather quickly when the military built a road, and with that road came consumer items from other cultures, and that road brought tourism, and that road brought neo-colonial oppression. Neo-colonialism relies on homogeny to continue its economic and social hierarchy.
Economic dominance is a reality for resource rich countries afflicted by neo-colonialism, leading to many problems. One of these problems is resource reliance, because of a lack of localized sustainability, brought on by the history of colonialism. Many of these problems could be solved with an out and out revolution, or insurrection against the legacy of colonialism and neocolonialism.

5.3.2 INFLATION AND TOURISM:

The phenomenon of price rising of general goods and services due to increased mass tourism activities is known as Inflation in the local economy. Inflation is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase. The value of a rupee does not stay constant when there is inflation. The value of a rupee is observed in terms of purchasing power, which are the real, tangible goods that money can buy. When inflation goes up, there is a decline in the purchasing power of money. For example, if the inflation rate is 3% annually, then theoretically a Rupees 1 pack of gum will cost R 1.03 in a year. After inflation, your rupee can't buy the same goods it could beforehand. Generally inflation in an economy can be of two types -

**Demand-Pull Inflation** - This type of inflation can be summarized as "too much money chasing too few goods". In other words, if demand is growing faster than supply, prices will increase. This usually occurs in growing economies.

**Cost-Push Inflation** - When companies' costs go up, they need to increase prices to maintain their profit margins. Increased costs can include things such as wages, taxes, or increased costs of imports.

If interest rates increase, inflation can occur. The cost to borrow money goes up for businesses, increasing their cost and so on. However, higher interest rates also encourage people to save more and spend less, shortening demand and lowering prices on items. The main reasons behind the rise of inflation in an economy are listed as below -

1. Increase in Demand and fall in supply causes rise in prices.
2. A Growing Economy has to pass through Inflation.
3. Lack of Competition and Advanced Technology (increases cost of production and rise in price)
4. Defective Monetary and Fiscal Policy (In India its fine)
5. Hoarding (when traders hoard goods with intention to sell later at high prices)
6. Weak Public Distribution System

Almost everyone thinks inflation is evil, but it isn't necessarily so inflation affects different people in different ways. It also depends on whether inflation is anticipated or unanticipated. If the inflation rate corresponds to what the majority of people are expecting (anticipated inflation), then we can compensate and the cost isn't high. For example, banks can vary their interest rates and workers can
negotiate contracts that include automatic wage hikes as the price level goes up. When more people fight over fewer goods, the price increases. We have seen an increase in the inflation rate, in part, because countries like China and India, which had virtually no industrial base a few generations ago, have billions of citizens poised to enter the middle class in the coming years. That means that the fixed, small supply of global copper, silver, gold, and other commodities will be bidded upon by a much larger group of potential buyers, driving up prices. In the past, a handful of industrialized nations, such as the United States, Canada, Australia, Great Britain, Germany, France, Italy, Russia, etc. were the only ones in the game when it came to requiring oil or other commodities. Problems arise when there is unanticipated inflation:

- Creditors lose and debtors gain if the lender does not anticipate inflation correctly. For those who borrow, this is similar to getting an interest-free loan.
- Uncertainty about what will happen next makes corporations and consumers less likely to spend. This hurts economic output in the long run.
- People living off a fixed-income, such as retirees, see a decline in their purchasing power and, consequently, their standard of living.
- The entire economy must absorb reprising costs ("menu costs") as price lists, labels, menus and more have to be updated.
- If the inflation rate is greater than that of other countries, domestic products become less competitive.

Rapid growth of tourism activities at a tourist destination demands the necessary goods and services at a higher rate. Sometimes at some distant destinations these goods and services may not be available as per the demand, but the tourists continue consumption at a higher rate. Due to increased mass tourism the local and regional retailers can adjust the prices (generally increase) so that they can take significant benefit from this higher demand. Group of tourists often don’t care about these changes in prices and they continue to buy the services. Inflation may cause some other serious problem in destination society like unemployment and the reduction in living standards.

![Image: Inflation rate in India](Figure 2: Inflation rate in India)
The most important steps a civilization can take to guard against a high rate of inflation is to maintain a stable currency. Mostly, this is accomplished by running balanced budgets and avoiding significant deficits. Unfortunately, if a nation finds itself in a situation where it is facing massive deflation risk due to an asset bubble popping, which just means prices were driven up because people took advantage of low interest rates to buy stuff and drive up the market price of homes, cars, jewelry, and art, the only way to avoid a Great Depression is to purposely print money and depreciate the currency.

CHECK YOUR PROGRESS - 1

1) what do you understand by’ neo colonization’?

2) How tourism increases neo colonization?

3) What factor of tourism causes inflation?

4) What was the average inflation rate in India during the year 2012?

5.3.3 CONSPICUOUS CONSUMPTION PATTERNS:

Conspicuous consumption is the spending of money on and the acquiring of luxury goods and services to publicly display economic power, either the buyer’s income or the buyer’s accumulated wealth. Sociologically, to the conspicuous consumer, such a public display of discretionary economic power is a means either of attaining or of maintaining a given social status. In the 19th century, the term conspicuous consumption was introduced by the economist and sociologist Thorstein Veblen (1857–1929). The desire to conspicuously consume dates back to tribal times when men possessed women and slaves as trophies of their status.

Since that time, although the players and what is consumed have changed, the game of ostentatious ownership has remained essentially the same, with the winners being awarded status, prestige and honor. Early in the game, only the aristocratic elite could play.

Tourism is a well known motivator of conscious consumption of goods and services within a tourist destination premises. Increased tourist arrival rate is directly related with the conspicuous consumption. Generally there are three ways of tourism related conspicuous patterns as follows –
1) Members of rich tourism generating countries such as USA, Europe etc can be viewed as the conspicuous consumers of the valuable natural or manmade resources around a tourist destination. Increased arrival rate of mass tourism from these developed countries can raise the problem of conspicuous consumption pattern.

2) Individual holiday choices made amongst complex status hierarchy of destination could generate conspicuous consumption. These wealthy groups of tourists often come to the destination to spend their holidays with leisure and comfort. They often show their ego and high status by consuming the necessary goods and services at a very higher rate.

3) The other potential indicators of prestige like souvenirs, photographs, gifts, postcards all of which can point the relative affluence of the holidaymaker and in that sense constitute the symbols of conspicuous consumption. This showing off is also known as post modernism.

The problem of conspicuous consumption patterns can be very serious for local community and economy. UN General Assembly has adopted a resolution on 'Sustainable Tourism' as part of its 'Programme for the further implementation of Agenda 21', the action programme adopted at the Rio Earth Summit. This resolution acknowledges the need to consider further the importance of tourism in the context of Agenda 21. Among other things, it states: 'For sustainable patterns of consumption and production in the tourism sector, it is essential to strengthen national policy development and enhance capacity in the areas of physical planning, impact assessment, and the use of economic and regulatory instruments, as well as in the areas of information, education and marketing.' Furthermore, the resolution calls for participation of all concerned parties in policy development and implementation of sustainable tourism programmes.

Conspicuous consumption around a tourist destination has also created considerable public debate about the impacts of global culture and lifestyle, including the issues of consumerism and the wasteful and unproductive use of resources. In several Asian countries - such as Korea, Thailand and Malaysia - outbound tourism is now being discouraged as it is seen as conspicuous consumption that has contributed to the negative balance of payments. The term ‘conspicuous consumption’ has differentiated the society into two different level one that can buy everything for their pleasure (rich tourists) and second that is unable to buy theses valuable resources and goods (often poor local community).

Conspicuous consumption due to tourism may be related with the following valuable resources –

- The rapid consumption of valuable natural resources such as fresh water, fresh air and natural land spots in the form of industries, hotels and other infrastructure services.
- Consumption at a higher rate of necessary resources like drinks, foods and other goods essential for life.
- Consumption of special limited resources like natural oil, gas, transportation mediums trees and forests etc.

**Total energy consumption in India, 2011**

5.3.4 WITHDRAWAL OF LABOUR FROM OTHER SECTORS:

Withdrawal of a large amount of labour from other industries/sectors to tourism sector around a popular destination could be a common social problem of tourism. Tourism can attract significant amount of labour in the form of various employment opportunities such as jobs in hotels, tour and travel agencies, guides and other indirect jobs related to tourism. The hotels, catering and tourism sector is one of the fastest growing sectors of the global economy. It is also among the top-job creating sectors because its labour intensive nature and the significant multiplier effect on employment in other related sectors. Yet, the sector has a reputation of poor working conditions due to a number of factors: it is a fragmented industry with a majority of employers small and medium sized enterprises with low union density, and work characterized by low wages and low levels of skill requirements, shift and night work and seasonality.

The tourism industry is one of the fastest growing, accounting for more than one-third of the total global services trade. The ILO Forum addressed the high intensity of labour within the industry, making it a significant source of employment and placing it among the world's top creators of jobs that require varying degrees of skills and allow for quick entry into the workforce by youth,
women and migrant workers. According to an ILO report prepared for the Forum, international tourism was affected by the global economic and social crisis but is projected to grow significantly over the coming decade. The United Nations World Tourism Organization (UNWTO) is expecting the sector’s global economy to provide 296 million jobs by 2019.

Overall tour and traveling activities essentially requires a enough amount of laboring power, which can be described in the following categories-

1) **Labour resources of hotels and restaurant industries:** Catering industries such as hotels, motels and restaurants are labour intensive sectors and they solely depend upon the people resources. Increased mass tourism can attract labors from other sectors various types of tourism jobs in accommodation sector like hotels, guest house etc.

2) **Labour in the form of local tourism related small industries:** Various local industries may be started by local people in order to attract and support tourism activities around the destination. Local food and drinking industries, clothing services are the examples of these local services. These small industries related to tourism can cause damage to various other local labour intensive industries.

3) **Adventure tourism support in the form of local labour:** some types of tourism such as adventure tourism and distant forest and mountaineering camps essentially need some support of local people in the form of supporting labour (e.g. goods and luggage transporters).

4) Labour working in various supply chain services in goods and services sectors related to tourism.

Tourism sector has employed children labour for its various operations and services in restaurants, transportation and luggage services. According to the International Labour Organization’s (ILO) Global Report 2006, Tourism affects the lives of 218 million children. India has the distinction of the largest number of working children in the world today. According to Indian official statistics about 13 million children are engaged in tourism industry but unofficial estimates vary between 60-100 million. Throughout India there have been numerous studies which have shown the existence of child exploitation due to tourism. In the year 2006 the tourism and hospitality sector was added to the list of hazardous occupation under the Child Labour Act 1986.

The ILO estimates that between 13 and 19 million children under 18 years of age (10%-15% of employees) are employed in the tourist industry, in both developing and developed countries. However, Maggie Black, author of ‘In the Twilight Zone’ (1995) a report on child labour in the hotel, tourism and catering industry (HTC), emphasised that these figures are only a rough estimate as children working in the sector are often invisible and work on the fringes of legality. These figures also exclude the informal sector where most children are
employed. UNICEF and ILO estimate that 300,000 West African children descend into a life of servitude each year to work in plantations that sell their products to the tourism industry. In the Ivory Coast boys work in cocoa and coffee plantations while 30,000 girls under 14 years are domestic servants or street vendors in the city of Abidjan. In Colombia, many boys work from the age of 7 years as bricklayers on tourist resorts and then at 10 years become waiters in restaurants working from 8am to 11pm.

Tourism is widely recognized as a labour-intensive service sector. In addition, the nature of the sectors such that the multiplier and spillover effects are generally expected to be higher than other sectors.

Manpower Requirement in Hospitality Sector As per the study commissioned by Ministry of Tourism, the total employment in Hospitality Sector (Hotels- classified and unclassified, eating outlets, Tour Operators, Travel Agents and Medical & Wellness units) in selected years are estimated to be as follows:-

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>43.84</td>
</tr>
<tr>
<td>2012-13</td>
<td>47.26</td>
</tr>
<tr>
<td>2016-17</td>
<td>63.79</td>
</tr>
</tbody>
</table>

CHECK YOUR PROGRESS - 2
1) Name any four valuable resources related to tourism industry.

2) How tourism can generate conspicuous consumption?

3) What is the contribution of petroleum energy to the overall energy resources of India?

4) What is the role of labour in tourism industry?

5) How tourism can increase the ‘child labour‘ around a tourist destination?
5.3.5 OVER DEPENDENCE ON TOURISM:

Attracting and sustaining tourists towards a tourist spot could be very beneficial economically for local community. The negative side of this benefit cans results into over dependence on tourism sector. An over dependence means that fluctuations in demand can have far reaching effects on the overall economy. That means that a country (or town, city, etc.) relies too heavily on tourism to help their economy. In other words, they need to diversify to have a more stable economy. An example might be Tunisia. When dissidents targeted tourists and murdered several in Monastir the country became a no-go destination. The economy more or less collapsed and loads of people were laid off while hotels stood empty and tourist that went unsold. (Similarly, Egypt after the shootings at Hatshepsut Temple, or The Gambia after the various coup attempts).

Jobs involved in the industry of tourism are seasonal and not well paid; this can be very dangerous for countries that become dependent on tourism as their main source of revenue. Economic dependence, counties who rely heavily on tourism industry can be dangerous; this can lead the tourism to changes overnight because of the natural disaster, terrorism, changing consumer taste and economic recession in the source of the country.

Anywhere, whether it is a town or a country is in an economically vulnerable position when it is dependent on the health and vigor of just one industry. This also applies when tourism is the principal industry. Indeed, tourism revenues may fluctuate, for more than just seasonal reasons, beyond a destination or an attraction ability to predict and manage such a situation. Diversification in an economy is a sign of health.

**Trouble in Paradise**

The state of Hawaii is facing its worst recession in decades, largely due to a decline in its tourism. Hawaii’s unemployment rate has increased from 8% to 10% in the past year. Spending by air visitors has also declined, reflecting the economic downturn.

Sources: Labor Department: Hawaii’s Department of Business, Economic Development & Tourism
If a country, or region within a country, becomes dependent for its economic survival on one industry and that industry fails then the social consequences can be devastating. Overdependence on one or two industries is also often accompanied by underdevelopment within other sectors of the economy such as education, health, and the manufacturing and agricultural industries.

The tourism industry is extremely vulnerable to economic, social, and political changes in either the generating or host countries. In The Gambia, for instance, 30% of the workforce depends directly or indirectly on tourism. In small island developing states, percentages can range from 83% in the Maldives to 21% in the Seychelles and 34% in Jamaica, according to the WTO. Over-reliance on tourism, especially mass tourism, carries significant risks to tourism-dependent economies. Economic recession and the impacts of natural disasters such as tropical storms and cyclones as well as changing tourism patterns can have a devastating effect on the local tourism sector. In these top 10 countries, Caribbean, South Pacific and Indian Ocean island nations dominate, because of their remoteness from mainland’s and also because they happen to be in temperate climate that encourages tourism. They have also developed good air and shipping links with mainland hubs, mainly as a result of their history under Western imperialism.

Figure: Top Ten Countries that depend too much on tourism for its GDP.

If a country or region depends too much on tourism for its economic growth, then its economy would be very vulnerable in case of some natural or manmade disasters like earthquakes, terrorism, and floods etc. along with the decreasing tourist’s arrival rates the overall economy of that destination could be in great trouble. To avoid the sudden destruction of the destination economy, other industries and sectors must be developed parallel with the tourism sector.
CHECK YOUR PROGRESS - 3

1) What do you understand by over dependent on tourism?

2) What is the percentage contribution of tourism to the Indian GDP (2012?)

3) List top three countries around the world which are mostly tourism dependent

5.4 SUMMARY:

Tourism sector can have various negative social implications in the form of various socio-economic impacts due to tourism. Wealthy tourists of rich countries can start to dominate the destination economy and community by their economic, social and political power. This results in the well known old phenomenon of “neo colonization”.

Neo colonization could be the serious problem for poor and developing countries with weak economic and political power. Rapid growth in tourism activities in a destination community may raise the economic problem of inflation.

Inflation occurs when there are a high rate of increase in prices of general goods and services in the destination economy. Conspicuous consumption patterns occur when there is an increase in the mass tourism arrival rate. Group of rich tourists start to consume the necessary goods and resources of local community / economy by using their economic power, this situation harms the local people as they are unable to buy these precious goods and services which are also limited inside an economy.

Tourism needs a significant amount of man power generally in the form of labour resources working in hotels; restaurants etc. tourism can attracts this labour from various other sectors around the tourist destination. This continuous with drawl of labour from other sectors / industries can leave the other industries in danger by generating the loss of man power. Over dependence on tourism could be another problem for an economy or community. Whenever, due to any natural or manmade reason the destination economy falls down such as terrorism, natural disasters etc the whole country or region loses its economic stability.
5.5 GLOSSARY:

- **Neo colonization**: exploitation by a stronger country of weaker one
- **Economy**: An economy consists of the economic system in a certain region, comprising the production, distribution or trade, and consumption of goods and services
- **UNICEF**: United Nations Children's Fund, New York City, USA
- **ILO**: International Labour Organization, Geneva, Switzerland
- **Rio Earth Summit**: United Nations Conference on Sustainable Development
- **Mass tourism**: Mass tourism is group travel to a destination for purposes of leisure
- **Inflation**: inflation is a rise in the general level of prices of goods and services in an economy over a period of time.

5.6 CHECK YOUR PROGRESS

**Check your progress-1:**
1) Overdependence of poor country upon rich country
2) Economic dependence
3) Seasonal trend
4) Around 8.5

**Check your progress-2:**
1) Labour resources, water resources, power resources, and infrastructure
2) Peak seasons, buying power of rich tourists
3) 23 %
4) Support in hotel and adventure tourism
5) Child workers in hotel and restaurant services

**Check your progress-3:**
1) When most of the economy depends on tourism earnings
2) About 5%
3) Macau, British Virgin Islands, Aruba

5.7 REFERENCES:

- Cultural Tourism: The Partnership between Tourism and Cultural Heritage..., Bob MacKercher, Hilary Du Cros
- Managing Tourism Growth: Issues And Applications, Fred Bosselman, Craig Peterson, Claire McCarthy
- Principles of Tourism Part II' 2005 Ed., Z. Cruz
TOURISM IMPACTS

- Tourism and the Environment: A Quest for Sustainability, R. N. Batta
- Introduction to Tourism, Leonard J Lickorish, Carson L Jenkins

5.8 SUGGESTED READINGS:

- Cultural Tourism: The Partnership between Tourism and Cultural Heritage..., Bob MacKercher, Hilary Du Cros
- Principles of Tourism Part Ii 2005 Ed., Z. Cruz
- The Economic and Social Impact of Tourism, Batir Mirbabayev, Malika Shagazatova

5.9 MODEL QUESTIONS:

Short answer type questions:
1) What do you understand by the term ‘neo colonization? ’
2) What are the negative sides of mass tourism?
3) How tourism growth can cause inflation in the local economy
4) Differentiate between demand pull and cost push inflation
5) What are ILO and UN?
6) Write short notes on the followings-
   (a) Conspicuous consumption (b) inflation rate
   (c) Local economy (d) labour withdrawal

Long answer type questions:
1) Discuss the origin and concept of neo colonization, how tourism can increase the neo colonization in a poor economy
2) How tourism generates the problem of inflation and conspicuous consumption pattern in the local destination economy.
3) “The growth and development of tourism sector is creating the problem of withdrawal of labour from other sectors “justify this statement with examples in Indian context”
UNIT 6: SOCIAL COSTS OF TOURISM

Structure:
6.1 Introduction
6.2 Objectives
6.3 Social costs of tourism
   6.3.1 Demonstration Affect
   6.3.2 Materialistic Attitude
   6.3.3 Dilution of Social Institutions
   6.3.4 Increase in crime
6.4 Summary
6.5 Glossary
6.6 Check your progress
6.7 References
6.8 Suggested Readings
6.9 Model questions

6.1 INTRODUCTION:

Tourism has some social costs too. The behavior of individuals or group of tourists affects the local community and society (socio-cultural environment) of the destination in various ways. Some of these socio cultural effects are just positive such as cultural preservation, wider communication etc but some of these are negative like demonstration effect and materialistic attitude towards local people or society. Tourists are often going to the destination to enjoy their vacations with leisure and comforts. During their stay period around the destination their communication with local people, interaction and social behavior significantly affects the local community. Demonstration effects are effects on the behavior of individuals caused by observation of the actions of others and their consequences. The impact of tourists’ values and custom on local people is known as the demonstration effect. The term is particularly used in political science and sociology to describe the fact that developments in one place will often act as a catalyst in another place.

As tourists are the visitors around a destination for a short period of time they often just don’t have the enough respect or emotional aspects towards the various valuable resources and peoples of the destination. This type of social attitude towards the local community is better known as materialistic attitude. Tourism is also responsible for the dilution of the different types of social institutions such as families, local societies etc. the growing rate of mass tourism arrival to a specific destination can significantly affect these local social institutions.
The growing amount of mass tourism not only increases the above described social problems but it also responsible for the increase in different types of crimes and social –cultural abuse of local community and tourists both. In lack of proper security and safety guidelines the crime ratio can increase around a distant tourist destination. Increased rate of crime can significantly damage the local economy as tourists arrival rate (FTA and DTA) decreases and this reflects the bad image of the destination among the tourists around the world. Tourism related crime is a very serious and common problem especially for developing countries such as India, Pakistan and Sri Lanka etc.

6.2 OBJECTIVES:

After reading this unit learners will be able to understand the following issues related to social costs of tourism –

- To understand what is the ‘demonstration effect’ due to tourism
- How tourism develops materialistic attitude towards local resources and people
- How tourism is responsible for the dilution of the social institutes
- Why tourism can be a catalyst in ‘increase in crime around the destination’

6.3 SOCIAL COSTS OF TOURISM:

The tourism sector essentially has various social costs some of them are just simple problems but others could be very dangerous for tourists and local community. These costs include demonstration effect, materialistic attitude, dilution of social institutions and increase in crime rate around a tourist destination. Demonstration effects occur when the group of tourists continuously shows off their leisure and richness among the relatively poor local society and community. This showing off by outsiders has a noticeable negative social impact on local socio cultural environment of the destination. This is an important reason behind the destruction and unbalance of the local society. Tourism can grow the problem of dilution of social institutions.

In developing countries like India tourism may be responsible for increase in crime around a distant situated tourist destination.

We will now discuss each of these social costs of tourism which negatively affects the local people and societies as well as tourists.

6.3.1 DEMONSTRATION AFFECT:

In social terms demonstration effects are the effects due to outsider tourists as they show off their richness and modern social behavior towards the local community or society. “The demonstration effect shows how influential the host communities are to western values and tourists’ image.” Another definition of demonstrator effects is:
“The demonstration effect is seen as a corruptor of values in places that have strong cultural influence and strict social norms.”

Tourism in rural and indigenous communities has many positive and negative impacts. One of the most detrimental impacts on the culture of the host community is the demonstration effect. The demonstration effect is the occurrence of indigenous and rural communities and cultures adopting Western style and behavior that they have observed in visiting tourists through demonstration and interaction. The demonstration effect displays impact on the host communities through the establish influence on host communities.

Demonstration effect inherently includes the following social problems caused by the increased mass tourism-

1) Acculturation: “Changing components of culture due to foreign influence. “Acculturation explains the process of cultural and psychological change that results following meeting between cultures. The effects of acculturation can be seen at multiple levels in both interacting cultures. At the group level, acculturation often results in changes to culture, customs, and social institutions. Noticeable group level effects of acculturation often include changes in food, clothing, and language. At the individual level, differences in the way individuals acculturate have been shown to be associated not just with changes in daily behavior, but with numerous measures of psychological and physical well-being.

![Figure 1: Basic Acculturation Process](image)

Mass Tourism is very strongly and directly related with acculturation of the destination society. Another definition is “” Acculturation is a process in which members of one cultural group adopt the beliefs and behaviors of another group. Although acculturation is usually in the direction of a minority group adopting habits and language patterns of the dominant group, acculturation can be reciprocal—that is, the dominant group also adopts patterns typical of the minority group. Assimilation of one cultural group into another may be evidenced by changes in language preference, adoption of common attitudes and values,
members’ hip in common social groups and institutions, and loss of separate political or ethnic identification.

Growing tourist activities inside a destination community can increase the acculturation process by continuously observing and absorbing the socio-cultural behaviors of the foreign and domestic tourists. This is the process of acquiring or modifying a certain culture for the benefit of the tourist demand. Examples of this are:

- Changing components of traditional dance to meet the tourists: schedule, Budget, and photography needs.
- Allowing people and cameras into sacred buildings
- Wearing formal traditional dress on regular basis etc.

Acculturation generates changes in three levels of functioning:

- **Behavioral** - includes behaviors like language use, customs, and food consumption.
- **Affective** - includes emotions that have cultural connections; for example, the individuals’ feelings towards their country of origin or towards the U.S.
- **Cognitive** - includes individuals’ belief systems and fundamental values.

Acculturation effects merely depend upon the contact time (tourist stay duration) and the socio cultural level of the distention society. Longer stay period of mass tourists increases the acculturation process as they are exposed to a new culture and are able to incorporate it into their everyday lives.

2) **Globalization:** Globalization is the second important factor of demonstration effect. Globalization is responsible for Reduction of undeveloped global spaces due to increase in availability of transport of people and products. Globalization is the exchange and flow of economic and intellectual items in terms of goods, knowledge, values and images, as well as people on a global scale. Tourism is a pathway for globalization in the sense that tourists spread around the world sharing all of these influences and products with the local culture they encounter. By spreading western influence and destroying unique culture around the world, tourism has created and increased globalization.”

Tourism can be thought of as the strongest medium of globalization. The tourism industry in India is substantial and vibrant, and the country is fast becoming a major global destination. India’s travel and tourism industry is one of them most profitable industries in the country, and also credited with contributing a substantial amount of foreign exchange. Global tourism is now the latest trend which is more dangerous for the socio-cultural environment of the destination community.

3) **Modernization:** Third factor of demonstration effect is the ‘modernization’ of the destination community in its various aspects like infrastructure, economy, social and cultural values etc. Modernization comes in the form of improved
infrastructure, enhanced economy, and a change in values, at the cost of the independent culture of the host destination. Modernization allows developing countries to:

Improve upon their social status but forces them to give up their cultural identity. Mass tourism could not have developed without air travel. Annual trans border tourist arrivals rose to 456 million by 1990 and are expected to double again, to 937 million per annum, by 2010 (Knowles, 1994: FT, 7 January 1997: V11). Communication is another major area that has grown due to modernization. Communication industries have enabled capitalism to spread throughout the world. Telephony, television broadcasts, news services and online service providers have played a crucial part in globalization. Modernization is a continuous and open-ended process. Historically, the span of time over which it has occurred must be measured in centuries, although there are examples of accelerated modernization. In either case, modernization is not a once-and-for-all-time achievement. There seems to be a dynamic principle built into the very fabric of modern societies that does not allow them to settle, or to achieve equilibrium. Their development is always irregular and uneven. Whatever the level of development, there are always “backward” regions and “peripheral” groups. This is a persistent source of strain and conflict in modern societies. Such a condition is not confined to the internal development of individual states. It can be seen on a global scale, as modernization extends outward from its original Western base to take in the whole world. The existence of unevenly and unequally developed nations introduces a fundamental element of instability into the world system of states.

Modernizing socio-economic systems

Modernizing agricultural technology
Modernizing livestock technology
Modernizing seeds production

Maintaining socio-economic foundation
Maintaining the capital city of Damascus
Modernizing logistics
stable supply of power
Promoting Information Communication Technology

Modernizing Industry
Promoting small enterprises
Modernizing textile industry

Promoting Tourism
Promoting tourism
Maintaining museums
Educating the Japanese language
Modernization seems to have two main phases. Up to a certain point in its course, it carries the institutions and values of society along with it, in what is generally regarded as a progressive, upward movement. Initial resistance to modernization may be sharp and prolonged, but it is generally doomed to failure. Beyond some point, however, modernization begins to breed discontent on an increasing scale. This is due in part to rising expectations provoked by the early successes and dynamism of modern society. Groups tend to make escalating demands on the community, and these demands become increasingly difficult to meet. More seriously, modernization on an intensified level and on a world scale brings new social and material strains that may threaten the very growth and expansion on which modern society is founded. In this second phase, modern societies find themselves faced with an array of new problems whose solutions often seem beyond the competence of the traditional nation-state. At the same time, the world remains dominated by a system of just such sovereign nation-states of unequal strengths and conflicting interests.

CHECK YOUR PROGRESS - 1:
1) What are the main factors included in ‘demonstration effect’?

2) What do you understand by the acculturation of a destination community?

3) How tourism increased the globalization process around the world?

4) How tourism can be thought of as a promoter of modernization of culture and societies?

6.3.2 MATERIALISTIC ATTITUDE:

Materialistic attitude is a kind of social and cultural attitude of outside people (tourists) which looks each and everything in the destination society without the necessary feelings and emotions towards local people and culture. This results in senseless behavior of tourists. 'Materialism' is synonymous with 'physicalism'. However, materialists have historically held that everything is made of matter, but physics has shown that gravity, for example, is not made of matter in the traditional sense of "an inert, senseless substance, in which extension, figure, and motion do actually subsist"... So it is tempting to use 'physicalism' to distance oneself from what seems a historically important but no longer
scientifically relevant thesis of materialism, and related to this, to emphasize a connection to physics and the physical sciences. Increasing rate of foreign tourist arrivals in the form of mass tourism, materialistic attitude could be dangerous for local traditions and values that make the destination culture and society. Group of foreign tourists can have the materialistic attitude towards the local natural resources as described below-

1) **Materialistic attitude towards natural resources**: Local destination community can have an emotional attitude towards the different local natural resource such as rivers, trees, gardens, forests etc. as they have been connected with these natural resources since a long period of time; they have some natural feelings about these resources.

   The visiting tourists (foreign and domestic) may not support the emotional attitude of local people towards these resources. They just treat and handle all these resources with pure physical attitude, as they are there only for spending their vacations with leisure and comfort. This materialistic attitude of tourists can destroy or corrupt, pollute all these natural resources without taking into account the emotional aspect. Without concerning any emotional aspects tourists just spent the valuable resource and eventually corrupt or destroy them.

   Rapid growth of tourism sector has started to corrupt / destroy these strong emotional connections between local community and natural resources. Tourism activities essentially requires various infrastructures related services such as roads, small industries, hotels and restaurants etc.

   ![Figure 2: the strong emotional connection of local people (river Ganges, Haridwar)](image)

   All these modern tourist activities are continuously destroying or corrupting these valuable resources due to lack of emotional aspects. As an example the river gangs in Haridwar has been worshiped like the mother by Hindu followers but a foreign tourists can not treat it like mother Ganges.
2) Materialistic attitude towards children and local people: The growing tourism around a destination essentially requires a significant amount of man power in various forms such as labors in hotel and accommodation industry, people working as luggage transporter in hill side tourist spots etc. children labour in various tourist destination could be serious social problem due to tourism. The insatiable demand for cheap labour to service a developed world dominated by materialism and obsessed with convenience, multitudinous choices and luxury tastes, has led to poverty-stricken, vulnerable children being forced to work, particularly in the lucrative tourism industry. Some are sold into lives of servitude. Others suffer sexual and physical exploitation, lured by the promise of a better quality of life. Despite the United Nations Universal Declaration of Human Rights (1948), the Convention on the Rights of the Child (1989) and the International Labour Organization’s (ILO) Child Labour Conventions many employers in the Hotel, Catering and Tourism (HCT) sector still employ poor, uneducated children, especially in developing countries. Observations during the author’s research tours over the last seven years to developing countries in Asia, South and Central America, North Africa and the Middle East, have highlighted the complex causes of this controversial global issue and its insidious impacts as it ricochets around world. There is no single solution; a range of approaches is needed to uncover, prevent, condemn, isolate and eradicate its practice.

![Figure 3: trends in children labour around the world (ILO report.)](image)

**Figure 3: trends in children labour around the world (ILO report.)**

Child Labour is a complex social issue. According to the International Labour Organizations’ (ILO) Global Report 2006, it affects the lives of 218 million children. India has the distinction of the largest number of working children in the world today. Indian official statistics speak about almost 13 million children, but unofficial estimates vary between 60 and 100 million children.
In India, as in the world over, tourism is one more realm that pulls in a significant number of children as child labour. It is common to see children working in abysmal conditions in small restaurants and shacks, selling curios and trinkets, as tourist guides or begging rich tourists for money. In hotels, children work as bell-boys, waiters and waitresses, maids, housekeeping workers while in catering many serve dishes, work as kitchen helpers or dish-washers. Children also work as masseurs and prostitutes. This briefing sheet highlights this issue and looks into the reasons that compel children into working, the measures being taken so far to address the issue and what remains to be done.

Tourism ranks as one of the world’s fastest growing economic sectors and its largest employer. It provides income to cash strapped, developing countries, many with a large proportion of the population living on less than one dollar a day. In search of increased economic growth these developing countries generally welcome tourists by providing them with cheap accommodation, transport and artifacts, achievable largely at the expense of exploited child labour. Unfortunately this has also led to an increase in the commercial sexual exploitation of children, by tourists, notably in Asia, Africa, Latin America, the Caribbean and transition countries (Black, 1995). The ILO reports that certain tourist destinations are frequented by pedophiles, supported by networks of pimps, taxi drivers, hotel staff, brothel owners, entertainment establishments and tour operators who organize package sex tours and, at the international level, agents who provide information about resorts where such practices are commonplace (ILO, 2001). Also, recent developments in the tourism trade such as increasing competition have adversely impacted on child labour, further ignoring the rights of this vulnerable group.

Children are omnipresent in tourism. Historical narratives testify that this has been the case ever since this particular form of travel began to develop at the end of the eighteenth century. Children are full of curiosity. And as they are often uninhibited with strangers, they offer travellers a chance to make contact. They are generally the object of spontaneous sympathy. The tourism industry takes advantage of this: children are very often presented as objects of sympathy in the advertising and sale of holiday arrangements and tourist destinations. But if they are too persistent, children can also annoy tourists. Yet, even when sympathy disappears, these clever young business people still know how to evoke pity. Children can sell trifles and small services for good money, where adults would fail. Travelers, whether well-off or not, often tend to spend money on objects that they would rarely buy at home. Children consider them rich, and will obviously take advantage of this – all the more so as appearances are indeed accurate: the relationship between the tourists and their hosts is usually one characterized by considerable economic disparity.
CHECK YOUR PROGRESS - 2

1) What do you understand by materialistic attitude of tourists?

.................................................................

2) Which type of tourists don’t have any emotions towards local resources?

.................................................................

3) How tourism activities can increase child labour?

.................................................................

4) Which river in India is known as the ‘Mother river’?

.................................................................

6.3.3 DILUTION OF SOCIAL INSTITUTIONS:

Socially tourism has a great influence on the host societies. Tourism can be both a source of international amity, peace and understanding and a destroyer and corrupter of indigenous cultures, a source of ecological destruction, an assault of people’s privacy, dignity, and authenticity. Mass tourism can have the common problem of dilution of various social institutions such as families, communities and societies etc. social contacts between tourists and local people may result in mutual appreciation, understanding, tolerance, awareness, learning, family bonding respect, and liking. Residents are educated about the outside world without leaving their homes, while their visitors significantly learn about a distinctive culture. Local communities are benefited through contribution by tourism to the improvement of the social infrastructure like schools, libraries, health care institutions, internet cafes, and so on. Besides, if local culture is the base for attracting tourists to the region, it helps to preserve the local traditions and handicrafts which maybe were on the link of the extinction.

Typically, contemporary sociologists use the term ‘social institution’ to refer to complex social forms that reproduce themselves such as governments, the family, human languages, universities, hospitals, business corporations, and legal systems. A typical definition is that proffered by Jonathan Turner (Turner 1997: 6): “a complex of positions, roles, norms and values lodged in particular types of social structures and organizing relatively stable patterns of human activity with respect to fundamental problems in producing life-sustaining resources, in reproducing individuals, and in sustaining viable societal structures within a given environment.

Increased and continuous mass tourism to a tourist destination can dilute (wholly/partially) all the social institutions including hospitals, universities, local
governing bodies, schools and societies and communities etc. longer contact period with foreign tourists increases this effect. Tourism has an effective interdependence with all these social institutions of the destination. The rapid expansion of the tourism industry has provided many economic benefits and affected every facet of contemporary societies including employment, government revenue and cultural manifestations. However, tourism can also be considered a problematic phenomenon, promoting dependency, underdevelopment and adverse socio-cultural effects, especially for developing countries.

Figure: Interaction between Tourism and Different Social Institutions.

Cultural homogenization blurs the distinctions between western and indigenous cultural values and disintegrates the traditional values of the host community.

Tourism has the power to affect cultural change. Successful development of a resource can lead to numerous negative impacts. Among these are overdevelopment, assimilation, conflict, and artificial reconstruction. While presenting a culture to tourists may help preserve the culture, it can also dilute or even destroy it. The point is to promote tourism in the region so that it would both give incomes and create respect for the local tradition and culture.

Mass tourism from foreign countries can be responsible for Change of indigenous peoples’ values and behaviors inside different social institutions that
could lead to disrespect of traditions, which may lead to disintegration of host community. Tourism can disrupt the established activity patterns by changing the direction of the work force from agriculture to satisfying tourists. Tourism can increase crime rates and present overcrowding issues which cause negative impacts on the local lifestyles of communities around the world.

Desire for wealth may lead to people moving to cities to try and become wealthy, which removes key people in the succession of their desires that may rise due to the above described demonstration effect of tourism. Tourism indirectly dilutes (corrupts or destroys) social institutions by encompassing various activities inside these institutions. Tourism activities can corrupt or unbalance their fundamental structure and behaviors. The main cause of social dilution is the economic advantages by the tourism sector itself.

The Impact of Social Institutions on Value-chain Performance

CHECK YOUR PROGRESS-3

1) Name any three social institutions.

2) What do you understand by the term ‘dilution of social institution?’

3) Define the “contact period” in the perspective of tourism.
6.3.4 INCREASE IN CRIME:

Increase in crime is the most terrible cost of tourism. Different tourist activities around a distant destination across the country may increase the rate of various social and legal crimes in the region/destination. Tourism activities can promote both organized and unorganized crime. Organized crime includes drug trafficking, gunrunning, money laundering, and extortion, murder for hire, fraud, human trafficking and poaching. Many criminal operations engage in black marketeering, political violence, religiously motivated violence, terrorism, and abduction. Other crimes are homicide, robbery, assault, etc. Property crimes include burglary, theft, motor vehicle theft, and arson. Corruption is a significant problem. Tourist locations and markets are visited by criminals looking to target foreigners. Westerners, including U.S. citizens, have become victims of robbery, rape, and other violent attacks. Because the foreigners' purchasing power is relatively large than the general population, foreigners become more preferred targets for robbery or other serious crimes. The presence of a large number of tourists with a lot of money to spend, and often carrying valuables such as cameras and jewelry, increases the attraction for criminals and brings with it activities like robbery and drug dealing.

Crime rates typically increase with the growth and urbanization of an area, and growth of mass tourism is often accompanied by increased crime. The presence of a large number of tourists with a lot of money to spend, and often carrying valuables such as cameras and jewelry, increases the attraction for criminals and brings with it activities like robbery and drug dealing. Repression of these phenomena often exacerbates social tension.

In Rio de Janeiro, Brazil, tourists staying in beachside five-star resorts close to extremely poor communities in hillside "favelas" (shantytowns) are at risk of pickpockets and stick-ups. Security agents, often armed with machine guns, stand guard nearby in full sight, and face aggressive reactions from locals who are often their neighbors when they go home. Tourism can also drive the development of gambling, which may cause negative changes in social behavior.

The commercial sexual exploitation of children and young women has paralleled the growth of tourism in many parts of the world. Though tourism is not the cause of sexual exploitation, it provides easy access to it. Tourism also brings consumerism to many parts of the world previously denied access to luxury commodities and services. The lure of this easy money has caused many young people, including children, to trade their bodies in exchange for T-shirts, personal stereos, bikes, and even air tickets out of the country. In other situations, children are trafficked into the brothels on the margins of the tourist areas and sold into sex slavery, very rarely earning enough money to escape.
The United Nations has defined child sex tourism as "tourism organized with the primary purpose of facilitating the effecting of a commercial sexual relationship with a child". Certain tourism destinations have become centers for this illegal trade, frequented by pedophiles and supported by networks of pimps, taxi drivers, hotel staff, brothel owners, entertainment establishments, and tour operators who organize package sex tours. At the international level, there are agents who provide information about particular resorts where such practices are commonplace. (See the ILO report on Human resources development, employment and globalization in the hotel, catering and tourism sector.)

Although sexual exploitation of children is a worldwide phenomenon, it is more prevalent in Asia than elsewhere. ECPAT, an organization that fights child sex tourism, has started a campaign against child prostitution in Asian tourism. In 2000 ECPAT international created a Certified Code of Conduct (CCC) for tour operators against child sex tourism and this year initiated a follow-up project, the "Code of Conduct of the Tourism Industry to protect children from sexual exploitation". The negative influence of crime on tourism activity is not surprising theoretically. Crime is a demand shifter for tourism. When individuals decide about whether to take a holiday and where to spend that holiday, they would take the risk of victimization into account. Other things being equal, potential tourists are more likely to visit countries with smaller risk of victimization.

Security has been a major problem as well for growth of tourism for a number of years. Terrorist attacks or political unrest in different parts of the country have adversely affected sentiments of foreign tourists. Terror attacks at Mumbai in November 2008 dealt a strong blow to tourism in the country. The terror attacks raised concerns of safety. In addition, insurgency in different parts of the country also mars India’s image as a safe destination. Following the terror attacks in Mumbai, security at tourist spots, airports and hotels has been beefed up
to regain confidence of tourists. However, the government needs to take a proactive approach in addressing these issues and in averting the potential impact on the industry.

Cyber crime is another major challenge the travel industry faces. Use of Internet in the travel and tourism industry has increased rapidly in recent years and has emerged as one of major segments for online spends. However, some of the biggest frauds have been detected in this segment and the issue of online security has assumed significant importance. While the online travel industry has registered robust growth, major concerns relating to security of online transactions persist. The industry needs to take measures to make the process of online bookings more secure and transparent and also needs to create awareness regarding this.

• The commercial sexual exploitation of children and young women has paralleled the growth of tourism in many parts of the world.
• Though tourism is not the cause of sexual exploitation, it provides easy access to it.
• Tourism also brings consumerism to many parts of the world previously denied access to luxury commodities and services.
• The lure of this easy money has caused many young people, including children, to trade their bodies in exchange for T-shirts, personal stereos, bikes and even air tickets out of the country.
• In other situations children are trafficked into the brothels on the margins of the tourist areas and sold into sex slavery, very rarely earning enough money to escape.

The increase in crime due to mass tourism can dramatically decrease the tourist arrival rate (FTA and DTA) in a country. The number of foreign tourists arriving in India dropped by 25% during the first three months of this year (2012-2013), largely because of fears about the risk of sexual assault, according to an industry survey. The number of female tourists fell by 35% compared with the same period last year, with Indian tour operators reporting many cancellations from January to March following the fatal gang rape of a physiotherapist on a Delhi bus last December.

<table>
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<th>Years</th>
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<th>Crimes against tourists</th>
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Table II. Major crimes reported vs crimes against tourists

Figure: Tourism related Crime Rates of Jamaica (South Africa)
1) What are the main types of crime generated by tourism?

2) What do you understand by CCC?

3) Explain the term ECPAT.

4) What is black marketing?

6.4 SUMMARY:

The tourist destination societies and communities have to pay the social cost of tourism in various forms like demonstration effects, acculturation of local culture, dilution of institution and increase in crime rate etc. Demonstration effects by relatively rich and foreign tourists includes the globalization of culture and tourism, modernization of various traditions values and resources and acculturation itself. These demonstration effects by mass tourism can really destroy the destination culture and eventually motivate local people to learn and follow their styles and manners. Longer contact period of mass tourists with local community ultimately dilutes the different social institutions and their structure such as families’ education institutions and local governing bodies etc. As generally tourists don’t have any emotional aspects towards the resources and peoples of local community, and hence they consume all these resources without any respect or emotional connection. Materialistic attitude of tourists towards these resources could be very fatal for local community and results in child labour and the destruction of valuable natural resources. Crime generation around tourist destination can be another serious problem of tourism. Various types of crimes can take place due to mass tourism such as theft of valuable items, sexual assaults, child labour; prostitutions etc. Increase in destination crime can be dangerous for both tourists and local community.

6.5 GLOSSARY:

- **Demonstration**: The act of showing or making evident
- **Acculturation**: Cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture
- **Globalization**: The tendency of investment funds and businesses to move beyond domestic and national markets to other markets around the globe
- **Modernization**: the transformation from a traditional, rural, agrarian society to a secular, urban, industrial society
- **Cyber**: related to the internet worldwide
- **ECPAT**: End Child Prostitution and Trafficking
- **Extortion**: Illegal use of one's official position or powers to obtain property, funds, or patronage
- **CCC**: rules and regulation of conduct enforced by the law

### 6.6 CHECK YOUR PROGRESS:

**Check your progress-1**
1) Richness, tendency of showing off  
2) Acquiring the culture of another community  
3) By forcing enhanced interaction  
4) Investment of money into local economy

**Check your progress-2**
1) Treating everything as a physical entity  
2) Foreign tourists  
3) In the form of tourism support services  
4) River Ganges

**Check your progress-3**
1) Family, community, society  
2) Loss of structure and stability  
3) Stay time period in a local destination

**Check your progress-4**
1) Theft, robbery and prostitution  
2) Certified code of conduct  
3) End Child Prostitution and Trafficking

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6.8 SUGGESTED READINGS:

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- Liberalization, Globalization and International Business, R.C. Dangwal G.S. Batra
- The Economic and Social Impact of Tourism, Batir Mirbabayev, Malika Shagazatova

6.9 MODEL QUESTIONS:

**Short answer type questions:**

1) What is demonstration effect of tourism, explain with an example
2) Explain the term materialistic attitude
3) What is the meaning of the term ‘dilution’ in the context of social institutions?
4) What do you understand by the term black marketing?
5) What is sex tourism?
6) How tourism is related to increase in crime
7) Write short notes on the followings-
   (a) Acculturation
   (b) child labour
   (c) 'Physicalism'
   (d) globalization

**Long answer type questions:**

1) Describe the negative social impacts of tourism, how tourism promotes the problem of neo colonization among the poor countries.
2) How the growth of mass tourism can increase crime around the tourist destination?
3) Write short notes on the followings, give examples if necessary
   (a) Withdrawal of labour due to tourism
   (b) Acculturation and globalization due to tourism
   (c) Tourism and dilution of social institution in India
BLOCK 2:
TOURISM AND DESTINATION CULTURE
UNIT 7: TOURISM AND CULTURE INTER-RELATIONSHIP

Structure:
7.1 Introduction
7.2 Objectives
7.3 Culture and Tourism Inter Relationship
   7.3.1 Synergy
   7.3.2 Symbiosis
   7.3.3 Antagonism
7.4 Summary
7.5 Glossary
7.6 Check your progress
7.7 References
7.8 Suggested readings
7.9 Model questions

7.1 INTRODUCTION:

Tourism activities are strongly connected with destination culture and social values. Culture refers to the cumulative deposit of knowledge, experience, beliefs, values, attitudes, meanings, hierarchies, religion, notions of time, roles, spatial relations, concepts of the universe, and material objects and possessions acquired by a group of people in the course of generations through individual and group striving. Another definition of culture “Culture in its broadest sense is cultivated behavior; that is the totality of a person’s learned, accumulated experience which is socially transmitted, or more briefly, behavior through social learning”.

As individuals are group of tourists visits the destination they come close to the local society and their culture and behavior. Tourism essentially provides the opportunity to the different groups of people in the form of tourists and the local community. Communities around a destination continuously interact with these foreign groups and communities for various needs of tourism activities such as traveling and guidance, food and accommodation etc. This interaction eventually turns into cultural inter relationship of tourism and local society. They often experience and learn each other’s values, traditions, rituals, festivals, religious activities in order to promoting or maintaining tourism activities around a destination.

These multiple elements of cultural and social interaction collectively produce new values and traditions; this effect is known as ‘synergy’. Tourists and the local society / culture often treated as symbiotic relationship. Some symbiotic relationships are obligate, meaning that both symbionts entirely depend on each other for survival. Symbiosis is the interaction process between two or more biological species. Tourists need the local community for their guidance and comfort and the local community around the destination need tourists for their economical benefits.

Tourism is one of the most important factors capable of facilitating cultural inter relationship between two different groups or communities. Sometimes this interaction is positive and sometimes negative. Negative social and cultural impacts of tourism are collectively known as ‘Antagonism’.

Antagonism is hostility that results in active resistance, opposition, or contentiousness. Antagonism can occur from both the side i.e. from tourist’s side or from local community side. Local people around a destination may hate or dislike the foreign culture and behaviors of tourists groups.

On the other hand the visitor groups may not like local cultures and values, this overall negative cultural interaction results into antagonism. This chapter will explain you all the relationships between tourism and culture that may be general, positive or negative relationships between tourism and culture.

7.2 OBJECTIVES:

After completing this unit, learners will able to understand the relationship between tourism and culture with specific concepts of synergy, antagonism and symbiosis with the following points of interests-

- How tourism and culture are interrelated
- What factors constitute synergy effects
- How antagonism is related with tourism activities
- What is the meaning and effect of symbiosis ‘in tourism perspective
7.3 CULTURE AND TOURISM INTER RELATIONSHIP:

Culture and tourism have well known relationship between them. Continuous tourism activities around a tourist region gradually affect its local community and its various cultural values and traditions. Tourism can be thought of as a strong promoter, supporter and originator of various cultures around the world. Different cultural groups think, feel, and act differently. There are no scientific standards for considering one group as intrinsically superior or inferior to another. Studying differences in culture among groups and societies presupposes a position of cultural relativism. It does not imply normalcy for oneself, nor for one’s society. It, however, calls for judgment when dealing with groups or societies different from one's own. Information about the nature of cultural differences between societies, their roots, and their consequences should precede judgment and action. Negotiation is more likely to succeed when the parties concerned understand the reasons for the differences in viewpoints.

Tourism is a strong factor in cultural transformation of destination community. The destination culture can experience many types of cultural impacts due to tourism such as synergy, symbiosis and antagonism. These interrelationships between culture and tourism has originated a new type of tourism called ‘cultural tourism’. Cultural tourism (or culture tourism) is the subset of tourism concerned with a country or region's culture, specifically the lifestyle of the people in those geographical areas, the history of those people, their art, architecture, religion(s), and other elements that helped shape their way of life. Cultural tourism includes tourism in urban areas, particularly historic or large cities and their cultural facilities such as museums and theatres. It can also include tourism in rural areas showcasing the traditions of indigenous cultural communities (i.e. festivals, rituals), and their values and lifestyle. It is generally agreed that cultural tourists spend substantially more than standard tourists do. This form of tourism is also becoming generally more popular throughout the world, and a recent OECD report has highlighted the role that cultural tourism can play in regional development in different world regions.

7.3.1 SYNERGY:

Cultural synergy is a term coined from work by Nancy Adler of McGill University which describes an attempt to bring two or more cultures together to form an organization or environment that is based on combined strengths, concepts and skills. The differences in the world’s people are used in such a way that encourages mutual growth by cooperation. In a more general sense, cultural synergy can be observed in the creation new or reproduced cultural forms that are
distinct from the cultures from which those forms are derived. In either case, cultural synergy may be expected to be more prevalent as globalization takes place. Cultural differences manifest themselves in different ways and differing levels of depth. Symbols represent the most superficial and value the deepest manifestations of culture, with heroes and rituals in between.

1) Symbols are words, gestures, pictures, or objects that carry a particular meaning which is only recognized by those who share a particular culture. New symbols easily develop, old ones disappear. Symbols from one particular group are regularly copied by others. This is why symbols represent the outermost layer of a culture.

2) Heroes are persons, past or present, real or fictitious, who possess characteristics that are highly prized in a culture. They also serve as models for behavior.

3) Rituals are collective activities, sometimes superfluous in reaching desired objectives, but are considered as socially essential. They are therefore carried out most of the times for their own sake (ways of greetings, paying respect to others, religious and social ceremonies, etc.).

4) The core of a culture is formed by values. They are broad tendencies for preferences of certain state of affairs to others (good-evil, right-wrong, natural-unnatural). Many values remain unconscious to those who hold them. Therefore they often cannot be discussed, nor can they be directly observed by others. Values can only be inferred from the way people act under different circumstances.

Symbols, heroes, and rituals are the tangible or visual aspects of the practices of a culture. The true cultural meaning of the practices is intangible; this is revealed only when the practices are interpreted by the insiders.

![Figure 1. Manifestation of Culture at Different Levels of Depth](image-url)
The destination culture can be different from the national or regional culture. Tourists visiting the whole country often come across to various cultures, traditions and values. Consequently they significantly affect all these cultures. The destination culture can have various levels associated with it.

- **The national level**: Associated with the nation as a whole.
- **The regional level**: Associated with ethnic, linguistic, or religious differences that exist within a nation.
- **The gender level**: Associated with gender differences (female vs. male)
- **The generation level**: Associated with the differences between grandparents and parents, parents and children.
- **The social class level**: Associated with educational opportunities and differences in occupation.
- **The corporate level**: Associated with the particular culture of an organization within community or society.

Cultural synergy can be very beneficial for local community as well as for tourist group’s cultures. Various cultural hazards and superstitions can be removed and improved with the cultural synergy effect on destination locality. Synergy is cooperative or combined action that can occur when diverse or disparate groups of people with varying viewpoints work together. The objective is to increase effectiveness by sharing perceptions, insights, and knowledge. But synergy is more than simply working together toward the mutual achievement of certain goals. The power of synergy rests in the reality that “when solving problems, groups are often smarter than the smartest people within them. According to the above description of synergy the combined culture can generated or derive the more effective and attractive values and traditions. Cultural synergy in today’s global economy requires that individuals within multinational organizations be culturally aware and competent in cross-cultural communication. Extensive research indicates that cross-cultural competence impacts the effectiveness of global corporations (Cox, Lobel, & McLeod, 1991; Matveev & Nelson, 2004; Townsend, DeMarie. The culturally diverse workforce offers a variety of perspectives, skills, and attitudes (Maznevski, 1994) and outperforms homogeneous groups in identifying problems and generating more creative solutions (Marquardt & Horvath, 2001; McLeod & Lobel, 1992; Watson, Pitt, Cunningham, & Nel, 1993). In their study of Russian and American managers, Matveev and Nelson (2004) found that “cross cultural competence accounted for 20% of the variance in the performance level of multicultural teams” (p. 33). Ng and Tung (1998) found that multicultural divisions reported higher levels of productivity and financial profitability than their homogeneous counterparts within a multi branch financial services organization.
Today the growing and modern tourism is transitioning our world into a new high-synergy postmodern society in which leadership fosters win-win and all triumph. It is an open system of connected people that emphasizes cooperation for mutual advantage. Social institutions promote individual and group development and utilize community resources and talents for the commonwealth. Successfully transitioning into the emerging postmodern era requires acceptance of this new high-synergy society that can provide new energy for international business practices. Synergy takes on increasing importance as multinational organizations, nonprofit agencies, and governmental activities become more global in scope, more complex in practice, and more sophisticated in technology. Charles Handy (1995) declares that “the world is up for re-invention [and] we cannot wait for great visions from great people, for they are in short supply. It is up to us to light our own small fire in the darkness (p. 286).

Tourism is a natural originator and promoter of cultural synergy. Various popular tourist destinations around the world have experienced the synergy effect in their local culture and values. Modernization and globalization effects have increased the process of synergy among different cultures, traditions and values.

CHECK YOUR PROGRESS - 1

1) What do you understand by the term ‘synergy’ in tourism perspective?

2) How tourism is related with cultural synergy?

3) How many levels the destination culture can have?

7.3.2 SYMBIOSIS:

The mutual dependence that exists between tourism and cultural heritage is becoming more evident. While culture heritage creates a foundation for tourism’s growth, tourism has the power to generate funds that make conservation possible. Cultural heritage loses much of its meaning without an audience, and a society participating in and benefiting from it. Without sustainable management, tourism loses its potential for growth.

Symbiotic relationships include those associations in which one organism lives on another or where one partner lives inside the other. Symbiosis is also classified by physical attachment of the organisms; symbiosis in which the organisms have bodily union is called conjunctive symbiosis, and symbiosis in which they are not in union is called disjunctive symbiosis. Tourism and culture both have an explicit symbiotic nature of relationship. Tourism itself depends on
Tourism in its natural perspective is a symbiotic activity between local society, culture and tourists. Transportation is a fundamental driver of the tourism industry: it is a precondition for travel, since it facilitates mobility and the movement of tourists from their place of origin (i.e., their home area) to their destination and back. In this respect it has a symbiotic relationship with tourism: one cannot occur without the other and the two are codependent. This has many similarities with the tourism–environment relationship also discussed in this volume, although it has certainly not attracted the same level of research activity that the environment–sustainability debate has raised, even though transportation is a key element of that debate. Despite many influential books being published on tourism since the 1970s, few ever address in any level of depth, this symbiotic relationship or the dependencies which exist between tourism and transportation.

Culture often provides the pretense or alibi for travel, the serious element of an otherwise frivolous pursuit, but sometimes tourist interest is what keeps traditional cultural forms alive where local cultures cannot. A symbiotic relationship between culture and tourism can be studied in the case of Bali where a new dance “ritual” was developed for anthropologists but sustained and performed with other “traditional” forms.

![Diagram: Symbiosis between visitor, environment and local people in ecotourism](source: Ayob (2003).

**Figure: A symbiotic relationship between tourist and local environment**

Generally when tourist selects a destination for their travel they keep in mind the various cultural aspects of the destination. In fact all the popular tourists’ destinations have something to attract and sustain tourism activities for a long period of time. Various architectural heritages, monuments, scriptures around the
world are originated from the root of culture of their own community. Every culture can inspire a type of architecture that can inspire a type of architecture that can range from landmarks to everyday homes. Religion and family seem to be the most common influences overall. Each culture is unique and the more we learn about them, the more we appreciate our surroundings and understand why certain things appeal to us.

Almost every tourist destination has the following cultural elements to attract the visitors-

1) **Architectural heritages:** various architectural heritages around a tourist destination reflect the specific culture of that community. The cultural impacts can easily be seen inside these architectural wonders such as Taj mahal, red fort, and forts of Rajasthan etc.

2) **Cultural monuments:** cultural monuments are directly related with the local culture and its development. Cultural tourism is the modern type of tourism that is strongly related to this type of monuments and the practices of specific cultures around the world.

3) **Local traditions and values** local traditions and values are generally reflected by the local culture of that community. These cultural elements often attract foreign and domestic tourists towards the local destinations inside that culture.

4) **Cultural activities and festivals:** various cultural activities, fair and festivals, meets etc have been attracting the tourists since a long period of time. These activities and festivals have an effective symbiotic nature of relationship with tourism itself.

![Figure: Symbiotic relationship of Tourism with different cultural elements of destination](image-url)
CHECK YOUR PROGRESS - 2

1) What is ‘symbiotic relationship’?

2) Minimum components required for symbiotic relationship are

3) How tourism is related with cultural symbiotic relationship?

4) When Bennett used the word ‘symbioses’ for the first time?

7.3.3 ANTAGONISM:

The term antagonism can be simply defined as “Antagonism is hostility that results in active resistance, opposition, or contentiousness.”

In cultural perspective antagonism can be thought of as a feeling of resistance or dislike among the people of multiple cultures and traditions. Because tourism involves movement of people to different geographical locations, and establishment of social relations between people who would otherwise not meet, cultural clashes can take place as a result of differences in cultures, ethnic and religious groups, values and lifestyles, languages, and levels of prosperity.

The result can be an overexploitation of the social carrying capacity (limits of acceptable change in the social system inside or around the destination) and cultural carrying capacity (limits of acceptable change in the culture of the host population) of the local community.

The attitude of local residents towards tourism development may unfold through the stages of euphoria, where visitors are very welcome, through apathy, irritation and potentially antagonism, when anti-tourist attitudes begin growing among local people. Tourists often, out of ignorance or
carelessness, fail to respect local customs and moral values. When they do, they can bring about irritation and stereotyping. They take a quick snapshot and are gone, and by so acting invade the local peoples' lives.

As an example “In many Muslim countries, strict standards exist regarding the appearance and behavior of Muslim women, who must carefully cover themselves in public. Tourists in these countries often disregard or are unaware of these standards, ignoring the prevalent dress code, appearing half-dressed (by local standards) in revealing shorts, skirts or even bikinis, sunbathing topless at the beach or consuming large quantities of alcohol openly. Besides creating ill-will, this kind of behavior can be an incentive for locals not to respect their own traditions and religion anymore, leading to tensions within the local community. The same types of culture clashes happen in conservative Christian communities in Polynesia, the Caribbean and the Mediterranean.

In developing countries especially, many jobs occupied by local people in the tourist industry are at a lower level, such as housemaids, waiters, gardeners and other practical work, while higher-paying and more prestigious managerial jobs go to foreigners or "urbanized" nationals. Due to a lack of professional training, as well as to the influence of hotel or restaurant chains at the destination, people with the know-how needed to perform higher level jobs are often attracted from other countries. This may cause friction and irritation and increases the gap between the cultures.

Even in cases where tourism "works", in the sense that it improves local economies and the earning power of local individuals, it cannot solve all local social or economic problems. Sometimes it substitutes new problems for old ones. Cultural deterioration, damage to cultural heritage may arise from vandalism, littering, pilferage and illegal removal of cultural heritage items or by changing the historical landscape that surrounds it.

Resource use conflicts, such as competition between tourism and local populations for the use of prime resources like water and energy because of scarce supply. Conflicts with traditional land-uses may also arise in coastal areas, when the construction of shoreline hotels and tourist faculties cuts off access for the locals to traditional fishing grounds and even recreational use of the areas.

Traditional values and cultural beliefs are an area of the destination that is not easily compromised by local people within the community. Cultural differences pose a particular problem when the host and the guests are from different cultural backgrounds.

Different types of cultural clashes can be raised due to the growing rate of mass tourism, as described below-

**1- Language:** Language is a very important element of culture; it may be a medium of antagonism if not handled properly. Guest and host generally don’t
speak or understand the same language; this difference could result in language antagonism.

2- Local norms: Norms as humanly created rules for behavior. Norms are generally created and maintained by the powerful authority in the community. If the visitors don’t follow destination community norms, it increases antagonism.

3- Value: Values are anything members of a culture aspire to or hold in high esteem. Values are things to be achieved, things considered of great worth or value. Values are human creations. They are social products. Values can and do become reified. Values can be renegotiated and changed. The tourists are hardly expected to follow these cultural and social values.

4- Beliefs and ideologies: Beliefs are the things members of a culture hold to be true. They are the "facts" accepted by all or most members. Beliefs are not limited to religious statements, but include all the things a people know and accept as true, including common sense everyday knowledge. Like all other cultural elements, beliefs are humanly created and produced. They are collective social agreements produced during interaction and reified over time. What is "true" or "factual" for a given people is what they collectively agree to be true at that point in time. The growing mass tourism and effect of globalization can disturb these beliefs.

5- Statuses and Roles: Status, although related, is not a measure of a person’s wealth, power, and prestige. To speak of "high" or "low" status is somewhat misleading. A status is a slot or position within a group or society. They tell us who people are and how they "fit" into the group. Roles are norms specifying the rights and responsibilities associated with a particular status. The term role is often used to mean both a position in society and role expectations associated with it. The differences and diversions between the statuses of visitors and local people eventually create the social clashes.

CHECK YOUR PROGRESS-3

1) How many official languages are there in India?

2) Name any three popular culture of India.

3) Which country has most cultural diversity around the world?

7.4 SUMMARY:

Tourism and culture are very strongly related to each other. Culture is the originator and promoter of tourism. The continuous interaction of culture and
tourism creates various positive and negative effects on the culture of local community. The merging of two different culture values and traditions can produce the third culture which may be more effective and attractive than the original one. This process of reproduction of another culture is known as cultural synergy effect on destination community.

Tourism and culture are so closely interrelated that they hardly exist without the presence of each other. Tourist depends upon the destination culture and community; while the local community depends upon tourism. This type of cultural mutual relationship is better known as symbiotic relationship. However the interrelationship between culture and tourism can produce cultural clashes and dislikes known as antagonism.

7.5 GLOSSARY:

- **Synergy:** the interaction of multiple elements in a system to produce an effect different from or greater than the sum of their individual effects
- **Symbiosis:** Living together for the mutual benefit of each other.
- **Antagonism:** hostility that results in active resistance, opposition, or contentiousness.
- **OECD:** Organization for Economic Co-operation and Development
- **Rituals:** The prescribed order of a religious ceremony
- **Manifestation:** The act or process of becoming manifest
- **Community:** Social groups of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage.

7.6 CHECK YOUR PROGRESS

**Check your progress-1**
1) Development of new culture with the interaction of tourist and local cultures
2) Tourism provides an opportunity to come close
3) 4

**Check your progress-2**
1) Inter dependant relationship
2) 2
3) Interaction of cultures due to tourism
4) 1877

**Check your progress-3**
1) 22
2) Punjabi culture, Bengali culture, Hindu culture
3) India
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- Tourism and Culture, K.K. Sharma

7.9 MODEL QUESTIONS

**Short answer type questions:**

1) What is culture? Explain.
2) What is cultural tourism?
3) Define the term ‘antagonism’.
4) Explain the term symbiosis with a suitable example.
5) Give any two factors that represent the symbiotic relation between tourism and the local community.
6) Write short notes on the following:
   (a) Symbiotic Relationship (b) Cultural Modification
   (c) Values and Traditions (d) OECD

**Long answer type questions:**

1) How tourism is related to culture, describe in detail the concept of ‘antagonism’ in the context of Indian tourism?
2) Explain the concept of symbiotic relationship in the light of mass tourism; explain with a suitable India example.
3) Discuss the concept of cultural synergy in the context of tourism in India.
UNIT 8: POSITIVE IMPACTS OF TOURISM ON CULTURE

Structure:
8.1 Introduction
8.2 Objectives
8.3 Positive cultural effects of tourism
   8.3.1 Contribution towards Conservation of Heritage Objects
   8.3.2 Revival and Rediscovery of lost traditions
   8.3.3 Motivation to Artisans and Craftsmanship
   8.3.4 Cultural Awareness and Keener Sense of belongingness for cultural heritage
8.4 Summary
8.5 Glossary
8.6 Check your progress
8.7 References
8.8 Suggested readings
8.9 Model questions

8.1 INTRODUCTION:

The interaction between tourism and culture has a plenty of good positive impacts. We have learned about various tourism and cultural effects on the destination community. Culture is a very broad term which includes so many things and activities inside a destination society. The various elements of culture are traditions, ethical values and norms, heritages and monuments, local crafts and arts etc. Generally tourism has good and effective positive impact on the different elements of destination culture. Every community or destination culture essentially has some cultural architectural objects such as architectural wonders and monuments. Tourism activities towards these architectural heritages not only make them more popular but also contribute towards the conservation and maintenance of these heritages.

Growing tourism activities along with the globalization and modernization effects has revived and rediscovered many architectural wonders around the world. Tourism and culture are so strongly interrelated that it has generated a new type of tourism called ‘cultural tourism.’ The cultural tourism is responsible for the discovery and establishment of various lost traditions and elements of local culture. The heritage of Asia and the Pacific is under threat. The passage of time and the effects of harsh climates render already-fragile places of culture and tradition ever more vulnerable. When coupled with neglect, poor maintenance, inadequate financial support, unregulated urban development, and the exponential
growth of tourism, the very survival of the region’s most special places is at risk. Cultural tourism (or culture tourism) is the subset of tourism concerned with a country or region's culture, specifically the lifestyle of the people in those geographical areas, the history of those people, their art, architecture, religion(s), and other elements that helped shape their way of life. Cultural tourism includes tourism in urban areas, particularly historic or large cities and their cultural facilities such as museums and theatres. It can also include tourism in rural areas showcasing the traditions of indigenous cultural communities (i.e. festivals, rituals), and their values and lifestyle. It is generally agreed that cultural tourists spend substantially more than standard tourists do. This form of tourism is also becoming generally more popular throughout the world, and a recent OECD report has highlighted the role that cultural tourism can play in regional development in different world regions.

The local arts and craftsmanship is an important part of local culture, which is consistently supported and promoted by tourism. Archaeological sites, historic monuments, traditional towns and villages, cultural landscapes, handicrafts, rituals, traditional music and performing arts are all important parts of cultural tourism. At its best, tourism can generate the financial resources needed to invest in the rehabilitation of historic buildings and conservation areas. Tourism can help to revive dying or lost traditions, arts and cultural practices and can provide the impetus for artisans to continue their traditional crafts. Tourism can also provide new livelihood opportunities for large numbers of people in local communities. Unfortunately these positive impacts are often negated by the unintentional destructive impacts of tourism that rob a community of its ancestral heirlooms, undermine traditional cultural values and alter the physical character of a tourism destination through inappropriate development and infrastructure. Tourism is the most important contributor in the process of conservation of these valuable cultural elements, so that they can be preserved for our upcoming generations. Cultural tourism activities around a destination proves as a great cultural advantages as it can remind the local community about the importance of these ancient heritages, arts, values and traditions.

8.2 OBJECTIVES:

After reading this unit you will be able to understand:

- What are the main positive impact of tourism on destination culture
- How tourism contributes towards the conservation of various cultural objects
- How tourism benefits the local arts and craftsmanship in the destination culture
- How tourism promotes cultural awareness and belongingness
8.3 POSITIVE CULTURAL EFFECTS OF TOURISM:

Tourism can have a number of positive impacts on the destination culture. Every community has various cultural elements in side its society such as architectural wonders, specific values and traditions, local arts and craftsmanship etc. Cultural tourism is one of the largest and fastest-growing global tourism markets. Culture and creative industries are increasingly being used to promote destinations and enhance their competitiveness and attractiveness. Many locations are now actively developing their tangible and intangible cultural assets as a means of developing comparative advantages in an increasingly competitive tourism marketplace, and to create local distinctiveness in the face of globalization. Tourism is a great conservator of natural and cultural resources. If tourism does not contribute to the preservation of the region’s environments, cultures and traditions, then there will be no place for tourism in the future development of the region. Many lost and forbidden traditions and places have been rediscovered due to growing cultural tourism activities. We will now examine all these positive cultural impacts of tourism on the destination culture.

8.3.1 CONTRIBUTION TOWARDS CONSERVATION OF HERITAGE OBJECTS:

Generally tourism activities move around the famous cultural objects including ancient architectural heritages, monuments, forts, architectural wonders and other cultural elements. Most of the tourists want to see and experience that cultural heritages by going as close to them as possible. Tourism activities around these cultural heritages not only beneficial for local community in economic terms but also promotes the conservation and maintenance of these objects. Cultural heritage or just "heritage" is the legacy of physical artifacts (cultural property) and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Cultural heritage includes tangible culture (such as buildings, monuments, landscapes, books, works of art, and artifacts), intangible culture (such as folklore, traditions, language, and knowledge), and natural heritage (including culturally significant landscapes, and biodiversity). Cultural heritage is unique and irreplaceable, which places the responsibility of preservation on the current generation. Smaller objects such as artworks and other cultural masterpieces are collected in museums and art galleries. Grass roots organizations and political groups, such as the international body UNESCO, have been successful at gaining the necessary support to preserve the heritage of many nations for the future. According to UNESCO there are 936 World Heritage Sites: 725 cultural, 183 natural, and 28 mixed properties, in 153 countries. Each of these sites is considered important to the international community. Tourism has the
power to imitate and motivate various government and private authorities towards the preservation of these heritages. Tourism can support the conservation of following types of cultural heritages-

1- Conservation of architectural wonders:

Architectural wonders have a great significance in the conservation of various architectural wonders related to the specific culture of the destination community. The Archaeological Survey of India (ASI), as an attached office under the Department of Culture, Ministry of Tourism and Culture, is the premier organization for the archaeological researches and protection of the cultural heritage of the nation. Maintenance of ancient monuments and archaeological sites and remains of national importance is the prime concern of the ASI. Besides it regulate all archaeological activities in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958. It also regulates Antiquities and Art Treasure Act, 1972. For the maintenance of ancient monuments and archaeological sites and remains of national importance the entire country is divided into 24 Circles. The organization has a large work force of trained archaeologists, conservators, epigraphist, architects and scientists for conducting archaeological research projects through its Excavation Branches, Prehistory Branch, Epigraphy Branches, Science Branch, Horticulture Branch, Building Survey Project, Temple Survey Projects and Underwater Archaeology Wing.

Growing tourism activities towards architectural heritages consequently draw the attention of various government organizations and motivate them to preserve these heritages.

The monuments and sties that received nominal funds and attention way back in 19th century was Taj Mahal, Tomb at Sikandara, Qutb Minar, Sanchi and Mathura. Based on the proposal submitted in 1898, 5 Circles were constituted to do the Archaeological work in India. These Circles were required to devote themselves entirely to conservation work.

*Figure: Kutub Minar Complex, New Delhi India*
One of the foremost conservators, J. Marshall who laid down the principles of conservation was also instrumental in preserving a number of monuments some of which are now under the World Heritage List. The conservation work of stupas at Sanchi earlier lying in a maze of ruins gave the site its pristine looks. The conservation processes had now become quite formalized and the later workers in the field were acquiring cumulative knowledge of several generations. Even before Independence, thus, the Archaeological Survey of India had developed significant expertise so much as that it was invited for conservation work in other countries. Some of the outstanding examples of such works are that of Bamiyan in Afghanistan and later in the Angkor Vat of Cambodia. The Archaeological Survey of India’s Science Branch is responsible mainly for the chemical conservation treatment and preservation of some three thousand five hundred ninety three protected monuments besides chemical preservation of museum and excavated objects countrywide.

2- Conservation of local handicrafts and arts:

Every tourist destination generally has its own specialized local handicrafts business and arts related works. They are important factors of local culture and traditions. These art works and handicrafts play a very important role in the economic development of the destination. India is a big country; many communities across the country have their specialized and impressive range of these objects. Since the time that dates back to ancient India, it has been seen that the customs, traditions, culture & beliefs of the people on this land have always remained magnificent & astonishing, and so is the art & craft created by the people here, which is undoubtedly the most mesmerizing & vivid throughout the world. But still one thing which is worth noticing is that the artisans and craftsmen who shape the cultural India are living in misery.
Tourism activities and the growth of foreign tourist arrival towards these specialized destinations make it possible to preserve, conserve these cultural assets. There is a good demand of these artworks from foreign and domestic tourists.

The National Research Laboratory for Conservation of Cultural Property (NRLC) was established in 1976 as a subordinate office of the Department of Culture, and was recognized as a scientific institution of the Government of India in 1987 by the Department of Science & Technology. The aims and objectives of the NRLC are to develop the conservation capabilities of different cultural institutions of the country, and provide services to museums, archives, archaeology departments and other similar institutions, in the conservation of cultural property. To meet the objectives, NRLC carries out following activities.

2. Training in conservation
3. Library & information services
4. Conservation Services, and
5. Technical advice in conservation.

A regional Laboratory (RCL) is functioning at Mysore, to render services on different aspects of conservation to cultural institutions in the Southern region of the Country.

**CHECK YOUR PROGRESS-1**

1) Where is the headquarter of UNESCO situated:

2) What is ASI?

3) What is NRLC and when was it established?

4) In which country Angkor Vat is situated:

**8.3.2 REVIVAL AND REDISCOVERY OF LOST TRADITIONS:**

Tourism activities have a great influence upon the destination community and culture. Different culture and societies across the country has their unique different traditions. Some of these traditions are really interesting and they eventually attract tourists around the world. Take a cultural tour to India to understand what makes the country so interesting and beautiful. The people of
India belong to different religions, caste and faith as such inhabitants of every region, state, and city and even within it have their own set of beliefs and practices that guide them in their lives. Each of these cultural practices has its own importance and charm.

On a cultural trip to India, you will not only discover the intricacies of each of these cultures individually but will also understand how so many cultures coexist peacefully. As the time passed, different shades of traditions and rituals have been adding to the Indian culture and heritage resulting in a multi-hued culture which India proudly boasts of. People following different religions, caste and faith coming from various region and state have made a nice amalgamation of diverse culture enriching the Indian culture even more. India's culture is like a rainbow of multiple facets which accommodates music, dance, performing arts, paintings and literature in itself which have gained recognition and fame from every corner of the world.

Modern tourism has a wide range of its impact due to infrastructural and technological advantages. Language, religion, food and the arts are just some of the various aspects of Indian culture. The customs and traditions of India are very rich and full of cultural heritage which have been reformed and modeled from the long history of Indian society to the modern age. India is the glorious monumental example of the cultural and social diversity based on the different geography, new adapted traditions and culture, ideas and national heritage. India is well known as the birthplace of lovable customs and traditions which can be explored on world stage also. As India is the secular country and everyone here has his own right to celebrate any festival can part in any fairs and pursue any religion of his own choice. Indians followed various traditions and customs throughout his life from the birth to the death, one can find different traditions and customs here that are originated and bounded with each occasions. Some popular customs and traditions of India are described below-

Traditions of marriage, Namaste and pranam, worshiping of nature such as earth and water (river), menhandi, performing arts and specialized dances, celebrations and festivals, join family system, tilak, aarti, bindi, lightening diya etc.

Tourism has the capability to boost the development and growth of these ancient India traditions. Destination communities are now following and developing these ancient traditions in order to attract and sustain tourism activities in their locality. Many of the local dances and festivals across the country are revived and rediscovered as a result of tourism impact both economical and social impact. Tourism has revived a number of old traditions across the country in various states / regions such as Rajsthan, gujrat kerala, Kashmir, asam, himachal pradesjh etc.
Today modernisation and tradition co-exist, making Indian culture opulent, complex, magical and truly cosmopolitan. The country has seen a revival of the arts. Age-old crafts are being resurrected. In dance and music the ancient guru-shisya concept - whereby students live with and serve the teacher - is still followed.

Indian festivals, associated with mythology and the seasons, are moments of gaiety, fun and celebration. In architecture and crafts, trained Indian designers are seeking out old masters to recreate old techniques to revive traditions that have been losing out because of the use of modern materials. Indians are rediscovering the quality and sensibilities of local art forms which are best suited to its climate. Also seeing a revival is India's rich medical heritage. Yoga and Ayurveda - both ancient sciences are today acknowledged as beneficial forms of alternative medicines.

Foreign tourist groups often enjoy and respect these Indian traditions with a great curiosity. To impress and respect the local community foreigners watch them carefully and start to practice these specialized ancient traditions of India. One of the biggest beneficial features of cultural tourism is that it helps protect and preserve cultural resources. The economic opportunities it provides stimulate local communities to conserve their heritage in order to continually attract visitors. For example, Lijiang, an ancient town of China, expanded its budget for heritage maintaining from 1998 to 1999 since its total income had increased significantly due to the developing tourism industry. Traditions, customs, traditional art and techniques and other cultural inheritance are at a greater chance of being survived; there may even be a revival of them because local people can make money from their cultural resources. Another significant positive impact is that cultural tourism promotes local culture. Whereby tourists get an opportunity to know about the traditions, values and lifestyle of indigenous communities.

Rural areas in India still have the traditions telling people throughout the world to live simply in peaceful coexistence and keep aside faith in religion as a means for continuing self development. It is a wrong notion that India adhered to concept of secular living after independence, rather the fabric of Indian society is secular right from time immemorial. Hinduism, Buddhism, Jainism, Sikhism, Islam, innumerable faiths, sects of spirituality and religions could grow in India because of the secular and liberal mindset of people living in this great nation. Cultural tourism is the biggest motivator in the preservation, revival and rediscovery of these cultural and social traditions. A number of areas of India are very specialized and rich in their cultural traditions such as Dandiya dance of Gujarat, bhangra of Punjab, odisi of Orissa etc. these ancient cultural heritages has been continuously practiced by local community for their own joy and
satisfaction. Tourists often go to destinations to spend their vacation with pleasure. During their tourism activities they come close to the local people and enjoy their special traditions. This also gives the pleasure and satisfaction to the local people as well as helps the revival of these traditions.

CHECK YOUR PROGRESS-2

1) Name the famous dance of Assam

2) Name any 2 old cultural traditions of India.

3) What is tilak?

8.3.3 MOTIVATION TO ARTISANS AND CRAFTSMANSHIP

Growing trend of cultural tourism created a significant impact on the artisans and craftsmanship of the local community around the tourist destination. Tourist often attracts and buys these cultural memorandums for their own pleasure. Local communities and entrepreneurs can partner with the public sector to develop, package and market a whole new suite of export-ready tourism experiences to domestic and international visitors. These can include culinary, sporting, musical, heritage, art and craft, shopping and activities Barbados’ notable accomplishments in the areas of music, heritage and cuisine for instance, can be capitalized on by developing new and innovative tourism products and utilizing the people behind them to promote the destination while “the iron is hot”. It could provide global opportunities and exposure for local chefs, local products, local music, art and metal work, crafts etc.

A study by the Travel Industry Association in 2003 shows that heritage travelers stay longer at their destinations and spend more money there than other types of travelers. A more recent State of the American Traveler Survey done in 2008 states that over 70% of travelers visited one or more of the following cultural heritage attractions: historic attraction; state, local, or national park; an art gallery or museum; concert, play, or musical; or an ethnic or ecological heritage site. Travelers say that trips are more memorable if they include a heritage activity where they learn something. Many visitors said they extended their stay because of a heritage activity. The majority of these travelers stay
overnight at local hotels, motels, bed and breakfasts, or campgrounds. Heritage travelers also tend to put more money back into the community spending on average $166 more than other types of travelers per trip.

Most of the tourist destination across a big country like India is situated at the far reaches. These distant tourist places have their different culture as well as their special art and craft work. Tourist from India and around the world is big consumers/ buyers of these art works. Various types of brass, metal, stone and wooden work are the identity of Indian tourist places. Heritage and cultural tourism can be a driving force to boost the local art and craftsmanship in a local community. The entire state of Rajasthan, Kashmir etc are driven by cultural and craft tourism. The carving and costumes of the sculpture speak volumes about skilled craftsmanship of the ancient Kashmiri art. Tourism provides economic benefits as well as emphasizing the cultural and identity aspects of the local population of the host country and as a tool for job creation and raising the level of economic welfare. Among developing countries, international tourism is seen as a way to gain foreign capital. When the arts and crafts makers being to cater the tourist market, their work often loses its (authenticity) and the result is commodization of culture. On the other hand, far from leading to a degeneration of arts and crafts, tourism can contribute to their preservation and revival. Traditional handicrafts and industries are a vital part of country cultural, national and popular heritage over the centuries, these crafts have been associated with the style and mode of people's living. However, today these industries are threatened with extinction of various reasons and not just in Bahrain.

The craft sector, while benefiting from the demand from tourism, can lose out on quality because this demand sometimes goes hand in hand with dramatic degeneration of finished product. Tourist demand can provide the basis for the growth and diversification of artisanal production and the creation of markets in major tourist areas.

If there is one sector whose fate is intimately bound up with that of tourism, it is clearly that of the craft sector. Indeed, whatever the type of tourism (resort holiday tourism or tour holidays), the tourist never fails to take home the obligatory souvenir. Tourism has developed into a new market for the handicrafts industry, and the articulation of the tourism handicrafts mechanism is seen through the creation of new products directed towards the domestic and foreign tourist demands.

Image: tourism and the development of arts and handicrafts
Types of Handicrafts

Indian crafts are highly acclaimed throughout the world for their aesthetic appeal and magnificence. The huge ethnical custom and cultural variety has made possible for different types of crafts to accomplish. These are made up of different materials, themes and proficiencies.

Indian crafts are highly acclaimed throughout the world for their aesthetic appeal and magnificence. The huge ethnical custom and cultural variety, has made possible for different types of crafts to accomplish. These are made up of different materials, themes and proficiencies.

Works on woodwork, Pottery, hand looms, terracotta, paintings, beadwork, jewelry and embroidery etc have survived through centuries with fewer changes. With the advent of modernity, the craft materials have underwent sea change over the years and also the proficiency of construction have not altered to a great extent.

Articles of daily use like chairs, bags, cushions, hats, purses, sofas etc are made; recycled materials like wire, plastic and tin are also part and parcel of crafts of India. Thus the crafts not only provide the day-to-day needs of the people and also utilized for decorative and religious ceremonies in India. They are exquisite and delicate, providing new definitions to the Indian crafts and artifacts. There are several sub categories, which include Bubblegram, Glass blowing, Glass bead making, Stained glass, Mosaics and Pottery.

**Bubblegram:** A bubblegram is a three dimensional image which is composed of points and remains suspended in a medium, usually a plastic block. Laser bubblegrams is in vogue. Crossing lasers in `appropriately-doped` plastic, which may cause a chemical reaction through heat or `photonic` inflammation makes these images.

**Stone craft:** The art of sculpture is the poetic expression of stone craft. Sculptures of deities, decorative for house interiors, modeled on classical prototypes, continue to be made in nok and corner of India. In interior of India
such sculptures and exquisite figures are carved in relief with details engraved in fine lines. These objects are handmade artistic work made using hammer and chisels.

**Glass craft:** As early as 800 B.C., i.e., at the time when the Yajurveda was composed, glass craft was very popular. It is evident from the archaeological findings at Basti in UP that glassware is about 2000 years old. The way glass is prepared transformed into various shapes is remarkable.

**Leather craft:** India is famous for its leather products. The state of Uttar Pradesh is an important source for finished leather and leather products. The Tanneries in Kanpur are known all over the world for the finest quality leather tanned by them. Kanpur and Agra in U.P. is the two renowned production centres for leather items.

**Wood craft and Paper Craft:** The tradition of the paper craft in India is fairly old. The paper industry was located mainly in Patna, Delhi, Rajgir, Avadh, Ahemdabad, Gaya and Shahzadpur (near Allahabad). Since the paper is one of the easily perishable materials, the traditions of the paper craft have been left unrecorded.

**Indian Arts:**

Indian Art is the visual art produced on the Indian subcontinent from about the 3rd millennium BCE to modern times. Voluptuous feeling is given unusually free expression in Indian culture. A strong sense of design is also characteristic of Indian art and can be observed in its modern as well as in its traditional forms.

**Temple and Sculpture Art**

Indian temple sculpture can be divided into two types: the Nagara (North India) and the Dravidian (South India). The primary difference between the two is the way in which the shikharas of the temples are carved out. As far as the architectural elements are concerned these include the garbhagrihas, vimanas, mandapas, miniature towers, lathe turned pillars and others. The best specimen of the Mauryan stone sculpture had a rare feeling for monumental form and royal power. The sculpture has an exquisite finish and a brilliant polish. The monolithic pillars of Ashoka on which are inscribed his famous edicts are the great monuments of the Mauryan age. The most striking feature of these pillars is the finely carved capital with magnificent animal figures. In east India in the state of Orissa the finest examples of exquisite sculpture are the Lingaraja temple and the Konarak temple. Each wheel of the chariot in the Konark temple has rich carvings. The human and animal figures are carved out in black stone. The poses of dancing apsaras depicted look lively. The theme of several of these sculptures is passionate. The Chandella rulers of central India built temples of Khajuraho that is adorned with sculptures. The style of the shikhara varies from that of the
The Jain temples at Mount Abu are the finest monuments of the Solanki kings of Gujarat who were great patrons of art. The Abu temples are very attractive because of the delicate and intricate carvings in white marble.

The south Indian temple sculptures can bestow a completely separate identity to the temple building idiom in India. The south Indian temple sculpture received an added boost under the reign of the Cholas and Chalukyas. While the Vijayanagara Empire immortalised their art and sculpture on stone in Hampi, the former two kingdoms are also renowned for their massive temples. Another special feature of the south Indian temple sculpture is the miniature towers.

**Indian fresco:** The tradition and methods of Indian cliff painting gradually evolved throughout many thousands of years - there are multiple locations found with prehistoric art. The early caves included overhanging rock decorated with rock-cut art and the use of natural caves during the Mesolithic period (6000 BCE). Their use has continued in some areas into historic times.[6] The Rock Shelters of Bhimbetka, a World Heritage Site, are on the edge of the Deccan Plateau where deep erosion has left huge sandstone outcrops. The many caves and grottos found there contain primitive tools and decorative rock paintings that reflect the ancient tradition of human interaction with their landscape, an interaction that continues to this day.[7] The oldest frescoes of historical period have been preserved in the Ajanta Caves from the 2nd century BCE. Despite climatic conditions that tend to work against the survival of older paintings, in total there are known more than 20 locations in India with paintings and traces of former paintings of ancient and early medieval times (up to the 8th to 10th centuries CE).[8] The most significant frescoes of the ancient and early medieval period are found in the Ajanta, Bagh, Ellora, and Sittanavasal caves.

**Jewelry:** The Indian subcontinent has the longest continuous legacy of jewelry-making, with a history of over 5,000 years.[9] One of the first to start jewelry-making were the peoples of the Indus Valley Civilization. Early jewelry making in China started around the same period, but it became widespread with the spread of Buddhism around 2,000 years ago.

**Folk and tribal art:** Folk and tribal art in India takes on different manifestations through varied media such as pottery, painting, metalwork,[10] paper-art, weaving and designing of objects such as jewelry and toys. These are not just aesthetic objects but in fact have an important significance in people's
lives and are tied to their beliefs and rituals. The objects can range from sculpture, masks (used in rituals and ceremonies), paintings, textiles, baskets, kitchen objects, arms and weapons, and the human body itself (Tattoos and piercings). There is a deep symbolic meaning that is attached to not only the objects themselves but also the materials and techniques used to produce them.

Often puranic gods and legends are transformed into contemporary forms and familiar images. Fairs, festivals, local heroes (mostly warriors) and local deities play a vital role in these arts.

Folk art also includes the visual expressions of the wandering nomads. This is the art of people who are exposed to changing landscapes as they travel over the valleys and highlands of India. They carry with them the experiences and memories of different spaces and their art consists of the transient and dynamic pattern of life. The rural, tribal and arts of the nomads constitute the matrix of folk expression. Examples of folk artists are Warli and Gond.

**Contemporary arts of India:** From the 1990s onwards, Indian artists began to increase the forms they used in their work. Painting and sculpture remained important, though in the work of leading artists such as Nalini Malani, Subodh Gupta, Narayanan Ramachandran, Vivan Sundaram, Jitish Kallat, they often found radical new directions. Bharti Dayal has chosen to handle the traditional Mithila painting in most contemporary way and created her own style through the exercises of her own imagination, they appear fresh and unusual.

The increase in discourse about Indian art, in English as well as vernacular Indian languages, changed the way art was perceived in the art schools. Critical approach became rigorous; critics like Geeta Kapur, R. Siva Kumar, Shivaji K. Panikkar, Ranjit Hoskote, amongst others, contributed to re-thinking contemporary art practice in India. The last decade or so has also witnessed an increase in art magazines like Art India, Art & Deal, Indian Contemporary Art Journal and Art Etc. complementing the catalogues produces by the respective galleries.

The crafts of India have been valued throughout time; their existence today proves the efforts put into their preservation. Contemporary designers such as Ritu Kumar and Ritu Virani are constantly embedding traditional crafts into their designs. The National Institute of Fashion Technology (NIFT) includes education of traditional crafts in their course curriculum to maintain this culture. Despite these efforts, the roots of these crafts, which are the rural craftsmen, are in decline. This argued by the India Foundation for the Arts organisation. Rising costs of materials and supplies have placed many of these craft communities in financial struggle. A recent article in the Times of India predicts the price of steel to rise between Rs 600 and 1000 per tonne. On the other hand, statistics from the All India Handicrafts Board show that craft export has
risen from 23 crores to over 9000 crores since the past 50 years.\[19\] With rising economic and political issues in India, the craft sector is struggling to uphold. Although an interest to retain the culture of crafts is seen in designers and institutions. After Independence, The Handicrafts Board was set up to look into the plight of the dying crafts. Slowly demand grew for these items both at home and also abroad. Recent export figures show that India is lagging behind in many handicraft commodities except in the case of gems and jewellery items.

Despite the growth of handicrafts industry in India, the average earnings of the craftsmen when compared to other fields is very low. Hence the younger generation is moving onto other fields with only the elder craftsmen left over. The average age of many master craftsmen is around 50 years.

Improving educational system and lifestyles of the middle class people contribute a lot for the eroding of the native crafts in India. Cheap plastic items have now flooded the market and people have left out the age-old clay and metal containers. They do not understand the harmfulness of plastic items, which may react with their food. Also they have moved onto wearing synthetic clothes avoiding good, comfortable and cheap cotton woven items, just for their patterns and cost.

The need of the hour is assistance for the craftsmen to improve their techniques, availability of good raw materials, direct marketing channels, credit and enough wages and socio-economic benefits.

CHECK YOUR PROGRESS-3

1) Stone art work is mostly found in the state of ……………………………
2) Which is the famous handicraft of Jammu and Kashmir?
…………………………………………………………………………………………
3) Who is Natraj?
…………………………………………………………………………………………

8.3.4 CULTURAL AWARENESS AND KEENER SENSE OF BELONGINGNESS FOR CULTURAL HERITAGE

Diversity is an increasingly important factor in working life as tourism organizations, worldwide, become more diverse in terms of the race, ethnicity, national origin and other personal characteristics of their members (Shaw and Barrett-Power, 1998). One of the key challenges of diversity is that the term means different things to different people. People undertake overseas travel to experience and broaden their understanding of different cultures. However, while wanting to experience different cultures, visitors also want or expect host countries to understand and respect their own culture. Many tourism businesses provide their staff with Welcome Host or similar training to ensure they offer a warm welcome to visitors.
However, far fewer offer training specifically on the cultural mores and attitudes of overseas visitors. Yet it is the improved awareness and understanding of different visitors’ cultures that can provide far greater business benefits. This article illustrates how having a better understanding of different cultures, and being able to provide products and services in appropriately differing ways, can provide significant benefits to tourism businesses and destinations. It is argued that there is a correlation between the level of cultural awareness of the tourism business and the subsequent perception of product/service quality on the part of the tourist. Increased customer satisfaction is likely to ensue as a result of enhanced staff cultural awareness and subsequent development of culturally appropriate products and services. Ultimately in today’s competitive market it is vital to understand the economic benefits that cultural awareness can bring to tourism businesses.

When there was relatively limited contact, and contacts were confined to a small number of individuals, cultural awareness was the preserve of a few. In the current global marketplace some level of cultural awareness is a prerequisite for successes.

Both the tourist’s and the businesses’/destinations’ knowledge and understanding of another culture may hinder or enhance the service exchange. It is important for tourism businesses and destinations to take this into account in the provision of products and services.

Culture relates to the norms, values and beliefs that influence and shape individuals, businesses and destinations. It is a strong determinant of behavior.

Culture influences every aspect of our lives and often people are unaware of why they do and see things in a particular way. Only when we step outside our cultural boundaries can we see how our actions are determined by the culture in which we live.

One of the biggest problems in the customer service exchange within the tourism industry is the common assumption that everyone has the same needs, expectations and behavioral patterns, when in fact the actions and reactions of people are a result of their cultural conditioning and therefore may differ.

‘Tourism service encounters take place in the context of a tourism culture which is formed by four components: the national/regional settings of the tourist and the host region, the tourists’ various subcultures and the organizational culture of tourism enterprises in the tourism receiving region’.

It is therefore important for tourism businesses to identify the specific cultural components relevant to their organization, their market and their product/service offering. And to ensure that adaptations are made to enhance the customer experience and ultimately assure customer satisfaction and loyalty. Undoubtedly the tourism industry and culture are inextricably linked in that it is
often the search for a cultural exchange that is an inherent part of the motivation for the tourist to travel. As already illustrated, to meet expectations there is a need for cultural awareness, both on the part of the individuals travelling and, equally importantly, tourism businesses. In order to enhance service provision and ultimately attract and retain loyal customers, tourism businesses should be aware of important cultural characteristics, including values, attitudes, language, etiquette, customs and manners. Only by enhancing our understanding of the diverse cultures of our inbound markets will we be able to improve international perceptions of Britain and deliver a first-class welcome to all visitors. Cultural awareness and foreign language training are identified by the strategy as contributing to the improvement of customer skills across a range of sectors.

Cultural awareness matters to all stakeholders in the tourism industry, both the tourists themselves and the service providers. In many cases this is a subconscious requirement and it generally only becomes apparent when things go wrong.

For tourists, understanding the culture of the destinations visited is likely to enhance their experience and increase their enjoyment, whereas a lack of understanding has the opposite effect.

Culture conditions people to abide by certain norms and expectations, and if the hosts fail to recognise these it makes for a less positive experience. Employees should also be culturally aware in order to provide effective customer care that meets the needs, and exceeds the expectations of customers.

From a business perspective, the industry decision makers need to have an understanding of diverse cultures as they are responsible for making decisions or formulating policy affecting culturally diverse tourists. Such decisions will ultimately affect income generation and competitiveness that will impact upon long-term survival.

One of the difficulties faced by the tourism industry is that, because of the multi-faceted nature of the industry and the wealth of stakeholders involved in the provision of the overall product, tourists tend to judge the total holiday experience. It is therefore important that everyone from transport and accommodation providers to restaurants and attractions make cultural awareness a priority.

Customers in a ‘collectivist’ culture are more likely to express dissatisfaction to others, ie friends and peers, rather than to the organization. Conversely, customers from an individualistic culture are more likely to voice their complaints to the organization and consequently receive a solution to their dissatisfaction, having expressed it to the organization in the first place.

‘Cultures that value formal rules and standards need a well-defined set of policies and procedures when dealing with organizations. They will be more
comfortable (less uncertain) by knowing the expectations of the organizations with whom they deal… Organizations need to be prepared to encounter a variety of differing value structures and not set expectations for behaviors, relationships or business practices by their home country’s standards. The better we know our customers and their corresponding culture, the more correctly we will adapt our business strategy to their differing needs.’

From an aesthetic perspective, which includes art and folklore, it is important for an organization to recognize the importance of symbolism within certain cultures. Problems may be caused when symbolic values are incorrectly interpreted, for example: ‘… Russian folklore has established the bat as a symbol of bad luck. As a result the famous movie Batman has had no success in Russia and the bat, owl and mouse should not be used in advertising.’

Whilst the film example may not be relevant to the tourism industry, the message however is relevant. Imagine if the design of a hotel room featured artwork containing such images. This would be culturally inappropriate, especially if the key market was Russian tourists.

Furthermore, advertising must also be considered from a cultural perspective, as symbols commonly used in one culture and incorporated into product marketing, may be considered inappropriate in another. This attitude towards time is likely to cause frustration in a Western culture when appointments and schedules are not strictly adhered to. Providers should consider check-in/out times and meal times at hotels or schedules imposed on UK coach tours where non-adherence to times can cause problems and frustration to the staff involved and potential dissatisfaction for the customer.

Cultural brokers can make a valuable contribution, too. The idea of the cultural broker, whose role is to mediate between tourist and host, is explored by Wall and Matheson. Included in the category of cultural broker are tour guides, organizers and retailers of tourism products and services.

The interaction between tourists and hosts is, to some extent, controlled by the broker and they are also in a position to influence and enhance the cultural exchange by providing information to both tourists and hosts that will facilitate the exchange and lead to increased customer satisfaction.

The cultural broker is therefore an essential component in the tourism process and their importance should not be underestimated. A broker well-versed in the cultural idiosyncrasies of an organization’s key market can be the lynchpin of a successful exchange. An underlying theme throughout cultural awareness literature relates to the ability to empathise and suspend judgment [31]. Learn how others would like to be treated, how they think and feel, and collect as much information as possible about cultural norms and values before evaluating a situation.
Learning simple cultural dos and don’ts can avoid misunderstandings, help to generate respect and understanding and ultimately lead to repeat business through customer satisfaction [32]. These attitudes and behaviors can be learnt through cultural awareness training.

The type of intercultural training is a further consideration: whether culture-specific or culture-general [33]. Culture-general training will offer an overview of different cultures whereas culture-specific training will, as the title suggests, offer training in a limited number of cultures. Clearly the choice is dependent on the level of cross-cultural contact involved but whatever the type selected; it will ultimately lead to an increased understanding and enhanced service quality.

8.4 SUMMARY:

Cultural awareness recognizes that we are all shaped by our cultural background, which influences how we interpret the world around us, perceive ourselves and relate to other people.

You don't need to be an expert in every culture or have all the answers to be culturally aware; rather, cultural awareness helps you to explore cultural issues with your care recipients more sensitively. Cultural tourism is one of the largest and fastest-growing global tourism markets. Culture and creative industries are increasingly being used to promote destinations and enhance their competitiveness and attractiveness.

Many locations are now actively developing their tangible and intangible cultural assets as a means of developing comparative advantages in an increasingly competitive tourism marketplace, and to create local distinctiveness in the face of globalization. The Impact of Culture on Tourism examines the growing relationship between tourism and culture, and the way in which they have together become major drivers of destination attractiveness and competitiveness.

Based on recent case studies that illustrate the different facets of the relationship between tourism, culture and regional attractiveness, and the policy interventions which can be taken to enhance the relationship, this publication shows how a strong link between tourism and culture can be fostered to help places become more attractive to tourists, as well as increasing their competitiveness as locations to live, visit, work and invest in.

8.5 GLOSSARY:

- Culture: the way of life depending on the region, or religious values
- UNESCO: United Nations Educational, Scientific and Cultural Organization, Paris, France
• Menhandi: Mehndi is the application of Henna as a temporary form of skin decoration in South Asia
• Natraj: The Lord (or King) of Dance, Lord Shiva
• NIFT: National Institute of Fashion Technology (NIFT) is a fashion institute in India. It was set up in 1986 under the aegis of the Ministry of Textiles, Government of India.
• NRLC: National Research Laboratory for Conservation of Cultural Property (NRLC) is a scientific institution of the Ministry Of Culture, Government of India
• Odisi: one of the eight classical dance forms of India. It originates from the state of Odisha, in eastern India
• Contemporary: Belonging to the same period of time

8.6 CHECK YOUR PROGRESS:

Check your progress-1
1) Paris, France
2) Archeological survey of India
3) National Research Laboratory for Conservation of Cultural Property,
4) Cambodia

Check your progress-2
1) Bihu
2) Yagya, mehandi,
3) A mark on the forehead (religious)

Check your progress-3
1) Rajasthan
2) embroidery
3) Dancing lord Shiva

8.7 REFERENCES:
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• Domestic tourism in India, D.S. bhardwaj, O.P. kandkari
• Tourism in India, Vijay Kumar Gupta

8.8 SUGGESTED READINGS:
• The Culture of Tourism, the Tourism of Culture: Selling the Past to the, Hal K. Rothman
• Cultural Tourism: Global and Local Perspectives, Greg Richards
• Indian culture: tradition & continuity, Dept. of Culture, Ministry of Tourism and Culture, Govt. of India, 2002
• Domestic tourism in India, D.S. bhardwaj, O.P. kandari
• Tourism: An Impact on Society and Culture, Dr. Sharmistha Bhattacharjee

8.9 MODEL QUESTIONS:

Short answer type questions:
1) What do you understand by ‘heritage objects’?
2) List any three traditions of your local community and culture.
3) Explain the term ‘handicrafts’.
4) Which Indian state is famous for its beautiful embroidery?
5) The origin of river Ganges is known as……………………………………
6) In which country the Angkor vat temple is situated?
7) Explain the following terms
   (a) OECD  (b) UNESCO
   (c) NIFT  (d) Pranam

Long answer type questions:
1) What is the importance of cultural heritages? How tourism motivates the preservation of different cultural heritages in the country?
2) Write an ‘essay on ‘tourism and the revival of lost traditions in India’.
3) How tourism promotes the cultural awareness around the destination? Also explain the effects of tourism on social values.
UNIT 9: NEGATIVE CULTURAL IMPLICATIONS OF TOURISM

Structure:
9.1 Introduction
9.2 Objectives
9.3 Negative Cultural Impacts of Tourism
   9.3.1 Over-use of Monuments and other Cultural Objects
   9.3.2 Xenophobia
   9.3.3 Cultural Shocks
   9.3.4 Erosion of Religious Values and Institutions
   9.3.5 Acculturation
   9.3.6 Beggar Mentality
   9.3.7 Commercialization of Art, Craft and Traditions
9.4 Summary
9.5 Glossary
9.6 Check your progress
9.7 References
9.8 Suggested readings
9.9 Model questions

9.1 INTRODUCTION:

Tourism can have various negative cultural implications on the destination community in the form of cultural pollution and destruction of cultural heritages. Increasing rate of mass tourism around popular cultural destinations is one of the primary reasons behind these negative cultural implications. Growing mass tourism activities towards architectural heritages and ancient monuments has affected them. Many of the fears surrounding tourism are closely associated with uncontrolled, unsustainable and massed tourism growth. Tourism is an industry and is dominated by private enterprise with a purpose of making money by selling experiences. Market led planning can fail to achieve the objectives of sustainable tourism and has a tendency to forget environmental, social and cultural impacts. The impact that tourism has on the cultural lives of communities is one of the most important issues debated by tourism researchers and academics today. There is an increasingly growing concern that tourism development is leading to destinations losing their cultural identity by catering for the perceived needs of tourists.
Although they take longer to appear, the cultural consequences of tourist activity have the potential to be much more damaging in the long term than environmental or social effects. In many countries, tourists are not sensitive to local customs, traditions and standards. Offence is given without intent, as tourists are short-stay visitors carrying with them their own cultural norms and behavioral patterns. They are usually unwilling to change these norms for a temporary stay – and may be unaware that these norms are offensive to the host community.

Commercialization of traditional cultural events and customs is leading to ‘fake folklore’ for the tourists, but more importantly, with no cultural value for the local population or the visitors. The issue is the potential conflict between the economic and cultural interests, leading to culture being sacrificed for reasons of promoting tourism i.e. creating an additional economic value at the price of losing a cultural value. Tourist groups generally come to destination from distant places or abroad. People of local community often fears for an unknown reason. This unknown fear or stress can give birth to xenophobia among local people. Overcrowding may lead to tourists taking over the best local facilities, because they usually have more money than the locals. Culture clashes may also lead to resentment, when for example; a visitor from a liberal culture may offend the conservative hosts. Economic differences between the hosts and tourists, and competition over scarce water and space can also cause tension.

As locals try to imitate tourists, they can loss their original culture. This leads to standardization of many forms of cultural, such as clothing and diet. But as a unique culture is one of the main attractions of tourist destinations, this may make the destination less desirable. Sudden change or loss of local culture or experiencing the new and strange culture is known as cultural shock.

When local activities are molded to fit tourist expectations. Local art and craft traditions may be 'trinket zed' to fit tourist tastes. This type of cultural and religious modification to attract more and more tourists cans results into destruction and erosion of religious values and institutions.

Culture shock is primarily a set of emotional reactions to the loss of perceptual reinforcements from one's own culture, to new cultural stimuli which have little or no meaning, and to the misunderstanding of new and diverse experiences. It may encompass feelings of helplessness, irritability, and fears of being cheated, contaminated, injured or disregarded.

Acculturation is a process in which members of one cultural group adopt the beliefs and behaviors of another group. Although acculturation is usually in the direction of a minority group adopting habits and language patterns of the dominant group, acculturation can be reciprocal--that is, the dominant group also adopts patterns typical of the minority group. Assimilation of one cultural group
into another may be evidenced by changes in language preference, adoption of common attitudes and values, members’ hip in common social groups and institutions, and loss of separate political or ethnic identification.

9.2 OBJECTIVES:

After reading this unit carefully, learner will understand the following concept-

- How tourism can be dangerous for monuments and other heritages
- Negative cultural implications in the form of xenophobia and cultural shocks
- How tourism is responsible for the erosion of Religious Values and Institutions
- Growing trend of acculturation and beggar mentality
- Tourism and Commercialization of Art, Craft and Traditions

9.3 NEGATIVE CULTURAL IMPACTS OF TOURISM:

With the rapid growth of mass tourism and technological advances related to tourism industry, tourism has now started to affect the destination culture. Tourism industry can have a number of negative cultural implications such as acculturation, xenophobia, loss of traditions and values and the commercialization of arts, crafts and traditions etc. There is an increasingly growing concern that tourism development is leading to destinations losing their cultural identity by catering for the perceived needs of tourists.

Although they take longer to appear, the cultural consequences of tourist activity have the potential to be much more damaging in the long term than environmental or social effects. In many countries, tourists are not sensitive to local customs, traditions and standards. Offence is given without intent, as tourists are short-stay visitors carrying with them their own cultural norms and behavioral patterns. The following sections describe each of these negative cultural implications in detail.

9.3.1 OVERUSE OF MONUMENTS AND OTHER CULTURAL OBJECTS:

Monuments and other cultural heritage objects such as ancient buildings, forts, statues etc have been a great source of attraction for tourists since hundreds of years ago. Mass tourism activities near these monuments and heritages make their overuse and eventually harm these objects. Various monuments in India and across the world are now facing increased number of tourists than ever before. Growing tourism activities near these objects require various types of services such as food services, logging, transportation and permission for the visit.
The historical monuments of India are not just remains and ruined sites, but building landmarks of India's past standing there to delight tourists, as well as to represent the rich cultural heritage of India. India's famous must visit monuments include the outstanding architectural wonder - Taj Mahal, the exquisite monumental temples of Khajuraho and the heritage forts and palaces of Rajasthan.

The rich heritage of India comes alive with all its fragrance and color which are still breathing in the heritage forts, palaces, temples and monuments fringed in each and every corner of this multi facet country, India. The splendid architecture, minutely carved motifs, embellished facades of the heritage monuments narrates the immense skill of the craftsmen of the yore which have been fascinating the world for many centuries. If you start counting, you may fail to accommodate all the heritage sites of India in your fingers which have evolved with the passage of time. UNESCO has come up with the mission to protect these treasures which are the finest gifts to world from India so that generations to come feel them as fortunate as we consider ourselves after acquainting with these incredible Indian heritage sites. Be it the exquisite marble inlay work of the Taj Mahal or the titillating sculptures of the Khajuraho Temples or the excellent fusion of science and art in Konark Sun Temple, Indian heritage sites are the manifests to the extremely rich heritage of India.

To fulfill the demand of foreign and domestic tourists authorities of these cultural objects have to open them for a long enough period of time as it also generates revenue. Tourism activities are also beneficial for the local community as well as the overall GDP of the country. All these reasons are responsible for the over use of these monuments and other cultural objects. Although some rules and regulations have been developed and enforced around these objects in order to prevent their overuse. Various national and international organizations are now working towards the protection of these objects such as UNESCO. Monuments and other cultural objects like forts, stupas, heritage sites, statues, cave paintings etc are important part of culture and they must be protected from their overuse. Almost all popular tourist destinations across the country are now facing various problems due to increased mass tourism activities like pollution around these destinations. The transportation sectors, hotels and food services including tourist
activities leaving a significant amount of pollutants eventually damage them. Increased tourism (or the promise of it) is often the driving force behind the highest-profile efforts aimed at preserving cultural heritage sites, and it has likely saved many sites that may have been otherwise neglected or destroyed. Many people who live where these important heritage sites exist, often in second- and third-world economies, have gained substantial benefits from increased development designed to serve an influx of visiting tourists, a large number of whom come armed with first-world incomes.

However, such tourism-oriented infrastructural development can make site managers and other authorities hesitant to place any restrictions on site access, potentially hastening wear and tear on the sites from ever-increasing numbers of visitors. This deterioration is then further compounded by continued hesitance on the part of site authorities to close down any parts of these sites in order to conduct needed preservation or consolidation projects. Even more dangerous is when local authorities lack either the will or resources to preserve such sites at all.

AJANTA CAVES (India, Buddhist) located deep in the forests of Maharashtra, India, the Ajanta Cave monuments are very influential pieces of early Buddhist art dating to the 1st and 2nd centuries CE, as well as later additions from the Gupta period 400-500 years later. Twenty nine caves were cut into the cliff face of an escarpment that looms from 35 to 100 feet above the River Waghur, fronted by majestic columns, porches, and vestibules hewn from the rock. Within the caves more rock-cut sculptural masterpieces depict the Buddha over different phases of his life. Mural paintings cover all of the cave but the floor, depicting stunningly beautiful, colorful renditions of ancient narratives such as the Jakata Tales. ELEPHANTA CAVES (India, Hindu) This sacred Hindu sculptural site, located on Gharapuri Island in Mumbai’s harbor, comprises over 60,000 square feet of area and is filled with beautiful sculptural pieces depicting, in particular, the Hindu deity Shiva; the cave temple complex is considered by Hindus to be Shiva’s abode. The main work in the caves was done between the 9th and 13th centuries CE, during the reign of the Silhara Kings. Some of the guidelines by the protecting organization for sustainable tourism are as under –

- Always keep the heritage sites clean. They are true representation of our tradition and culture
- Do not scribble names and messages on heritage sites. They only help to defame your name and culture
- Make sure that your travel does not cause environmental pollution. Do not litter plastic carry bags and other waste products around heritage sites
- Always use dustbins to dispose waste while travelling.
- Heritage is something inherited give due respect to them.
9.3.2 XENOPHOBIA:

Xenophobia refers to the irrational or unreasoned fear of that which is perceived to be foreign or strange. It comes from the Greek words xenos, meaning "stranger," "foreigner," and Phobos, meaning "fear." Mass tourism activities can create xenophobia among the people of local destination community. Xenophobia can manifest itself in many ways involving the relations and perceptions of an in-group towards an out-group, including a fear of losing identity, suspicion of its activities, aggression, and desire to eliminate its presence to secure a presumed purity. Xenophobia can also be exhibited in the form of an "uncritical exaltation of another culture" in which a culture is ascribed "an unreal, stereotyped and exotic quality". Vienna Declaration and Programme of Action urge all governments to take immediate measures and to develop strong policies to prevent and combat all forms and manifestations of racism, xenophobia or related intolerance, where necessary by enactment of appropriate legislation including penal measure.

One of the major impediments to tourism achieving its economic and social roles is Xenophobia. Safety has always been an important prerequisite for the attraction of international tourists. Xenophobic attacks puts tourism is a difficult trading environment as it scares tourist away. As tourism aids in building nation's image, this is damaged easily by xenophobic attacks, and also international relation is impeded. Xenophobia destroys the nation's economy structure that tourism might have built. The recent xenophobic violence that ravaged through South Africa was sparked partly by accusations of foreigners stealing local jobs. Mass tourism has originated various socio, economic and cultural problems due to neo colonization by large tourist groups and increasing rates of foreign tourist arrivals. In mass tourism destinations, the tourist is itinerant, relaxed, free-spending, enjoying his leisure and absorbing the experience of being in a different place. In contrast, the host is stationary and if is employed in the tourist industry, spends a great part of the time catering to the needs and desires of visitors. Social impacts of tourism refer to the changes in the quality of life of residents of tourist destinations. The nature and dynamics of the tourist-host relationship has three dimensions: people’s interactions, perceptions and attitudes. Host attitudes may rapidly become antagonistic and even reach xenophobic proportions when there is a non-stop development of facilities and services to satisfy tourist demands. “Xenophobia occurs when the carrying capacity, or saturation point, is reached and exceeded” referring to tourists behavior. The tolerance of tourists by hosts varies spatially and temporally. As long as the economic impacts remain positive, the presence of tourists is usually accepted and welcomed. But once the host population consider that the limit is
exceeded, some negative symptoms of discontent appears going from apathy and irritation to extreme xenophobia, and from bad-tempered courtesy to open exploitation. There are numerous situations that provoke feelings of tourist resentments and they arise from different conditions. Residents frequently resent the visible economic superiority of visitors and try to copy their behavior. The introduction of foreign ideologies and ways of life into societies exposed to tourism indicates a foreign domination of the industry and an adaptation of work. Furthermore, the hosts perceive quickly the desire of tourists to spend money and their weaknesses are exploited. Hosts may develop an inferiority complex that start out a process of imitation. Most case studies that examine demonstration effect agree that tourism can modify local behavior and divide the population of destinations areas.

Figure: Negative Cultural Implications and Tourism

Once the host population consider that the limit is exceeded, some negative symptoms of discontent appears going from apathy and irritation to extreme xenophobia, and from bad-tempered courtesy to open exploitation. Tourism has grown to be a major social and economic force in the world today. Tourism majorly contributes to the balance of payment of a nation and also an earner of foreign exchange. Tourism serves a multiplier of income and a generator of employment in the world today. However one of the major impediments to tourism achieving its

Economic and social roles are Xenophobia. Safety has always been an important prerequisite for the attraction of international tourists. Xenophobic attacks puts tourism is a difficult trading environment as it scares tourist away. As tourism aids in building nation's image, this is damaged easily by xenophobic attacks, and also international relation is impeded. Xenophobia destroys the nation's economy structure that tourism might have built, reduces socio-economic benefits accrued to community residents through tourism enterprises. As the world is a global society several tiers of government should take vivid stands against several causes of xenophobia in the society. This would be a stand
TOURISM IMPACTS

to stop further decline of economy of social standard of the world society. There are numerous situations that provoke feelings of tourist resentments and they arise from different conditions-

1- The physical presence of tourists in the destination area
2- The demonstration effect. (We have discussed in earlier sections)
3- Foreign ownership and employment
4- Language and cultural antagonism etc

CHECK YOUR PROGRESS - 1:

1- Where is sanchi stupa situated?

2- What is the main type of pollutant caused by tourism industry?

3- Who build the buland darvaja?

4- From which language the word ‘xenophobia comes:

9.3.3 CULTURAL SHOCKS:

Tourists often experience cultural shocks during tourism activities near distant places and communities. Culture shock is the personal disorientation a person may feel when experiencing an unfamiliar way of life due to immigration or a visit to a new country, a move between social environments, or simply travel to another type of life. One of the most common causes of culture shock involves individuals in a foreign environment. Culture shock can be described as consisting of at least one of four distinct phases: Honeymoon, Negotiation, Adjustment, and Mastery, are the most common attributes that pertain to existing problems, further hindrances include: information overload, language barrier, generation gap, technology gap, skill interdependence, formulation dependency, homesickness (cultural), infinite regress (homesickness), boredom (job dependency), response ability (cultural skill set). There is no true way to entirely prevent culture shock, as individuals in any society are personally affected by cultural contrasts differently. Culture shock relates to individuals' feelings of well-being in the host culture, the social adjustment component refers to individuals' capacity for effective social interaction with host members. Psychological dimension of culture shock can be understood in terms of cultural dissimilarities and of feelings of loneliness in the host country.
Social dimension of culture shock can be explained in terms of – (a) individuals lacking the appropriate cultural knowledge about the host country– (b) individuals having strong cultural identities that would make them less likely to adapt to the host culture.

Various tourist places are situated at a sufficient distances across the country or globe. When tourists visit these distant destinations they come across to the entire new and different culture and traditions. Culture shock is defined as a psychological disorientation that most people experience when living in a culture markedly different from one’s own. Culture shock occurs when our "...cultural clues, the signs and symbols which guide social interaction, are stripped away.

A difficult part of this process for adults is the experience of feeling like children again, of not knowing instinctively the ‘right’ thing to do."

Symptoms of culture shock include:-

- Homesickness
- Boredom
- Withdrawal
- Excessive sleep
- Compulsive eating/drinking
- Irritability
- Stereotyping host nationals
- Hostility towards host nationals

Everyone experiences culture shock in different ways, at different times and to different degrees. Since you will be spending a lot of your time with other Americans, the culture shock you should expect would be minimal compared to someone who is going to live with a Swiss host family and attend a Swiss university without any other Americans around.
Usually the cultural adjustment process follows a certain pattern. At first, you will be excited about going to Europe and starting a new adventure. When you first arrive, everything will appear new and exciting. However, after some time, you may start to feel homesick and question why the Swiss (or Italians or French) do things differently than Americans do. You may even become irritated with these differences. However, you will eventually get used to this new way of life. And before you know it, you will be getting excited about the return home to your family and friends.

Tourism is one of the most effective reasons behind cross cultural interaction as well as cross community interaction. Culture shock is the reaction one faces when confronted with a new cultural environment; the effect of going from culture into another. By the time you begin orienting yourself, you could be experiencing the first signs of culture shock.

**Figure: Stages of Cultural Shocks**

- **Euphoria:** This is the initial state of culture shock, which tends to blend in with the highs of planning a trip and starting off on an adventure. Like a new love, we tend to overlook some of the host country's short-comings and delight in all the new pleasures of being abroad. A quaint 3-hour walk to the closest market and source of food is a quaint representation of how to enjoy the simple things of life. Enjoy this initial state but prepare for a come down.

- **Anxiety:** A growing amount of anxiety can develop during which the traveller may feel helpless. The difficulties of living abroad, such as language barriers, absence of social cues and familiar geographic references can come to the surface. This can develop into frustration, anger and sleeplessness. Not knowing where and when to cross the street or even how to find your way back to the market can result in a physical discomfort.

- **Rejection of the new culture:** This is where that once quaint 3-hour walk becomes an unbearable nuisance. You find yourself thing in terms of things being 'wrong' and 'backwards'. Commonly travellers in this stage start to withdraw.
themselves from the local community preferring to surround themselves with other foreigners. Beware the 3 am impulse to suddenly call a family member or friend back home.

- **Adjustment:** With a bit of luck and advanced preparation, one enters the adjusted stage. At this point you can recognize some of the perceived shortcomings of your host culture without rejecting everything. The 3-hour walk becomes just that; a necessary inconvenience.

  Cultural shocks can be minimized by knowing and understanding it. Being familiar with the cultural and social nuances of a host country is essential. Before travelling to a country, you should try to gain as much knowledge about the country as possible. International awareness, cross cultural communication skills and cultural sensitivity can reduce the impact of cultural shocks.

  Culture Shock comes from mis-interpretation of cultural values, beliefs, behaviours, and norms of the new society.

  - People ineffectively use their own cultures as the standard for interpreting, judging, and behaving in the new culture

    For example – Collectivist Societies (e.g., Mexico, Philippines) tend to place greater value on behaviours promoting in-group interdependence and in-group goals

    Individualist Societies (e.g., United States, Great Britain) are likely to endorse behaviours related to independence from the in-group and to individual goals

  - People from collectivist societies may interpret independence from the in-group, for example, as a sign of disrespect for the social group.

  - In contrast, those from individualist societies may interpret the same behaviour as a sign of maturity. Culture shock occurs because individuals do not know the systems of rewards and punishment associated with the verbal and nonverbal behaviours in the host culture.

**Curing cultural shock:**

- pursue information gathering;
- look for logic;
- make sense of the environment;
- use wisdom and patience;
- use humour;
- have faith in yourself;
- don't pity yourself;
- be mentally, physically, and socially active;
- get sufficient rest;
- maintain a balanced diet;
- take reasonable risks;
• ask for help;
• and use friends and family as emotional support.

9.3.4 EROSION OF RELIGIOUS VALUES AND INSTITUTIONS:

Every culture and community across the country has their own specific culture, values, and traditions. They are important constituents of the overall destination culture. Religious values are ethical principles founded in religious traditions, texts, and beliefs. In contrast to personal values, religious-based values are based on scriptures and a religion’s established norms. The same way that tourism can encourage the preservation of socio-cultural authenticity of host communities, mass tourism may also erode traditional values by introducing foreign elements which are in conflict with the cultural, historical, and religious heritage of the community. Tourism can turn local cultures into commodities when religious rituals, traditional ethnic rites, and festivals are reduced and sanitized to conform to tourist expectations, resulting in what has been called “reconstructed ethnicity.” Once a destination is sold as a tourism product, and the tourism demand for souvenirs, arts, entertainment, and other commodities begins to exert influence, basic changes in human values may occur. Sacred sites and objects may not be respected when they are perceived as goods to trade. Indigenous Knowledge and Sustainability explores the importance of indigenous values and spirituality in providing guidance for sustainable living. Such principles and values encourage a spirit of harmony between people, their natural environments, and their spiritual identities.

Tourists are sometimes presented with a commercialized and stylized presentation of a destination’s cultural identity, which may lack authenticity. This is currently happening in parts of South America, for example. This destination is becoming ever more popular and in places such as Paraguay, the cultures and traditions are in danger of disappearing. The native Indians have become mercenaries, changing their traditional dances for the tourists’ benefit.

Cross-cultural interaction between a group of tourists and the destination community eventually harms the local religious values and beliefs. In order to attract more and more tourists, the local society and people start to look and behave like tourists. This cultural trend directly or indirectly destroys and corrupts the original religious values of the local community.

For a big country like India, this could be a significant harm to the various cultures. "Unity in diversity". It is not just another phrase or quotation. But, these words are highly prudent to a country like India that is incredibly rich in culture and heritage. Few quotations or statements cannot describe the pedestal that India holds in the world map because of its colorful and unique culture. Religious institutions and places are now continuously facing the attack of foreign culture.
and norms, brought to them by foreign tourists. Various technological, social and economical advances have changed the way of life of the local communities across the country. Tourism can turn local cultures into commodities when religious rituals, traditional ethnic rites and festivals are reduced and sanitized to conform to tourist expectations, resulting in what has been called "reconstructed ethnicity." Because tourism involves movement of people to different geographical locations, and establishment of social relations between people who would otherwise not meet, cultural clashes can take place as a result of differences in cultures, ethnicity, religion, values, lifestyles, languages, and levels of prosperity. Tourists are often unwilling to completely immerse themselves in the local culture and this means that in order to keep your custom, local communities must adjust to your needs. Traditional food, wares and customs are replaced with those of the traveller's homeland, effectively creating a home away from home. Yet by doing this, by demanding that destinations change to meet your demand you are taking away the very essence of travel. Therefore, in order to travel responsibly you must accept your surroundings for what they are and not expect anything else.

Image: Traditions of Gujarat

CHECK YOUR PROGRESS - 2

1- How many official languages are there in India?
2- What is the first stage of cultural shocks?
3- According to Hindu religion who is the goddess of knowledge:
4- Who is the founder of Islam religion?
3.5 ACCULTURATION:

Acculturation is strongly related to mass tourism activities around a tourist destination. Acculturation is a process in which members of one cultural group adopt the beliefs and behaviors of another group. Although acculturation is usually in the direction of a minority group adopting habits and language patterns of the dominant group, acculturation can be reciprocal—that is, the dominant group also adopts patterns typical of the minority group. Assimilation of one cultural group into another may be evidenced by changes in language preference, adoption of common attitudes and values, member’s hip in common social groups and institutions, and loss of separate political or ethnic identification. The rapid growth in tourism sector and the impact of globalization, modernization are the main reasons behind acculturation. Acculturation is the process of reciprocal and mutual changes that occurs as a result of Sustained intercultural contact between two or more groups in a single society, as well as their individual members (Berry, 2003). The most influential and widely established acculturation theory is Berry’s bi-dimensional model, which suggests acculturation centres around two choices (the extent to which an individual wishes to interact with and adopt aspects of their host culture, and the extent to which an individual wishes to preserve elements of their home culture).

![Globalization and Acculturation](image)

Acculturation theory has been widely used to understand and explain migrant and sojourner adaptation. However, it has yet to be examined in a tourism context, despite evidence to suggest the degree of host culture acquisition and home culture maintenance plays key roles in tourists’ preferences and behaviors (Goelder & Ritchie, 2003; Yiannakis & Gibson, 1992). The present study evaluated the applicability of Berry’s (2003) bi-dimensional model using a sample of 668 recent or prospective international travelers from China (n = 205), Germany (n = 201), and the United States (n = 262). Recent international travelers and prospective tourists to Australia from these countries were chosen for two reasons. First, they have significantly different country cultures (Hofstede, 2001; Schwartz, 2006) and, therefore, increase theoretical generalisability. Second, these countries are important source tourism markets and had the highest global tourism expenditures in 2011. A two-step clustering procedure was used to group respondents based on their responses to an acculturation measure and discriminate analysis was used to assess differences between the clusters (Wood, 2005).
An even larger contradiction and potential threat, the demise of cultural diversity on a global scale due to acculturation, is emanating from global tourism and other global economic activity. Acculturation, according to Kroeber (1948) comprises those changes in a culture brought about by another culture and will result in an increased similarity between the two cultures. Although this type of change may be reciprocal, it is more often an asymmetrical process resulting in the absorption of one culture into the powerful other. Through globalizing processes, languages and ethnic dialects have succumbed to the English language, and many have or are in danger of becoming extinct.

Growing tourist activities inside a destination community can increase the acculturation process by continuously observing and absorbing the socio-cultural behaviors of the foreign and domestic tourists. This is the process of acquiring or modifying a certain culture for the benefit of the tourist demand. Examples of this are:

- Changing components of traditional dance to meet the tourists: schedule, Budget, and photography needs.
- Allowing people and cameras into sacred buildings
- Wearing formal traditional dress on regular basis. Etc.

Acculturation generates changes in three levels of functioning:

- **Behavioral** - includes behaviors like language use, customs, and food consumption.
- **Affective** - includes emotions that have cultural connections; for example, the individuals’ feelings towards their country of origin or towards the U.S.
- **Cognitive** - includes individuals’ belief systems and fundamental values.

Acculturation effects merely depend upon the contact time (tourist stay duration) and the socio-cultural level of the distention society. Longer stay period of mass tourists increases the acculturation process as they are exposed to a new culture and are able to incorporate it into their everyday lives.
Modern advances in all the supporting services of tourism like Internet, online services, increase in hotel and food industry etc are responsible for the occurrence of acculturation. Acculturation can be of two type i.e. incorporation and directed changes. Incorporation refers to the free borrowing and modification of cultural elements and occurs when people of different cultures maintain contact as well as political and social self-determination. It may involve syncretism, a process through which people create a new synthesis of phenomena that differs from either original culture; adoption, in which an entirely new phenomenon is added to a cultural repertoire; and adaptation, in which a new material or technology is applied to an extant phenomenon. In contrast, directed change occurs when one group establishes dominance over another through military conquest or political control; thus, imperialism is the most common precursor to directed change.

9.3.6 BEGGAR MENTALITY:

Beggar mentality is a very common and scariest problem of local culture in many poor and developing countries including India, Pak, Sri Lanka etc. tourists are often rich and they visit a destination for their pleasure and luxury. The local community near the distant tourist spots may not be as rich and prosperous as tourist groups. To Mumbai dwellers, especially expatriates, the concept of slum tourism, poverty tourism, poorism or simply slumming it needs no introduction.

Starting first in London in the late 1800s when groups of wealthy Victorians dared venture into poor neighborhoods like Whitechapel and Shoreditch, it moved across the pond, where New York City’s then-dodgy Lower East Side held the same draw.

Today poverty tourism is practiced all over the world -- from Rio’s favelas to South Africa’s townships, from Nairobi’s Kibera to Mumbai’s Dharavi -- charging tourists a relatively small fee to see how the other half lives. It's literally the other half, in Mumbai’s case, as 55 percent of the population lives in squatter settlements, about one million of them in Dharavi, Asia's largest slum.

Someone should and probably has written a thesis about the ambivalent position of Western tourists in India. Travelling in India maxed out my middle-class guilt and existential angst, which sits at a pretty high base level at the best of times. I mean, we were there, like cashed up enlightenment brogans, chasing spiritual and personal fulfillment, reaping the benefits of cheap prices, yet completely dependent on the assistance of Indians, as if we were babies. Because you’re so dependent, and you have money, sometimes it almost feels like you’re acting like a bit of a lord, expecting them to meet your every need, even when those needs might seem bizarre to them. In terms of benefiting from inequality,
there’s really no difference between being in India or in Australia. In Australia, we’re still benefitting from economic exploitation – for example, the only reason things are so cheap is because it’s produced under horrible, cost-cutting labour conditions. The inequity is just more obvious in India.

CHECK YOUR PROGRESS - 3

1- Which form of truism is responsible for acculturation?

2- Which city holds the biggest slum area of the country India?

3- What do you understand by the term sustainability?

4- What is Aarti in Hindu Religion?

9.3.7 COMMERCIALIZATION OF ART, CRAFT AND TRADITIONS:

The history and tradition of almost all countries has shown that patronage of the arts and culture by the wealthy was the principal reason why these survived and flourished. The Medici patronage in Italy resulted in an explosive growth of the local arts, painting, sculpture, and glassware in Murano, tapestries and weaving and cuisine, which influenced all of Europe. The famed zari and brocade weaves of Banaras, the Ikkat, Kanjeevaram, Chanderi, Chikan, to name only a few of the world famous, timeless traditions of weaving and embroidery in India, have survived to this day, because there continue to be patrons for these fabrics. The skills and knowledge base of traditional societies, which encompassed all fields of relevance to their lives, are under threat today. This is true of growing food, of healing of both men and animals, of clothing and ornamentation, constructing dwellings and establishing a code for society. This loss has acquired critical proportions in the essential sectors of food and health care and its detrimental impact is becoming increasingly visible. Genetic erosion in the field is threatening the long term sustainability of food production. Loss of indigenous knowledge about healing traditions is taking away from local communities their trusted, affordable, holistic health care system. At the same time, an exploding
herbal industry, its appeal ranging from pharmaceuticals, nutraceuticals and health foods to cosmetics, toiletries and ethnic products, is exploiting the knowledge base of indigenous and local communities. The question is what share these communities get from all the profits that are made from commercialization of their skills. This is true of song and dance, of color and design, of weaving and painting and many other skills. The legendary Michael Jackson owes much of his phenomenal success to the use of African tribal music as does the Indian AR Rehman to the Adivasi music of Kerala and Tamil Nadu. But what returns to the communities?

Commercialisation of Ayurveda, the most dominant system of ISM, is about 100 years old. The oldest Ayurveda companies, which are the leading companies even today are Dabur in eastern India, Baidyanath in north India, Dodh Pappaswar in the west and the famed Kotakkal (which spread to Sri Lanka) in the south. These groups were all established between 1890 and 1910. Prior to this, commercialisation of Ayurveda was decentralised, practised in a small and sustainable way by the physicians. It really was more service than commerce, the knowledge considered sacred and its practice imbued with spiritualism. Since time immemorial Art has been understood to be the savior of humankind from all the afflictions of life. It completed the vacant spots of an individual with rich and soulful beauty. To be precise, Art is the expression of human skills and imaginations, which can create an object that is aesthetic in nature and pleases the sentiments of common people as well as satisfies the thirst of intellects. It is indeed a disgraceful opinion to relate art with money. But, as the bitter nature of truth stands today, Art is getting commercialized and is leading to the death of authentic talent.

It is due to the capitalist phenomenon, that there is a dearth of raw and pure talent amongst us. The excess of commercialization has resulted into the demise of imagination and ingenuity among the young minds. The core concept of greed has blackened out the inventiveness and freshness of Art. It never was a business and should never be treated to be a pursuit of extracting revenues. The enormous power that art possess has gone beyond one’s conception. Commercialization will only corrode its roots and will destroy the flair of a burning mind. As Oscar Wilde quoted, “Art is the most intense mode of individualism that the world has known”, we all should remind ourselves the admiration we gather for real talent and thus should not let this individualism burn into commercialization.

The Tibetan people behold a sacred worldview that embodies adoration and worship for their mountains. “As though realizing that their very existence depended on the water, which flowed down from the mountains, they worshipped them” (Cameron 1984: 31). To show respect for the mountains, the Tibetans lined
mountain tracks with shrines, adorned prayer-flags on mountain slopes, and they thought of mountain peaks as gods. Even the names the Tibetans give their mountains show respect. They call Mount Everest the “Goddess mother of the world” and Annapurna the “Bringer of Life” (Cameron 1984: 21).

The Tibetan civilization and religion in fact has deep roots in an appreciation of the environment (Wardle et al. 1996: vi). In the Buddhist tradition, spaces become sacred by their association with the Buddha or with other sacred persons (Eckel 2002: 65). Buddhism encourages this placement of value on land and nature. Buddhists believe that they live in harmony with nature, are interdependent with it, and continuity exists. Therefore, any destruction of nature that may be caused by tourism is viewed as sacrilegious. Humans in the Himalayas over time traveled for the purposes of trade, resources, work, pilgrimage, or socializing. Some confirmations that travel has been an ongoing feature of the mountainous regions are the intricate systems of walking trails, resting places, and mountain passes, and presence of cultural traditions such as inn keeping and porters. Trade, livestock movements, journeys to work and ceremony are all traditional events that link the Himalayan places to one another over time.

9.4 SUMMARY:

The growing trend of mass tourism and the impact of globalization and modernization affected the destination culture significantly. The same way that tourism can encourage the preservation of socio-cultural authenticity of host communities, mass tourism may also erode traditional values by introducing foreign elements which are in conflict with the cultural, historical, and religious heritage of the community. Adapting cultural expressions and manifestations to the tastes of tourists or even performing shows as if they were "real life" constitutes "staged authenticity". As long as tourists just want a glimpse of the local atmosphere, a quick glance at local life, without any knowledge or even interest, staging will be inevitable. Because tourism involves movement of people to different geographical locations, and establishment of social relations between people who would otherwise not meet, cultural clashes can take place as a result of differences in cultures, ethnic and religious groups, values and lifestyles, languages, and levels of prosperity. The result can be an overexploitation of the social carrying capacity (limits of acceptable change in the social system inside or around the destination) and cultural carrying capacity (limits of acceptable change in the culture of the host population) of the local community. Tourists often, out of ignorance or carelessness, fail to respect local customs and moral values. When they do, they can bring about irritation and stereotyping. They take a quick snapshot and are gone, and by so acting invade the local peoples' lives.
9.5 GLOSSARY:

- **Monuments**: A type of structure either explicitly created to commemorate a person or important event or which has become important to a social group.
- **Commercialization**: To apply methods of business to for profit.
- **Buddhist**: Buddhism is a religion indigenous to the Indian subcontinent that encompasses a variety of traditions, beliefs and practices largely based on teachings attributed.
- **Acculturation**: A process in which members of one cultural group adopt the beliefs and behaviors of another group.
- **Stereotyping**: A conventional, formulaic, and oversimplified conception, opinion, or image.
- **Euphoria**: medically recognized as a mental and emotional condition in which a person experiences intense feelings.
- **Cognitive**: A group of mental processes that includes attention, memory, producing and understanding language, learning, reasoning etc.

9.6 CHECK YOUR PROGRESS:

**Check your progress - 1**
1) Sanchi is a small village of India, located 46 km north east of Bhopal, M.P.
2) CO2 (air pollution)
3) Akbar
4) Greek

**Check your progress - 2**
1) 22
2) euphoria
3) Goddess Saraswati
4) Mohammad Sahab

**Check your progress - 3**
1) Mass tourism
2) Mumbai
3) Ability to endure
4) A lyrical worshiping of God

9.7 REFERENCES:

- Cultural Tourism: The Partnership between Tourism and Cultural Heritage, bob Mckercher, hilyari du cros.
- International Tourism: Cultures and Behavior, Yvette Reisinger.
- Tourism: A Community Approach, Peter E Murphy.
- Community Development Through Tourism, Sue Beeton.
### 9.8 SUGGESTED READINGS:

<table>
<thead>
<tr>
<th>Title</th>
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<tr>
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<td>Tourism, globalization and sustainable development: are these contravening concepts?</td>
<td>E. Wanda George, University of Guelph</td>
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### 9.9 MODEL QUESTIONS

**Short answer type questions:**

1) List any four famous and ancient cultural monuments of India.
2) Explain the term acculturation with an example.
3) What do you understand by the term ‘cultural shock’?
4) Define the term ‘xenophobia’.
5) How tourism is promoting the beggar mentality among poor Indian people?
6) Define the following terms –
   (a) Handicrafts
   (b) Commercialization
   (c) Traditions
   (d) Pathy

**Long answer type questions:**

1) What do you understand by cultural objects? How tourism is helping the preservation of different cultural heritages around the world? Discuss with an example.
2) Explain the process of acculturation in the context of Indian tourism.
3) How the development of tourism is related with the commercialization of the various local arts, handicrafts and traditions in India?
BLOCK 3:
TOURISM, ENVIRONMENT AND ECOLOGY
10.1 INTRODUCTION:

Tourism and ecology are strongly connected with each other. Tourism activities around a popular destination affect the overall ecology and environment of destination. Ecology is the scientific study of interactions among organisms and their environment; organisms have with each other, and with their abiotic environment. Topics of interest to ecologists include the diversity, distribution, amount (biomass), number (population) of organisms, as well as competition between them within and among ecosystems. Ecosystems are composed of dynamically interacting parts including organisms, the communities they make up, and the non-living components of their environment. Tourism and ecology would be natural allies, often these two industries have been anything but allies.

Environmentalists have argued that the tourism / travel industry has all too often failed to take into account the impact that thousands of people have on a particular locale. They note that vacationers often are careless at best when it comes to cleaning up after them, and at worst destructive. Environmentalists also
complain about people in tourism who seek to earn quick money without regard to the long-term impact of their actions. Tourism officials have often complained that environmentalists are insensitive to natural expansion and the need for economic growth. Both environmentalists and tourism officials state that they desire a sustainable industry. Polluted beaches, dirty streets, unhealthy air and garbage laden forests are neither attractive nor conducive to tourism development. In fact, we might argue that a well managed and protected environment will lead to greater profitability. The months of July and August mark the high tourism season in much of the world; these are the months not only to enjoy, but also to protect our natural surroundings. The environment is not then simply a special interest; it is an important part of tourism economic development.

Tourism and ecology have both type of relationship i.e. complementary and conflict. The latest trend of tourism namely sustainable tourism tries to reduce the negative relations between these two. Natural features provide attractions worldwide and tourism managers are promoting them. Special tours now focus on science Research and interpretation. Ecotourism and sustainable development enlist tourism to help maintain and enhance environmental integrity and attractiveness. Uncontrolled tourism activities around a natural destination environment may disturb or event destroys the original ecological system.

The growing trend of travel and tourism activities can be very dangerous for the natural environment of the destination. Tourism can pollute the environment by contributing in many forms like transport and infrastructure development. Tourism and Environment are intrinsically related with each other. The development and up gradation of the tourist sector de-pends on a clean environment, free from all hazards. Environmentally responsible tourism is a new concept the world over. There are two aspects of the relation between tourism and environment. Tourism depends heavily on unspoilt natural environment. The world over, location of scenic beauty and unspoilt natural splendor have replaced heritage monuments in tourism trends.

However, the new trends and concepts of tourism sector are now concentrating towards the conservation and protection of the natural environment of popular tourist destinations.

### 10.2 OBJECTIVES:

After completing this unit, readers will be able to understand that –

- How tourism and ecology is related to each other
- What are the complementary relations and what are the conflicts between these two.
- How tourism affects the destination environment
- Various positive and negative relations between tourism and environment
10.3 TOURISM AND ECOLOGY:

Ecology is a science that contributes considerably to our understanding of evolution, including our own evolution as a species. All evolutionary change takes place in response to ecological interactions that operate on the population, community, ecosystem, biome and biosphere levels.

Studies conducted within the scientific discipline of ecology may therefore focus on one or more different levels: on populations of a single species, on an interacting community involving populations of many species, on the movement of matter and energy through a community within and ecosystem, on large scale processes within a biome, or on global patterns within the biosphere.

The boom in mass tourism sector along with the other variable like modernization and globalization is dangerous for the natural ecological system of the tourist destinations. Following sections describes the relations of tourism and ecology.

10.3.1 TOURISM AND ECOLOGY: COMPLEMENTARY VS. CONFLICT RELATIONSHIP

While it would seem logical that tourism and ecology would be natural allies, often these two industries have been anything but allies. Environmentalists have argued that the tourism/travel industry has all too often failed to take into account the impact that thousands of people have on a particular locale. They note that vacationers often are careless at best when it comes to cleaning up after them, and at worst destructive.

Environmentalists also complain about people in tourism who seek to earn quick money without regard to the long-term impact of their actions. Tourism officials have often complained that environmentalists are insensitive to natural expansion and the need for economic growth. Both environmentalists and tourism officials state that they desire a sustainable industry. Polluted beaches, dirty streets, unhealthy air and garbage laden forests are neither attractive nor conducive to tourism development. In fact, we might argue that a well managed and protected environment will lead to greater profitability. The months of July and August mark the high tourism season in much of the world; these are the months not only to enjoy, but also to protect our natural surroundings. The environment is not then simply a special interest; it is an important part of tourism economic development.

ECOSYSTEM COMPONENTS

Ecosystems consist of various non-living, abiotic, and living, biotic components. The abiotic components of an ecosystem include various physical and chemical factors.
The physical factors having the greatest effect on the ecosystem are:

- Sunlight and shade
- Average temperature
- Average precipitation and distribution
- Wind
- Latitude and altitude
- Nature of soil (for terrestrial ecosystems)
- Fire (for terrestrial ecosystems)
- Water current (for aquatic ecosystems)
- Amount of suspended solid material (for aquatic ecosystems)

The chemical factors are:

- Level of water and air in soil
- Level of plant nutrients dissolved in soil moisture (for terrestrial) and in the water (for aquatic)
- Level of natural or artificial toxic substances dissolved in soil moisture and in water
- Salinity of water for aquatic ecosystems
- Level of dissolved oxygen in aquatic ecosystems
- Organisms that make up the biotic component of an ecosystem are usually classified as autotrophs and heterotrophs, based on how they get their food or organic nutrients they need to survive.

Types of Species Found in Ecosystems

- Native species—which normally live and thrive in a particular ecosystem.
- Immigrant species—which migrates into an ecosystem or which are deliberately or accidently introduced into an ecosystem by humans.
- Indicator species—which serves as an early warning that a community or an ecosystem is being degraded.
- Keystone species—which plays a role affecting many other organisms in an ecosystem. The loss of a keystone species can lead to sharp population drops and extinction of other species that depend on it for certain services.

Ecology with a range of popular meanings is a biological study of the relationship of plants and animals to each other and to their environment. Cultural ecology concerns human beings and their environment. The relationship of tourists, communities, managers, developers, and policymakers to each other, and especially to their environment is the substance of ecological tourism and, certainly, sustainable development.

Public sector priorities and policies related to natural resource management are, and will increasingly be, crucial to tourism development. Many
tourism resources in the United States, such as national parks, government facilities on shorelines and in other recreation resource

Areas, and many historic features and attractions, are either in public ownership or are heavily influenced by government regulations. In the United States, the emphasis on recreational use of federally managed lands, the vast national forests in particular, is currently increasing as other land and forest uses, such as timber production and grazing, become more restricted in order to maintain important habitat quality. The pertinence of resource-based tourism will likely expand in the future as urban concentrations become greater and environmental quality at many existing visitor destinations becomes increasingly degraded. Obviously those locations which succeed in enhancing, or at the very least maintaining, their relative environmental quality will enjoy increasing competitive advantages.

The research on urban tourism and urban ecological construction is not only a theoretical issue, but also a practical issue. In the rapid transitional period of time of the society and economy, it is not only the calling of academic research, but also the historic mission demanded by the time to know how to understand the urban tourism and the urban ecological construction and the relationship between them, how to plan urban tourism rationally and construct the eco-city. Eco-city is the goal of the urban development in the 21st century, the harmony between mankind and nature is the core of the city's ecological construction, the ecological construction can create an optimized environment for the city that is suitable for viewing, traveling and living. The function of tourism
is one of the important functions of the cities; the urban tourism has become the mainstay of modern tourism and an important part of modern urban life. The principle of eco-tourism should be put into the practice of urban tourism and establish an urban ecosystem which is in harmony with the society, economy and nature and promote the sustainable development of cities.

Protected areas are important potential areas from the point of view of ecological tourism because of their natural, historical and cultural richness. Negative impacts from tourism occur when the level of visitor use is greater than the environment's ability to cope with this use within the acceptable limits of change. Uncontrolled conventional tourism poses potential threats to many natural areas around the world. It can put enormous pressure on an area and lead to impacts such as soil erosion, increased pollution, discharges into the sea, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the use of critical resources. The various tourism activities are constantly destroying the natural ecology of tourist destinations in India. Himalayas dot most of the Indian subcontinent with its marvelous peaks, few of which are sacred to the Hindu devotees, hundreds of thousands of who flock to the so-called holy sites every year. The religious fervor is so high in the country that it sidelines everything else, what to talk of the environment. Every year sees a doubling in the number of pilgrims, creating danger to the already fragile ecosystem.
Piles of human waste produce drenching smell, which is the cause of many ills along with garbage, rubbish that is thrown in the precincts without realizing how much harm it causes. The dumped plastic waste has a devastating effect on the soil and life in the region. Plastic blocks the air passage in the soil and thus, chunking the plants of water and air, harming the ecosystem.

The ecological costs of air travel severely detract from the potential for sustainable tourism development and may indeed call into question the utility of the term itself. “As long-distance travel contributes substantially to global warming, the current understanding of tourism as a sustainable economic activity needs to be revised”. While ecological efficiency gains become a priority at the local or destination level, the global environmental costs of air travel, undoubtedly a more difficult challenge with which to deal goes under explored.

Eco-tourism is, Tourism involving travel to areas of natural or ecological interest, typically under the guidance of a naturalist, for the purpose of observing wildlife and learning about the environment. One "promise" of eco-tourism is it increases the monetary value of standing (vs. logged, degraded, extinct) biological systems and thereby hopefully encourages the preservation of biological diversity. The problem is that some kinds of "eco-tourism" do not contribute much to the local economy, meaning that they can enrich a few people while leaving others left out of the loop. In this case, for those left out, there is still little incentive to engage in conservation. So the fulfillment of the promise depends on the details of how an eco-tourism business is established - whether it's community-owned or owned by just a few individuals.

Another "promise" of eco-tourism is that it is supposed to bring people closer to nature and thus instill a greater desire to protect it. It is very difficult to define eco-tourism, however, so not all "eco-tourist" activities do this equally well. For example, is off-roading eco-tourism? Is swimming with captive dolphins in an artificial lagoon eco-tourism? Is trekking through a rainforest in a small group eco-tourism? They may all be, but they probably impart different impressions of nature and the desire to preserve it.

CHECK YOUR PROGRESS - 1:

1. What are the main components of an ecosystem?

2. Name the natural resources which are strongly related to tourism activities.

3. What is ecotourism?

4. Name any two abiotic components of ecosystem.
10.4 TOURISM AND ENVIRONMENT:

There is no tourism setting that does not need to protect its environment. It is really unimportant if the setting is urban or rural, forested or desert. In all cases there is an environment that impacts tourism. Even urbanized areas need environmental protection. No one enjoys visiting a locale filled with trash and urban beauty. Visit your own locale as if you were seeing it for the first time, ask yourself what streets need to be repaired, what gardens need to be replanted, which buildings need to be repainted, how does the city’s entranceways and exits impact you. Is the area a physical delight to the eye and sense of smell or something you would prefer to avoid?

The natural environment encompasses all living and non-living things occurring naturally on Earth or some region thereof. It is an environment that encompasses the interaction of all living species. The concept of the natural environment can be distinguished by components:

- Complete ecological units that function as natural systems without massive human intervention, including all vegetation, microorganisms, soil, rocks, atmosphere, and natural phenomena that occur within their boundaries.

- Universal natural resources and physical phenomena that lack clear-cut boundaries, such as air, water, and climate, as well as energy, radiation, electric charge, and magnetism, not originating from human activity.

The natural environment is contrasted with the built environment, which comprises the areas and components that are strongly influenced by humans. A geographical area is regarded as a natural environment.

The term Environment can be broadly defined as one’s surroundings. To be more specific we can say that it is the physical and biological habitat that surrounds us, which can be felt by our physical faculties (seen, heard, touched, smelled and tasted.) The two major classifications of environment are:

(A) Physical Environment: External physical factors like Air, Water, and Land etc. This is also called the Abiotic Environment.

(B) Living Environment: All living organisms around us viz. plants, animals, and microorganisms. This is also called the Biotic Environment.

Earth’s environment can be further subdivided into the following four segments:

(1) Lithosphere
(2) Hydrosphere
(3) Atmosphere
(4) Biosphere.

- Lithosphere: The earth’s crust consisting of the soil and rocks is the lithosphere. The soil is made up of inorganic and organic matter and water. The main mineral constituents are compounds or mixtures derived from the elements of Si, Ca, K, Al, Fe, Mn, Ti, O etc. (Oxides, Silicates, and Carbonates). The
organic constituents are mainly polysaccharides, organo compounds of N, P and S. The organic constituents even though form only around 4% – 6% of the lithosphere, they are responsible for the fertility of the soil and hence its productivity.

- **Hydrosphere:** This comprises all water resources both surface and ground water. The world’s water is found in oceans and seas, lakes and reservoirs, rivers and streams, glaciers and snowcaps in the Polar Regions in addition to ground water below the land areas. The water locked up in the Oceans and Seas are too salty and cannot be used directly for human consumption, domestic, agriculture or Industrial purposes. Only less than 1% of water resources are available for human exploitation. Water is considered to be a common compound with uncommon properties. These uncommon properties (e.g. anomalous expansion of water) are mainly responsible for supporting terrestrial and aquatic life on earth.

- **Biosphere:** The biosphere is a capsule encircling the earth’s surface wherein all the living things exist. This portion extends from 10000 m below sea level to 6000 m above sea level. Life forms do not exist outside this zone. The biosphere covers parts of other segments of the environment viz. Lithosphere, Hydrosphere and Atmosphere. Life sustaining resources like food, water and oxygen present in the biosphere are being withdrawn and waste products in increasing quantities are being dumped. The biosphere has been absorbing this and assimilating them. However the rate of waste dumping has gone beyond the assimilating capability of the biosphere and signals of this stress is becoming evident.

- **Atmosphere:** It is the gaseous envelope surrounding the earth and extends upto 500 kms above the earth’s surface. The atmosphere, which is a gaseous cover, protects the earth from cosmic radiations and provides life sustaining Oxygen, the macronutrient Nitrogen and Carbon dioxide needed for photosynthesis. The atmosphere screens the dangerous UV radiations from the sun and allows only radiations in the range of 300 nm – 2500 nm (near UV to near IR) and radio waves. The atmosphere plays a major role in maintaining the heat balance of the earth by absorbing the re-emitted radiation from the earth. In addition the atmosphere is the medium of carriage of water from the oceans to the land in the hydrological cycle.
Mass tourism activities affect the surrounding environment of the destination. Tourism and Environment are intrinsically related with each other. The development and upgradation of the tourist sector depends on a clean environment, free from all hazards. Without long term strategic planning, tourism development can be detrimental to the local environment. Embarking on major promotional campaigns for an area without first ensuring that the necessary infrastructure is in place can have devastating effects on the environment and resident community, with potentially costly consequences. Tourism development based on an environmental and commercially sustainable approach, integrated into the wider planning process, can generate significant benefits for the local environment, business and community. It requires proper planning and land management policies to ensure that the environment (whether it is beaches, parks or gardens, heritage landscapes or streetscapes) is preserved.

On the credit side, tourism has been partly responsible for increased interest in, and concern for, the natural and built environment and its condition. Effective visitor information services, interpretative signing, guided tours etc can raise the profile of natural assets and issues surrounding them. In many cases tourism has provided an economic argument for conservation, preservation and restoration of natural and built resources.

Environmentally responsible tourism is a new concept the world over. There are two aspects of the relation between tourism and environment. Tourism depends heavily on an unspoilt natural environment. The world over, location of scenic beauty and unspoilt natural splendor have replaced heritage monuments in tourism trends.

Therefore for tourism to survive, protection of these natural environments becomes a pre-requisite. At the same time providing amenities of potable water and other infrastructure to tourists often become a cause for environmental degradation. Unrestrained commercialization has harmed many a fragile eco-system.

The Earth Summit in Brazil discussed the issue of "sustainable tourism"- i.e. tourism without harm to environment, within the context of overall sustainable development. In India, an environmental impact assessment is now being insisted upon as a prerequisite for all major tourism projects.

Tourism development can put pressure on natural resources when it increases consumption in areas where resources are already scarce.

- **Water resources**: Water, and especially fresh water, is one of the most critical natural resources. The tourism industry generally overuses water resources for hotels, swimming pools, golf courses and personal use of water by tourists. This can result in water shortages and degradation of water supplies, as well as generating a greater volume of waste water.
• **Local resources**: Tourism can create great pressure on local resources like energy, food, and other raw materials that may already be in short supply. Greater extraction and transport of these resources exacerbates the physical impacts associated with their exploitation. Because of the seasonal character of the industry, many destinations have ten times more inhabitants in the high season as in the low season. A high demand is placed upon these resources to meet the high expectations tourists often have (proper heating, hot water, etc.).

• **Land degradation**: Important land resources include minerals, fossil fuels, fertile soil, forests, wetland and wildlife. Increased construction of tourism and recreational facilities has increased the pressure on these resources and on scenic landscapes. Direct impact on natural resources, both renewable and nonrenewable, in the provision of tourist facilities can be caused by the use of land for accommodation and other infrastructure provision, and the use of building materials.

  Forests often suffer negative impacts of tourism in the form of deforestation caused by fuel wood collection and land clearing. For example, one trekking tourist in Nepal - an area already suffering the effects of deforestation - can use four to five kilograms of wood a day.

### POLLUTION

Tourism can cause the same forms of pollution as any other industry: air emissions, noise, solid waste and littering, releases of sewage, oil and chemicals, even architectural/visual pollution.

**Air pollution and noise**: Transport by air, road, and rail is continuously increasing in response to the rising number of tourists and their greater mobility. To give an indication, the ICAO reported that the number of international air passengers worldwide rose from 88 million in 1972 to 344 million in 1994. One consequence of this increase in air transport is that tourism now accounts for more than 60% of air travel and is therefore responsible for an important share of air emissions.

  One study estimated that a single transatlantic return flight emits almost half the CO2 emissions produced by all other sources (lighting, heating, car use, etc.) consumed by an average person yearly. (Mayer Hillman, Town & Country Planning magazine, September 1996. Source: MFOE).

  Transport emissions and emissions from energy production and use are linked to acid rain, global warming and photochemical pollution. Air pollution from tourist transportation has impacts on the global level, especially from carbon dioxide (CO2) emissions related to transportation energy use. And it can contribute to severe local air pollution. Some of these impacts are quite specific to tourist activities. For example, especially in very hot or cold countries, tour buses
often leave their motors running for hours while the tourists go out for an excursion because they want to return to a comfortably air-conditioned bus.

**Noise pollution:** It is from airplanes, cars, and buses, as well as recreational vehicles such as snowmobiles and jet skis, are an ever-growing problem of modern life. In addition to causing annoyance, stress, and even hearing loss for it humans, it causes distress to wildlife, especially in sensitive areas. For instance, noise generated by snowmobiles can cause animals to alter their natural activity patterns.

**Solid waste and littering:** In areas with high concentrations of tourist activities and appealing natural attractions, waste disposal is a serious problem and improper disposal can be a major despoiler of the natural environment - rivers, scenic areas, and roadsides. For example, cruise ships in the Caribbean are estimated to produce more than 70,000 tons of waste each year. Today some cruise lines are actively working to reduce waste-related impacts. Solid waste and littering can degrade the physical appearance of the water and shoreline and cause the death of marine animals.

**Sewage:** Construction of hotels, recreation and other facilities often leads to increased sewage pollution. Wastewater has polluted seas and lakes surrounding tourist attractions, damaging the flora and fauna. Sewage runoff causes serious damage to coral reefs because it stimulates the growth of algae, which cover the filter-feeding corals, hindering their ability to survive. Changes in salinity and siltation can have wide-ranging impacts on coastal environments. And sewage pollution can threaten the health of humans and animals.

**Aesthetic Pollution:** Often tourism fails to integrate its structures with the natural features and indigenous architectural of the destination. Large, dominating resorts of disparate design can look out of place in any natural environment and may clash with the indigenous structural design.

A lack of land-use planning and building regulations in many destinations has facilitated sprawling developments along coastlines, valleys and scenic routes. The sprawl includes tourism facilities themselves and supporting infrastructure such as roads, employee housing, parking, service areas, and waste disposal.

Attractive landscape sites, such as sandy beaches, lakes, riversides, and mountain tops and slopes, are often transitional zones, characterized by species-rich ecosystems. Typical physical impacts include the degradation of such ecosystems.

An ecosystem is a geographic area including all the living organisms (people, plants, animals, and microorganisms), their physical surroundings (such as soil, water, and air), and the natural cycles that sustain them. The ecosystems most threatened with degradation are ecologically fragile areas such as alpine regions, rain forests, wetlands, mangroves, coral reefs and sea grass beds. The
threats to and pressures on these ecosystems are often severe because such places are very attractive to both tourists and developers.

In industrial countries, mass tourism and recreation are now fast overtaking the extractive industries as the largest threat to mountain communities and environments. Since 1945, visits to the 10 most popular mountainous national parks in the United States have increased twelve-fold. In the European Alps, tourism now exceeds 100 million visitor-days. Every year in the Indian Himalaya, more than 250,000 Hindu pilgrims, 25,000 trekkers, and 75 mountaineering expeditions climb to the sacred source of the Ganges River, the Gangotri Glacier. They deplete local forests for firewood, trample riparian vegetation, and strew litter. Even worse, this tourism frequently induces poorly planned, land-intensive development.

The development of tourism facilities such as accommodation, water supplies, restaurants and recreation facilities can involve sand mining, beach and sand dune erosion, soil erosion and extensive paving. In addition, road and airport construction can lead to land degradation and loss of wildlife habitats and deterioration of scenery.

Construction of ski resort accommodation and facilities frequently requires clearing forested land. Coastal wetlands are often drained and filled due to lack of more suitable sites for construction of tourism facilities and infrastructure. These activities can cause severe disturbance and erosion of the local ecosystem, even destruction in the long term.

Development of marinas and breakwaters can cause changes in currents and coastlines. Furthermore, extraction of building materials such as sand affects coral reefs, mangroves, and hinterland forests, leading to erosion and destruction of habitats. In the Philippines and the Maldives, dynamiting and mining of coral for resort building materials has damaged fragile coral reefs and depleted the fisheries that sustain local people and attract tourists.

**ALTERATION OF ECOSYSTEMS BY TOURIST ACTIVITIES**

Habitat can be degraded by tourism leisure activities. For example, wildlife viewing can bring about stress for the animals and alter their natural behavior when tourists come too close. Safaris and wildlife watching activities have a degrading effect on habitat as they often are accompanied by the noise and commotion created by tourists as they chase wild animals in their trucks and aircraft. This puts high pressure on animal habits and behaviors and tends to bring about behavioral changes. In some cases, as in Kenya, it has led to animals becoming so disturbed that at times they neglect their young or fail to mate.

There are 109 countries with coral reefs. In 90 of them reefs are being damaged by cruise ship anchors and sewage, by tourists breaking off chunks of
coral, and by commercial harvesting for sale to tourists. One study of a cruise ship anchor dropped in a coral reef for one day found an area about half the size of a football field completely destroyed, and half again as much covered by rubble that died later. It was estimated that coral recovery would take fifty years.

![Health effects of pollution](image)

Figure: health effects of pollution.

Sound environmental management of tourism facilities and especially hotels can increase the benefits to natural areas. But this requires careful planning for controlled development, based on analysis of the environmental resources of the area. Planning helps to make choices between conflicting uses, or to find ways to make them compatible. By planning early for tourism development, damaging and expensive mistakes can be prevented, avoiding the gradual deterioration of environmental assets significant to tourism.

Cleaner production techniques can be important tools for planning and operating tourism facilities in a way that minimizes their environmental impacts. For example, green building (using energy-efficient and non-polluting construction materials, sewage systems and energy sources) is an increasingly important way for the tourism industry to decrease its impact on the environment. And because waste treatment and disposal are often major, long-term environmental problems in the tourism industry, pollution prevention and waste minimization techniques are especially important for the tourism industry.

**ENVIRONMENTAL AWARENESS RISING**

Tourism has the potential to increase public appreciation of the environment and to spread awareness of environmental problems when it brings people into closer contact with nature and the environment. This confrontation may heighten awareness of the value of nature and lead to environmentally conscious behavior and activities to preserve the environment. For instance, Honduran schoolchildren from the capital city of Tegucigalpa are routinely taken
to visit La Tigra cloud forest visitor center, funded in part by eco-tourist dollars, to learn about the intricacies of the rainforest.

If it is to be sustainable in the long run, tourism must incorporate the principles and practices of sustainable consumption. Sustainable consumption includes building consumer demand for products that have been made using cleaner production techniques, and for services - including tourism services - that are provided in a way that minimizes environmental impacts. The tourism industry can play a key role in providing environmental information and raising awareness among tourists of the environmental consequences of their actions. Tourists and tourism-related businesses consume an enormous quantity of goods and services; moving them toward using those that are produced and provided in an environmentally sustainable way, from cradle to grave, could have an enormous positive impact on the planet's environment.

Tourism can significantly contribute to environmental protection, conservation and restoration of biological diversity and sustainable use of natural resources. Because of their attractiveness, pristine sites and natural areas are identified as valuable and the need to keep the attraction alive can lead to creation of national parks and wildlife parks.

CHECK YOUR PROGRESS-2:
1) Which sector is the second largest contributor of air pollution?
2) Which tourism related service is responsible for water pollution?
3) By which of the industry, the green house effect is generated:

10.5 SUMMARY:

Tourism, ecology and the environment of the destination are closely related to each other. The uncontrolled and unmanaged tourism activities can significantly damage the original natural eco system and the environment of the tourist destination. Tourism sector can be thought of as a big contributor of different types of pollution such as water, air and soil pollution. Various services related to tour and travelling sector e.g. transportation, hotels, food and clothing industries are continuously damaging the original environment. Uncontrolled mass tourism activities are responsible for increasing the unbalance of the destination ecosystem. However well planned and managed tourism activities can reduces the negative impact on the ecology and environment. The new trends in tourism sector such as sustainable and eco tourism’ are playing a very important role in the preservation of the natural environment. Organizations and
governments around the world are now experiencing the importance and effect of eco tourism, which is essential for the conservation of the environment. Tourism sector is now constantly focused on the conservation of various natural resources and the protection of environment and the ecology of the destination.

10.6 GLOSSARY:

- **Ecology**: The science of the relationships between organisms and their environments
- **Abiotic**: Abiotic components (also called abiotic factors) are non-living chemical and physical factors in the environment
- **Salinity**: The saltiness or dissolved salt content (such as sodium chloride, magnesium and calcium sulfates, and bicarbonates) of a body of water.
- **Eco-tourism**: A form of tourism involving visiting fragile, pristine, and relatively undisturbed natural areas, intended as a low-impact
- **Atmosphere**: Layer of gases surrounding the planet Earth
- **Deforestation**: The removal of a forest or stand of trees where the land is thereafter converted to a non-forest use
- **Pesticides**: Substances meant for preventing, destroying or mitigating any pest. They are a class of biocide.

10.7 CHECK YOUR PROGRESS

**Check your progress-1:**

1) Biotic factors (living factors--any living organism in that ecosystem).
   Abiotic factors (nonliving factors--such as light, temperature, water, atmospheric gases)
2) Air and water resources
3) Tourism with the low impact on ecology
4) Water, atmospheric gases etc

**Check your progress-2:**

1) Transport sector
2) Hotel industry
3) Domestic and accommodation services

10.8 REFERENCES:

- Natural Area Tourism: Ecology, Impacts and Management, David Newsome, Susan A. Moore
- Ecology, Recreation and Tourism, John M. Edington, M. Ann Edington
- Ecology, Environment and Tourism by L.K. Singh
10.9 SUGGESTED READINGS:

- Ecology, Environment and Tourism by L.K. Singh
- Landscape Ecology in Asian Cultures, Part 1, Sun-Kee Hong, Jae-Eun. Kim,
- Culture, Ecology and Sustainable Development, Sukant Kumar Chaudhury
- Ecology: A Pocket Guide by Ernest Callenbach

10.10 MODEL QUESTIONS

Short answer type question:
1) Explain the term ecology with a suitable environment
2) What are the main components of a natural ecological system around a destination?
3) What is natural environment?
4) How the tourism activities can disturb the ecology of a natural tourist spot
5) What do you understand by global warming?
6) Explain the green house effect; list any four green house gases
7) Define the terms lithosphere, hydrosphere and biosphere
8) Explain the following terms –
   (a) Wild life
   (b) eco tourism
   (c) Sewage
   (d) land pollution

Long answer type questions:
1) Discuss the relation between ecology and tourism. Also explain some of the important negative impact of tourism on the destination ecology.
2) What are the main components of a natural environment? How tourism activities are polluting them? Explain with example.
3) Write an essay on the topic “the interrelationship of tourism, ecology and the environment”.

UNIT 11: POSITIVE IMPACTS OF TOURISM ON ECOLOGY

Structure:
11.1 Introduction
11.2 Objectives
11.3 Positive Impacts of Tourism on Ecology
   11.3.1 Direct and Indirect Contribution in Protection
   11.3.2 Preservation of Natural Heritage
   11.3.3 Judicious and Non-Consumptive use of Natural Resources
   11.3.4 Infusing Environmental Awareness and Supporting the Cause of National Parks
   11.3.5 Wildlife Sanctuaries and Biosphere Reserves
11.5 Summary
11.6 Glossary
11.7 Check your progress
11.8 References
11.9 Suggested readings
11.10 Model questions

11.1 INTRODUCTION:

Tourism can have various positive impacts on the destination ecology and environment. The latest trend of sustainable and eco tourism are beneficial for the natural environment. With increased tourism activities around a destination can aware the various authorities to protect the natural environment of that tourist spot. Tourism sector is also responsible for generating the more and more study and awareness related to the environment protection policies at a national and international level both. Sound environmental management of tourism facilities and especially hotels can increase the benefits to natural areas. But this requires careful planning for controlled development, based on analysis of the environmental resources of the area. Planning helps to make choices between conflicting uses, or to find ways to make them compatible. By planning early for
tourism development, damaging and expensive mistakes can be prevented, avoiding the gradual deterioration of environmental assets significant to tourism. Cleaner production techniques can be important tools for planning and operating tourism facilities in a way that minimizes their environmental impacts. For example, green building (using energy-efficient and non-polluting construction materials, sewage systems and energy sources) is an increasingly important way for the tourism industry to decrease its impact on the environment. And because waste treatment and disposal are often major, long-term environmental problems in the tourism industry, pollution prevention and waste minimization techniques are especially important for the tourism industry.

Tourism has a significant contribution in the preservation of various natural heritages around the world. Just like historic and architectural heritage sites, natural milieus are fundamental to the identity of a region. They contribute to the local economy (fishing, agriculture, tourism, etc.) and to the quality of life of local populations. The Total Foundation has been working with renowned organizations for a long time to preserve these lands, which are as unique as they are indispensable.

Legal and regulatory from all over the world is now realizing the importance of the natural environment, and hence is developing new provisions for the protection. These rules regulations and acts are working towards the protection of environment. Eco tourism and sustainable tourism are the new type of tourism that tends to preserve the original natural environment of the destination. Tourism activities can significantly preserve the natural heritages of a country such as lakes, rivers and the coral reefs etc. rapid growth of tourism sector has started the process of discovering and indentifying various natural heritages from all over the world. The different environment conservation and protection laws have been created by the almost all governments around the world. India also has its own environment protection acts in the form of environment protection act (1986), forest protection act, wildlife protection act etc. these legal authorities are ensuring the protection and conservation of natural resources and the ecological balance of the destination.

These acts and regulations have forced the tourism sector and the local community for the non- consumptive use of natural resources like water, air, soil and the energy resources. Eco tourism and the sustainable tourism are now creating a significant environmental awareness among the people of the local community as well as in the tourist groups. With the growth of natural and mass tourism governments are now planning to develop various natural areas across the country as national parks animal reserves e.g. tiger reserves. Various wild life sanctuaries have been rising from all over the world along with the development and protection of biosphere reserves.
11.2 OBJECTIVES:

This unit explains the following concepts to the learners:

- How tourism contributes in the protection of the environment
- How tourism can help in the preservation of natural heritages.
- Tourism and non consumptive use of natural resources
- Environmental awareness due to tourism and the development of national parks.
- Wild life sanctuaries and biosphere reserves.

11.3 POSITIVE IMPACTS OF TOURISM ON ECOLOGY:

Along with the various negative impacts on the natural environment, tourism sector can have a number of positive impacts on the environment and ecology of the destination. Tourism activities around a destination can encourage the local community as well as tourist to protect and preserve the ecology. Directly or indirectly tourism can contribute to the protection of the natural environment and ecology. Tourist groups are now awaking towards the importance of the environment and they are supporting the various provisions of protection. A good percentage of tourism activities focus towards the natural heritages across the country.

Natural heritages are very important part of the ecology and they must be preserved and protected from being destroyed. The following sections describe the positive impacts of tourism on the destination ecology.

11.3.1 DIRECT AND INDIRECT CONTRIBUTION IN PROTECTION:

Growth and development of tourism is of vital importance for the local community for its economic advantages. Various tourist destinations across the country have their own specific natural environment, some of them can be considered as natural heritages. In order to attract and sustain more and more tourists towards their local community, local authorities and communities directly or indirectly help to protect them.

Tourism has been recommended as a sustainable development option particularly for the economically depressed and underdeveloped regions of the world that has little potential for development. There is no tourism setting that does not need to protect its environment. It is really unimportant if the setting is urban or rural, forested or desert. In all cases there is an environment that impacts tourism. Even urbanized areas need environmental protection. No one enjoys visiting a locale filled with trash and urban beauty. Visit your own locale as if you were seeing it for the first time, ask yourself what streets need to be repaired,
what gardens need to be replanted, which buildings need to be repainted, how does the city’s entranceways and exits impact you. Is the area a physical delight to the eye and sense of smell or something you would prefer to avoid?

Figure: Natural Environment and its Interaction with various bodies.

Public sector priorities and policies related to natural resource management are, and will increasingly be, crucial to tourism development. Many tourism resources in the United States, such as national parks, government facilities on shorelines and in other recreation resource areas, and many historic features and attractions, are either in public ownership or are heavily influenced by government regulations. In the United States, the emphasis on recreational use of federally managed lands, the vast national forests in particular, is currently increasing as other land and forest uses, such as timber production and grazing, become more restricted in order to maintain important habitat quality. The pertinence of resource-based tourism will likely expand in the future as urban concentrations become greater and environmental quality at many existing visitor destinations becomes increasingly degraded. Obviously those locations which succeed in enhancing, or at the very least maintaining, their relative environmental quality will enjoy increasing competitive advantages. It is characteristic of most natural features that they are physically altered by use. Positive change should be the goal. Negative change, even in small amounts, can be critically damaging. The extent and nature of this environmental alteration, and/or the alteration of the recreation experience by users, typically is influenced by a number of factors, including the intensity, duration, location and other characteristics of use. Because demand and use so closely influence natural resource quality, any approach to maintaining or enhancing resource quality must involve a planning and management approach. Good management intervenes
purposefully and valuably between use and its effects. Environmentalism is a form of marketing. All too often people in tourism forget that a clean and healthy environment does not take away from the bottom line it adds to it. Do not define the word in its most narrow sense, but rather in its broadest sense. For example, a restaurant that offers a romantic setting is selling environmental tourism. Few people will spend a lot of money to eat over a garbage dump, but many people are more than willing to spend top dollar to eat in a charming setting, be that setting a table overlooking an ocean, a crystal clear lake, a beautiful garden, or a forest. Tourism officials need to promote their locale’s ecology and be creative in finding ways to protect it and still use it. The wise tourism marketer promotes the ecological health of his/her area in all written, oral and visual marketing efforts. The tourism sector is now realizing the importance of ecological protection. Some new types of tourism are significantly supporting the environmental protection programs.

**ECO – TOURISM:**

Ecotourism is about uniting conservation, communities, and sustainable travel. This means that those who implement and participate in ecotourism activities should follow the following ecotourism principles:

- Minimize impact.
- Build environmental and cultural awareness and respect.
- Provide positive experiences for both visitors and hosts.
- Provide direct financial benefits for conservation.
- Provide financial benefits and empowerment for local people.
- Raise sensitivity to host countries' political, environmental, and social climate.

Generally, ecotourism deals with living parts of the natural environments. Ecotourism focuses on socially responsible travel, personal growth, and environmental sustainability. Ecotourism typically involves travel to destinations where flora, fauna, and cultural heritage are the primary attractions. Ecotourism is intended to offer tourists insight into the impact of human beings on the environment, and to foster a greater appreciation of our natural habitats.

**SUSTAINABLE TOURISM:**

Sustainable tourism is tourism attempting to make as low an impact on the environment and local culture as possible, while helping to generate future employment for local people. The aim of sustainable tourism is to ensure that development brings a positive experience for local people, tourism companies and the tourists themselves. "Sustainable tourism is an adopted practice in successful ecotourism."
Non-governmental organizations are one of the stakeholders in advocating sustainable tourism. Their roles can range from spearheading sustainable tourism practices to simply doing research. University research teams and scientists can be tapped to aid in the process of planning. Such solicitation of research can be observed in the planning of Cat Ba National Park in Vietnam.

Large conventions, meetings and other major organized events drive the travel, tourism and hospitality industry. Cities and convention centers compete to attract such commerce, commerce which has heavy impacts on resource use and the environment.

Major sporting events, such as the Olympic Games, present special problems regarding environmental burdens and degradation. But burdens imposed by the regular convention industry can be vastly more significant. In short we can say that tourism is somehow contributing towards the protection and preservation of the natural environment.

CHECK YOUR PROGRESS - 1:

1) Name any four components of an ecological system.

2) World environment day is celebrated on...

3) When did the Indian government ban the plastic bags?

11.3.2 PRESERVATION OF NATURAL HERITAGE:

Natural heritages of a country includes important tourist spots like rivers, lakes, mountains, natural eco systems, coral reefs etc. they are very crucial for a country in order to attract and sustain tourists. Another definition for natural heritages “Natural heritage is the legacy of natural objects and intangible attributes encompassing the countryside and natural environment, including flora and fauna, scientifically known as biodiversity, and geology and landforms (geo diversity).”

The term "natural heritage", derived from "natural inheritance", pre-dates the term "biodiversity", though it is a less scientific term and more easily comprehended in some ways by the wider audience interested in conservation biology. "Natural Heritage" was used in the United States when Jimmy Carter set up the Georgia Heritage Trust while he was governor of Georgia.
An important site of natural heritage or cultural heritage can be listed as a World Heritage Site by the World Heritage Committee of UNESCO. The UNESCO programme, catalogues, names, and conserves sites of outstanding cultural or natural importance to the common heritage of humanity.

*Image: Western Ghats of India: A natural heritage*

As of March 2012, there are 936 World Heritage Sites: 725 cultural, 183 natural, and 28 mixed properties, in 153 countries. The 1972 UNESCO World Heritage Convention established that biological resources, such as plants, were the common heritage of mankind or as was expressed in the preamble: "need to be preserved as part of the world heritage of mankind as a whole.". These rules probably inspired the creation of great public banks of genetic resources, located outside the source-countries.

New global agreements (e.g., the Convention on Biological Diversity), now give sovereign national rights over biological resources (not property). The idea of static conservation of biodiversity is disappearing and being replaced by the idea of dynamic conservation, through the notion of resource and innovation.

The new agreements commit countries to conserve biodiversity, develop resources for sustainability and share the benefits resulting from their use. Under new rules, it is expected that bio prospecting or collection of natural products has to be allowed by the biodiversity-rich country, in exchange for a share of the benefits. In 2005, the World Heritage Marine Programme was established to protect marine areas with Outstanding Universal Values.

The World Heritage Sites in India are recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as on 29, as of 2012. These are places of importance of cultural or natural heritage as described in the UNESCO World Heritage Convention, established in 1972. The Convention concerning the protection of the World Cultural and Natural Heritage was adopted on 17 November 1997 following the General Conference of the UNESCO held from 17 October 1972 to 21 November 1972. The Convention is defined under 28 Articles.

Broadly, the Cultural Heritage Sites are defined in Article 1 as monuments, groups of buildings and sites, while the natural sites defined under Article 2 refer to natural features, geological and physiographical formations and natural sites.
As of date, there are 911 properties under the World Heritage List, which cover 711 cultural sites, 180 natural sites and 27 mixed properties encompassing 152 countries, including India.[3] Countries who have signed the Convention are 187 States, including India, which signed the Convention on November 14, 1977.

The following table describes some important natural heritage sites of India:

<table>
<thead>
<tr>
<th>Name</th>
<th>Location/ state</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaziranga Wild Life Sanctuary, Assam</td>
<td>Assam, India</td>
<td>Kaziranga Wild Life Sanctuary, located in the Northeastern state of Assam in the flood plains of the Brahmaputra River’s south bank, was declared a World Heritage Site by UNESCO in 1985 for its unique natural environment.</td>
</tr>
<tr>
<td>Rock Shelters of Bhimbetka, Madhya Pradesh</td>
<td>Madhya Pradesh, India</td>
<td>Rock Shelters of Bhimbetka described in the UNESCO Inscription as “the site complete a magnificent repository of rock paintings within natural rock shelters” is located in the foothills of the Vindhya range of hills in the Central Indian state of Madhya Pradesh.</td>
</tr>
<tr>
<td>Ajanta Caves</td>
<td>Maharashtra, India</td>
<td>Ajanta Caves listed under UNESCO World Heritage as a cultural heritage site, are Buddhist caves that were built in two phases, the first phase was from 2nd century BC</td>
</tr>
<tr>
<td>Keoladeo National Park</td>
<td>Bharatpur, Rajasthan, India</td>
<td>Keoladeo National Park in Bharatpur is located within the Indus-Ganges Monsoon Forest Biogeographical Province. It extends over an area of 2,783 hectares (6,880 acres).</td>
</tr>
<tr>
<td>Mountain Railways of India</td>
<td>Ooty, Tamilnadu</td>
<td>The Mountain Railways of India represents a collective listing of the Darjeeling Himalayan Railway, the Nilgiri Mountain Railway and the Kalka-Shimla Railway under the UNESCO World Heritage Site.</td>
</tr>
<tr>
<td>River Island of Majuli</td>
<td>Brahmaputra River, Assam, India</td>
<td>River Island of Majuli in midstream of the Brahmaputra River in Assam</td>
</tr>
<tr>
<td>Wild Ass Sanctuary</td>
<td>Kutchh, Gujarat, India</td>
<td>Wild Ass Sanctuary, largest wildlife sanctuary in India is known for the endangered wild ass sub-species of Indian Wild Ass in Little Rann of Kutch</td>
</tr>
<tr>
<td>Bhitarkanika Conservation Area</td>
<td>Orissa, India</td>
<td>A mangrove wetland in Orissa</td>
</tr>
</tbody>
</table>
Heritage tourism helps make historic preservation economically viable by using historic structures and landscapes to attract and serve travelers. Heritage tourism can be an attractive economic revitalization strategy, especially as studies have consistently shown that heritage travelers stay longer and spend more money than other kinds of travelers. As an added bonus, a good heritage tourism program improves the quality of life for residents as well as serving visitors.

Development and preservation of different natural heritage spots across the country is an important part of tourism development activities. Heritage and tourism are always associated with each other, but sometimes the development of tourism can have a negative impact on protecting heritage. Visitors may intentionally or unintentionally violate or damage the heritage site, while services and enterprises around the site focused on making profits may spoil the site, especially spiritual sites like pagodas and temples.

CHECK YOUR PROGRESS - 2:

1) When the UNESCO world heritage convention was established?
   ..............................................................................................................................................
   ..............................................................................................................................................

2) In which of the state Wild Ass Sanctuary is situated?
   ..............................................................................................................................................

3) According to UNESCO how many natural sites are there in the world………
   ..............................................................................................................................................

4) When did UNESCO declared Kaziranga Wild Life Sanctuary, as a world heritage site.
   ..............................................................................................................................................
   ..............................................................................................................................................

11.3.3 JUDICIOUS AND NON-CONSUMPTIVE USE OF NATURAL RESOURCES:

The rapid development of the tourism sector is an important reason behind the growing awareness about conservation of various natural resources like air, water, wet lands and mountains etc. Consumptive resources are resources that are unable to be renewed or take a long period of time to do so. Non consumptive resources are resources like solar energy that don't use up any resources. Some of the natural resources are limited like fresh water, crude oil; coal etc and they must be consumed in a controlled and non consumptive manner. Natural resources management implies systematic and planned utilization of natural resources- Land (Soil), Water and flora and fauna, which constitute the basic life support system, for development. NRM would call for increase in productivity and efficiency of the existing ecological system. From the view of sustainable economic development, the management of natural resources implied that the environmental
stocks should be held constant over time, as their over exploitation can cause depletion of genetic resources which indicate limit the options for future generation. There are certain ecological limits beyond which the exploitation of natural resources would not be sustainable. These limits determine the carrying capacity of the ecosystem in the extent to which the natural resources could be exploited consistent with their sustained availability in the case of renewable resources. In the case of non-renewable resources like minerals etc, their utilization has to be judicious with necessary measures for safeguarding the ecology & environment.

In other words, natural resources management is an activity which would drive towards ensuring sustainable –development for economic efficiency and growth towards self reliance with equity and social justice, through conservation of resources.

Natural resources are the resources available in a nature like air, water, sunlight, soil, minerals, forests, wild life etc. Natural resources are of two main types. They are renewable and non-renewable natural resources.

i) **Renewable natural resources:** Those resources which can be replenished in a short period of time like air, water, sunlight, forests etc.

ii) **Non-renewable natural resources:** Those resources which cannot be replenished in a short period of time like minerals (coal, petroleum, natural gas, metals etc.) because they take millions of years to be formed.

Tourism activities produce a lot of waste materials which are thrown away into the environment. These wastes cause pollution of natural resources like air, water and soil. The three R’s to save the environment are Reduce, Recycle and Reuse.

i) **Reduce:** - means using less of natural resources and avoiding wastage of natural resources.

ii) **Recycle:** - means the materials like paper, plastic, glass, metals etc used for making things can again be used for making new things instead of synthesizing or extracting new paper, plastic, glass or metals.

iii) **Reuse:** - means using things again and again like the plastic bottles in which we buy jams, pickles etc can be again used for storing things in the kitchen.

All the things we use and consume are obtained from natural resources. Due to increase in population, industrialization and urbanization the demand for natural resources is increasing and their availability is limited. So there is a need for proper management of natural resources. The proper management of natural resources consists of:-

i) Judicious use of natural resources and avoiding wastage of natural resources.

ii) Long term planning for the use of natural resources so that it last not only for the present but also for future generations.
iii) The exploitation of natural resources should not be for the benefit of a few people but should be distributed equally for all.
iv) While extracting and using natural resources we should also plan for the safe disposal of wastes so that no damage is caused to the environment.

**Importance of forests:**

- i) Forests help to preserve biodiversity.
- ii) Forests are natural habitats of plants and animals.
- iii) Forests provide timber, wood, fuel, medicines, fodder, etc.
- iv) Forests help to maintain ecological balance.
- v) Forests help to control climate and rainfall.
- vi) Forests help to prevent soil erosion and controls floods.
- vii) Forests help to maintain the oxygen–carbon dioxide balance in nature.

**Conservation of forests:**

Forests can be conserved by:

- i) Afforestation – planting of more trees.
- ii) Preventing or reducing deforestation.
- iii) Preventing over grazing by cattle.
- iv) By setting up wildlife sanctuaries, national parks, biosphere reserves etc.
- v) Undertaking social forestry programs like Van Mahotsav, Chipko movement for planting and protecting trees on a large scale.

**Uses of water:**

Water is a basic necessity for all living things. We use water for our daily needs, for agriculture, transportation, construction of buildings, roads, dams etc. Water is a natural habitat for aquatic organisms. Human activities are affecting the availability of water and causing pollution of water bodies.

**Dams:**

**Advantages of dams:**

- i) Irrigation of crops.
- ii) Producing electricity.
- iii) Supplying water to towns and cities.
- iv) To control floods.

**Disadvantages of dams:**

- i) **Social problems:** It displaces a large number of people who have to be rehabilitated.
- ii) **Economic problems:** It is expensive and uses a huge amount of public money.
- iii) **Environmental problems:** It causes deforestation and loss of biodiversity.
Water harvesting

Water harvesting is collecting and storing rain water for future use. The common methods of water harvesting are:-

i) Digging pits, ponds, lakes etc.
ii) Building small earthen dams or concrete check dams.
iii) Construction of dykes.
iv) Construction of reservoirs.
v) Construction of rooftop collecting units in houses.

Coal and petroleum are fossil fuels formed by the decomposition of dead plants and animals inside the earth after several millions of years. They are non-renewable sources of energy. Petroleum reserves may last for about 40 years and coal reserves may last for about 200 years. Coal and petroleum contain carbon, hydrogen, nitrogen and sulphur. When they are burnt, they release carbon dioxide and oxides of nitrogen and sulphur. Carbon dioxide is a greenhouse gas which causes global warming. Oxides of nitrogen and sulphur combine with moisture in the air and produces acid rain.

11.3.4 INFUSING ENVIRONMENTAL AWARENESS AND, SUPPORTING THE CAUSE OF NATIONAL PARKS:

Modern tourism activities are more focused towards the environmental protection and awareness than any other industry or business sector. Various new emerging forms of tourism like ‘ecotourism’ and sustainable tourism are now
growing very fast in the overall tourism sector. Tourism activities can significantly contribute in the infusion of environmental awareness among the local community and the tourist groups both. It is widely accepted that the tourism industry of any destination is highly dependent on the quality of its natural environment.

Indeed, according to one commentary, the long-term viability of any tourism industry is dependent on the natural attractiveness of the destination being maintained. Environmental education is a learning process that increases people’s knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, fosters attitudes, motivations and commitments to make informed decisions and take responsible action (UNESCO, Tbilisi Declaration, 1978).

According to UNUN “The growth and development of awareness, understanding and consciousness toward the biophysical environment and its problems, including human interactions and effects. Thinking "ecologically" or in terms of an ecological consciousness. (Source: UNUN)”

Environmentalism is a broad philosophy, ideology and social movement regarding concerns for environmental conservation and improvement of the health of the environment, particularly as the measure for this health seeks to incorporate the concerns of non-human elements. Environmentalism advocates the preservation, restoration and/or improvement of the natural environment, and may be referred to as a movement to control pollution or protect plant and animal diversity. For this reason, concepts such as a land ethic, environmental ethics, biodiversity, ecology and the biophilia hypothesis figure predominantly.

At its crux, environmentalism is an attempt to balance relations between humans and the various natural systems on which they depend in such a way that all the components are accorded a proper degree of sustainability. The exact measures and outcomes of this balance is controversial and there are many different ways for environmental concerns to be expressed in practice. Environmentalism and environmental concerns are often represented by the color green, but this association has been appropriated by the marketing industries and is a key tactic of green washing. Environmentalism is opposed by anti-environmentalism, which takes a skeptical stance against many environmentalist perspectives.

Environmentally responsible tourism is a new concept the world over. There are two aspects of the relation between tourism and environment. Tourism depends heavily on an unspoilt natural environment. The world over, location of scenic beauty and UN spoilt natural splendor have replaced heritage monuments in tourism trends. Tourists travel for all sorts of reasons - seeking health, recreation, education, adventure and thrills on their own or on guided tours.
Nature is often a major part of the experience: scenery, forests and wild animals, or forms of agricultural use attract tourists and thus become a central factor for the economy. Wherever self-sustained financing of conservation measures in nature reserves is possible, even if only in part, it is through tourism. Environmental protection at tourism facilities and during travel is of increasing importance. Tourists notice and frown upon the wasteful use of resources, problems with waste disposal, or a waste of energy.

The environment-tourism relationship has incorporated four phases over the last four decades. In the 1950s it was being viewed as one of coexistence. As environmental impact increased with the advent of mass tourism and as environmental awareness grew in the early 1970s, the relationship was perceived to be in conflict. During the next decade this view received much support, although a new suggestion was also emerging that the relationship could be mutually beneficial to both the environment and to tourism. Over recent years the relationship has increasingly been viewed as one with considerable potential for either conflict or symbiosis. The latter view maintains that environmentally compatible tourism developments may be achieved through an integrated approach fostering sustainable development. The link between conservation of biodiversity and the development needs of local communities - a central component of the biosphere reserve approach - is now recognized as a key feature of the successful management of most national parks, nature reserves and other protected areas. Each biosphere reserve is intended to fulfill three complementary functions: a conservation function, to preserve genetic resources, species, ecosystems and landscapes; a development function, to foster sustainable economic and human development, and a logistic support function, to support demonstration projects, environmental education and training, and research and monitoring related to local, national and global issues of conservation and sustainable development. International conferences mark changes in thinking and approaches. They also set new agendas for action. The first set of international recommendations to guide environmental education was developed in Tbilisi, Georgia in 1977. The 4th International Conference on Environmental Education, held in Ahmadabad, India, in 2007 within the framework of the UN DESD, marks 30 years after Tbilisi.

Indian Environmental Society (IES), a non-profit development organization, has been promoting Environmental Improvement Initiatives in India since 1972. IES is active in Environmental Education, Biodiversity Conservation, Information Dissemination, Solid Waste Management, and Eco-Technology & Heritage Conservation. Environmental Education has been the centerpiece of all programs of the Society. The organization is meritoriously operating in different States of the Country.
TOURISM IMPACTS

CHECK YOUR PROGRESS - 3:

1) Name any two non renewable natural resources.

2) List any two renewable natural resources.

3) What is the contribution of natural gas in the total energy consumption of India?

4) What is the full form of UNDESD?

11.3.5 WILDLIFE SANCTUARIES AND BIOSPHERE RESERVES:

One of the most important influences of the tourism industry is the motivation to develop and sustain the different types of biosphere reserves and wildlife sanctuaries. These are the important natural parts of any natural tourist destination across the world. A wildlife sanctuary is a space that is set aside exclusively for the use of wild animals, which are protected when they roam or live in that area. They are also referred to as wildlife refuges in some areas.

Typically, a sanctuary is created through a government mandate that sets the space aside for the use of animal protection, and rangers or other government employees may patrol the area to ensure that no one hunts or otherwise harasses the animals. There are a number of reasons to establish a wildlife sanctuary. In many cases, a government creates one for the purpose of protecting endangered species with a limited territorial range.

Since it is not always possible to relocate animals or breed them in captivity, protecting their natural habitat can be very important. Endangered species are typically closely monitored, and if their populations grow while under protection, some specimens may be captured for breeding in conservation parks to ensure that the species survives.

A sanctuary may also be established for the purpose of maintaining biodiversity, or preserving a nation's unique natural environment. For example, several rainforest countries have wildlife sanctuaries that are intended to preserve the rainforest as well as the creatures in it; since these conditions could never be replicated somewhere else, it is necessary to preserve them where they are. Many nations also recognize the value of their natural environment and the local wildlife, and as a result they have made the establishment of sanctuaries a priority.

A biosphere reserve is an area proposed by its residents, ratified by a national committee, and designated by UNESCO’s’ Man and Biosphere’ program [MAB], which demonstrates innovative approaches to living and working in
harmony with nature. One of the primary objectives of MAB is to achieve a sustainable balance between the goals of conserving biological diversity, promoting economic development, and maintaining associated cultural values.

The term ‘biosphere’ refers to all of the land, water and atmosphere that supply life on earth. The word ‘reserve’ means that it is a special area recognized for balancing conservation with sustainable use. The term ‘reserve’ does not mean that these places are set aside from human use and development. In fact, the study of human use is an important part of the biosphere reserve program. Each biosphere reserve demonstrates practical approaches to balancing conservation and human use of an area. They are excellent examples of community-based initiatives that protect our natural environment while ensuring the continued healthy growth of the local economy.

Image: three functions of biosphere reserve

Modern tourism activities are more nature centric than even before. Tourists often feel more relaxed and peaceful on visiting these natural places. Historically and culturally, forests and all forms & wildlife in them, have played a very important role in the Indian way of life. Plants and animals have even been worshipped over the centuries and thus the importance accorded to them. According to estimates the forests, the deserts, the mountains and swamplands of India sustain over 350 species of mammals 2,100 kinds of birds - both local and migratory, 350 varieties of reptile and innumerable insects. Each sanctuary has several species of mammals and birds but is sometimes known for one particular species. For instance the Sultanpur Sanctuary in Haryana is known for the large contingent of migratory birds from October onwards every year and Gir in Gujarat for its lions.
Wildlife tourism can be an eco and animal friendly tourism, usually showing animals in their natural habitat. Wildlife tourism, in its simplest sense, is watching wild animals in their natural habitat. Wildlife tourism is an important part of the tourism industries in many countries including many African and South American countries, Australia, India, Canada, Indonesia, Bangladesh, Malaysia and Maldives among many. It has experienced a dramatic and rapid growth in recent years worldwide and is closely aligned to eco-tourism and sustainable-tourism. Some important wild life sanctuaries of India are being described here –

**Corbett National Park Uttarakhand:** Corbett National Park in Uttarakhand is one of the most sought after wildlife tourist destinations in India. It is an initiative taken by the Government of India to protect the endangered Tigers. Corbett National Park has an honor of being the oldest National Park in Asia. The park is dedicated to the writer Jim Corbett whose wildlife stories are as popular as the park itself.

**Bandipur Wildlife Sanctuary Karnataka:** Bandipur Wildlife Sanctuary located in Karnataka is a home to Asian Elephants in their natural habitat. This wildlife sanctuary is situated at the meeting point of the Deccan Plateau and the majestic Western Ghat mountains and considered as one of the most beautiful wildlife sanctuaries in India. Bandipur Wildlife Sanctuary is located at a distance of 80 km from Mysore and Ooty and at a distance of 215 km from Bangalore.

**Kanha National Park Madhya Pradesh:** Kanha National Park is located in Madhya Pradesh and was established in 1955. This park has the honor of saving the almost extinct species of Swamp Deer (Barasingha). It is one of the well-maintained parks in the entire Asia. Highlight of the Kanha National Park is the Bamni Dadar that is also known as the Sunset Point. View of grazing animals with the backdrop of Sunset is just amazing.

**Periyar Wildlife Sanctuary Kerala:** Periyar Wildlife Sanctuary located in Kerala covers the area of 777 sq. km. and was established in 1950 as wildlife sanctuary and as tiger reserve in 1978. Exact location of Periyar Wildlife Sanctuary is the Hills of Western Ghats. In this sanctuary both flora and fauna are found in great diversity. Elephants, Tiger, Nilgiri Tahr, Nilgiri Langur are the main animals found at Periyar Wildlife Sanctuary.

The Indian government has established 17 Biosphere Reserves of India, (categories roughly corresponding to IUCN Category V Protected areas), which protect larger areas of natural habitat (than a National Park or Animal Sanctuary), and often include one or more National Parks and/or preserves, along buffer zones that are open to some economic uses. Protection is granted not only to the flora and fauna of the protected region, but also to the human communities who inhabit these regions, and their ways of life.
Seven of the sixteen biosphere reserves are a part of the World Network of Biosphere Reserves, based on the UNESCO Man and the Biosphere (MAB) Programme list.

1. Nilgiri Biosphere Reserve, 2000
2. Gulf of Mannar Biosphere Reserve, 2001
3. Sundarbans national park, 2001
4. Nanda Devi Biosphere Reserve, 2004
5. Nokrek Biosphere Reserve, 2009
6. Pachmarhi Biosphere Reserve, 2009
7. Simlipal Biosphere Reserve, 2009

CHECK YOUR PROGRESS - 4

1) How many biosphere reserves are there in India?

2) List any two national parks of uttrakhand.

3) When was Periyar Wildlife Sanctuary located in Kerala Established?

4) What is the full form of MAB?

11.5 SUMMARY:

National parks and wildlife sanctuaries are very important to attract and sustain the natural tourism activities around a destination spot. Tourism activities has supported and motivated various types of national parks and animal reserves across the country and globe. Biosphere reserves are important factors in maintaining the balance of different species, and the destination ecosystem. National parks and their natural environment have been attracting tourists since hundreds of years. Growing Tourism activities around these natural destinations has motivated the governments to develop and maintain more and more such type of tourist destination. We need national parks for survival, nature is an integral part of our lives, and we need to preserve as much as it as possible in order to keep the cycle of life flowing. They are tools for the preservation of wilderness areas for sightseeing and recreation. They also are preserves for animals that otherwise might not have an environment to exist in. National Parks provide an opportunity for visitors to connect (or re-connect) with their national heritage, be that connection natural, cultural, or historic. There are educational, moral, health, and other intangible benefits that arise from using national parks for recreation. In many cases, they provide "escape" from cities, one of the big reasons nature-based parks were established in the first place.
11.6 GLOSSARY:

- **Ecology:** the scientific study of interactions among organisms and their environment
- **Sustainable Tourism:** tourism attempting to make as low an impact on the environment and local culture as possible
- **Geo-Diversity:** Variety of earth materials, forms and processes that constitute and shape the Earth, either the whole or a specific part of it
- **Sanctuary:** a place where animals can come to live and be protected or the rest of their lives
- **MAB:** Man and the Biosphere (MAB) Programme is an Intergovernmental Scientific Programme aiming to set a scientific basis for the improvement of the relationships between people and their environment globally.
- **Heritage:** something inherited from the past
- **NRM:** Natural resource management

11.7 CHECK YOUR PROGRESS

**Check your progress-1**

1) Gas, water, animal and trees  2) 5 June  3) 2009

**Check your progress-2**

1) 16 Nov 1945  2) Kutchh, Gujrat  3) 936  4) 1985

**Check your progress-3**


**Check your progress-4**

1) 18  2) Jim Corbett national park, rajaj ji national park  3) 1982  4) Man and bio sphere program, UNESCO

11.8 REFERENCES:

- Natural Area Tourism: Ecology, Impacts and Management by David Newsome, Susan A. Moore
- Tourism Impacts, Planning and Management by Peter Mason
- Wildlife Tourism by David Newsome, Ross Kingston Dowling, Susan A. Moore
- Ecology, Environment and Tourism by L.K. Singh
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- Creating a Sustainable Ecology Using Technology-Driven Solutions edited by Elias G. Carayannis
- The Geography of Tourism and Recreation: Environment, Place and Space by Colin Michael Hall
- Ecotourism and Environmental Sustainability: Principles and Practice edited by Jennifer Louise Hill, Tim Gale

11.9 SUGGESTED READINGS:

- Creating a Sustainable Ecology Using Technology-Driven Solutions edited by Elias G. Carayannis
- The Geography of Tourism and Recreation: Environment, Place and Space by Colin Michael Hall
- Ecotourism and Environmental Sustainability: Principles and Practice edited by Jennifer Louise Hill, Tim Gale
- Ecology, Environment and Tourism by L.K. Singh

11.10 MODEL QUESTIONS:

Short answer type questions:
1) What are the primary components of an ecological system?
2) Explain the term ‘eco tourism’.
3) How tourism is contributing towards the preservation of natural resources?
4) What do you understand by National Parks and Wildlife Sanctuary?
5) Define the term ‘biosphere reserves’.
6) Name any two national parks of south India.
7) Define the following terms –
   (a) Renewable natural resources  (b) ozone layer
   (c) UNESCO  (d) water harvesting

Long answer type questions:
1) Discuss the interrelationship between tourism and ecology, how tourism can help in the preservation of natural environment and ecology.
2) How tourism can protect various natural resources, what is conspicuous consumption?
3) Discuss the need and development of national parks and sanctuaries in India.
UNIT 12: NEGATIVE ENVIRONMENTAL IMPLICATIONS OF TOURISM

Structure:
12.1 Introduction
12.2 Objectives
12.3 Negative environmental implications of tourism
   12.3.1 Encroachment on natural areas
   12.3.2 Over-crowding
   12.3.3 Noise and Pollution
12.4 Deterioration of environmental quality and Disturbance in Eco-balance
12.5 Summary
12.6 Glossary
12.7 Check your progress
12.8 References
12.9 Suggested readings
12.10 Model questions

12.1 INTRODUCTION:

In previous chapter we have seen that tourism may support some type of environmental protection in the form various national parks and biosphere reserves. Mass tourism has produced a number of ways to destroy or pollute the original natural environment of the tourist destination such as pollution from transport sector, from hotel industry etc. Tourism can cause the same forms of pollution as any other industry: air emissions, noise, solid waste and littering, releases of sewage, oil and chemicals, even architectural/visual pollution. Noise pollution from airplanes, cars, and buses, as well as recreational vehicles such as snowmobiles and jet skis, is an ever-growing problem of modern life. In addition to causing annoyance, stress, and even hearing loss for it humans, it causes distress to wildlife, especially in sensitive areas. For instance, noise generated by snowmobiles can cause animals to alter their natural activity patterns. Growing
mass tourism activities around a destination normally encroach the natural areas like forests, rivers, lakes etc. Transport by air, road, and rail is continuously increasing in response to the rising number reported that the number of international air passengers worldwide rose from 88 million in 1972 to 344 million in 1994. One consequence of this increase in air transport is that tourism now accounts for more than 60% of air travel and is therefore responsible for an important share of air emissions. One study estimated that a single transatlantic return flight emits almost half the CO2 emissions produced by all other sources (lighting, heating, car use, etc.) consumed by an average person yearly. Transport emissions and emissions from energy production and use are linked to acid rain, global warming and photochemical pollution. Air pollution from tourist transportation has impacts on the global level, especially from carbon dioxide (CO2) emissions related to transportation energy use. And it can contribute to severe local air pollution. Some of these impacts are quite specific to tourist activities. For example, especially in very hot or cold countries, tour buses often leave their motors running for hours while the tourists go out for an excursion because they want to return to a comfortably air-conditioned bus.

Tourism makes up 5% of the world GDP. That means millions of people are moving around the world. Except for those people walking or cycling to their destination all these tourists are causing CO2 emissions from the transport they take. Especially when that transport is on an airplane. Despite rising airplane ticket prices and a global recession people are still getting in planes by droves to go on holiday. It is often the case that beautiful coastal areas that cater for tourists don’t have the resources to deal with large numbers of people. Sanitation and refuse disposal becomes a bigger problem as a beach in Koh Tao, for example, becomes more important. Although the locals try their best in many cases tourists have a polluting influence.

Overcrowding in many natural destinations is a very common problem generated by tourism itself. Overcrowding can disturb the peaceful environment of tourist destination and consequently disturbs the various types of wildlife and the local community. All these negative effects of mass tourism are dangerous for the ecological balance of the tourists spot and the surrounding environment.

12.2 OBJECTIVES:
After reading this unit carefully, learners will be able to understand –

- How mass tourism is disturbing the natural environment of various destinations
- Mass tourism and overcrowding effect on ecology
- Different types of pollution due to tourism
- How tourism activities harms natural areas and quality of environment.
12.3 NEGATIVE ENVIRONMENTAL IMPLICATIONS OF TOURISM:

Along with different economical and social advantages, environmental pollution due to tourism can be thought of as its ugly face. The rapid development of tourism industry and the modernization of its supporting services have really increased the foreign and domestic tourist arrivals across all over the world. This current scenario of tourism sector has damaged the natural environment significantly. Various natural areas of the country are now suffering from rapid mass tourism growth which results in ecological disturbance. Following sections describe the various negative environmental effects of tourism on the destination environment and ecology.

12.3.1 ENCROACHMENT ON NATURAL AREAS:

One of the obvious negative environmental implications of mass tourism is the encroachment around the various natural areas such as forest areas, biosphere reserves, lakes etc. natural destinations always attracts tourists. Various infrastructure based services have been developed around natural destinations such as hotel and restaurant infrastructures, transport infrastructure (road, rail and air transport), power projects etc. The most common types of violations seen in our parks are when citizens extend their personal possessions or land onto natural areas property. Common encroachments include fire pits, mowed strips, unapproved plantings, compost bins, parked vehicles, bike park construction and forts. The effects of these violations are immediate, and cause damage to the delicate environmental balance.

All non-native plant material is a threat to the natural balance of the park. Unwanted plants such as weeds – may easily take over and out-compete the native plants. Adding loam to a natural area is the most common way of introducing unwanted weeds. Tourism is arguably the world's largest industry - and continues tremendous annual growth rates. The industry's gains grew to $439 billion dollars last year. As the world's natural areas are also destroyed at an alarming rate, the tourism industry is encroaching on remote and biologically diverse areas, home to Indigenous Peoples and threatens our environment and way of life.

According to the World Tourism Organization, in 1998 there were 635 million tourist arrivals around the world. For the recipients (host countries) of international tourism, the tourism industry creates dependency upon a fickle and fluctuating global economy beyond their local control. Local economic activities and resources are used less for the benefit and development of communities and increasingly for export and the enjoyment of others (i.e., tourists, consumers in other areas of the world). With so few international policies and guidelines
restricting it, tourism has been given free reign to develop throughout the world. In fact, it has led the globalization process in the areas of transportation, communications, and financial systems.

It has been promoted as a panacea for "sustainable" development. However, tourism's supposed benefits (generation of employment, development of infrastructure, etc.) have not "trickled down" or benefited Indigenous Peoples. The destructiveness of the tourism industry (environmental pollution and enormous waste management problems, displacement from lands, human rights abuses, unfair labor and wages, Commodification of cultures, etc.) has brought great harm to many Indigenous Peoples and communities around the world. Recently we have witnesses many government bodies, international environmental treaties, and other policies as they are made about "sustainable tourism," yet Indigenous Peoples have not been invited to participate adequately in these policies which will have negative consequences for the rest of time.

Dumping your yard waste into a natural area has a negative effect on the park. Piles of grass clippings, sod, branches, and other yard waste do not easily decompose. This is the most common way for weeds, pesticides and herbicides to be introduced into a natural park. Dumping also increases the risk of rodents and creates fuel for grass fires. It is important to keep the areas next to your property in their natural state. Encroachments can damage the natural environment and cause irreparable damage to sensitive ecosystems.

Natural ecosystems in our parks, woodlands and greenbelts play a crucial role in flood prevention, erosion control, protecting air and water quality and provide valuable wildlife habitat. The City acts on behalf of residents as stewards of all public lands to ensure our existing natural areas and trees are protected and continue to grow.

### 12.3.2 OVER-CROWDING:

The tourism has a huge effect on a countries economic development. How much money country gets a year depends on two main things in the tourist industry; one being how many tourists visit that country a year and the other one being who the country works with and how much money different companies get out of the countries profit. Tourism links countries together in many ways:

- The first way is different countries depending on each other for supplies such as bed linen, towels, food etc.
- Also if a holiday resort in Spain attached many British tourists (like Benidorm or Ibiza) some British citizens would go and live in Spain so they could work in hotels and they could talk the language of holiday makers.
- Similar to my second point, people who live in poverty would go to more economical developed country to find work.
Over the past years there has been a tourism boom. This has been down to many factors:

- Cheap travel, low cost airlines, they offer cheap flight to major cities around the world.
- Cheap Living cost, it is very cheap to stay in a villa, apartments or hotel.
- Package deals, the internet and travel agents offer package deals which include flights, accommodation and insurance at a very low cost.
- Our economic status. Many people are working now and earning money so they can afford to go on abroad on holiday.
- The climate, if holiday makers are after a hot climate, there are many destinations which have an increasing climate.
- When more people travel to an area, more people end up recommending it to their friends who then take their advice and go on holiday there.

Overcrowding is a major problem, with loads of tourists hitting the hot climates in the summer, beaches become packed. Which is a bad thing for residents who want to go down and relax, not to be squashed by tourists? Also is many tourists hire cars, traffic congestion will not only be annoying but it will also be regular. People after they have retired they move to a destination for some peace and quiet. If that destination becomes a popular tourism destination then their peace and quiet is spoiled.

The effect of mass tourism around a tourist destination often results into traffic congestions and overcrowding on nearby places such as hotels, restaurants and local societies.  Tourism is almost wholly dependent on the environment. Natural resources (beaches, seas, mountains, lakes, rivers etc) and manmade resources (historic cities, heritage buildings and sites, monuments etc) constitute the primary source of tourism. Any degradation of the primary sources is likely to lead to a decline of tourism. Areas where overcrowding and overdevelopment occur are often relatively small and possess fragile environments. At peak season visitors can outnumber the resident population. Overcrowding, misuse of natural resources, the construction of buildings and infrastructure, and other activities associated with tourism, produce impacts on the environment. These impacts may be not only physical, but also cultural. In this chapter the most frequent and damaging tourism impacts at local level in regard to protected areas are analyzed. In general, the impacts of tourism vary according to the number and nature of tourists and the characteristics of the site. The individual tourist normally has a relatively small impact. Problems arise, however, if the number of tourists is large or the resource overused. Thus although tourism can be a lucrative source of revenue for a protected area, it can also represent a major management problem. As with most problems, the negative impacts of tourism can only be managed effectively if they have been identified, measured and evaluated.
CHECK YOUR PROGRESS-1:

1) What is the number of total foreign tourist arrival in India in the year 2012?

2) How many national parks are there in India?

3) List any two problem generated by overcrowding of tourists around the local community.

4) Name any one important natural resource directly affected by mass tourism.

12.3.3 NOISE AND POLLUTION:

Noise and pollution is one of the major problems of tourism sector. The effect of globalization and modernization has pushed the tourism industry to the new horizon. Tourism sector is now considered as a powerful economical tool for the country’s economic growth. Excessive noise can be a health hazard, a safety issue at the workplace, a nuisance, and an environmental concern. Mass tourism activities around a popular destination may produce excessive sound generated by roar of vehicles, tourist’s conversations, restaurants and advertising industries etc. Noise pollution from airplanes, cars, motorbikes, buses, as well as recreational vehicles such as snowmobiles and jet skis, is an ever-growing problem of tourism, causing annoyance, stress and even hearing loss.

In simple terms, noise is unwanted sound. Sound is a form of energy which is emitted by a vibrating body and on reaching the ear causes the sensation of hearing through nerves. Sounds produced by all vibrating bodies are not audible. The frequency limits of audibility are from 20 HZ to 20,000 HZ. Noise may be continuous or intermittent. Noise may be of high frequency or of low
frequency which is undesired for a normal hearing. For example, the typical cry of a child produces sound, which is mostly unfavorable to normal hearing. Since it is unwanted sound, we call it noise. The discrimination and differentiation between sound and noise also depends upon the habit and interest of the person/species receiving it, the ambient conditions and impact of the sound generated during that particular duration of time. There could be instances that, excellently rendered musical concert for example, may be felt as noise and exceptional music as well during the course of the concert! Tourism activities often involve various kinds of meets, festivals and transportation usage, which may generate noise problems in the destination. The source of most outdoor noise worldwide is mainly caused by machines and transportation systems, motor vehicles, aircrafts, and trains. Outdoor noise is summarized by the word environmental noise. Poor urban planning may give rise to noise pollution, since side-by-side industrial and residential buildings can result in noise pollution in the residential areas. Indoor noise is caused by machines, building activities, music performances, and especially in some workplaces. There is no great difference whether noise-induced hearing loss is brought about by outside (e.g. trains) or inside (e.g. music) noise.

High noise levels can contribute to cardiovascular effects in humans, a rise in blood pressure, and an increase in stress and vasoconstriction, and an increased incidence of coronary artery disease. In animals, noise can increase the risk of death by altering predator or prey detection and avoidance, interfere with reproduction and navigation, and contribute to permanent hearing loss.

DIFFERENT TYPES POLLUTION DUE TO TOURISM:

Modern mass tourism activities around a destination can significantly damage the natural environment of the tourist spot. Tourism sector is responsible for the various types of pollution including air, water and soil pollution. India is a tourist attraction for many national as well as international tourism enthusiasts. Unfortunately with the growing number of people flocking these places of natural beauty, it is adversely affecting our environment. Littering of tourist places, the upcoming hotels and resorts at the cost of trees, the growing transport and air pollution have collectively led to the degradation of environment at many tourist attractions. The rapid growing industrialization is leading lots of environmental issues by its uncontrolled polluted emission.

Other reasons of pollutions in India are the destruction of forests, emotions of vehicles, land degradation due to use of poisonous insecticide for agriculture, shortage of natural resources, rampant burning of wood-fuel and many more. Pollution is the main reason to lead lots of disease, health issues and long term livelihood impact. When the level of visitor use is greater than the capability of
the environment to cope with this use, operating beyond the acceptable limits of change or regeneration capacity of a given territory, e.g., by the sheer effect of the number of visitors. A good example is constituted by the Mediterranean coast, where in a narrow strip (50-100 km) about 130 millions of residential habitants are incremented seasonally by about 100 million of tourists. In marine areas tourist activities such as diving or cruising, may cause damage of fragile ecosystems such as coral reefs, which are also affected by CO2-emissions due to the change in the pH-value of seawater (coral bleaching). The following sections describe various types of pollution due to tourism:

**Air Pollution and Tourism:** Normal component of fresh air are consist of 78.1 percent Nitrogen, 21 percent Oxygen, 0.95 percent Argon and 0.04 percent Carbon di-oxide. When these normal percentage of Air component irregular due to the influence of several harmful gases then our surrounding environment become polluted. There are some example of harmful elements of air like hydrocarbon gases, carbon monoxide, nitrogen oxides, sulfur dioxide, hydrogen sulfide and some greenhouse gases including carbon dioxide, nitrous oxide, methane and many more.

Major reason to increase above mentioned compositions in the air is industry emissions which increase the percentage of carbon monoxide and many harmful gases. Vehicles also contribute up to 35% of air pollution in the big cities of India like Bangalore, Mumbai, Kolkata, Chennai etc. some other reasons of air pollutions are the burning wood-fuel in rural areas for cooking and millions of old diesel engines persistently burning away diesel. Tourism is strongly related to all types of transport sector like air, road and water transport. Transport sector is one of the greatest sources of air pollution. Damaging air pollutants include sulphur dioxide, particulate matter-a mixture of extremely small particles and water droplets-ozone, and nitrogen dioxide.

Air pollution is defined as the presence of one or more contaminants in the atmosphere such as dust, fumes gas, mist, odors, smoke or vapor in quantities, of characteristics, and of duration. Such as to be injurious to human, plant or animal life or to property or which unreasonably interfaces with the Comfortable enjoyment of life and property.

One of the most negative impacts of tourism is on climate through so-called Greenhouse Gases (GHG) emissions, in particular CO2. In fact, it is now widely recognized that climate change is a global issue and one of the most serious threats to society, the economy and the environment, being by now for decades a constant issue of concern. The Inter-Governmental Panel on Climate Change (IPCC) has reported that warming of the global climate system is unequivocal and that it is likely that anthropogenic GHG production (mainly from energy conversion) have caused most of the observed.
In the tourism sector, energy consumption at destinations and the related GHG emissions strongly depend, e.g., on the infrastructure of the accommodation, particularly installations for heating, cooling and hot water [7]. On the other hand, by definition tourism is impossible without transportation. At destinations the impact of the GHG emissions can be challenged by improving new concepts and/or changing existing infrastructure.

**Image: Air Quality Monitoring in India**

Transport is one of the main sources of air pollution in Europe, particularly in cities and urban areas such as towns, airports and sea ports. Key air pollutants emitted from combustion engines in all modes of transport include NOx, PM, CO, and VOCs. However, non-exhaust emissions of PM are also released due to the mechanical wear of brakes, tyres and road surfaces, and are not currently regulated. Emissions of VOCs also come from gasoline evaporation during refueling and from vehicle and fuel storage tanks. Tourism involves the movement of people from their homes to other destinations and accounts for about 50% of traffic movements; to give an indication, the ICAO reported that the number of international air passengers worldwide rose from 88 million in 1972 to 344 million in 1994. From 594 million international travellers in 1996, numbers are forecast to leap to 702 million by next year, and from 698 million international travelers in 2000, numbers are forecast to leap to 1,018 million by 2010 and 1.6 billion by 2020.

One consequence of this increase in air transport is that tourism now accounts for more than 60% of air travel and is therefore responsible for an important share of air emissions and the role of air travel within the industry is also likely to expand and cause considerable environmental damage and to have knock-on effects on the tourism industry itself.
Air pollution from tourist transportation has impacts on the global level, especially from carbon dioxide (CO2) emissions related to transportation energy use. And it can contribute to severe local air pollution. Some of these impacts are quite specific to tourist activities.

Currently, aircraft account for around 3% of all emissions globally. The International Panel on Climate Change expects this to increase by up to 7% by 2050. Because emissions from other sectors are also expected to increase, this figure masks the increase in real terms: the actual tonnage of carbon emitted, driven by air traffic increase of 5% per year, will increase by over 75% by 2015.

**Water Pollution and Tourism:** Uncontrolled conventional tourism poses potential threats to many natural areas around the world. It can put enormous pressure on an area and lead to impacts such as soil erosion, increased pollution, discharges into the sea, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the use of critical resources. Water, and especially fresh water, is one of the most critical natural resources. The tourism industry generally overuses water resources for hotels, swimming pools, golf courses and personal use of water by tourists. This can result in water shortages and degradation of water supplies, as well as generating a greater volume of waste water. Water resources, especially rivers, are a prime attraction for tourism and recreational developments, and thus suffer impacts.

Related to the impacts of tourism on wildlife and plant resources are the effects tourism has had on wetlands and estuaries. In a number of cases wetlands and estuaries have been destroyed or damaged due to tourism development. Such areas have been related to the impacts of tourism on wildlife and plant resources are the effects tourism has had on wetlands and estuaries. In a number of cases wetlands and estuaries have been destroyed or damaged due to tourism development. Such areas have been used for access roads, parking lots, airports, resorts, sewage treatment plants or recreational facilities, and other projects. The tourism industry also produces large quantities of waste products. Hotels, airlines and other related businesses that serve tourists throw away tons of garbage a year. Much is dealt with through open air incineration or poorly managed comporting. Exposed waste is not only aesthetically displeasing, but also attracts health hazardous vermin. A related solid waste problem is the litter often left behind by tourists. Even human waste in areas where toilet facilities are nonexistent is becoming a problem. Water pollution is an increasingly serious problem especially in river basin areas. It is a result of waste water generated by tourist facilities and runoff from disturbed soil as well as septic tank seepage, lawn fertilizer, and road oil, which in turn affect the marine environment. Further, extra nutrients in the water system cause eutrophication of lakes and streams and
influence other aquatic life. Inadequately treated effluent or raw sewage discharged into water resources is a health hazard, as well. Sedimentation is an additional impact associated with tourism, a result of erosion, and thus related to deforestation and plant destruction. It is an especially large problem when tourist facilities are being constructed. Water pollution problems and sedimentation have been directly linked to near-by developments. Sedimentation reduces the clarity of water and affects aquatic life. It can also fill in lakes and reservoirs over an extensive period of time. Tourists can place a burden on the aquatic environment or ecosystem by:

1. Demanding higher availability of water for accommodations thus reducing stream flow
2. Developing roadways and built-up areas with increased run off
3. Discharging materials not native to the environment (chemicals)
4. Contaminating groundwater supplies with dumpsites
5. Requiring improved depths on near shore areas for vessels
6. Depositing trash or litter in the water
7. Changing the flow of groundwater or surface streams
8. Discharging hydrocarbons from fueling depots
9. Changing water temperatures with warm discharges
10. Adding BOD5 containing material to stream flows

**Soil Pollution and Land:** Land pollution is pollution of the Earth’s natural land surface by industrial, commercial, domestic and agricultural activities. Tourism activities often needed a number of infrastructural services like roads, hotels and local markets etc which can damage the natural land. Land pollution is basically about contaminating the land surface of the earth through dumping urban waste matter indiscriminately, dumping of industrial waste, mineral exploitation, and misusing the soil by harmful agricultural practices. Pollution includes visible litter and waste along with the soil itself being polluted. The soil gets polluted by the chemicals in pesticides and herbicides used for agricultural purposes along with waste matter being littered in urban areas such as roads, parks, and streets. Land pollution is the result of human misuse of soil. Poor agricultural practices, digging up of important resources and dumping of garbage underground can cause land pollution. Urbanization, the growth of rural lands into urban areas and industrialization that results in the formation of an industrial society is regarded as the two main causes of land pollution. The excavation of minerals, the increasing quarrying and mining activities lead to land pollution. The excavation and mining activities lead to the loosening of soil. Increased mechanization leads to the contamination of soil, thus causing severe land pollution. Deforestation is one of the major causes of loosening of soil, which in turn causes soil erosion. The soil that is left naked on harvesting crops
from agricultural lands is vulnerable to being eroded by wind and water. Intensive agricultural practices cause the soil cover to lose its nutritional elements, making it of no use for agriculture. Excessive use of pesticides and chemical fertilizers causes soil contamination. Chemicals can prove harmful to the animal and plant life. An excessive use of chemicals leads to a decrease in the fertility of soil.

*Image: Tourism and Land Based Pollution.*

Important land resources include minerals, fossil fuels, fertile soil, forests, wetland and wildlife. Increased construction of tourism and recreational facilities has increased the pressure on these resources and on scenic landscapes. Direct impact on natural resources, both renewable and nonrenewable, in the provision of tourist facilities can be caused by the use of land for accommodation and other infrastructure provision, and the use of building materials.

Forests often suffer negative impacts of tourism in the form of deforestation caused by fuel wood collection and land clearing. For example, one trekking tourist in Nepal - and area already suffering the effects of deforestation - can use four to five kilograms of wood a day. There can be catastrophic consequences of land pollution in relation to humans, animals, water and soils. The effects are even worse if the garbage is not separated into organic, re-usable and recyclable waste.

Contaminated lands and environments can:

1. Cause problems in the human respiratory system.
2. Cause problems on the skin.
3. Cause various kinds of cancers.

The toxic materials that pollute the soil can get into the human body directly by:

A- Coming into contact with the skin.
B- Being washed into water sources like reservoirs and rivers.
C- Eating fruits and vegetables that have been grown in polluted soil.
D- Breathing in polluted dust or particles.
Solid Waste and Littering: In areas with high concentrations of tourist activities and appealing natural attractions, waste disposal is a serious problem and improper disposal can be a major despoiler of the natural environment - rivers, scenic areas, and roadsides. For example, cruise ships in the Caribbean are estimated to produce more than 70,000 tons of waste each year. Today some cruise lines are actively working to reduce waste-related impacts. Solid waste and littering can degrade the physical appearance of the water and shoreline and cause the death of marine animals. In mountain areas, trekking tourists generate a great deal of waste. Tourists on expedition leave behind their garbage, oxygen cylinders and even camping equipment. Such practices degrade the environment with all the detritus typical of the developed world, in remote areas that have few garbage collection or disposal facilities. Some trails in the Peruvian Andes and in Nepal frequently visited by tourists have been nicknamed "Coca-Cola trail" and "Toilet paper trail".

Aesthetic Pollution: Often tourism fails to integrate its structures with the natural features and indigenous architectural of the destination. Large, dominating resorts of disparate design can look out of place in any natural environment and may clash with the indigenous structural design.

A lack of land-use planning and building regulations in many destinations has facilitated sprawling developments along coastlines, valleys and scenic routes. The sprawl includes tourism facilities themselves and supporting infrastructure such as roads, employee housing, parking, service areas, and waste disposal.

CHECK YOUR PROGRESS - 2:

1) Which industry is responsible for producing green house effect?

2) What is the total percentage of air pollution caused by transport sector?

3) Name any two green house gases

4) Which of the pollutants can cause damage to the human nervous system?

5) What is BOD5?
12.4 DETERIORATION OF ENVIRONMENTAL QUALITY AND DISTURBANCE IN ECO-BALANCE

The rapid growth and development of tourism sector along with its related industries has a significant impact on destination ecosystem and natural environment. Mass tourism activities eventually damage the natural ecosystem of the destination with various types of impacts on natural environment such as air, water and land pollution, deforestation, disturbance of eco balance etc. Population growth is commonly regarded as one of the most important sources of environmental degradation. This opinion is often justified by the following arguments: nations with a high population growth – such as many African states - are often not able to produce enough goods to meet the basic needs of their inhabitants. An expansion of the production of various goods seems to be necessary in order to help people to survive. But, an increase in the amount of goods produced may aggravate environmental problems, in particular if the less developed countries follow the pattern of development of western industrialized countries. The following tourism activities are associated with the degradation of environment quality:

1- Growth and development of tourism supporting infrastructures like airports, roads and rail network.
2- Rapid growth of various tourism related industries around the destination such as hotel and restaurants, accommodation services, traveler cruise etc.
3- Increase in tourism based pollution e.g. air, water and soil pollution and waste dumping related to tourists.
4- Lack of tourism generated pollution management plans and awareness among tourists and local community etc.
5- Growth of tourists groups towards various natural destination across the country and world.
6- Modernization of transportation tourism related services without taking care of environmental policies.

Environmental degradation is the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems and the extinction of wildlife. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable. As indicated by the I=PAT equation, environmental impact (I) or degradation is caused by the combination of an already very large and increasing human population (P), continually increasing economic growth or per capita affluence (A), and the application of resource depleting and polluting technology (T).

One major component of environmental degradation is the depletion of the resource of fresh water on Earth. Approximately only 2.5% of all of the water on
Earth is fresh water, with the rest being salt water. 69% of the fresh water is frozen in ice caps located on Antarctica and Greenland, so only 30% of the 2.5% of fresh water is available for consumption. Fresh water is an exceptionally important resource, since life on Earth is ultimately dependent on it. Water transports nutrients and chemicals within the biosphere to all forms of life, sustain both plants and animals, and molds the surface of the Earth with transportation and deposition of materials.

The current top three uses of fresh water account for 95% of its consumption; approximately 85% is used for irrigation of farmland, golf courses, and parks, 6% is used for domestic purposes such as indoor bathing uses and outdoor garden and lawn use, and 4% is used for industrial purposes such as processing, washing, and cooling in manufacturing centers. It is estimated that one in three people over the entire globe are already facing water shortages, almost one-fifth of the world’s population live in areas of physical water scarcity, and almost one quarter of the world’s population live in a developing country that lacks the necessary infrastructure to use water from available rivers and aquifers. Water scarcity is an increasing problem due to many foreseen issues in the future, including population growth, increased urbanization, higher standards of living, and climate change.

Vegetation is one of the major attractions of many destination areas. Large grassland, forests or greenery in general, create beautiful scenes for tourist projects. In spite of vegetation being a primary tourist resource, it is important to mention tourist and recreational activities affecting vegetation. The collection of flower plants and, the careless use of fire in parks, the excessive dumping of garbage, the construction of campsites and the vehicular traffic could involve the removal of vegetation. In the Mediterranean region, water pollution has reached crisis proportions in several of the older tourist resort. There is a real threat that this could occur around the Mediterranean. Tourist developments along the coast are responsible for large quantities of waste materials. Accordingly, tourism threatens to undermine the resource, which has been primarily responsible for its existence. For activities such as swimming, fishing, and many types of boating, the need of high quality water is essential. The introduction of pollutants into water bodies is both environmentally degrading and economically disastrous for water-based tourist resorts. Information on the effects of tourism on geology is scarce. There has been occasional mention of the impact of collectors of minerals, rocks and fossils, and in some areas the stripping caves of their natural formations has become a serious problem. Damage has also occurred to the coral reefs, and in areas of unique features, it consequently would be a major problem in coastal tourist areas. Natural resource depletion and environmental degradation associated with tourism, for example, are often serious problems in tourism-rich
regions. As an example of tourism caused degradation of environment we can talk about Mount Everest. A 1963 National Geographic article dubbed Mount Everest "the highest junkyard on Earth" due to the mountain of discarded oxygen bottles, kerosene containers and climbing gear left on its slopes. After another five decades of climbing, the trash has gotten so bad that climbers plan expeditions specifically for trash collection. For example, in April 2010, concerned climbers began an expedition to remove 4,410 pounds (2,000 kilograms) of garbage from the "death-zone," the dangerous region above 26,250 feet (8,000 meters).

An ecosystem is a delicate and complex balance of relationships among plants, animals, humans and natural resources in a particular environment. Within an ecosystem, relationships between species are interdependent, and any changes in the health or population of one species affect the entire system. Tourism increases the human population in the destination environment, and as a result changes the balance of life in the local ecosystem. The arrival of tourists results in dramatic changes in the way local populations engage with the natural world, as more resources are required to feed, shelter and entertain visiting travelers.

Marine ecosystem loss

Image: Damages to Marine Ecosystem by Tourist Cruise Activities

The depletion of natural resources is one of the most harmful consequences of tourism, and negatively affects both animals and local human life. Tourism poses challenges to water in particular, as tourist infrastructure commonly overuses resources for swimming pools, lawn maintenance, golf courses and hotel functions. Tourism also places strains on natural food-producing environments, and can contribute to overfishing and unsustainable agricultural practices. Additionally, as tourists often have different food preferences, a significant tourist presence in an area can result in changes in traditional agricultural production in order to accommodate visitors' tastes.
Ecotourism, or sustainable tourism, is a travel ideology that aims to minimize the negative environmental impact of travelers on their destinations. As an industry, ecotourism has developed out of concerns about how travel can damage local ecosystems, while striving also to uphold people’s rights to enjoy sites of natural and cultural heritage.

CHECK YOUR PROGRESS - 3:
1) What is the percentage of CO2 in normal fresh air?
2) Which is the highest peak in the world?
3) Who started the chipko movement in the Himalayan Areas?
4) Which tourism related industry is responsible for water pollution?
5) What is the percentage of pure fresh water out of total water available on earth?

12.5 SUMMARY:

Tourism and the destination environment are very closely related to each other. Without long term strategic planning, tourism development can be detrimental to the local environment. Embarking on major promotional campaigns for an area without first ensuring that the necessary infrastructure is in place can have devastating effects on the environment and resident community, with potentially costly consequences. Tourism activities generate many types of pollutions including air, water, land and deforestation. All these pollution due to increased tourism activities eventually results into the disturbance of the destination ecosystem. The future of Irish tourism is inextricably linked to the quality of the environment. Our scenic landscapes, coastline, rivers and lakes, and cultural heritage are the bedrock upon which Irish tourism has been built. Tourism developments worldwide have had a substantial impact on the natural world. From the visual impact of hotel and resort complexes to noise and air pollution from increased traffic, contamination of water supplies and the loss of natural habitats, tourism has played its role in destroying the natural environment.

12.6 GLOSSARY:

- **Aesthetic**: a branch of philosophy dealing with the nature of art, beauty, and taste, with the creation and appreciation of beauty
- **Encroachment**: advance beyond proper limits
- **Sustainable**: the capacity to endure
• **Mass tourism:** group travel to a destination for purposes of leisure

• **PH-value:** The letters pH stand for "power of hydrogen" and the numerical value is defined as the negative base 10 logarithm of the molar concentration of hydrogen ions. A pH of 7 is neutral. A pH less than 7 is acidic. A pH greater than 7 is basic.

• **GHG:** (green house gas) gas in an atmosphere that absorbs and emits radiation within the thermal infrared range

• **ICAO:** International Civil Aviation Organization

• **BOD5:** Biochemical Oxygen Demand, amount of dissolved oxygen consumed in five days by biological processes breaking down organic matter.

### 12.7 CHECK YOUR PROGRESS:

**Check your progress-1**

1) 66.48 lakh                                      2) 102
3) Noise pollution, disturbance                    4) land resources

**Check your progress-2**

1) Hotel and recreational industry                  2) 70%
3) Water vapor, co2                                  4) Mercury
5) Biochemical oxygen demand of wastewater during decomposition occurring over a 5-day period

**Check your progress-3**

1) 0.03 %                                            2) Mount Everest, Nepal
3) Sundarlal bahuguna                                4) Accommodation industry
5) 2.5 %

### 12.8 REFERENCES:

• Environment and Tourism by Andrew Holden

• Toxic Tourism: Rhetoric’s of Pollution, Travel, and Environmental Justice, Phaedra C. Pezzullo

• Tourism and the Environment: A Quest for Sustainability: with Special By R. N. Batta

• Aviation and Tourism: Implications for Leisure Travel By Anne Graham, Anne Graham, Andreas Papatheodorou and Peter Forsyth, Andreas Papatheodorou, Peter Forsyth

• Air Pollution: Economic Modelling and Control Policies edited by Mara Llop

• The Economics of Recreation, Leisure and Tourism by John Tribe

• Tourism: A Modern Synthesis By Stephen John Page, Joanne Connell
TOURISM IMPACTS

12.9 SUGGESTED READINGS:

- TOXIC TOURISM: RHETORIC’S OF POLLUTION, TRAVEL, AND ENVIRONMENTAL JUSTICE, PHAEDRA C. PEZZULLO
- TOURISM AND THE ENVIRONMENT: A QUEST FOR SUSTAINABILITY: WITH SPECIAL BY R. N. BATTA
- AVIATION AND TOURISM: IMPLICATIONS FOR LEISURE TRAVEL BY ANNE GRAHAM, ANNE GRAHAM, ANDREAS PAPATEODOROU AND PETER FORSYTH, ANDREAS PAPATEODOROU, PETER FORSYTH
- AIR POLLUTION: ECONOMIC MODELING AND CONTROL POLICIES EDITED BY MARA LLOP
- THE ECONOMICS OF RECREATION, LEISURE AND TOURISM BY JOHN TRIBE

12.10 MODEL QUESTIONS:

Short answer type questions:
1) Name any four natural resources.
2) Differentiate between renewable and non renewable natural resources.
3) What do you understand by eco balance?
4) Which of the tourism related industry is responsible for water pollution?
5) Explain noise pollution.
6) What are the primary green house gases?
7) Write short notes on the followings-
   (a) Overcrowding          (b) disturbance of eco balance
   (c) Global warming        (d) IPCC

Long answer type questions:
1) How the mass tourism can be dangerous from the various natural areas like national parks etc? Describe in detail.
2) How tourism causes noise and air pollution? Describe by taking a suitable example.
3) Explain the disturbance of eco balance due to tourism activities in detail.
BLOCK 4:
TOURISM CARRYING CAPACITY
AND ENVIRONMENTAL IMPACT
ASSESSMENT
UNIT 13: ESSENCE OF SUSTAINABLE TOURISM DEVELOPMENT

Structure:
13.1 Introduction
13.2 Objectives
13.3 Essence of sustainable tourism development
   13.3.1 Protection of natural heritage
   13.3.2 Tourism related infrastructures and services
   13.3.3 Careless tourism operators and tourists
   13.3.4 Degradation of natural environment and ecosystems
13.4 Social, cultural and economical problems due to tourism
13.5 Summary
13.6 Glossary
13.7 Check your progress
13.8 References
13.9 Suggested readings
13.10 Model questions

13.1 INTRODUCTION:

A number of countries in Asia and the Pacific consider tourism to be an important vehicle for economic and social development. The tourism industry has the potential to generate foreign exchange earnings, create employment, promote development in various parts of the country, reduce income and employment disparities among regions, strengthen linkages among many sectors of the national economy and help to alleviate poverty. However, this standard view of the tourism industry does not give a complete picture of the potential contribution that tourism can provide for developing countries. A more complete viewpoint can be provided by the concept of sustainable tourism development, because it can help policy-makers make more effective policies and plans designed to realize the full social and economic potential of the tourism industry.

Sustainable tourism development is premised on the responsibility of governments and all stakeholders in the tourism sector to ensure that long-term
prosperity and the quality of life of future generations is not placed at risk. Well-designed and managed tourism can make a significant contribution to the three dimensions of sustainable development, has close linkages to other sectors, and can create decent jobs and generate trade opportunities.

We recognize the need to support sustainable tourism activities and relevant capacity-building that promote environmental awareness, conserve and protect the environment, respect wildlife, flora, biodiversity, ecosystems and cultural diversity, and improve the welfare and livelihoods of local communities by supporting their local economies and the human and natural environment as a whole. We call for enhanced support for sustainable tourism activities and relevant capacity-building in developing countries in order to contribute to the achievement of sustainable development.

Like other forms of development, tourism can also cause its share of problems, such as social dislocation, loss of cultural heritage, economic dependence and ecological degradation. Learning about the impacts of tourism has led many people to seek more responsible holidays. These include various forms of alternative or sustainable tourism such as: ‘nature-based tourism’, ‘ecotourism’ and ‘cultural tourism’. Sustainable tourism is becoming so popular that some say that what we presently call ‘alternative’ will be the ‘mainstream’ in a decade. All tourism activities of whatever motivation – holidays, business travel, conferences, adventure travel and ecotourism – need to be sustainable. Sustainable tourism is defined as “tourism that respects both local people and the traveler, cultural heritage and the environment”. It seeks to provide people with an exciting and educational holiday that is also of benefit to the people of the host country.

The unplanned and uncontrolled development of tourism can damage the destination environment and the natural ecosystem. The unbalanced growth of tourism has raised the serious problem of environment protection from air, water and land pollution. The main important factors for sustainable tourism development are: (a) human resources development; (b) the economic impact of tourism; (c) environmental management; (d) infrastructure development and investment; (e) facilitation of travel; and (f) regional and sub regional cooperation. A number of national and regional modalities have been suggested in order to enable effective implementation that would yield positive and far-reaching results.

Global economists forecast continuing international tourism growth, the amount depending on the location. As one of the world's largest and fastest growing industries, this continuous growth will place great stress on remaining biologically diverse habitats and indigenous cultures, which are often used to support mass tourism. Tourists who promote sustainable tourism are sensitive to
these dangers and seek to protect tourist destinations, and to protect tourism as an industry. Sustainable tourists can reduce the impact of tourism in many ways:

- informing themselves of the culture, politics, and economy of the communities visited
- anticipating and respecting local cultures, expectations and assumptions
- contributing to intercultural understanding and tolerance
- supporting the integrity of local cultures by favoring businesses which conserve cultural heritage and traditional values
- supporting local economies by purchasing local goods and participating with small, local businesses
- conserving resources by seeking out businesses that are environmentally conscious, and by using the least possible amount of non-renewable resources

13.2 OBJECTIVES:

After reading this unit, learners will be able to understand the following issues-
- What is sustainable tourism, eco tourism and nature tourism
- How different types of pollution and environmental degradation demanding sustainable tourism
- What is the essence of sustainable tourism in social and cultural issues etc
- How the rapid growth of tourism sector will eventually lead to sustainable tourism

13.3 ESSENCE OF SUSTAINABLE TOURISM DEVELOPMENT:

Sustainable tourism is tourism attempting to make as low an impact on the environment and local culture as possible, while helping to generate future employment for local people. The aim of sustainable tourism is to ensure that development brings a positive experience for local people, tourism companies and the tourists themselves. Sustainable tourism is an adopted practice in successful ecotourism. The values and ulterior motives of governments often need to be taken into account when assessing the motives for sustainable tourism. One important factor to consider in any ecologically sensitive or remote area or an area new to tourism is that of carrying capacity. This is the capacity of tourists of visitors an area can sustainably tolerate without damaging the environment or culture of the surrounding area. This can be altered and revised in time and with changing perceptions and values.

For example, originally the sustainable carrying capacity of the Galapagos Islands was set at 12,000 visitors per annum but was later changed by the Ecuadorian government to 50,000 for economic reasons and objectives. Non-
governmental organizations are one of the stakeholders in advocating sustainable tourism. Their roles can range from spearheading sustainable tourism practices to simply doing research. University research teams and scientists can be tapped to aid in the process of planning.

According to WTO, “Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, and biological diversity and life support systems.”

13.3.1 PROTECTION OF NATURAL AND ARCHITECTURAL HERITAGE:

Various natural and architectural heritages of a country are a good source of attraction for tourist groups from all over the world. For the past 40 years the UNESCO World Heritage Convention has conserved, protected and presented the Outstanding Universal Value of our shared heritage.

World Heritage properties are important travel destinations that if managed properly, have great potential impact for local economic development and long-term sustainability. The UNESCO World Heritage and Sustainable Tourism Programme represents a new approach based on dialogue and stakeholder cooperation where planning for tourism and heritage management is integrated at a destination level, the natural and cultural assets are valued and protected, and appropriate tourism developed.

According to the UNESCO mission “Facilitate the management and development of sustainable tourism at World Heritage properties through fostering increased awareness, capacity and balanced participation of all stakeholders in order to protect the properties and their Outstanding Universal Value whilst ensuring that tourism delivers benefits for conservation of the properties’ sustainable development for local communities as well as a quality experience for visitors.” The five Programme objectives:

1- Integrate sustainable tourism principles into the mechanisms of the World Heritage Convention.

2- Strengthen the enabling environment by advocating policies, strategies, frameworks and tools that support sustainable tourism as an important vehicle for protecting and managing cultural and natural heritage of Outstanding Universal Value.

3- Promote broad stakeholder engagement in the planning, development and management of sustainable tourism that follows a destination approach to heritage conservation and focuses on empowering local communities.
4- Provide World Heritage stakeholders with the capacity and the tools to manage tourism efficiently, responsibly and sustainably based on the local context and needs.

5- Promote quality tourism products and services that encourage responsible behavior among all stakeholders and foster understanding and appreciation of the concept of Outstanding Universal Value and protection of World Heritage.

Key elements in realizing the vision and mission of UNESCO related to sustainable tourism development to protect natural and man made heritages across the globe.

- An interpretation and implementation of the World Heritage Convention that embraces sustainable tourism;
- National, regional and local governments have policies and frameworks that recognize sustainable tourism as an important vehicle for managing their cultural and natural heritage;
- All stakeholders are aware and committed to sustainable development, and have the capacity to manage tourism sustainably;
- Local communities take pride in- and have a sense of responsibility and empowerment towards the World Heritage properties contributing to property conservation and the sustainable management of tourism at the World Heritage destinations;
- The tourism sector values World Heritage and engages in its preservation while ensuring that its activities based at World Heritage properties are responsible, and support social and economic development;
- Visitors understand and gain an appreciation of the meaning of Outstanding Universal Value of World Heritage and adopt responsible behaviors.

The World Heritage name is well recognized worldwide and often attracts attention from tourism players, particularly tour operators, tourism developers and tourists themselves. The fact that the label represents “Outstanding Universal Value” gives tourists the expectation that visiting the site will be a unique experience and at the same time provides the tourism industry with an easily promoted and almost fail-proof destination. World Heritage Sites are therefore amongst the most popular and heavily promoted attractions in a variety of countries (Buckley, 2004). Moreover, tourism development in such sites can have important implications for their protection.

On the one hand, tourism has the potential to bring about economic benefits that support site conservation and the local/national economy, but on the other, uncontrolled and poorly managed tourism can have severe consequences for the site’s integrity, compromise its OUV, as well as having social and cultural
impacts. In regards to negative impacts of tourism development, some common trends were reported. Increased visitor pressure is seen as one of the key issues associated with World Heritage Site status and can have severe consequences for the integrity particularly when the increases are either unplanned or very rapid, outstripping the capacity of site infrastructure and management systems to cope. A rapid increase in tourism numbers, particularly when this is not accounted for by the management of the property often threatens the values for which the property was inscribed in the list in the first place. Associated to an increase in visitor numbers are other issues reported in the survey including congestion, heavy traffic, infrastructure development, air, noise and/or water pollution and severe effects to the diversity of the area through physical changes provoked by the presence of large numbers of tourists (e.g. through trampling, disturbance, vandalism etc.). A number of indirect effects of high numbers of visitors to an area, such as the introduction of invasive species were also reported. Pollution and waste also rank highly on the list of tourism-driven impacts to natural World Heritage Sites. These tend to be related to increased visitor numbers and infrastructure development but also to recreational activities that take place in the site. Sites such as Ha Long Bay in Vietnam have seen pollution and waste become a considerable problem over time. The tourism offer is currently limited to boat trips around the bay and there are more than 400 boats in operation which contribute to pollution and decrease in water quality. In addition, most boats do not have adequate methods for waste disposal and/or management. Another issue exacerbating the pollution problem is infrastructure development outside the site boundaries, namely construction of hotels and ports. Protecting coastal habitat, marine environments and cultural heritage is a key strategy for sustainable tourism.

Image: Sustainable Tourism for the Protection of Natural Heritages
13.3.2 TOURISM RELATED INFRASTRUCTURES AND SERVICES:

Tourism is one of the fastest growing sectors of the global economy and developing countries are attempting to cash in on this expanding industry in an attempt to boost foreign investment and financial reserves. While conceding that the uncontrolled growth of this industry can result in serious environmental and social problems, the United Nations contends that such negative effects can be controlled and reduced. The World Commission on Environment and development outlines sustainability as: "forms of progress that meet the needs of the present without compromising the ability of future generations to meet their needs." International tourism can be interpreted as a channel of globalization, which reveals its fundamental characteristics: polarization on a global scale and the historicity of spatial disparities. Tourism is also one of the possible trajectories for the integration of places into global sphere. Revealed and constructed by tourism, some places in the world have achieved a position in the global hierarchy. Tourism and heritage are often linked as show the correlations with UNICCO’s World heritage list and the number of international tourist visitors".

Many types of tourism related infrastructure and services are being developed around the natural environment of the destination. This modern development of infrastructure includes the following -

1- Hotel and restaurant services
2- Various transport services and mediums like new roads, airports etc
3- Development of tourism supporting industries like food and clothing services
4- Growth of business and local markets

As more regions and countries develop their tourism industry, it produces significant impacts on natural resources, consumption patterns, pollution and social systems. The need for sustainable/responsible planning and management is imperative for the industry to survive as a whole.

Tourism involves activities of persons traveling to and staying in places outside their usual environment for leisure, business and other purposes. Tourism Infrastructure demands for goods and services, and the establishments which provide such services are considered as part of the tourism industry. Further, the Tourism Infrastructure also includes establishments whose products are mainly...
sold to visitors, though they do not form a major share of tourist consumption. Several infrastructure sectors like power, telecommunication, water supply, roads and some production sectors like travel items, sports equipment, photographic materials, medicines and cosmetics are included in this category along with Tourism Infrastructure.

The infrastructure for tourism thus includes basic infrastructure components like airports, railways, roads, waterways, electricity, water supply, drainage, sewerage, solid waste disposal systems and services. Moreover, facilities like accommodation, restaurants, recreational facilities and shopping facilities also come under the ambit of Tourism Infrastructure. Planning for sustainable development of Tourism Infrastructure, therefore, involves the integrated development of basic infrastructure and amenities along with all the tourism facilities in a balanced manner. The basic requirements for the development of Tourism Infrastructure are:

- Accommodation
- Forest lodges.
- Tented accommodation.
- Tourist complexes / tourist lodges.
- Wayside amenities.
- Restaurants.
- Tourist reception centers.
- Pilgrim sheds / dormitories, etc. at pilgrimage centers.
- Tourist transport -
  - Mini-buses, jeeps, elephants, etc. for wildlife viewing.
  - Cruise boats, ferry launchers, etc. for water transport.
- Tourist coaches in selected circuits.
- Special tourist trains.

The Central Department of Tourism meets almost the entire expenditure, except the cost of land and interior decoration in the case of construction projects. The Central Government provides 28% cost of the project and 12% is provided by the State Governments. The remaining 60% has to be raised as a loan from financial institutions or banks. It is expected that the State Governments would be able to mobilize more resources from financial institutions for investment in Tourism Infrastructure. Along with the development of tourism infrastructure various issues must be kept in mind such as environmental balance and ecosystem of the local destination. Sustainable tourism is about re-focusing and adapting. A balance must be found between limits and usage so that continuous changing, monitoring and planning ensure that tourism can be managed. This requires thinking long-term (10, 20+ years) and realizing that change is often cumulative,
gradual and irreversible. Economic, social and environmental aspects of sustainable development must include the interests of all stakeholders including indigenous people, local communities, visitors, industry and government. Tourism in developing countries is often viewed by critics as an extension of former colonial conditions because from the very beginning, it has benefited from international economic relationships that structurally favor the advanced capitalist countries in the North. Unequal trading relationships, dependence on foreign interests, and the division of labour have relegated poor countries in the South to becoming tourism recipients and affluent countries in the North to the position of tourism generators, with the latter enjoying the freedom from having to pay the price for the meanwhile well-known negative impacts in destinations.

The Global Sustainable Tourism Council (GSTC) serves as the international body for fostering increased knowledge and understanding of sustainable tourism practices, promoting the adoption of universal sustainable tourism principles and building demand for sustainable travel. This is accomplished through the work executed by its diverse programs: international standard setting, destinations, education and training, market access, and accreditation. Sustainable Tourism is not just for the “converted”, nor just for a small group of intellectuals to discuss highly complex issues. It is not only for Corporate Responsibility, or Responsible Tourism, or Sustainability experts: it must permeate in all corporate cultures, since it involves the sheer future of tourism Industry itself.

CHECK YOUR PROGRESS-2:

1) What is GSTC?

2) Name any two important infrastructural services related to tourism

3) Solid waste disposals generated by mass tourism activities include-
13.3.3 CARELESS TOURISM OPERATORS AND TOURISTS:

Most of the tour and travel operators and tourists are very careless towards the conservation and protection of the natural environment of the destination. Tourists that visits coral reefs all over the world play some kind of part in helping the coral reefs die. Some careless tourists walk on the corals, touch the corals, grab and ride the turtles, and break off pieces of coral to bring home. So much as touching a little piece of coral can kill it. Tourists also buy and eat fish and turtles from the reef. That makes the animals even more endangered. Massive influxes of tourists, often to a relatively small area, have a huge impact. They add to the pollution, waste, and water needs of the local population, putting local infrastructure and habitats under enormous pressure.

The damage doesn't end with the construction of tourist facilities. Some resorts empty their sewage and other wastes directly into water surrounding coral reefs and other sensitive marine habitats. Recreational activities also have a huge impact. For example, careless boating, diving, snorkeling, and fishing have substantially damaged coral reefs in many parts of the world, through people touching reefs, stirring up sediment, and dropping anchors.

Marine animals such as whale sharks, seals, dugongs, dolphins, whales, and birds are also disturbed by increased numbers of boats, and by people approaching too closely. Tourism can also add to the consumption of seafood in an area, putting pressure on local fish populations and sometimes contributing to overfishing.

In recent years, there were many problems about mass tourism, which raise our concern about the mass tourism. Mass tourism means large, uncontrolled numbers of tourists. With the development of economy and the growth in the living standard tourism is booming. It is obvious that tourists enhance the development of hotels and shopping facilities, which in turn creates jobs for local people. It makes contribution to our society, meanwhile, do harm to our environment if the number of tourists is uncontrolled. So, mass tourism is harmful to the environment.

On the one hand, thousands of people visiting an area would cause more pollution. For instance, air pollution, water pollution, etc. With so many visitors crowding into the tourism city, there is an increasing demand for different means of transportation, such as buses, cars, metros, etc. At the same time, the more gases are demanded, the more waste gases were sent out, which could lower the air quality. It is well known that exhaust released by automobiles is one of the primary reasons causing air pollution.

With many travelers flocking to different destinations, the problem of water pollution is also acquiring attention. Many people who visit an area are
sometimes careless in their manner. They have food, paper, and bottles behind, which harm water resource. Because if it rains, we can see that the rubbish flowed by rainwater to rivers or to the sea. Sometimes, mass tourists even litter in the river, which also cause the water pollution.

On the other hand, the overcrowding will threaten the protection of tourist sites that some of them are natural heritage. Such as some mountains or sea, where has unique feature, which appeal to a mass of tourists. The mass tourism could results in damage of the local environment. The careless people could harm plants, animals or objects important to a local culture because those on vocation often didn’t realize that the damage they can cause.

### 13.3.4 DEGRADATION OF NATURAL ENVIRONMENT AND ECOSYSTEMS:

Three different relationships may exist between those promoting tourism and those advocating environmental conservation. This relationship is highly dependent upon natural resources.

1. Tourism and environmental conservation can exist in a situation in which both camps promote their respective position, remain in isolation, and establish little contact with each other. This situation is unlikely to remain for a long period because of the substantial changes in the environment, which are apt to occur with the growth of mass tourism. This stage, therefore, is usually succeeded by other symbiotic or conflicting relationships;

2. Tourism and conservation may enjoy a mutually supportive or symbiotic relationship where they are organized in such a way that each benefits from the other. From the perspective of the conservationist, environmental features and conditions are left as close as possible to their original state but, at the same time they provide benefits to the tourists who view and experience them. There are few places where this has been achieved;

3. Tourism and conservation can be in conflict, particularly when tourism induces detrimental effects to the environment. Most documented relationships between tourism and the environment fall into this category. On some occasions, effects of tourism have stimulated conservatory measures in order to protect fragile ecosystems. More commonly, the damage has already reached irreparable proportions.

Tourism may also become in conflict with the environment. The destruction of coastlines, the pollution of waters: sea and rivers, from human wastes and detergents and traffic congestion. In addition to tourism, coasts are also sites for other activities such as ports, power generation, and refineries. Thus, tourism adds to stresses, which are already imposed upon fragile coastal resources. Most effects of tourism have been largely negative because of
inadequate planning. Detrimental effects include the elimination of some plants, animal habitat, the obliteration of geological features, by excavation, water pollution, and a diminution in the aesthetic qualities of scenery. These acts lead inevitably to a reduction in the attractiveness of the resources itself: the disposal of wastes in the water of many resort beaches has reduced the bathing and boating potential of those areas. Tourists are only guests in the host country and should therefore behave appropriately. Planning processes are a fundamental means of achieving sustainable tourism. The ill-conceived and badly planned development of tourism will inevitably harm or even destroy nature, monuments and indigenous human societies and cultures, and tourism itself will thus destroy its own raison d'être.

These planning processes must recognize the need and aspirations of the various component communities, thereby requiring an inventory of natural, cultural and built resources of the region; they should determine the biophysical, economic, environmental and other constraints to growth and to development, establish land use priorities and identity areas for development and for conservation, determine the limits of acceptable change to the area in a tourism context, and integrate tourism with other land uses.

Systematic studies on proper conservation and carrying capacities and limits of acceptable change must be carried out in anticipation to prevent irreversible damage, because safeguarding the right of present generations to tourism, and their cultural and natural heritage is the only guarantee of the rights of future generations.

All those involved in tourism should consider that in all circumstances, all factors of the human, cultural and natural environment contribute to equilibrium where damage to one factor inevitably affects the whole complex.

Planning and developing tourist activities must take into consideration the interrelations of all factors of the environment: physical, biological, human, animal, flora, cultural and spiritual in order to avoid negative effects. Scientific interdisciplinary studies by teams of experts should provide relevant environmental base-line studies and balanced impact evaluations.

Species diversity and ecosystem integrity cannot be replaced or substituted and it is therefore inappropriate to design tourism which threatens these values. Effective environmental impact assessment (EIA) processes and their application to tourism developments is an essential requirement for the achievement of sustainable tourism. Tourist organizations should advise their customers of any necessary health requirements prior to visiting a country, as well as any specific health risks in particular tourist destinations. Illnesses can be brought back from foreign countries but can also be brought into the host country with tourism. The environment of faunal of floral species which are locally fragile, rare or close to
extinction should be the object of scrupulous respect, in order to save the existence of such populations and their habitats as much as possible, to inhibit damages and to allow a regeneration of territories and waters subtracted from them by tourism.

Image: Benefits of Sustainable Tourism

These precautions should also apply to animal life of all kinds and birds of all ecosystems in all continents, for animals in all waters and also for animals dwelling in caves. Forests, coastlines, fresh and brackish waters should be observed with special diligence. Tourists must avoid leaving waste and litter or any refuse which cause deterioration in the quality of the environment. They should be particularly careful to avoid any risk of forest fires.

Tourists should be educated to avoid the waste of objects of all kinds currently abandoned and scattered everywhere; they should be aware that besides the disfiguring the litter produces, it also contributes to pollute the environment and, in certain cases, may also start fires. Pieces of broken glass may act as lenses, humid piles of organic matter left by tourists may ferment, produce heat and burn.

CHECK YOUR PROGRESS-3:
1) Which of the natural asset is rapidly destroying due to mass tourism activities?

2) Name any two marine animals disturbing by tourism boats and cruises

3) Overcrowding problem of tourism can cause damage to-
13.4 SOCIAL, CULTURAL AND ECONOMICAL PROBLEMS DUE TO TOURISM:

Tourism can raise various types of problems in the destination community including social, cultural and economical disturbance. In the absence of sustainable tourism policy these problems can really damage the local society. Tourism is now one of the world’s largest industries and one of its fastest growing economic sectors. For many countries tourism is seen as a main instrument for regional development, as it stimulates new economic activities. Tourism may have a positive economic impact on the balance of payments, on employment, on gross income and production, but it may also have negative effects, particularly on the environment. Unplanned and uncontrolled tourism growth can result in such a deterioration of the environment that tourist growth can be compromised. The environment, being the major source of tourist product, should therefore be protected in order to have further growth of tourism and economic development in the future. This is especially true with regard to tourism based on the natural environment as well as on historical-cultural heritage. Sustainable tourism has three interconnected aspects: environmental, socio-cultural, and economic. Sustainability implies permanence, so sustainable tourism includes optimum use of resources, including biological diversity; minimization of ecological, cultural and social impacts; and maximization of benefits for conservation and local communities. Many developing countries, facing debt burdens and worsening trade terms, have turned to tourism promotion in the hope that it brings foreign exchange and investment. Simultaneously, leading international agencies such as the World Bank, United Nations agencies and business organizations like the World Travel & Tourism Council (WTTC) have been substantially involved to make tourism a truly global industry.

Image: Social and Economical need of Sustainable Tourism
Tourism represents a very complex and multidimensional phenomenon that produces numerous positive economic as well as non-economic effects in the receptive tourist countries. As a result of the positive effects, the sustainable tourism can be treated as a means for eliminating poverty and increasing the standard of life, especially on long term. The sustainable tourism can bring higher and faster economic development and decrease poverty in more ways. That can be extremely important for all the countries in the world, especially for the least developed ones.

Many developing countries consider tourism to be important for economic progress and poverty reduction. However, it is also clear that the link between tourism and economic growth and poverty reduction is not automatic. It very much depends on whether tourism generates employment opportunities, creates linkages – in particular with agriculture and service-providing sectors – and stimulates the development of basic infrastructure through the construction of roads, port and airport facilities and the provision of financial services from which the economy as a whole can benefit. It also depends on whether the development of tourism is guided by a national strategy comprising policy, regulatory and institutional frameworks with sufficient incentives to stimulate the development of supply capacity in national markets. Equally important is the extent to which the national strategy limits financial leakages from the domestic economy, which appears to be a perennial problem in many developing countries, and the efforts made to minimize the adverse impact of tourism on the environment and on cultural heritage. While the role of tourism in structural economic progress and sustainable development is not a new topic on the international agenda, how to make tourism more sustainable and contribute to developing countries’ sustainable development objectives is still a challenge that requires urgent attention.

The number of international tourist arrivals – around one billion – is relatively small, compared with the number of annual domestic arrivals, estimated to be nearly four billion. Domestic tourism is important for employment creation and domestic value chains, especially in developed economies. However, the economic development potential of the tourism sector is often associated with international tourism because of its capacity to generate foreign exchange and provide opportunities for the transfer of capital and knowledge with increasing globalization and disposable income, tourism has over the last few decades become one of the largest and fastest growing industries. In 2011 the industry generated an estimated 5 per cent of global gross domestic product (GDP) and between 6 and 7 per cent of the overall number of jobs worldwide. Demand is expected to be sustained due to rising household incomes in emerging economies fuelling leisure activities and growing international trade, which bolsters business
travel. Given its size, the sector bears considerable potential for economic growth, diversification and structural transformation of economies. It has been said that the economic benefits of large-scale tourism are not doubted but that the backpacker or budget traveler sector is often neglected as a potential growth sector by Third World governments. This sector brings significant non-economic benefits which could help to empower and educate the communities involved in this sector. "Aiming 'low' builds upon the skills of the local population, promotes self-reliance, and develops the confidence of community members in dealing with outsiders, all signs of empowerment" and all of which aid in the overall development of a nation.

Social responsibility is usually defined as the voluntary assumption by enterprises of the social and environment objectives, complementary to the economic objectives, both in relation to the inner environment (shareholders, employers) and with the outer environment (partners, local community). Briefly, it can be defined as “voluntary engagement of enterprises to manage their actions responsibly” (the International Chamber of Commerce). At the European level, the concept also refers to the ethical aspects, observance of the fundamental rights, accountability of the impact of a business upon the society as a whole, as well as an active role in achieving the strategic objectives (of the local community, at regional, national and European level). It is a perspective referring to business practices going beyond meeting the social or environment legislation, in other words they involve actions which exceed the regulatory / legal
obligations of companies, by taking on a social function. Tourism can contribute to the sustainable development of a destination only in a way which associates the concepts of ecological development, ecological responsibility, social responsibility, integrated quality of the tourist product portfolio, competitiveness; a region choosing the development of the tourist function in order to take advantage of the growing potential by multiplication / involvement of the tourist industry specificity in a local economy must integrate in the development model the set of economic, social and environmental conditionings, taking into consideration the risks that the random development of tourism can take, especially in the developing regions. These regions can find in tourism a chance for growth and convergence (the more rapid reduction of development discrepancies), but they also risk to generate a negative relation between the marginal costs and benefits of the strategic orientation towards tourism if no integrated management of the destination is ensured, by taking into account the economic, social and environment risks. Consequently, it is absolutely necessary to have in consideration the development of the tourist destinations, a key role here being played by the tourist industry actors, obviously in correlation with the public actors, tourists and target population.

Tourist occupancy exceeding the capacity of absorption and regeneration of the receiving space in the areas with high tourist intensity, affecting the social-cultural area, the environment and biodiversity; some destinations can be very attractive, defined by a portfolio of products which suppose a high degree of seasonality, especially during the increasing period of the life cycle (it is the case of many growing destinations, based on culture and nature and which are seeking to valorize the potential of economic dynamics offered by the tourist market; but, without an integrated management of the destination, the tourist consumption can exceed in the season periods the absorption limit, with high risks of degradation of the receiving area.

![Image: Total tourist arrivals in India (2001-2010)](image-url)

*Fig 3: Number of Tourists in India - 2010*

*Image: Total tourist arrivals in India (2001-2010)*
Sustainable tourism is about re-focusing and adapting. A balance must be found between limits and usage so that continuous changing, monitoring and planning ensure that tourism can be managed. This requires thinking long-term (10, 20+ years) and realizing that change is often cumulative, gradual and irreversible. Economic, social and environmental aspects of sustainable development must include the interests of all stakeholders including indigenous people, local communities, visitors, industry and government.

According to the American Planning Association, Planning for sustainability requires a systematic, integrated approach that brings together environmental, economic and social goals and actions directed toward the 4 sustainability objectives for a community.

- Reduce dependence upon fossil fuels, underground metals, and minerals.
- Reduce dependence upon synthetic chemicals and other unnatural substances.
- Reduce encroachment upon nature.
- Meet human needs fairly & efficiently.

The mutual dependence that exists between tourism and cultural heritage is becoming more evident. While culture heritage creates a foundation for tourism’s growth, tourism has the power to generate funds that make conservation possible. Cultural heritage loses much of its meaning without an audience, and a society participating in and benefiting from it. Without sustainable management, tourism loses its potential for growth.

One of the most common forms of sustainable tourism is ecotourism, the term most commonly used to describe any form of holiday or recreation in natural surroundings. The Ecotourism Society also adds the concept of social responsibility in its definition of ecotourism as:

Purposeful travel to natural areas to understand the culture and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources beneficial to local people. (International ecotourism society).

CHECK YOUR PROGRESS-4:

1) What is ESTC?

2) What percentage of global GDP tourism contributed in the year 2011?

3) Where is the headquarter of UNWTO?
13.5 SUMMARY:

Rapidly growing tourism sector is now producing a number of problems not only to destination environment but also to the local economy and culture. From different types of pollution to economical disturbances, tourism is now becoming more and more dangerous for both tourists and the local community. Tourism is one of the world’s largest industries. For developing countries it is also one of the biggest income generators. But the huge infrastructural and resource demands of tourism (e.g. water consumption, waste generation and energy use) can have severe impacts upon local communities and the environment if it is not properly managed.

World Travel and Tourism Council (WTTC) estimates show that in 2002 travel, tourism and related activities will contribute 11% to the world’s GDP, rising to 12% by 2010. The industry is currently estimated to generate 1 in every 12.8 jobs or 7.8% of the total workforce. This percentage is expected to rise to 8.6% by 2012. Tourism is also the world’s largest employer, accounting for more than 255 million jobs, or 10.7% of the global labour force (WTTC 2002). The natural environment is an important resource for tourism. With increasing urbanization, destinations in both industrialized and developing countries with significant natural features, scenery, cultural heritage or biodiversity are becoming increasingly popular sites for tourist destinations. Efforts to preserve and enhance the natural environment should therefore be a high priority for the industry and for governments. Tourism in natural areas, euphemistically called “eco-tourism,” can be a major source of degradation of local ecological, economic and social systems. The intrusion of large numbers of foreigners with high-consumption and high-waste habits into natural areas, or into towns with inadequate waste management infrastructure, can produce changes to those natural areas at a rate that is far greater than imposed by local residents.

13.6 GLOSSARY:

- **Sustainable tourism**: is tourism attempting to make as low an impact on the environment and local culture as possible
- **WTO**: World Tourism Organization
- **WTTC**: World Travel and Tourism Council
- **Geo tourism**: deals with non-living parts of the natural and built environments
- **GSTC**: global sustainable tourism council
- **EIA**: environmental impact assessment (EIA) is an assessment of the possible positive or negative impacts that a proposed project may have on the environment
13.7 CHECK YOUR PROGRESS

Check your progress-1:
1) 1974
2) Deals with non living parts of the environment
3) Taj Mahal, Kutub minar

Check your progress-2:
1) Global sustainable tourism council
2) Hotel and transportation mediums
3) Plastic bags, food containers

Check your progress-3:
1) Trees
2) Fish and crocodiles
3) Peace and calm

Check your progress-4
1) Ecotourism and Sustainable Tourism Conference (ESTC), organized by The International Ecotourism Society (TIES)
2) 9 %
3) Madrid, Spain

13.8 REFERENCES:
- Tourism and the Environment: A Quest for Sustainability: with Special By R. N. Batta
- Sustainable Tourism by David Weaver
- Economics of Sustainable Tourism edited by Fabio Cerina, Anil Markandya, Michael McAleer
- Tourism and Sustainable Community Development edited by Derek Hall, Greg Richards
- Sustainable Tourism Development: A Himalayan Experience
- Ecology, Environment and Tourism by L.K. Singh
- Tourism and Environment: The Natural, Cultural and Socio-economic Challenges... edited by Council of Europe

13.9 SUGGESTED READINGS:
- Economics of Sustainable Tourism edited by Fabio Cerina, Anil Markandya, Michael McAleer
- Ecology, Environment and Tourism by L.K. Singh
- Sustainable Tourism by David Weaver
13.10 MODEL QUESTIONS:

Short answer type questions:
1) Name any three types of pollution due to tourism
2) How global warming can be dangerous
3) What do you understand by the degradation of the environment?
4) How the tourism sector is producing the noise pollution
5) What are the main ingredients of air pollution?
6) Which tourism related industry is causing water pollution?
7) How the tourism sector is promoting the tendency of aforestation around the destination environment
8) Write short notes on the followings-
   (a) Global
   (b) Careless Tourism
   (c) Mass tourism
   (d) Limited Natural Resources

Long answer type questions:
1) What is pollution? How the tourism sector is producing different types of pollution? Describe in detail.
2) What is the need of sustainable tourism from social and economical perspectives?
3) How the careless tourist groups and operators are responsible for the degradation of the natural environment? Explain with example.
UNIT 14: BIO-PHYSICAL, SOCIO-CULTURAL, AESTHETIC AND FACILITY CARRYING CAPACITY

Structure:
14.1 Introduction
14.2 Objectives
14.3 Concepts and need of Tourism carrying capacity
   14.3.1 Bio physical tourism carrying capacity and evaluation
   14.3.2 Socio- cultural carrying capacity and evaluation
   14.3.3 Aesthetic and Facility Carrying Capacity
   14.3.4 Assessment and evaluation techniques of carrying capacity
14.4 Summary
14.5 Glossary
14.6 Check your progress
14.7 References
14.8 Suggested readings
14.9 Model questions

14.1 INTRODUCTION:

Tourism carrying capacity is a now antiquated approach to managing visitors in protected areas and national parks which evolved out of the fields of range, habitat and wildlife management. In these fields, managers attempted to determine the largest population of a particular species that could be supported by a habitat over a long period of time. The notion of a carrying capacity assumes the world, such as the social-ecological systems in which protected areas and tourism destinations are situated, are stable. But we know they are dynamically complex and impossible to predict. We know that to implement a carrying capacity on a practical level, assume a level of control of entries into a destination or protected area not usually found in the real world. We know that a carrying capacity, if one could be determined, requires considerable financial and technical resources to administer; and we know that when demand exceeds a limit, the ways in which scarce opportunities are allocated are contentious.
"Tourism Carrying Capacity" is defined by the World Tourism Organization as “The maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction”.

Whereas Middleton and Hawkins Chamberlain (1997) define it as “the level of human activity an area can accommodate without the area deteriorating, the resident community being adversely affected or the quality of visitors experience declining”[2] what both these definitions pick up on is carrying capacity is the point at which a destination or attraction starts experiencing adverse as a result of the number of visitors.

Unfortunately, there are no studies which support this notion of visitor management. For example, in areas which have an objective of maintaining pristine conditions, any level of visitor use creates adverse or negative impacts, suggesting that the carrying capacity is zero.

Fundamentally, acceptable conditions are a matter of human judgment, not an inherent quality of a particular site. The natural environment is crucial to the attractiveness of almost all travel destinations and recreation areas. Natural resources, the ecosystem, regional ecology, whatever may be the designation or concept.

The main criticism of carrying capacity is that is fundamentally flawed conceptually and practically. Conceptually, the notion of an inherent carrying capacity assumes a stable and predictable world, a "J-shaped" curve in the relationship between use level and impact, and techno-scientific view of what are essential value judgments.

On the practical level, it is difficult to calculate a maximum number of visitors because this is also dependent on other factors like the way in which the tourists behave ‘a large group of bird Watchers moving through a landscape will have a different impact compared to a similar sized group of school children.’

In the case of natural heritage like national parks, visitor impacts change with seasons. What is important is the acceptability or appropriateness of these impacts, an issue that is largely dependent on social and cultural value systems with science having an input.

14.2 OBJECTIVES:

This unit will provide an in depth concept about the following issues-

- Basic concept of tourism carrying capacity and their evaluation techniques
- What is bio physical tourism carrying capacity
- Socio cultural tourism carrying capacity
- Aesthetic and Facility Carrying Capacity and evaluation technique
14.3 CONCEPTS AND NEED OF TOURISM CARRYING CAPACITY:

It is a well-known fact that tourist activities sometimes have negative effects on natural, social and economical aspects of a certain place, which have consequently brought about a need for preventing them. Namely, these effects are normally associated with the number of tourists that visit a certain tourist destination. This correlation makes for probably the most complex concept in tourism theory and practise also known as carrying capacity. The problem of defining the notion of carrying capacity used to be rather difficult, and various authors and institutions were using their own definitions. One of these accepted definitions says that “carrying capacity“ stands for the maximum number of visitors to a certain tourist destination without having any negative impacts on the environment or the undesirable decrease in the quality of visitors’ satisfaction.

According to the World Tourism Organization the carrying capacity is fundamental for environmental protection and sustainability. Namely, it stands for the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors’ satisfaction.

The concept of carrying capacity was adapted from range management and was applied to recreation management in the early 1960s. The focus is on determining the level of use beyond which impacts exceed acceptable levels specified by evaluative standards. This stems from the fact that carrying capacity is not a homogenous notion, but rather manifests itself in four basic levels, which are therefore analyzed as four different types of carrying capacity:

• Ecological carrying capacity relates to the maximum use of a tourist resource without causing any harm to the environment;
• Social carrying capacity relates to the reaction of the local people to the tourist development of the place, which should never be negative;
• Psychological carrying capacity relates to the quality of visitors’ satisfaction with a certain tourist destination, which is not to be decreased;
• Economic carrying capacity relates to the level of acceptable dependence between the local economy and the level of the tourist development of a place, which should never become too heavy.

The final carrying capacity of a tourist destination is a resultant of the four aforementioned types of carrying capacity that are all inter-dependable. However, sometimes they are completely opposite. In practice, carrying capacity has proven to be a methodology that cannot be applied accurately to tourism scenarios. While perceived to be scientific, several criteria of carrying capacity are subjective. The concept that tourism impacts can be measured to reach fixed impact thresholds
which can be evaluated as ‘in excess’ of a measurable carrying capacity has proven to be erroneous.

In reality, tourism impacts can rarely be put into the context of fixed biological parameters. Conditions change from site to site, impacts are highly variable depending on the volume of tourism from year to year and there is no straightforward correlation between the many variables that cause tourism impacts and resource degradation over a period of time. The final outcome depends on several factors that work in different forming levels, and can be put into two large categories. The first one includes local factors: social structure, cultural heritage, environment, economic structure, political structure and resources; whilst the second one includes side factors: tourists’ characteristics, types of tourist activities, planning, various influences, parameters, standards, as well as carrying capacity.

Different types of factors affect the overall tourism carrying capacity of a destination, as described below -

**Local factors:** The local factor, affecting the tourism carrying capacity are listed below -

1) Social structure of a destination is a key factor when it comes to defining a certain impact. For example, some communities are able to tolerate great number of tourists while others cannot.

2) Cultural heritage of a destination is extremely important if one needs to determine its carrying capacity. The more valuable cultural heritage, the more attractive the destination, which means bigger number of tourists.

3) Economic structure determines the benefits and the value of tourist activities. In fact, the economies that are more developed and industrialized are generally more adaptable. If an economic structure faces an increase and is more diverse, it also means better qualified workers.

4) Political structure can have impact on tourism and carrying capacity in many different ways. For example, political instability in a country dissuades tourist arrivals and therefore obstructs tourism development. On the other hand, political openness can induce greater openness of a society for tourism development, which then has considerable impact on the carrying capacity.

5) Resources (work, capital, country and other) and their availability on a local level can have certain impact on the desired direction of tourism development.

**Foreign factors:** the foreign factor, affecting the tourism carrying capacity are listed below -

1) Characteristics of tourist visiting certain destination are an important factor in determining social and cultural impact on local communities. Tourists belonging in mass group have more impact than groups of researchers/explorers
or adventurists. Difference between tourists and hosts is also important. The big difference between them, in communal and cultural sense, implies higher impact and changes.

2) Type of tourist activities is closely related to characteristics of the tourist participating in them. Negative activities require clear responsibility of the carrying capacity in limiting this kind of events.

3) Planning, management and technology are interested in organizing factors related to defining future events. More successfully planed and organized tourism implies less damaging effects and broader scope of carrying capacity.

4) Impact on social, ecological and economic structures is a result of local and foreign factors, organized through planning and management of the tourist destination.

5) Carrying capacity is dependent variable, which is not determined by the presence of tourist exclusively. Dynamics of the essence of carrying capacity is based on the tolerance change of each of the defined factors as a result of management. Supporting capacity significantly improves destination management by introducing innovations into tourism planning. Circumventing the supporting capacity will render tourism development impeded and result will be unsustainable tourism development.

14.3.1 BIO PHYSICAL TOURISM CARRYING CAPACITY:

The concept of carrying capacity is fundamental to many facets of resource management. It is the maximum level of use a specific bounded area can sustain, as determined by natural factors such as food, shelter and water. Beyond this limit, no sustained increases in population or use can occur. The concept originated in America during the 1960s as a tool for rangeland and grazing management and has gained worldwide. The rangeland carrying capacity has been extended in recent years to recreation management a response to increased levels of use of wilderness and outdoor areas. The concept of carrying capacity was initially developed in the fields of range and wildlife management and was based on the notion that an organism can survive only within a limited range of physical conditions. Biophysical impacts can be divided into three groups:

- **Terrestrial impacts**: including vegetation and habitat degradation, soil erosion and compaction, and damage to natural features.
- **Wildlife impacts**: including wildlife disturbance affecting behaviour and breeding success, and habitat alteration.
- **Visitor impacts** on environmental quality: including degraded water quality, contaminated soil, air pollution, noise pollution, and decrease in amenity values. Note that this group includes effects that may be regarded as social rather than biophysical.
Practical implementation of biophysical carrying capacity concepts in the tourist destination has been mainly through the protection of fragile vegetation and soils, wildlife (especially marine mammals) and a few fragile natural features. Development of biophysical carrying capacity needs to be based on an understanding of the biophysical impacts, and this can only be accomplished by monitoring. Usually such monitoring is based on selected indicators. A number of fundamental problems with implementation of biophysical carrying capacity concepts have emerged internationally. These problems include:

- Different recreation/tourism experiences have different carrying capacities.
- Impacts on biological and physical resources do not help establish carrying capacity.
- A strong cause-and-effect relationship between amount of use and impacts does not exist.
- Carrying capacity is a product of value judgement and is not purely a product of natural resource base and therefore not determinable through careful observation and research.
- Carrying capacity does not help determine the balance between protecting the pristine qualities of a natural area and allowing visitor use.

These judgements may be unfairly harsh when applied to some fragile environments or species, where almost any visitor interaction would result in significant adverse effects, e.g. fragile cave formations, threatened species with low tolerance of disturbance, physically fragile rare vegetation formations. In such situations, where the biophysical carrying capacity is obviously very low, it may be possible to set limits of use at very low levels and be confident that these levels help to protect the species or natural resource. Even here, biophysical carrying capacity is likely to be subject to fluctuations and variability in the natural environment and to seasonal variation. Elsewhere, in the majority of natural area tourism settings, tourism impacts are more about human perceptions of impacts (i.e., about social carrying capacity) rather than about absolute biophysical carrying capacity. In all such situations, questions about impacts are relative, such as “what impact is acceptable” or “how much change is acceptable?”, rather than “how much impact is too much?” This is the basis for the Limits of Acceptable Change (LAC) methodology or other types of crowding or visitor management.

The use of Carrying Capacity Assessments (CCA) and the setting of Limits of Acceptable Change (LAC) is not aimed at ecological management, but rather at more effective management regarding the impacts of activities on resources. Various understandings of the terms exist, of which Cifuentes (1992) and Ceballos-Lascurain (1996) provide some practical guidelines regarding the use of these as manage tools.
The process of estimating carrying capacity consists of six steps, namely:

1) Analysis of recreation and water resource management policies;
2) Analysis of objectives of the water resource;
3) Analysis of current recreational water use;
4) Definition, strengthening or modification of policies regarding recreational water use management;
5) Identification of factors influencing recreational water use; and
6) Determination of the recreational water use carrying capacity.

Three levels of recreational water use carrying capacity can be established:
- Physical Carrying Capacity (PCC);
- Real Carrying Capacity (RCC); and
- Effective or Permissible Carrying Capacity (ECC).

Each level constitutes a corrected capacity level of the preceding level. The PCC is always greater than the RCC, and the RCC is greater than the ECC, thus:

\[ \text{PCC} > \text{RCC} \text{ and } \text{RCC} \geq \text{ECC} \]

**Physical Carrying Capacity (PCC):** “The maximum number of users that can physically fit into or onto a defined resource, over a particular time.”

*Formula:* \( \text{PCC} = A \times \frac{U}{a} \times Rf \)

Where:
- \( A \) = available area for public use
- \( \frac{U}{a} \) = area required per user
- \( Rf \) = rotation factor (number of visits/day)

*Assumptions:* To measure the PCC, the following assumptions must be clarified:
- \( \frac{U}{a} \) - the area required by recreational water users to undertake activities;
- \( A \) - that the available area (A) is determined by the particular conditions of the water resources, and by limitations imposed due to fragility or as a result of the need for safety precautions; and
- \( Rf \) – the rotation factor is the number of permissible daily visits to a water resource, determined by:
  \[ Rf = \text{Open period} / [\text{Average time of utilisation/visit}] \]

**CHECK YOUR PROGRESS - 1**

1) The curve of relationship between use level and impact should be of which shape.................................................................................................................................

2) Physical tourism carrying capacity is related to....................................................
........................................................................................................................................

3) In carrying capacity evaluation A stands for ..................................................
........................................................................................................................................
14.3.2 SOCIO-CULTURAL CARRYING CAPACITY AND EVALUATION:

This relates to the negative socio-cultural related to tourism development. The indicators of when the social carrying capacity has been exceeded are a reduced local tolerance for tourism. Reduced visitor enjoyment and increased crime are also indicators of when the social carrying capacity has been exceeded.

Social structure of a destination is a key factor when it comes to defining a certain impact. For example, some communities are able to tolerate great number of tourists while others cannot. More specifically, it has been thus concluded that smaller local communities often experience rather dramatic social consequences once the tourism development occurs.

The socio-demographic set refers to those social aspects which are important to local communities. They relate to the presence and growth of tourism. Social and demographic issues, such as available manpower or trained personnel etc. Also including socio-cultural issues such as the sense of identity of the local community or the tourist experience etc.

Some of these can be expressed in quantitative terms but most require suitable socio-psychological research. Social capacity thresholds are perhaps the most difficult to evaluate as opposed to physical-ecological and economic ones since they depend to a great extent on value judgements. Political and economic decisions may affect some of the socio-demographic parameters such as, for example migration policies. Social carrying capacity is used as a generic term to include both the levels of tolerance of the host population as well as the quality of the experience of visitors of the area.

One of the main criticisms against the carrying capacity concept, and against the socio-cultural carrying capacity concept in particular, was the search for inflexible thresholds of tourism development and tourism operation. This yielded an upgraded concept which still leans on the need to avoid negative impacts resulting from excessive tourism, but adopts a more flexible approach.

Image: Tourism Carrying Capacity
As opposed to the carrying capacity leading dilemma, i.e., what is an excessive tourism utilization of human and natural resources, this concept, known as ‘limits for acceptable change’ (LAC), is much more holistic in its view. It is based on the dilemma of what is an acceptable change in the local human and natural environments in the wake of tourism development. It is argued in the literature that LAC ameliorates the carrying capacity concept by combining measurement and planning aspects together. Social carrying capacity is used as a generic term to include both the levels of tolerance of the host population, as well as the quality of the experience of visitors to the area. Levels of capacity for the components may be expressed in terms of:

- Number of tourists and tourist/recreation activity types which can be absorbed without affecting the sense of identity, life style and social patterns and activities of host communities,
- Level and type of tourism which does not alter significantly local culture in direct or indirect ways in terms of arts, crafts, belief systems, ceremonies, customs and traditions,
- Level of tourism that will not be resented by local population or pre-empt their use of services and amenities.
- Level of tourism (number of visitors and compatibility of types of activities) in an area without unacceptable decline of experience of visitors.

Using the carrying capacity value stretch (CCVS) model incorporated into nominal group Technique (NGT) methodology, socio cultural carrying capacity of a tourist destination can be calculated. As the awareness of the negative socio-cultural impacts of tourism became evident, researchers observed that host communities have a tolerance threshold beyond which they start extroverting their discontent from these impacts. Even in the early 1970s, Young (1973) had already called this threshold the ‘psychological saturation level’. He claimed that if local communities experience deterioration of their quality of life as a result of growing tourism activity, they will manifest their frustration by unwelcoming behaviour towards tourists. Doxey (1975) attributed the affect of tourism on communities’ socio-cultural resilience to their Level of tourism development. He termed the ‘irritation index’ in an effort to explain how

Uncontrolled tourism development crosses this threshold and leads to social stress. Subsequently, in the 1980s and 1990s, more and more case studies proved that the further this threshold is crossed the more destructive locals’ attitudes and behaviour become towards tourists and the tourist sector in their locality. Most of these studies also concluded that these:

- Causal relations lead to a deterioration of the destination’s level of attractively, a decline in the number of visitors and consequently an economic
Impacts arise when tourism brings changes in value systems / behaviour, threatening indigenous identity.

- Changes often occur in community structure, family relationships, collective traditional life styles, ceremonies and morality.
- But tourism can also generate positive impacts as it can serve as a supportive force for peace, foster pride in cultural traditions and help avoid urban relocation by creating local jobs.
- Socio-cultural impacts are ambiguous: the same objectively described impacts are seen as beneficial by some groups and as negative by others.

Cultural carrying capacity is the maximum number of individuals of a species that the human population will tolerate. The number may or may not be the same as the species' biological carrying capacity. Cultural carrying capacity depends on human attitudes towards a species, so it can be influenced by public education campaigns.

MEASURING TOURISM CARRYING CAPACITY FOR THE SOCIO-CULTURAL COMPONENT:

(a) Analysis of general cultural and social characteristics of the area. Data collection – analysis of population growth and density, age structure, etc.

(b) Analysis of cultural patterns and social relations. Particular emphasis is often placed on those aspects which might affect the use of resources and on the relationship of local community to tourists/visitors expressed often in terms of conflicts, perceived threats, etc. Sometimes for example, immigration of labour from neighbouring or other areas may result in conflicts and social tensions, particularly relevant for small islands with small and traditional local communities.

(c) Definition of the relationship with the broader system (cultural and social conditions in wider region) which may influence the system under study

Tourism development could have major implications on employment opportunities, family structures and social relations (i.e. divorces, etc). The study of these impacts will highlight the vulnerability of socio-demographic component in respect to tourism development.

(d) Assessment of impacts to local community: Identification of local population preferences- Residents are an important part of the tourism system around a destination. They are an important ingredient of "hospitality" of a destination.

The reaction of the inhabitants of a tourism destination to tourism in general, and to tourists and excursionists in particular, determines the social impact of tourism on the local society and thus the social-carrying capacity of the destination.
(e) Identification of problems, threats for key resources, socio cultural conflicts when ecosystems are scarce, conflicts can easily arise between different groups of users. The more groups that use an ecosystem, the more likely that such a situation will occur.

Image: Social carrying capacity.
Effective or Permissible Carrying Capacity (ECC)

Definition: The maximum number of visitors that a site can sustain, given the management capacity (MC) available.

Formula: \[ \text{ECC} = \left[ \frac{\text{Infrastructure Capacity} \times \text{MC}}{\text{RCC}} \right] \]

Where:
- \( \text{ECC} \) = effective carrying capacity
- \( \text{MC} \) = management capacity based on staff and budget
- \( \text{RCC} \) = real carrying capacity

Assumptions: To determine the ECC, the following assumptions must be clarified:
- MC – defined as the sum of conditions that the water resource management requires if it is to carry out its functions and objectives;
- Measuring MC is not easy, involving many variables, including inter alia policy measures, legislation, infrastructure, facilities, amenities and equipment, staff (both number and competency), funding, available budget, motivation and commitment;
- Limitations in management capacity constitute one of the most serious problems confronting recreational water resource management;
- As the capacity to manage recreational water resources increases, the ECC will increase, yet never be greater than the RCC, even in the most favourable conditions; and
- MC is determined by using the following formula:
  \[ \text{MC} = \frac{\text{Current staff and budget capacity}}{\text{required staff and budget capacity}} \]

CHECK YOUR PROGRESS-2:

1) Between minimum and maximum tourist activities, which type of tourism can be operated:

2) What is CCVS?

3) The cultural conflicts between tourists and local community are known as:

14.3.3 AESTHETIC AND FACILITY CARRYING CAPACITY:

The carrying capacity concept is essentially a decision-making framework, informed by the regular measurement of agreed indicators of quality. The growing interest in sustainable development and sustainable tourism has been paralleled with an equally accelerating concern about the social and bio physical effects of tourism. A burgeoning global economy in tourism coupled with the
transition of local communities away from traditional resource extraction to tourism have led to expanding concerns about the effectiveness of tourism as a tool to advance the social, economic and environmental welfare of the people it is supposed to benefit. At the same time, the appeal of the concept of carrying capacity as a paradigm for addressing and limiting the amount of tourism development and use at a destination has clearly emerged, leading to calls to establish carrying capacities in terms of specific numbers of tourists over a specified time period. Such concerns are deemed appropriate for sustaining local communities and their cultural and environmental context; fears of irretrievably committing resources to specific uses are increasingly important in a world of growing scarcity.

- Situations where visitor numbers are an issue:
  - Planning a new site to be opened to the public for the first time
  - Managing a site which is showing signs of negative impact from visitors
  - Designing the size of a critical new facility such as a car park or a visitor centre
  - Increasing visitor numbers without causing damage or deterioration to the environment or the recreational experience

The assessment of carrying capacity is used as a sign of tourism impact on space and the environment. It represents an important component of planning spatial development in tourism, and is one of the mechanisms for establishing standards for sustainable tourism. Carrying capacity can be defined as a maximum number of tourists that sojourn in a specific area and use its contents in a way that does not induce unacceptable and irreversible change in the environmental, social, cultural and economic structure of the destination nor does it decrease the quality of tourist experience. An insight into available literature shows that numerous
authors and institutions have so far dealt with problems and attempts at defining carrying capacity of tourist destinations, in particular, tourist-recreational areas.

In some situations, it may be necessary to consider the impacts of specific recreational activities and their timing. For example, small numbers of visitors carrying out noisy activities, such as motor boating, may require special capacities to be agreed for them, which are separate from the general visitor capacity agreements.

The timing of visits, such as spring visits to coincide with the breeding season in an important nature reserve, could also necessitate a separate capacity figure for those key periods. In an urban situation, it may be agreed that a local cultural event or festival will require visitor numbers to be restricted so that the event preserves its local "ownership" and character.

The conflict of different recreational activities may also need to be considered, necessitating capacity management for different user-groups such as fishermen and boaters on a stretch of water. The same principles described in the methodology could be applied to each of these groups. These recognize that the recreational carrying capacity of any tourist destination, whether it is a specific site, an area of countryside or a town, is not a single figure that can be calculated and fixed. It is a function of management objectives, measurements, judgments and evaluations over time and often requires the involvement of a range of stakeholders. However, some quantifiable judgments about the quality of the environment and the visitor experience are necessary to make any carrying capacity approach workable.

ADVANTAGES OF THE CARRYING CAPACITY APPROACH

Sustainable tourism is about:
  • the environment
  • the local community
  • the local economy.

The carrying capacity encompasses all three. An action that affects one factor will have implications for the other two.

Economic development alone can damage an area's cultural and environmental qualities. Similarly, blinkered preservation of the environment or of heritage resources can restrict the social and economic benefits that increased tourism can bring to an area and its population. Taking a carrying capacity approach can help to resolve these conflicts.

In some instances, carrying capacity could indicate that an area or site could accept more visitors. In another situation, it could help to gain agreement that visitor numbers should be limited or even reduced, at least at peak times, if not over the whole year.
The significant benefits of taking a carrying capacity approach include:

- encouraging stakeholders to agree a vision for the area or site
- helping to reconcile potentially conflicting interests
- encouraging open debate on difficult issues
- providing a consensus and preparing for the future development of tourism and its associated infrastructure
- placing emphasis on the quality of both environmental/social factors and the tourism experience
- Potentially providing a strong framework for making decisions about visitor management.

**ASSESSMENT AND EVALUATION TECHNIQUES:**

**Formation of methodological framework:** There is a variety of approaches, frameworks, method and tools to assess impact and carrying capacity, and to prepare adaptation techniques. Similarly there are many ways to categorize carrying capacity and adaptation assessment.

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**Stage I:** From literature reviews it has been found that there are various form and definitions of carrying capacity and tourism carrying capacity, therefore its must to select the particular form and specific definition while assessment of evaluation of tourism carrying capacity in stage one. The tourism activities are related to different exploited natural resources such as mineral resources, geo top, and cultural site. The rapid but unplanned exploitation and utilization of these resources create a risk of losing their recovery capacities, destroying the basic functionalities of ecosystem within tourism areas. Various tourism-related factors can be identified to have impact on these resources, among which the number of
tourists would be the most important one. The concept of carrying capacity of a tourism site can be stem from this perception. This concept is important in the tourism planning which aims to sustainable tourism development. The definition proposed by The World Tourism Organization (WTO-2004) is considered for assessment of carrying capacity. Within this context goals and management objectives need to be defined, alternative fields of actions evaluated and a strategy for tourist development formulated. On the basis of this Tourism Carrying Capacity can be defined.

Stage II: It includes the selection of components of tourism carrying capacity based on selected specific definition and character of region. In chosen case, stages II has been developed based on the world tourism organization 2004 definition and tourism and eco sensitive character of region as follow. On the basis of the main dimensions of development and environment interface, following a systemic analysis, the impacts of tourism in an area can be analyzed in terms of three major axes: physical environment (natural and man-made including infrastructure), social (population and social structure and dynamics) and economic (including institutional and organizational). These can also provide the basis for analyzing and assessing TCC in terms of main and distinct-but interrelated-components. Selections of components are based on Physical-Ecological, Socio-Demographic and Political-Economic as well as the level of capacity of eco sensitive region. The selections of subcomponent are based on the specific characteristic of region such as tourism, climate, economy etc.

Stage III: Initial stages are predetermined stages in evaluation carrying capacity framework methodology structure and applicable to any case study. Stage three is key element of the methodological framework, based on this element we have to work out the final output custom with help of the available data and assessment tools. For the tourism and eco sensitive character required the qualitative and quantitative outputs mould to evaluation of tourism carrying capacity for formation of policy and planning point of view. Therefore we can classify the stage three in two sub parts as per the output mould that is first qualitative analysis for tourist and local people satisfaction for social economic assessment. This describes how the system (tourist destination) under study works, including physical, ecological, social, political and economic aspects of tourist development. Second part consists of quantitative analysis which includes the multi-dimensional approaches, research techniques, and equations. Describes how an area should be managed and the level of acceptable impacts. This part of the process starts with the identification (if it does not exist already) of the desirable condition/preferable type of development. There are so many techniques available for evaluation of TCC. As per the out mould and eco sensitive region we had seen that miscarriage ecological footprint analysis of area because of
TOURISM IMPACTS

Tourism impacts topographical landscape features and outsourcing of other resources. Subsequently, carbon footprint and carbon sink techniques effectively utilized to work out the environment and infrastructure impact on eco-sensitive regions. Also, perceive the ecological landscape assessment technique for qualitative output mould. Tourism perspective of town and quantitative analyses are included in methodological framework for effective assessment and evaluation of tourism carrying capacity which consist of the Batelle Environmental Evaluation System (BEES) used in environmental impact assessment (EIA) studies and limits of acceptable change (LAC) framework from the field of tourism research for qualitative analyses. In addition to quantitative analyses comprises Physical Carrying Capacity (PCC), Effective Real Carrying Capacity (ERCC), Linear Programming For Economic Analysis.

Image: Different Components of Tourism Carrying Capacity

Carrying capacity can be measured either at the level of a tourist destination as a whole with all its associated contents or at the level of individual, specific services and facilities. In both cases, capacity is characterized by economic, physical, and social attributes that can be measured. Each type of capacity may significantly vary from one destination to another, depending on the natural-ecological characteristics of a given area, the manner of its use, and

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Tourism impacts: Each capacity type is characterized by a tolerance limit for a destination as a whole or for individual objects and facilities. Such a limit marks a threshold of change which, if over run, leads to mainly negative effects in tourism. If tolerance limits are not overrun, then the effects of tourism can in principle be said to be positive. There is a capacity for each of the economic, physical, and social subsystems within a system of tourist destination. To allocate space for souvenir shops, restaurants, hotels or parking lots can sometimes imply occupying a place that is already taken up by enterprises and economic subjects whose activities are primarily aimed at satisfying the needs of the domicile population, that is, the local market. In this respect, a good illustration is a historic city in Great Britain whose Mayor once expressed dissatisfaction about the fact that three department stores in the area are selling only sweets but not a single one is selling shoes (Webster, 1999). This is a good example of how necessary is to adequately estimate the economic capacity that will reflect the possibilities of absorbing tourism functions, while at the same time not suppressing the required local activities nor dramatically increasing production costs and services aimed at the domicile population. Dilapidation of historical objects or contamination of beaches due to inadequate treatment of waste waters illustrate another situation, i.e., when tourism manages to overrun the upper limit of the physical or ecological capacity. In addition, it is well known that the tolerance threshold that the domicile population has for tourists’ behavior can sometimes be overrun, manifesting itself as lack of politeness towards visitors. In this case we are dealing with overrunning the social carrying capacity.

Tourism carrying capacity is the maximum level of use before degradation occurs: Often the literature defines capacity as the amount of use that is accommodated without degrading resources.

Assessment of TCC is based on three major indicators: Physical-Ecological, Socio-Demographic and Political-Economic. Physical and Ecological Indicators are based on fixed components (ecological capacity, assimilative capacity) and flexible components (infrastructure systems like water supply, electricity, transportation, etc). Socio-demographic Indicators refer to social and demographic issues and importance to local communities, as they relate to the presence and growth of tourism. Some of these can be expressed in quantitative terms but most require suitable socio-psychological research.

Political-economic Indicators refer to the impacts of tourism on local economic structures, activities, etc. including competition to other sectors. The objective of the interventions intended by the Ministry of Tourism, Government of India is to improve the quality and quantity of tourism infrastructure at tourist destinations/circuits in a sustainable manner. Hence, for the purposes of this report the primary focus would be on the Physical and Ecological Indicators. It is
expected that improvement in physical infrastructure at destinations/circuits would translate into improvements in the socio-demographic and political economic conditions of these places.

I. Calculation of Existing Load (LEXISTING): This is done by calculating the following:

a) **Resident Population Density (βRP):** This was derived by dividing the existing resident population of the tourist town by its area in hectares (ha.)

b) **Domestic Tourist Density (βDT):** This was derived as follows:

   **Step 1:** Domestic Tourist Arrival (TD): Domestic tourist arrivals during peak season (days) was determined.

   **Step 2:** Domestic Tourist stay days in peak seasons (TDSP): Domestic tourist arrival was multiplied by average number of days of tourist stay at that tourist town.

   \[ TDSP = TD \times \text{Stay Average Days} \]

   **Step 3:** Average number of tourist staying per day during peak season (αDSP): This was evaluated by dividing the number of tourist stay days per season by the number of days comprising the peak season

   \[ αDSP = \frac{\text{Stay Average Days}}{\text{Days Peak Season}} \]

   **Step 4:** Domestic Tourist Density (βDT): This was evaluated by dividing Average number of tourist staying per day during peak season by area of tourist town in hectares.

   \[ βDT = \frac{αDSP}{\text{Area}} \]
c) Foreign Tourist Density (βFT): This was derived as follows:

Step 1: Foreign Tourist Arrival (TF): Foreign tourist arrivals during peak season (days) was determined

Step 2: Tourist stay days in peak seasons (TFSP): Foreign tourist arrival was multiplied by average number of day of stay for tourist at that tourist town.

\[ TFSP = TF \times \text{Stay Average Days} \]

Step 3: Average number of tourist staying per day during peak season (αFSP): This was evaluated by dividing the number of tourist stay days per season by the number of days comprising the peak season.

\[ \alpha_{FSP} = \frac{\text{Stay Average Days}}{\text{Days Peak Season}} \]

Step 4: Foreign Tourist Density: This was evaluated by diving Average number of tourist staying per day during peak season by area of tourist town in hectares.

\[ \beta_{FT} = \frac{\alpha_{PS}}{\text{Area}} \]

Aggregate Peak Density (APD) = Resident Population Density + Domestic Tourist Density + Foreign Tourist Density

\[ \text{APD} = \beta_{RP} + \beta_{DT} + \beta_{FT} \]

Existing Load (LEXISTING) = Aggregate Peak Density * Area of the town

\[ \text{LEXISTING} = \text{APD} \times \text{Area} \]

II. Estimation of Carrying Capacity (CC) a) UDPFI Density (DUDPFI): The Urban Development Plan Formulation and Implementation Guidelines (UDPFI, 1996) guidelines classify the towns on the basis of population as mentioned in Table below:

<table>
<thead>
<tr>
<th>Towns</th>
<th>Population</th>
<th>Upper Limit Density (PPH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Town</td>
<td>Less than 50000</td>
<td>125</td>
</tr>
<tr>
<td>Medium Town</td>
<td>50000 - 500000</td>
<td>150</td>
</tr>
<tr>
<td>Large City</td>
<td>More than 500000</td>
<td>150</td>
</tr>
<tr>
<td>Metro Cities</td>
<td></td>
<td>175</td>
</tr>
<tr>
<td>Small Hill Town</td>
<td>20000</td>
<td>75</td>
</tr>
<tr>
<td>Medium Hill Town</td>
<td>20000-80000</td>
<td>90</td>
</tr>
<tr>
<td>Large Hill Town</td>
<td>More than 80000</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: UDPFI Guidelines, 1996
CHECK YOUR PROGRESS - 3:

1) Physical carrying capacity is related to which of the tourism resource?

2) What is UDPFI?

3) Tourism density can be calculated with the formula:

14.4 SUMMARY:

The World Tourism Organisation (WTO) proposes the following definition of the carrying capacity “The maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors’ satisfaction.” Depending on the assessment criteria tourism carrying capacity can be of different types, e.g., socio-cultural carrying capacity, bio-physical and ecological carrying capacity, economic and demographic carrying capacity, etc. The ecological tourism carrying capacity is the maximum number of species an area can support during the harshest part of the year, or the maximum biomass it can support indefinitely. The maximum number of grazing animals an area can support without deterioration. Social carrying capacity relates to the reaction of the local people to the tourist development of the place, which should never be negative.

Cultural heritage of a destination is extremely important if one needs to determine its carrying capacity. The more valuable cultural heritage, the more attractive the destination, which means a bigger number of tourists. Hence, a large number of tourists also mean greater chances of damage to the place. The environment itself can be preserved in a lower or a higher degree. Dynamics of the essence of carrying capacity is based on the tolerance change of each of the defined factors as a result of management. Supporting capacity significantly improves destination management by introducing innovations into tourism planning. Circumventing the supporting capacity will render tourism development impeded and result will be unsustainable tourism development.

14.5 GLOSSARY:

- **Deteriorating**: To diminish or impair in quality, character, or value
- **Terrestrial**: refers to things related to land or the planet Earth
• **CCA:** the analysis of the carrying capacity is used in environmental planning to guide decisions about land use allocation

• **NGT:** a structured method for group brainstorming that encourages contributions from everyone.

• **Assessment:** the process of gathering, analysing, interpreting and using information

### 14.6 CHECK YOUR PROGRESS

**Check your progress - 1**
1) English letter J
2) Number of tourist arrival in a specified period of time
3) Available area for public use

**Check your progress - 2**
1) Sustainable tourism
2) Carrying capacity value stretch
3) Antagonism

**Check your progress - 3:**
1) Land and accommodation
2) Urban Development Plans Formulation and Implementation Guidelines
3) This can be evaluated by dividing Average number of tourist staying per day during peak season by area of tourist town in hectares.

### 14.7 REFERENCES:

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• Carrying capacity management in tourism settings: a tourism growth management process, Peter W. Williams, Alison Gill

• Tourism and the Environment: Regional, Economic, Cultural and Policy Issues edited by Helen Briassoulis, Jan van der Straaten

• Tourism and the Environment: A Quest for Sustainability: with Special By R. N. Batta

• Dominican Republic - Approaches Towards a Sustainable Tourism Development: A ... By Anonym

• Eco-Tourism And Livelihoods: Capacity Building For Local Authorities By A. K. Bhattacharya

• [http://www.pap-thecoastcentre.org/pdfs/CCA%20for%20Tourism%20Development.pdf](http://www.pap-thecoastcentre.org/pdfs/CCA%20for%20Tourism%20Development.pdf)
14.8 SUGGESTED READINGS:

- The Challenge of Tourism Carrying Capacity Assessment: Theory and Practice edited by Harry Coccossis, Alexandra Mexa
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- Tourism and the Environment: Regional, Economic, Cultural and Policy Issues edited by Helen Briassoulis, Jan van der Straaten
- Tourism and the Environment: A Quest for Sustainability: with Special By R. N. Batta
- [http://www.biodiversity.ru/coastlearn/tourism-eng/con_capacity.html](http://www.biodiversity.ru/coastlearn/tourism-eng/con_capacity.html)

14.9 MODEL QUESTIONS:

**Short answer type questions:**

1) Explain the basic concept of tourism carrying capacity.
2) What do you understand by physical carrying capacity?
3) What is cultural carrying capacity of a destination?
4) Explain Aesthetic and Facility Carrying Capacity of tourism.
5) What is the use of ‘limits for acceptable change’ (LAC) in the process of capacity assessment?
6) Give the relationship among PCC, RCC and ECC.
7) Write short notes on the followings:
   (a) Bio physical carrying capacity
   (b) carrying capacity assessment
   (c) Social carrying capacity
   (d) available capacity

**Long answer type questions:**

1) Discuss the need of tourism carrying capacity assessment. Also describe the different evaluation techniques.
2) What do you understand by bio physical carrying capacity? Discuss the factors affecting bio physical capacity of a tourist destination.
3) Explain the concept behind socio cultural carrying capacity and its assessment, by taking a suitable example.
UNIT 15: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) AND ENVIRONMENTAL AUDITING

Structure:
15.1 Introduction
15.2 Objectives
15.3 Environmental Impact Assessment
15.4 Environmental Auditing
15.5 Summary
15.6 Glossary
15.7 Check your progress
15.8 References
15.9 Suggested readings
15.10 Model questions

15.1 INTRODUCTION:
Tourism and environment are closely related to each other. The quality of the environment, both natural and man-made, is essential to tourism. However, tourism's relationship with the environment is complex. It involves many activities that can have adverse environmental effects. Many of these impacts are linked with the construction of general infrastructure such as roads and airports, and of tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas. The negative impacts of tourism development can gradually destroy the environmental resources on which it depends.

On the other hand, tourism has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance. Negative impacts from tourism occur when the level of visitor use is greater than the environment's ability to cope with this use within the acceptable limits of change. Uncontrolled conventional tourism poses potential threats to many natural areas around the world. It can put enormous pressure on an area and lead to
impacts such as soil erosion, increased pollution, discharges into the sea, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the use of critical resources. Uncontrolled tourism development can put pressure on natural resources when it increases consumption in areas where resources are already scarce. Tourism can contribute directly to the conservation of sensitive areas and habitat. Revenue from park-entrance fees and similar sources can be allocated specifically to pay for the protection and management of environmentally sensitive areas. Special fees for park operations or conservation activities can be collected from tourists or tour operators. Sound environmental management of tourism facilities and especially hotels can increase the benefits to natural areas. But this requires careful planning for controlled development, based on analysis of the environmental resources of the area. Planning helps to make choices between conflicting uses, or to find ways to make them compatible. By planning early for tourism development, damaging and expensive mistakes can be prevented, avoiding the gradual deterioration of environmental assets significant to tourism. Tourism, especially nature tourism, is closely linked to biodiversity and the attractions created by a rich and varied environment. It can also cause loss of biodiversity when land and resources are strained by excessive use, and when impacts on vegetation, wildlife, mountain, marine and coastal environments and water resources exceed the carrying capacity. This loss of biodiversity in fact means loss of tourism potential. The purpose of the environmental impact assessment is to ensure that decision makers consider the ensuing environmental impacts when deciding whether or not to proceed with a project. The International Association for Impact Assessment (IAIA) defines an environmental impact assessment as "the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made." EIAs are unique in that they do not require adherence to a predetermined environmental outcome, but rather they require decision-makers to account for environmental values in their decisions and to justify those decisions in light of detailed environmental studies and public comments on the potential environmental impacts of the proposal.

15.2 OBJECTIVES:

After reading this unit carefully readers will be able to understand –

- Fundamental concepts of environmental impact assessment
- Need and formation of environmental analysis framework
- Methods and techniques of environmental; impact analysis
- Concepts and techniques of environmental auditing
15.3 ENVIRONMENTAL IMPACT ASSESSMENT:

UNEP defines Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers. By using EIA both environmental and economic benefits can be achieved, such as reduced cost and time of project implementation and design, avoided treatment/clean-up costs and impacts of laws and regulations. Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

Image: Environment Impact Assessment Framework

In a nut shell EIA is just an information gathering exercise carried out by the developer and other bodies which enables a Local Planning Authority to understand the environmental affects of a development before deciding whether or not it should go ahead. The really important thing about environmental assessments is the emphasis on using the best available sources of objective information and in carrying out a systematic and holistic process which should be bias free and allow the local authority and the whole community to properly understand the impact of the proposed development. Environmental assessment should lead to better standards of development and in some cases development not happening at all. Where developments do go ahead environmental
assessments should help to propose proper mitigation measures. Environmental impact assessment is meant to be a systematic process which leads to a final product, the Environmental Statement (ES).

Although legislation and practice vary around the world, the fundamental components of an EIA would necessarily involve the following stages:

1) Screening: EIA process kicks off with project screening. Screening is done to determine whether or not a proposal should be subject to EIA and, if so, at what level of detail. Guidelines for whether or not an EIA is required are country specific depending on the laws or norms in operation. Legislation often specifies the criteria for screening and full EIA. Development banks also screen projects presented for financing to decide whether an EIA is required using their set criteria. The output of the screening process is often a document called an Initial Environmental Examination or Evaluation (IEE) (Section 4.1). The main conclusion will be a classification of the project according to its likely environmental sensitivity. This will determine whether an EIA is needed and if so, to what detail.” to determine which projects or developments require a full or partial impact assessment study;” Any application for which a Screening Opinion concludes that an Environmental Statement should be submitted has a determination period of 16 weeks. The time period does not commence until an Environmental Statement has been submitted. The Screening Opinion is the local planning authority’s assessment of whether an Environmental Statement should be submitted with the application. If an application falls within the categories of development set out in Schedule 2 of the Regulations and either (a) meets or exceeds the size thresholds or (b) is within a sensitive area, a Screening Opinion is a mandatory requirement.

Before submitting a planning application, potential applicants can apply for an opinion on whether a development should be subject to Environmental Impact Assessment. This is called a screening opinion. Requests should be made in writing and be accompanied by:

- a plan sufficient to identify the land
- a brief description of the proposed development's nature, purpose and possible effects upon the environment
- Any information or representation from the developer.

Applicants have the right to appeal to the Secretary of State for a Screening Direction to determine whether an assessment is necessary. This screening would normally consist of a meeting between planner(s) of the forestry project and relevant government officials (environmental protection, natural resources, public health, social affairs, etc.).

At this meeting, the likely biophysical and socio-economic impacts of the project would be discussed and further regulatory steps, if any, would be decided.
Depending on the circumstances, the meeting could be attended by independent experts, for example, wildlife experts from a university or research centre if the forestry project happens to be in or near a particularly sensitive wildlife area.

The outcome of the screening, that is the consensus reached, would ordinarily be stated in the initial project plan (in the case of UNDP/FAO, a paragraph under "Special Considerations" in the Project Document). The statement would be to the effect that either:

(a) The project proposed has no likely harmful impact (for example a survey of forest resources or a small experimental plantation), and no further environmental action is required (other than routine environmental precaution during execution of the project, such as avoiding undue disturbance of wildlife in the course of inventorying forest resources);

(b) Certain environmental aspects of the project (including mitigative methods) are poorly known or unknown, and a more systematic assessment is needed by means of a Preliminary Assessment of Impact.

(c) The project has one or several specific impacts, but these impacts can be prevented or mitigated by means of a revision of the project design, or by means of an environmental monitoring programme phased over the implementation of the project (Sec. 2.3 below);

(d) The project is in such an environmentally sensitive area, has an inevitable massive impact, or fails to maximize benefits that a detailed, formal assessment of impact is required; detailed assessment is designed primarily to consider alternative sites or development methods, and to weigh more accurately socio-economic benefits against environmental losses.

If screening does not clear a project, the developer may be required to undertake a preliminary Assessment. This involves sufficient research, review of available data and expert advice in order to identify the key impacts of the project on the local environment, predict the extent of the impacts and briefly evaluate their importance to decision makers. The preliminary assessment can be used to assist early project planning (for instance, to narrow the discussion of possible sites) and it can serve as an early warning to the serious environmental problems that the project may cause. It is in the developer's interest to do a preliminary assessment since, in practice; this step can clear projects of the need for a full EIA. If after reviewing a preliminary assessment the competent authority deems that a full EIA is needed, the next step for the project developer is the preparation of the EIA report. This entails:

1- Commissioning and briefing an independent co-coordinator and expert study team.

2- Identifying the key decision makers who will plan, finance, permit and control the proposed project, so as to characterize the audience for the EIA.
3- Researching laws and regulations that will affect these decisions.
4- Making contact with each of various decision makers.
5- Determining how and when the EIAs finding will be communicated.

2) Scoping: To identify which potential impacts are relevant to assess (based on legislative requirements, international conventions, expert knowledge and public involvement), to identify alternative solutions that avoid, mitigate or compensate adverse impacts on biodiversity (including the option of not proceeding with the development, finding alternative designs or sites which avoid the impacts, incorporating safeguards in the design of the project, or providing compensation for adverse impacts), and finally to derive terms of reference for the impact assessment;

The first task of the EIA study team is scoping the EIA. The aim of scoping is to ensure that the study address all the issues of importance to the decision makers. First of all the team’s outlook is broadened by the discussions (with the project proponents, decision makers, the regulatory agency, scientific institutions, local community representative and others) to include all the possible issues and concerns raises by various groups. Then the study team selects primary impacts for the EIA to focus upon depending on the basis of magnitude, geographical extent, significance to decision makers or because the area is special locally (e.g. soil erosion, the presence of an endangered species or nearby historical sites) or is an eco-sensitive area.

Many applicants and authorities now prefer the Scoping stage to be part of the wider pre application discussions and therefore do not formally seek/prepare a Scoping Opinion. Instead, the scope of the Environmental Statement is agreed over a longer period, often many applicants and authorities now prefer the Scoping stage to be part of the wider pre application discussions and therefore do not formally seek/prepare a Scoping Opinion. Instead, the scope of the Environmental Statement is agreed over a longer period, often with the applicants submitting a Scoping Report for the authority to consider. Because Scoping Opinions are not mandatory, this is perfectly acceptable and can produce more considered results as there is not the pressure to agree the content of the Statement within 5 weeks with the applicants submitting a Scoping Report for the authority to consider. Because Scoping Opinions are not mandatory, this is perfectly acceptable and can produce more considered results as there is not the pressure to agree the content of the Statement within 5 weeks. Where a developer proposes a Scoping meeting with a range of interested parties, it is acceptable for the local planning authority to attend and take part.

However, care must be taken where the developer is holding wider public consultation meeting, not to be seen to be prejudging the proposal. Unlike Screening Opinions it is much harder to produce Scoping Opinion Checklists.
because of the potential scope of issues but they can be a useful aide memoire. The EU guidance provides details of how to develop a matrix for Scoping Opinions. Where a formal Scoping Opinion is sought from a Local Planning Authority, it is mandatory for the authority to consult the statutory consultees. It is usually good practice to include relevant non-statutory consultees. After “scoping” the main EIA begins. The EIA attempts to answer five questions basically:

1. What will happen as a result of the project?
2. What will be the extent of the changes?
3. Do the changes matter?
4. What can be done about them?
5. How can decision makers be informed of what needs to be done?

The EIA becomes a cyclic process of asking and further asking the first four questions until decision makers can be offered workable solutions.

Image: steps of environmental impact assessment

CHECK YOUR PROGRESS-1

1) What is UNEP?

2) The very first stage of environmental impact assessment:

3) After which step the main EIA begins:

3) **Identification:** Identification means the answer to the first question, i.e. “what will happen as Result of the project?” If a preliminary assessment has been done it will have broadly reviewed the projects effect, also scoping will have focused the study on the most important issues for decision makers. Taking these findings in to account the full EIA study now formally identifies those impacts which should be assessed in detail. This identification phase of the study may use these or other methods

1- Compile a list of key impacts (e.g. changes in air quality, noise levels, wild life habitats, species diversity, landscape views, social and cultural systems, settlement patterns and employment levels from other EIA s for similar projects)

2- Name all the projects sources of impacts (e.g. smoke emissions, water consumption, construction jobs) using checklists of questionnaires, then list possible receptors in the environment (e.g. crops, communities using same water for drinking, migrant of labour) by surveying the existing environment and consulting with interested parties.

3- Identify impacts themselves through the use of checklist, matrices, networks, overlays, models and simulations.

Draw back in the Indian system:

1- There is always a lack of reliable data sources.

2- The secondary data is also not reliable.

3- The data collectors do not pay respect to the indigenous knowledge of local people.

4- The credibility of the primary data collected by the data collectors is doubtful.

4) **Prediction:** The next step called predictions answers the EIA’s second question: “what will be the extent of the changes”. As far as is practicable, prediction scientifically characterizes the impacts causes and effects and its secondary and synergetic consequences for the environment and the local community.

Prediction follows an impact within a single environmental parameter (e.g. toxic liquid effluents) in to its subsequent effects in many disciplines (e.g. reduced water quality, adverse impacts on fisheries, economic effects on fishing villages, and resulting socio-cultural changes). Prediction draws on physical, biological, socioeconomic and anthropological data techniques .In quantifying impacts, it may employ mathematical models, physical models, socio cultural models, economic models, experiments or expert judgments.

All prediction techniques by their nature involve some degree of uncertainty. So along with each attempt to quantify an impact, the study team should also quantify the predictions uncertainty in terms of probabilities or margins of error.
Draw back in the Indian system:

1- The detail method used for the prediction and evaluation of the project is not mentioned in the report.

   Limited explanations are given both to quantitative estimation of magnitude of impact and to the assumptions and judgments used in the evaluation of impacts.

2- The limited coverage of scoping is confined mainly to direct impacts.

5) Evaluation: The third question addressed by the EIA – do the changes matter is answered in the next step. Evaluation is so called because it evaluates the predicated adverse impacts to determine whether they are significant enough to warrant mitigation. Thus judgment of significance can be based on one or more of the followings.

   1- Comparison with laws, regulations or accepted standards.
   2- Consultation with the relevant decision makers.
   3- Reference to pre set criteria such as protected sites features of species.
   4- Acceptability to the local community or the general public.

6) Mitigation: In this phase the study team formally analyses mitigation. A wide range of measures are proposed to prevent, reduce, remedy or compensate for each of the adverse impacts evaluated as significant. Possible mitigation measures include:

   1- Changing project sites, routes, processes, raw materials, operating methods, disposal methods, Disposal routes or locations, timing or engineering designs.
   2- Introducing pollution controls, waste treatment monitoring, phased implementation, landscaping, personal training, special social services or public education.
   3- Offering (as compensation) restoration of damaged resources, money to affected persons, concessions on other issues, or off site programmes to enhance some other aspects of the environment or quality of life for the community.

   All mitigation measures cost something and this cost must be quantified too. These various measures are then compared, trade-offs between alternative measures are weighed, and the EIA study team proposes one or more action plans, usually combining a number of measures. The action plan may include technical control measures, an integrated management scheme (for a major project) monitoring, contingency plans, operating practices, project scheduling, or even joint management (with affected groups). The study team should explicitly analyze the implications of adopting different alternatives, to help make the choices clearer for the decision makers.
Several analytical techniques are available for this purpose as given below:

1- Cost benefit analysis in which all quantifiable factors are converted to monetary values, and actions are assessed for their effect on project costs and benefits

2- Explaining what course of action would follow from various broad ‘value judgments’ (e.g. those social impacts are more important than resources)

3- A simple matrix of environmental parameters versus mitigation measures, contain brief description of the effects of each measure.

4- Pair wise comparisons, whereby the effects of an action are briefly compared with the effects of each of the alternative actions are briefly compared with the effects of each of the alternative actions, one pair at a time.

7) Documentation: The last step in the EIA process, which answers the question – how decision makers be informed of what needs to be done? In documenting an EIA, this means identifying the key decisions makers, perceiving the question they will be asking and providing them with straight forward answers formatted for easy interpretation in relation to their decision making (e.g. tables, graphs, summary, and points). Successful EIA documentation is more readily produced if the audience and their needs are established at the start of the EIA, and then made to affect how the research is focused and reported. It is the job of the study team’s communications expert to make this happen. An EIA report should contain:

1- An executive summary of the EIA findings.

2- A description of the proposed development projects.

3- The major environmental and natural resource issues that needed clarification and elaboration.

4- The projects impacts on the environment (in comparison with a base line were identified and Predicate.).

5- A discussion of options for mitigating adverse impacts and for shaping the project to suit its proposed environment, and an analysis of the tradeoffs involved in choosing between alternative actions.

6- An over view of gaps or uncertainties in the information.

7- A summary of the EIA for the general public.

Once the EIA reports has been completed, the project proponent needs to submit 20 copies of the copy of executive summary of the proposed proposal containing the salient features of the project, the form XII prescribed under water rules, 1975, form I prescribed under Air rules, 1983 and other information or documents to the SPCB for getting the non clearance certificate (NOC). On receiving the required documents from the project proponents it is the responsibility of the SPCB to conduct the public hearing. After completion of the public hearing the project proponents has to submit to the secretary of MOEF for the environmental clearance.
Draw back in the Indian system: One of the biggest concerns with the environmental clearance process is related to the quality of EIA report that is being carried out. The reports are generally incomplete and provided with false data. EIA reports ignore several aspects while carrying out assessments and significant information is found to omit. Many EIA report are based on single season data and are not adequate to determine whether environmental clearance should be granted. All this makes the entire exercise contrary to its very intent. As things stand today, it is the responsibility of the project proponent to commission the preparation of the EIA for its project. The EIA is actually funded by an agency or individual whose primary interest is to procure clearance for the project proposed. There is little chance that the final assessment presented is unbiased, even if the consultant may provide an unbiased assessment that is critical of the proposed project.

Sometimes it is found that a consultancy which is working in the project area has no specialization in the concerned subject. For example for the preparation of EIA report of the proposed oil exploration in coast of Orissa by the reliance group has been given to the life science Dept of Berhampur university which has no expertise on the study of turtles and its life cycle. The EIA document in itself is so bulky and technical, which makes it very difficult to decipher so as to aid in the decision making process. There are so many cases of fraudulent EIA studies where erroneous data has been used, same facts used for two totally different places etc. This is due to the lack of a centralized baseline data bank, where such data can be crosschecked. There is no accreditation of EIA consultants, therefore any such consultant with a track record of fraudulent cases cannot be held liable for discrepancies. It is hard to imagine any consultant

After being paid lakh of rupees, preparing a report for the project proponents, indicating that the project is not viable. In nearly every case, the consultants try to interpret and tailor the information looking for ways and means to provide their clients with a report that gives them their money’s worth.

CHECK YOUR PROGRESS - 2

1) The last phase of an environmental impact assessment is -

2) What is the most serious problem of identification phase of EIA?

3) What is SPCB?
15.4 ENVIRONMENTAL AUDITING:

Environmental audit is a general term that can reflect various types or evaluations intended to identify environmental compliance and management system implementation gaps, along with related corrective actions. In this way they perform an analogous (similar) function to financial audits. There are generally two different types of environmental audits: compliance audits and management systems audits. The Supreme Audit Institution (SAI) in India is headed by the Comptroller and Auditor General (CAG) of India who is a constitutional authority. The CAG of India derives his mandate from Articles 148 to 151 of the Indian Constitution. The CAG’s (Duties, Powers and Conditions of Service) Act, 1971 prescribes functions, duties and powers of the CAG. While fulfilling his constitutional obligations, the CAG examines various aspects of government expenditure and revenues. The audit conducted by CAG is broadly classified into Financial, Compliance and Performance Audit. Environmental audit by SAI India is conducted within the broad framework of Compliance and Performance Audit.

Image: Environmental Assessment

The Ministry of Environment & Forests is The nodal agency in the administrative structure of the Central Government of India, for the planning, promotion, coordination and overseeing the implementation of environmental and forestry programmes. The Ministry is also the Nodal agency in the country for the United Nations Environment Programme (UNEP). In the states, the Department of Environment and Forest is the main agency for implementation of environment programmes. The principal activities undertaken by Ministry of Environment & Forests consist of:

- Conservation & survey of flora, fauna, forests and wildlife;
- Prevention & control of pollution;
Afforestation and regeneration of degraded areas; and protection of environment, in the frame work of legislations. Major policy initiatives by Ministry of Environment and Forests include:

- National Environment Policy, 2006;
- Policy Statement for Abatement of Pollution; • National Forest Policy etc.

Environmental audits have been conducted by SAI India for the last 25 years. This process was formalized with the introduction of specialized guidelines \{MSO (Audit) 2002\} for conduct of environmental audits. This laid down broad guidelines to enable SAI India’s auditors to examine whether the auditee institutions gave due regard to the efforts of promulgating sustainability development and environmental concerns, where warranted. With a view to bring in a focused attention and consolidate the approach for better outputs and infusing new techniques and tools, SAI India designated the office of the Principal Director of Audit (Scientific Departments) as the nodal office for Environmental Audit. This office undertakes exclusively, environmental audits of central government. A Regional Training Institute in Mumbai has been designated as the nodal training center to impart training to officers and staff of SAI India on environmental auditing. As a result of having a specialized office and a training institute, SAI India has a vast pool of audit professionals equipped with techniques of environmental auditing. The current work in the area of environmental auditing being done by SAI India includes:

- Preparing “Green Office Guidelines” which is a write-up for guiding SAI India offices all over the country to reduce the detrimental effects of office operation on the environment by more sustainable and efficient use of office resources. This write-up had also been adopted by the Ministry of Environment of Forests and is being circulated to all central government offices in India.
- Assisting the Ministry of Environment and Forests in preparing a policy for the effective management of Waste in India. As representative of SAI India,
Principal Director (Scientific Departments) is a member of a committee which will evolve policy and strategy for the better management of waste in India based on the recommendations made by SAI India in its Audit Report on “Management of Waste in India”.

- Preparing guidelines for “4th E—Integrating Environmental concerns in Auditing” which is guidance on incorporating environmental concerns in all kinds of audit.

Greater awareness and understanding of environmental issues have led the supreme audit institutions (SAI) to recognize the key role of the state in defining appropriate measures for reducing the damaging consequences for the environment; for the efficient and effective solutions of environmental problems. The increasing concern has influenced the SAIs to introduce the environmental auditing in the public sector.

Environmental auditing in the public sector encompasses independent and objective assessments whether:
- the governments implement the international agreements on environmental protection,
- there is a complete and appropriate institutional framework for the efficient protection and preservation of the environment,
- there is an efficient control over the implementation of the national legislation in order to realise the set strategic objectives of protection and preservation of the environment,
- There is provided for the appropriate use of public funds for the assessment and for solving of the environmental problems.

The term 'environmental auditing' is broad. Many definitions cover auditing in the private and public sector. ‘a management tool comprising a systematic, documented, periodic and objective evaluation of the performance of the organization, management system and processes designed to protect the environment with the aim of: (1) facilitating management control of practices which may have impact on the environment, and (2) assessing compliance with company policies' and the systematic examination of the interaction between any business operation and its surrounding. This includes all emissions to air, land and water legal constraints; the effects on the neighboring community, landscape and ecology; and the public's perception of the operating company in the local area’. Many types of audit have been carried out by companies:

- **Compliance audit** - the most common type of audit consisting of checks against environmental legislation and company policy;
- **Issues audit** - an evaluation of how a company's activities relate to an environmental issue or (e.g. global pollution, energy use) or an evaluation of a specific issue (e.g. buildings, supplies);
• **Health and safety audit** - an assessment of risks and contingency planning (sometimes merged with environmental auditing because of the interconnected impacts of industrial processes and hazards);

• **Site audit** - an audit of a particular site to examine actual or potential environmental problems;

• **Corporate audit** - an audit of the whole company and its polices, structures, procedures and practices;

• **Due diligence audit** - an assessment of potential environmental and financial risks and liabilities carried out before a company merger or site acquisition or divestiture (e.g. contaminated land remediation costs);

• **Activity or operational audit** - an assessment of activities that may cross company departments or units (e.g. energy or waste management) and

• **Product or life cycle audit** - An analysis of environmental impacts of a product throughout all stages of its design, production, use and disposal, including its reuse and recycling (cradle to grave).

More than 100 environmental audits (compliance and performance) have been carried out by SAI India over the last 20 years. The audits can be divided into five categories— (i) Air issues (ii) Water issues (iii) Waste (iv) Biodiversity (v) Environment Management System.

(i) **Air issues:** In 2002, audit of Air Pollution/ Vehicular emissions/Industry emissions was conducted in 23 states of India which showed that poor implementation and monitoring of the Air Pollution Control Act led to increase in pollution levels.

(ii) **Water issues:** Audit of water pollution and availability of water supply / quality has been conducted by SAI India. The flagship audit under water issues was the “Ganga Action Plan” which was a study of water pollution control measures in the river Ganga which showed that despite huge expenditure, Ganga remained as polluted as ever. A similar audit took place regarding water pollution in the River Yamuna. Some other audits under this category are:

• Implementation of Environmental Acts relating to Water Pollution in India, 2001
• Measures to control pollution in the river Yamuna in Delhi, 2004
• Provision of Safe drinking water in Madhya Pradesh, 2004
• Performance Audit of Arsenic Alleviation Programme in West Bengal, 2005
• Conservation and Management of Dal Lake in Jammu and Kashmir, 2006
• Urban Water Supply in Sikkim, 2006

(iii) **Waste Issues:** Audit of waste issues have looked at the implementation of waste laws in India. In 2008, performance audit on “Management of Waste in India” was conducted across 24 states which found weaknesses in policies
regarding waste reduction / recycling / reuse, lack of rules for disposal of all kinds of waste and poor compliance to the Municipal Solid waste, Bio-medical waste and Plastic waste rules. Poor quality of data, poor monitoring and lack of accountability led to the ineffective management of waste in India. Removal of garbage and sanitation work in Delhi, 2001

- Improper disposal of biomedical waste by medical establishments in West Bengal, 2001
- Non compliance to municipal solid waste rules and unsafe disposal of biomedical waste, Rajasthan, 2004
- Solid Waste Management by municipalities and corporations in Tamil Nadu, 2006
- Bio-medical waste Management in Orissa, 2005
- Management of bio medical wastes in four major Public Hospitals in Delhi, 2006

(iv) Biodiversity Issues: Audit of biodiversity has included audit of wildlife conservation programmes in India as well as Conservation and protection of forests in India. In 2006, audit of ‘Conservation & protection of Tiger in Tiger Reserves in India’ was conducted in 28 tiger reserves all across India. The audit revealed that relocation of the people living within the Tiger Reserves as well as removal and prevention of encroachment was essential to ease the biotic pressure on the tiger population.

The personnel employed to protect tigers were over-aged, under-trained and under-equipped in many cases. The intelligence and communication network at the Reserves level was also weak. Many tiger reserves had neither prepared the tourist management plans nor assessed the tourist carrying capacity of the reserves. Some other audits in this area are:

- Preservation of wild life in Meghalaya, 1996
- Management of Forests in Delhi, 2001
- Functioning of Zoos and Wildlife Sanctuaries in Rajasthan, 2002
- Unauthorized extraction/removal of forest produces in Arunachal Pradesh, 2005
- Illicit felling and removal of timber in Meghalaya, 2006

(v) Environment Management System: Environment Management Systems are controls put in place to minimize all kinds of pollution. In 2007, performance audit of Environmental Management by Mumbai Port Trust, India showed that the Port did not have a systematic documented environmental management plan and did not conduct environmental management audits. The Port’s pollution control
cell was also not adequately equipped and failed to control pollution of harbor waters. Some other audits done in this area are:

- Environmental Safeguards in thermal power stations in Andhra Pradesh, 2005.
- Environment management system in thermal power stations Gujarat, 2005.
- Compliance with Environmental Regulations by State public sector undertakings in Tamil Nadu, 2005.

**International cooperation on environmental auditing:** SAI India is an active member of INTOSAI WGEA and ASOSAI Working Group on Environment.

- SAI India has been conducting month long International training programmes on Environmental Audit. More than 100 participants from 40 countries have participated over the years.
- SAI India is a member of the 8th ASOSAI Research Project on ‘Guidance on conducting Environmental Audit’ along with China Pakistan, Malaysia and Saudi Arabia. The research group is in process of framing environmental audit guidelines specifically suited for use by member ASOSAI nations.
- SAI India also imparted specialized training in environmental audits to officers of SAI Bhutan in July 2007.
- ASOSAI seminar in China on auditing air pollution issues was attended by representatives of SAI India.
- India is a member in the INTOSAI Working Group on Environmental Audit and has been actively participating in the committee’s deliberations.

Environmental audits should be appropriate to the particular circumstances. As environmental auditing draws upon various methodologies, each organization will define its own system depending upon its size, its activities and its corporate culture. The scope and style of audits vary, but common stages and activities include:

**Pre-audit stage:**
- Full management commitment;
- Setting overall goals, objectives, scope and priorities;
- Selecting a team to ensure objectivity and professional competence;

**Audit stage:**
- On-site audit, well defined and systematic using protocols or checklists;
- Review of documents and records;
- Review of policies;
- Interviews;
- Site inspection;
Post-audit stage:

- Evaluation of findings;
- Reporting with recommendations;
- Preparation of an action plan; and
- Follow up.

CHECK YOUR PROGRESS-3

1) What is INTOSAI?

2) From which article the CAG of India derives his mandate?

3. What is ASOSAI?

15.5 SUMMARY:

With the growing rate of mass tourism and rapid industrialization has made the environment polluted. Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

UNEP defines Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers. By using EIA both environmental and economic benefits can be achieved, such as reduced cost and time of project implementation and design, avoided treatment / clean-up costs and impacts of laws and regulations. Environmental auditing started developing at the beginning of 70s of the past century in the United States of America and in the Western Europe. In that period the developed countries were adopting the environmental legislation in order to reduce the harmful consequences of the companies' actions that had affected the environment. Greater awareness and understanding of environmental issues have led the supreme audit institutions (SAI) to recognize the key role of the state in defining appropriate measures for reducing the damaging consequences for the environment; for the efficient and effective solutions of environmental problems.
15.6 GLOSSARY:

- **IAIA**: International Association for Impact Assessment
- **INTOSAI**: International Organization of Supreme Audit Institutions
- **UNEP**: United Nations environment programme
- **Screening**: the investigation of a great number of something
- **Mitigation**: effort to reduce loss of life and property by lessening the impact of disasters
- **UNDP**: United Nations Development Programme

15.7 CHECK YOUR PROGRESS

**Check your progress - 1**

1) United nations environment programme
2) Screening
3) Scoping

**Check your progress - 2**

1) Reporting
2) Lack of reliable data
3) State Pollution Control Board

**Check your progress - 3**

1) International Organization of Supreme Audit Institutions (INTOSAI) is a worldwide affiliation of governmental entities
2) Articles 148 to 151 of the Indian Constitution
3) Stands for Asian Organization of Supreme Audit Institutions (regional working group of INTOSAI)

15.8 REFERENCES:

- Methods of Environmental Impact Assessment edited by Peter Morris, Riki Therivel
- Environmental Impact Assessment: Theory and Practice By Peter Wathern
- Environmental Impact Assessment: Practical Solutions to Recurrent Problems By David P. Lawrence
- Conducting Environmental Impact Assessment for Developing Countries edited by Prasad Modak, Asit K. Biswas
- Geomorphology and Environmental Impact Assessment edited by Mauro Marchetti, Victoria Rivas
• Environmental impact assessment: principles and procedures, R. E. Munn, International Council of Scientific Unions
• Environmental Impact Assessment: Available Techniques, Emerging Trends By Shahid A. Abbasi, D. S. Arya

15.9 SUGGESTED READINGS:
• Conducting Environmental Impact Assessment for Developing Countries edited by Prasad Modak, Asit K. Biswas
• Geomorphology and Environmental Impact Assessment edited by Mauro Marchetti, Victoria Rivas
• Environmental impact assessment: principles and procedures, R. E. Munn, International Council of Scientific Unions
• Environmental Impact Assessment: Available Techniques, Emerging Trends By Shahid A. Abbasi, D. S. Arya
• http://www.cbd.int/impact/whatis.shtml

15.10 MODEL QUESTIONS:
Short answer type questions:
1) How tourism affects the surrounding environment of a destination
2) Explain the term environmental impact assessment
3) What is environmental auditing?
4) Define the very first step of an environmental impact analysis.
5) What is scoping in the context of EIA?
6) What are the main drawbacks in India EIA SYSTEMS?
7) What is NOC?
8) Explain the following terms: use examples where necessary.
   (a) Baseline  (b) reporting

Long answer type questions:
1) What is the need of environmental impact assessment; discuss the various techniques of EIA in India?
2) Describe the EIA process in detail. Also discuss the drawback of Indian system.
3) Discuss the importance and methods of environmental auditing.
BLOCK 5:
LEGAL AND REGULATORY FRAMEWORK FOR PROTECTION AND CONSERVATION OF ENVIRONMENT AND NATURAL RESOURCES
UNIT 16: ENVIRONMENT PROTECTION ACT

Structure:
16.1 Introduction
16.2 Objectives
16.3 Environment protection act
   16.3.1 Objectives and preliminaries of act
   16.3.2 Powers of the central governments
   16.3.3 Prevention, control and abatement of environmental pollution
   16.3.4 Miscellaneous of the act
16.4 Summary
16.5 Glossary
16.6 Check your progress
16.7 References
16.8 Suggested readings
16.9 Model questions

16.1 INTRODUCTION:

Tourism activities around the world have caused significant environmental damage by creating different types of pollution including air pollution, water pollution etc. According to The World Tourism Organization definition tourists as people who “travel to and stay in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited”. Tourism involves the movement of people from their homes to other destinations and accounts for about 50% of traffic movements; to give an indication, the ICAO reported that the number of international air passengers worldwide rose from 88 million in 1972 to 344 million in 1994. From 594 million international travelers in 1996, numbers are forecast to leap to 702 million by next year, and from 698 million international travelers in 2000, numbers are forecast to leap to 1,018 million by 2010 and 1.6 billion by 2020.

One consequence of this increase in air transport is that tourism now accounts for more than 60% of air travel and is therefore responsible for an important share of air emissions and the role of air travel within the industry is also likely to expand and cause considerable environmental damage and to have knock-on effects on the tourism industry itself.
Air pollution from tourist transportation has impacts on the global level, especially from carbon dioxide (CO2) emissions related to transportation energy use. And it can contribute to severe local air pollution. Some of these impacts are quite specific to tourist activities.

Currently, aircraft account for around 3% of all emissions globally. The International Panel on Climate Change expects this to increase by up to 7% by 2050. Because emissions from other sectors are also expected to increase, this figure masks the increase in real terms: the actual tonnage of carbon emitted, driven by air traffic increase of 5% per year, will increase by over 75% by 2015. Tourism is thus a significant contributor to the increasing concentrations of greenhouse gases in the atmosphere. This rapidly expanding air traffic contributes about 2.5% of the production of CO2. It is known that road transport also contributes to green house gases during tourism activities through World Tourism Organization.

Due to all these fatal effects on tourism on natural environment decisions were taken at the United Nations Conference on the Human Environment held at Stockholm in June, 1972.

In this conference many countries participated including India to discuss and develop the different means of protection against the pollution by tourism and other sectors. It is considered necessary further to implement the decision aforesaid in so far as they relate to the protection and improvement of environment and the prevention of hazards to human beings, other living creatures, plants and property.

The Environment (Protection) Act was enacted in 1986 with the objective of providing for the protection and improvement of the environment. It empowers the Central Government to establish authorities [under section 3(3)] charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country. The Act was last amended in 1991. It comprises all the necessary steps and regulatory authorities and legal bodies to enforce the legal protection against the pollution caused by any sector or industry. The following sections describe the various part and provisions of the environment protection act of India (1986) in detail.

16.2 OBJECTIVES:

- To learn how the environment protection act came into existence
- To understand the various sections of environment protection act of India (1986)
- What are the policies and regulatory authorities of environment protect act
- To understand the provisions and legal issues of the act
16.3 ENVIRONMENT PROTECTION ACT:

Environment protection act is an act to provide for the protection and improvement of environment and for matters connected therewith. Prior to the 1972 Stockholm Conference the majority of environmental conventions related to the conservation of wildlife. Of historical interest only are the very early bird protection conventions (e.g., the 1902 Convention for the Protection of Birds Useful to Agriculture; More significant in the longer term are the general nature conservation conventions, although the 1946 Washington Convention for the Regulation of Whaling (and its 1956 Protocol) is particularly noteworthy in this period—over time it has of course changed its focus from exploitation to conservation.

A pioneering convention in conservation terms was the 1968 African Convention on Conservation of Nature and Natural Resources, Algiers, which despite its comprehensive and innovative approach to conservation made the mistake of many other conventions in not establishing an administrative structure to oversee its supervision.

Also notable and considerably more successful is the 1971 Ramsar Convention on Wetlands of International Importance, especially as Waterfowl Habitat, which establishes a network of protected wetland areas in the territories of member states.

In 1980, the Department of Environment was established in India. Later on it became the Ministry of Environment and Forests in 1985. Environment protection act EPA, 1986 came into force soon after the Bhopal Gas Tragedy.

16.3.1 OBJECTIVES AND PRELIMINARIES OF ACT:

The Environment (Protection) Act, 1986 has 26 Sections and it has been divided into four chapters relating to i) Preliminary, ii) General Powers of the Central Government, iii) Prevention, Control, and Abatement of Environmental Pollution, iv) Miscellaneous. The Act consists of and deals with more stringent penal provisions. The minimum penalty for contravention or violation of any provision of the law is an imprisonment for a term which may extend to five years or fine up to one lakh rupees, or both. The Act also provides for the further penalty if the failure or contravention continues after the date of conviction. It is Rs. 5000/- per day. If the failure of contravention continues beyond the period of one year, then the offender is punished with imprisonment for a term which may extend to seven years.

Under the Act, there will be supremacy of provision. In other words, the provisions of this Act and the rules or orders made under this Act shall have effect and supremacy over anything inconsistent contained in any enactment other than this Act.
Followings are the main objectives of the EPA (1986) –

- To implement the decisions made at the U.N. Conference on the Human Environment held at Stockholm in June, 1972.
- To co-ordinate activities of the various regulatory agencies under the existing laws and creation of an authority or authorities for environment protection.
- To provide for deterrent punishment to those who endanger human environment, safety and health.
- To ensure sustainable development is also one of the goals of the EPA, 1986. If the act is not armed with the powers to ensure sustainable development, it will become a barren shell.
- To enact general law on environmental protection which could cover uncovered gaps in the areas of major environmental hazards as the existing laws generally focused on specific types of pollution or on specific categories of hazardous substances and some major areas of environmental were not covered.

According to the definitions of environment protection act of India the following major terms are described here-

- **Environment [Section 2(a)]**: Environment includes water, air and land and the inter relationship which exists among and between water, air and land and human beings, other living creatures, plants, microorganisms and property.

- **Environmental Pollutant [Section 2(b)]**: Environmental Pollutant means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment. Environmental pollution means the presence in the environment of any environmental pollutant.

- **Handling [Section 2(d)]**: Handling, in relation to any substance, means the manufacture, process, treatment, destruction, conversion, offering for sale, transfer, or the like of such substance.

- **Hazardous Substance [Section 2(e)]**: Hazardous substance means any substance or preparation which, by reason of its chemical or physicochemical properties or handling, is likely to cause harm to human beings, other living creatures, plants, microorganisms, property, or the environment.

- **Occupier [Section 2(f)]**: Occupier in relation to any factory or premises means a person who has control over the affairs of the factory or premises and includes, in relation to any substance, the person in possession of the substance.

The environment protection act gives various powers to the central government to take the different type of measure and to improve the environment of the whole country. This Act also empowers and authorizes the Central
Government to issue directions for the operation or process, prohibition, closure, or regulation of any industry. The Central Government is also authorized to stop, regulate the supply of electricity or water or any other service directly without obtaining the order of the Court in this regard. The Act prescribes a special procedure for handling hazardous substances and the concerned person has to handle the hazardous substances according to the procedure of the Act.

**Figure: Atmospheric air pollution**

**CHECK YOUR PROGRESS-1**

1) What was the aim of international environment conference on Geneva, 1972?

2) When did Indian parliament pass the environment protection act?

3) Department of environment was established in India in the year.

4) Name any four polluter of natural environment.
16.3.2 GENERAL POWERS OF THE CENTRAL GOVERNMENTS:

The environment protection act essentially gives various power and authorities upon almost all issues against environmental pollution. Subject to the provisions of this Act, the Central Government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing controlling and abating environmental pollution.

In particular, and without prejudice to the generality of the provisions of sub-section (1), such measures may include measures with respect to all or any of the following matters, namely: - Co-ordination of actions by the State Governments, officers and other authorities--

(a) Under this Act, or the rules made there under, or
(b) Under any other law for the time being in force which is relatable to the objects of this Act;

- planning and execution of a nation-wide programme for the prevention, control and abatement of environmental pollution;
- laying down standards for the quality of environment in its various aspects;
- laying down standards for emission or discharge of environmental pollutants from various sources whatsoever;
- restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards;
- laying down procedures and safeguards for the prevention of accidents which may cause environmental pollution and remedial measures for such accidents;
- laying down procedures and safeguards for the handling of hazardous substances;
- examination of such manufacturing processes, materials and substances as are likely to cause environmental pollution;
- carrying out and sponsoring investigations and research relating to problems of environmental pollution;
- inspection of any premises, plant, equipment, machinery, manufacturing or other processes, materials or substances and giving, by order, of such directions to such authorities, officers or persons as it may consider necessary to take steps for the prevention, control and abatement of environmental pollution;
- establishment or recognition of environmental laboratories and institutes to carry out the functions entrusted to such environmental laboratories and institutes under this Act;
• collection and dissemination of information in respect of matters relating to environmental pollution;
• preparation of manuals, codes or guides relating to the prevention, control and abatement of environmental pollution;
• Such other matters as the Central Government deems necessary or expedient for the purpose of securing the effective implementation of the provisions of this Act.

The Central Government may, if it considers it necessary or expedient so to do for the purpose of this Act, by order, published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under section 5) of the Central Government under this Act and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise and powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures.

Appointment of officers and their powers and functions: Without prejudice to the provisions of sub-section (3) of section 3, the Central Government may appoint officers with such designation as it thinks fit for the purposes of this Act and may entrust to them such of the powers and functions under this Act as it may deem fit.

The officers appointed under sub-section (1) shall be subject to the general control and direction of the Central Government or, if so directed by that Government, also of the authority or authorities, if any, constituted under sub-section (3) of section 3 or of any other authority or officer.

Power to give directions: Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions.

Explanation- For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct:
- the closure, prohibition or regulation of any industry, operation or process;
- stoppage or regulation of the supply of electricity or water or any other service.
Rules to regulate environmental pollution: The environment protection act provides various rules to regulate the behaviour and quantity of all the environmental polluter, described in following different sections-

1- The Central Government may, by notification in the Official Gazette, make rules in respect of all or any of the matters referred to in section 3.

2- In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-
   a- the standards of quality of air, water or soil for various areas and purposes;
   b- The maximum allowable limits of concentration of various environmental pollutants (including noise) for different areas;
   c- The procedures and safeguards for the handling of hazardous substances;
   d- The prohibition and restrictions on the handling of hazardous substances in different areas;
   e- The prohibition and restriction on the location of industries and the carrying on process and operations in different areas;
   f- The procedures and safeguards for the prevention of accidents which may cause environmental pollution and for providing for remedial measures for such accidents.

![Diagram](image)

**Figure: Sources of Air Pollution.**

**CHECK YOUR PROGRESS - 2**

1) Which section of the environment protection act gives the power to the central government for the appointment of officers?

2) What strength of noise can be considered as a polluter?

3) Name the instrument that checks the air pollution:

4) Which Indian state holds the most forest lands?
16.3.3 PREVENTION, CONTROL AND ABATEMENT OF ENVIRONMENTAL POLLUTION:

This section of environment protection act describes the various prevention and control guidelines related to environmental protection against pollution. Persons carrying on industry operation etc not to allow emission or discharge of environmental pollutants in excess of the standards. No person carrying on any industry, operation or process shall discharge or emit or permit to be discharged or emitted any environmental pollutants in excess of such standards as may be prescribed.

1- Persons handling hazardous substances to comply with procedural safeguards: No person shall handle or cause to be handled any hazardous substance except in accordance with such procedure and after complying with such safeguards as may be prescribed.

2- Furnishing of information to authorities and agencies in certain cases: Where the discharge of any environmental pollutant in excess of the prescribed standards occurs or is apprehended to occur due to any accident or other unforeseen act or event, the person responsible for such discharge and the person in charge of the place at which such discharge occurs or is apprehended to occur shall be bound to prevent or mitigate the environmental pollution caused as a result of such discharge and shall also forthwith—

A- Intimate the fact of such occurrence or apprehension of such occurrence; and

B- Be bound, if called upon, to render all assistance, to such authorities or agencies as may be prescribed.

- On receipt of information with respect to the fact or apprehension on any occurrence of the nature referred to in sub-section (1), whether through intimation under that sub-section or otherwise, the authorities or agencies referred to in sub-section (1) shall, as early as practicable, cause such remedial measures to be taken as necessary to prevent or mitigate the environmental pollution.

- The expenses, if any, incurred by any authority or agency with respect to the remedial measures referred to in sub-section (2), together with interest (at such reasonable rate as the Government may, by order, fix) from the date when a demand for the expenses is made until it is paid, may be recovered by such authority or agency from the person concerned as arrears of land revenue or of public demand.

3- Powers of entry and inspection:

  1- Subject to the provisions of this section, any person empowered by the Central Government in this behalf shall have a right to enter, at all reasonable times with such assistance as he considers necessary, and any place —
a- For the purpose of performing any of the functions of the Central Government entrusted to him;

b- For the purpose of determining whether and if so in what manner, any such functions are to be performed or whether any provisions of this Act or the rules made there under or any notice, order, direction or authorization served, made, given or granted under this Act is being or has been complied with;

c- For the purpose of examining and testing any equipment, industrial plant, record, register, document or any other material object or for conducting a search of any building in which he has reason to believe that an offence under this Act or the rules made there under has been or is being or is about to be committed and for seizing any such equipment, industrial plant, record, register, document or other material object if he has reason to believe that it may furnish evidence of the commission of an offence punishable under this Act or the rules made there under or that such seizure is necessary to prevent or mitigate environmental pollution.

2- Every person carrying on any industry, operation or process of handling any hazardous substance shall be bound to render all assistance to the person empowered by the Central Government under sub-section (1) for carrying out the functions under that sub-section and if he fails to do so without any reasonable cause or excuse, he shall be guilty of an offence under this Act.

3- If any person willfully delays or obstructs any persons empowered by the Central Government under sub-section (1) in the performance of his functions, he shall be guilty of an offence under this Act.

4- The provisions of the Code of Criminal Procedure, 1973, or, in relation to the State of Jammu and Kashmir, or an area in which that Code is not in force, the provisions of any corresponding law in force in that State or area shall, so far as may be, apply to any search or seizures under this section as they apply to any search or seizure made under the authority of a warrant issued under section 94 of the said Code or as the case may be, under the corresponding provision of the said law.

4- Power to take sample and procedure to be followed in connection therewith:

1- The Central Government or any officer empowered by it in this behalf shall have power to take, for the purpose of analysis, samples of air, water, soil or other substance from any factory, premises or other place in such manner as may be prescribed.

2- The result of any analysis of a sample taken under sub-section (1) shall not be admissible in evidence in any legal proceeding unless the provisions of sub-sections (3) and (4) are complied with.
3- Subject to the provisions of sub-section (4), the person taking the sample under sub-section (1) shall—

a- serve on the occupier or his agent or person in charge of the place, a notice, then and there, in such form as may be prescribed, of his intention to have it so analyzed;

b- In the presence of the occupier of his agent or person, collect a sample for analysis;

c- Cause the sample to be placed in a container or containers which shall be marked and sealed and shall also be signed both by the person taking the sample and the occupier or his agent or person;

d- Send without delay, the container or the containers to the laboratory established or recognized by the Central Government under section 12.

4- When a sample is taken for analysis under sub-section (1) and the person taking the sample serves on the occupier or his agent or person, a notice under clause (a) of sub-section (3), then,—

a- in a case where the occupier, his agent or person willfully absents himself, the person taking the sample shall collect the sample for analysis to be placed in a container or containers which shall be marked and sealed and shall also be signed by the person taking the sample, and

b- in a case where the occupier or his agent or person present at the time of taking the sample refuses to sign the marked and sealed container or containers of the sample as required under clause (c) of sub-section (3), the marked and sealed container or containers shall be signed by the person taking the samples, and the container or containers shall be sent without delay by the person taking the sample for analysis to the laboratory established or recognized under section 12 and such person shall inform the Government Analyst appointed or recognized under section 12 in writing, about the willful absence of the occupier or his agent or person, or, as the case may be, his refusal to sign the container or containers.

Figure: latest instrument for measuring air quality on the go
5- **Environmental laboratories:**

1- The Central Government may, by notification in the Official Gazette,--
   a- establish one or more environmental laboratories;
   b- Recognize one or more laboratories or institutes as environmental laboratories to carry out the functions entrusted to an environmental laboratory under this Act.

2- The Central Government may, by notification in the Official Gazette, make rules specifying—
   a- the functions of the environmental laboratory;
   b- the procedure for the submission to the said laboratory of samples of air, water, soil or other substance for analysis or tests, the form of the laboratory report thereon and the fees payable for such report;
   c- Such other matters as may be necessary or expedient to enable that laboratory to carry out its functions.

6- **Government analysts:**

The Central Government may by notification in the Official Gazette, appoint or recognize such persons as it thinks fit and having the prescribed qualifications to be Government Analysts for the purpose of analysis of samples of air, water, soil or other substance sent for analysis to any environmental laboratory established or recognized under sub-section (1) of section 12.

Any document purporting to be a report signed by a Government analyst may be used as evidence of the facts stated therein in any proceeding under this Act.

7- **Penalty for contravention of the provisions of the act and the rules, orders and directions:**

1- Whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued there under, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention.

2- If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to seven years.

8- **Offences by companies:**

1- Where any offence under this Act has been committed by a company, every person who, at the time the offence was committed, was directly in charge
of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

2- Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

3- Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Related definitions for this section:
"Company" means anybody corporate and includes a firm or other association of individuals;
"Director", in relation to a firm, means a partner in the firm.

9- Offences by government departments:

1- Where an offence under this Act has been committed by any Department of Government, the Head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly.

Provided that nothing contained in this section shall render such Head of the Department liable to any punishment if he proves that the offence was committed without his knowledge or that he exercise all due diligence to prevent the commission of such offence.

2- Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a Department of Government and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the Head of the Department, such officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

CHECK YOUR PROGRESS-3:

1) Where the environmental lab of India is situated?

..................................................................................................................................................

2) What do you understand by ‘sample?’

..................................................................................................................................................
16.3.4 MISCELLANEOUS OF THE ACT:

The fourth chapter of environment protection act has the following miscellaneous provisions and guidelines-

1- Protection of action taken in good faith: No suit, prosecution or other legal proceeding shall lie against the Government or any officer or other employee of the Government or any authority constituted under this Act or any member, officer or other employee of such authority in respect of anything which is done or intended to be done in good faith in pursuance of this Act or the rules made or orders or directions issued there under.

2- Cognizance of offences: No court shall take cognizance of any offence under this Act except on a complaint made by--
   a- the Central Government or any authority or officer authorized in this behalf by that Government, 20 or
   b- Any person who has given notice of not less than sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint, to the Central Government or the authority or officer authorized as aforesaid.

3- Information reports or returns: The Central Government may, in relation to its function under this Act, from time to time, require any person, officer, State Government or other authority to furnish to it or any prescribed authority or officer any reports, returns, statistics, accounts and other information and such person, officer, State Government or other authority shall be bound to do so.

4- Members, officers and employees of the authority constituted under section 3 to be public servants: All the members of the authority, constituted, if any, under section 3 and all officers and other employees of such authority when acting or purporting to act in pursuance of any provisions of this Act or the rules made or orders or directions issued there under shall be deemed to be public servants within the meaning of section 21 of the Indian Penal Code (45 of 1860).

5- Bar of jurisdiction: No civil court shall have jurisdiction to entertain any suit or proceeding in respect of anything done, action taken or order or direction issued by the Central Government or any other authority or officer in pursuance of any power conferred by or in relation to its or his functions under this Act.

6- Powers to delegate: Without prejudice to the provisions of sub-section (3) of section 3, the Central Government may, by notification in the Official Gazette, delegate, subject to such conditions and limitations as may be specified in the notifications, such of its powers and functions under this Act [except the powers to constitute an authority under sub-section (3) of section 3 and to make rules under section 25] as it may deem necessary or expedient, to any officer, State Government or other authority.
7- **Effect of other laws:**

1- Subject to the provisions of sub-section (2), the provisions of this Act and the rules or orders made therein shall have effect notwithstanding anything inconsistent therewith contained in any enactment other than this Act.

2- Where any act or omission constitutes an offence punishable under this Act and also under any other Act then the offender found guilty of such offence shall be liable to be punished under the other Act and not under this Act.

8- **Power to make rules:**

1- The Central Government may, by notification in the Official Gazette, make rules for carrying out the purposes of this Act.

2- In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely—
   a- the standards in excess of which environmental pollutants shall not be discharged or emitted under section 7;
   b- The procedure in accordance with and the safeguards in compliance with which hazardous substances shall be handled or caused to be handled under section 8.
   c- The authorities or agencies to which intimation of the fact of occurrence or apprehension of occurrence of the discharge of any environmental pollutant in excess of the prescribed standards shall be given and to whom all assistance shall be bound to be rendered under sub-section (1) of section 9.
   d- The manner in which samples of air, water, soil or other substance for the purpose of analysis shall be taken under sub-section (1) of sect 11
   e- The form in which notice of intention to have a sample analyzed shall be served under clause (a) of sub section (3) of section 11;
   f- The functions of the environmental laboratories, the procedure for the submission to such laboratories of samples of air, water, soil and other substances for analysis or test; 27 the form of laboratory report; the fees payable for such report and other matters to enable such laboratories to carry out their functions under sub-section (2) of section 12.
   g- The qualifications of Government Analyst appointed or recognized for the purpose of analysis of samples of air, water, soil or other substances under section 13.
   h- The manner in which notice of the offence and of the intention to make a complaint to the Central Government shall be given under clause (b) of section 19.
   i- The authority of officer to whom any reports, returns, statistics, accounts and other information shall be furnished under section 20.
   j- Any other matter which is required to be, or may be, prescribed.
9- Rules made under this act to be laid before parliament: Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

CHECK YOUR PROGRESS-3:
1) Who can make environmental reports?

2) What do you understand by delegate?

16.4 SUMMARY:
After the international conference on environmental protection in Stockholm (1972) India passed its own environment protection act in 1986. This act has various sections and rules for the prevention, control and governing of environment protection. Environment protection act is a regulatory legal body explaining the various forms of environmental pollution e.g. water, air and soil pollution and the regulations to control them. The Environment (Protection) Act was enacted in 1986 with the objective of providing for the protection and improvement of the environment. It empowers the Central Government to establish authorities [under section 3(3)] charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country. The Act was last amended in 1991. The act contains the description of almost all the major and minor pollutants, their sources and authorities to prevent them.

16.5 GLOSSARY:
- **ICAO**: International Civil Aviation Organization (ICAO), Montreal, Canada
- **U.N.**: an international organization whose stated aims include promoting and facilitating cooperation in international law, international security, economic development, social progress, human rights, civil rights, civil liberties, political freedoms, democracy, and the achievement of lasting world peace(1945).
• **Green house gases**: gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. [Water vapor, carbon dioxide, methane, nitrous oxide, and ozone]

• **Analyst**: a person who analyses or is skilled in analysis

### 16.6 CHECK YOUR PROGRESS:

**Check your progress -1**

1) Protection of planet earth an its environment  
2) 1986  
3) 1980  
4) Transportation, industries, power plants, sewage

**Check your progress - 2**

1) Sub section 1, and sub section 3  
2) Greater than 20,000 HZ. (>80 db)  
3) Uttrakhand

**Check your progress - 3**

1) State and central governments board officers  
2) A person acting on behalf of another person or institution

### 16.7 REFERENCES:

• **ENVIRONMENTAL LAW IN INDIA: ISSUES AND RESPONSES, R.B. SINGH**

• Environmental Legislation in India, Kulwant Rai Gupta

• [www.moef.nic.in](http://www.moef.nic.in) as retrieved on 10 June 2013

• Environmental Jurisprudence in India, C. M. Abraham, 68-75

• [www.envfor.nic.in](http://www.envfor.nic.in/) as retrieved on 10 June 2013

• Development and Environmental Economics and International Trade, TR Jain, OP Khanna, Vir Sen, 149-155

• Environment Protection and Sustainable Development, Saligram Bhatt, 83-90

• Ecological Policy and Politics in Developing Countries: Economic Growth, Uday Desai,

### 16.8 SUGGESTED READINGS:

• **ENVIRONMENTAL LAW IN INDIA: ISSUES AND RESPONSES, R.B. SINGH**

• Environmental Legislation in India, Kulwant Rai Gupta

• [www.moef.nic.in](http://www.moef.nic.in) as retrieved on 10 June 2013

• Environmental Jurisprudence in India, C. M. Abraham, 68-75

• Environment Protection and Sustainable Development, Saligram Bhatt, 83-90

• [http://www.thepeopleschronicle.in](http://www.thepeopleschronicle.in)
16.9 MODEL QUESTIONS:

**Short answer type questions:**
1) What is the need of environment protection?
2) Define the term ‘ICAO’.
3) What was the basic aim of international environment conference held in Geneva?
4) What are the primary objectives of Indian environment protection act, 1986?
5) According to the Indian EPA give the definition of the following terms:
   (a) Pollutants  
   (b) handling
6) What are the different sources of air pollution?
7) How the Indian EPA distributes the power to central and state governments?
8) Under which section the EPA describes the Prevention, control and abatement of environmental pollution? Explain.

**Long answer type questions:**
1) How the Indian environmental protection act came into existence? Discuss its salient features and objectives.
2) Discuss the various Powers of the central and state governments distributed by the environmental protection act, 1986.
3) How the Indian environmental protection act enforces the Prevention, control and abatement of environmental pollution?
UNIT 17: WILDLIFE AND FOREST PROTECTION ACT

Structure:
17.1 Introduction
17.2 Objectives
17.3 Wildlife protection act
   17.3.1 Objectives and preliminaries of the act
   17.3.2 Authorities to be appointed or constituted under the act
   17.3.3 Hunting of wild animals
   17.3.4 Protection of specified plants
   17.3.5 Sanctuaries, national parks and closed areas
17.4 Indian Forest Act, 1927
   17.4.1 Forest Conservation Act, 1980.
17.5 Summary
17.6 Glossary
17.7 Check your progress
17.8 References
17.9 Suggested readings
17.10 Model questions

17.1 INTRODUCTION:

Wildlife is a very important asset of a country. Wildlife refers to all living organisms in their natural habitat other than cultivated plants and domesticated animals. Wildlife, natural resources and the surrounding environment together make the ecological system on the earth. Wildlife traditionally refers to non-domesticated vertebrates, but has come to broadly reference to all wild plants, animals and other organisms. Domesticating wild plant and animal species for human benefit has occurred many times all over the planet, and has a major impact on the environment, both positive and negative. Mass tourism activities inside the natural wildlife areas can disturb the entire wildlife of the destination.

Wildlife is very important to maintain ecological 'balance of nature' and maintain food chain and nature cycles. It also has economic value. Many wild plants provide useful substances like timber, paper, gums etc. and they also have wide applications in Ayurveda and other branches of medicine. Wild animals’ products are tusk, ivory, leather, honey etc. Most important contribution of wild
life for human progress is availability of large gene pool for the scientists to carry breeding programmes in agriculture, animal husbandry and fishery. Wild life provides aesthetic value to man and is considered as a natural asset of a country.

Due to the growing impact of deforestation and mass tourism, continuous efforts are being made by some anxious animal lovers to protect the endangered species of wildlife as well as those that are on the verge of extinction and thus save the world from running out its green heritage. To promote wildlife awareness among the people, the Indian government has started various natural projects and programs such as Project Tiger, Nature Camps and Jungle Lodges. These projects not only help to preserve our natural heritage, but encourage eco-tourism as well. The financial value of wild species is important to the economies of several nations, as it provides many valuable substances like wood and other plant products, fibers, meat and other foods, and skins and furs. Scientific value: By studying wildlife, scientists have gained valuable knowledge about various life processes and discovered important medical products. Survival value: Wildlife helps in maintaining the balanced living systems of earth, which consequently ensures survival of life.

Wild Life, which is a part and parcel of the environment, constitutes wealth of the nation. It included wild animals, birds, plants etc. However, man, in the process of progress and development and also for his selfish ends, is causing much damage to the forests and wild life. Wild life is nature's gift and its decline has an adverse effect of ecology and hence there is an urgent need to protect the wild life. Therefore, in order to protect the wild life from destruction, the Indian Parliament passed the Wild Life (Protection) Act in the year 1972.

The Indian Forest Act, 1927 was largely based on previous Indian Forest Acts implemented under the British. The first and most famous was the Indian Forest Act of 1878. Both the 1878 act and the 1927 one sought to consolidate and reserve the areas having forest cover, or significant wildlife, to regulate movement and transit of forest produce, and duty leviable on timber and other forest produce. It also defines the procedure to be followed for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest. It defines what is a forest offence, what are the acts prohibited inside a Reserved Forest, and penalties livable on violation of the provisions of the Act.

17.2 OBJECTIVES:

After reading the unit carefully readers’ will be able to understand –

- What is the importance and need to protect the wild life
- Introduction to wildlife protection act: objectives and preliminaries
- Protection against hunting of wild animals
- Indian forest act and its different provisions.
17.3 WILD LIFE PROTECTION ACT:

India is the first country in the world to have made provisions for the protection and conservation of environment in its constitution. On 5th June 1972, environment was first discussed as an item of international agenda in the U.N. Conference of Human Environment in Stockholm and thereafter 5th June is celebrated all over the world as World Environment Day. Soon after the Stockholm Conference our country took substantive legislative steps for environmental protection. The Wildlife (Protection) Act was passed in 1972, followed by the Water (Prevention and Control of Pollution) Act 1974, the Forest (Conservation) Act, 1980, Air (Prevention and Control of Pollution) Act, 1981 and subsequently the Environment (Protection) Act, 1986. The Wildlife Protection Act, 1972 is a landmark in the protection of wildlife in India especially after the Second World War when the struggle for freedom started taking its shape and the wildlife was ignored to sustain at its own risks. The Indian Board of Wildlife (IBWL) was constituted in the year 1952 after the independence which took the task of preserving the natural wildlife habitats and saving the animals from probable extinction.

The Wildlife Protection Act, 1972 which we read today is a product of process which started long ago in 1887 for the protection of a few wild birds and after addition of wild animals in 1912 and specified plants in 1991 it covered almost all the wildlife resources which need protection and management.

17.3.1 OBJECTIVES AND PRELIMINARIES OF THE ACT:

The main object of the Act is to proved protection to the wild animals’ birds and plants. The Act empowers the Central Govt. to declare certain areas as Sanctuaries or National Parks. The Act prohibits hunting of wild animals; birds etc. and impose punishment for violating the same. The Act contains 66 Sections divided into seven chapters and six schedules. Chapter- I (Secs. 1 and 2) contains short title and definitions. Chapter - II deals with Authorities under the Act. Chapter - III deals with the protection of Specified Plants. Chapter - IV provides for declaration of sanctuaries, National Parks and Closed Areas. Chapter - IV - A deals with Central Zoo Authority and Recognition of Zoos. Chapter- V deals with Trade or Commerce in Wild Animals, Animal Articles and Trophies. Chapter - V- A deals with prohibition of Trade or Commerce in Trophies, Animal Articles etc. Chapter- VI relates to Prevention and Detection of offences and finally Chapter-VII contains Miscellaneous Provisions.

Definitions under Section 2 of Wildlife Protection Act of 1972 Section 2 of Chapter I of the Act provides several definitions. Some of them are as follows -

(1) "Animal" includes amphibians, birds, mammals and reptiles and their young, and also includes, in the cases of birds and reptiles, their eggs;
(2) "animal article" means an article made from any captive animal or wild animal, other than vermin, and includes an article or object in which the whole or any part of such animal has been used, and ivory imported into India and article made there from;

(3) "Board" means the Wild Life Advisory Board constituted under sub-section (1) of section 6;

(4) "captive animal" means any animal, specified in Schedule I, Schedule II, Schedule III or Schedule IV, which is captured or kept or bred in captivity;

(5) "Chief Wild Life Warden" means the person appointed as such under clause (a) of sub-section 4.

(7) "circus" means an establishment, whether stationary or mobile, where animals are kept or used wholly or mainly for the purpose of performing tricks or man oeuvres;

(8) "Closed area" means the area which is declared under sub-section (1) of section 37 to be closed to hunting;

(9) "Collector" means the chief officer in charge of the revenue administration of a district;

(10) "Commencement of this Act", in relation to-

   (a) A state, means commencement of this Act in that State,

   (b) Any provision of this Act, means the commencement of that provision in the concerned State;

(11) "Dealer" means any person who carries on the business of buying and selling any captive animal article, trophy, uncured trophy meat or specified plant;

(12) "Director" means the person appointed as Director of Wild Life Preservation under clause (a) sub-section (1) of section 3;

(12A) "Forest Officer" means the Forest Officer appointed under clause (2) of section 2 of the Indian Forest Act, 1927;

(14) "Government property" means any property referred to in section 39; or section 17H;

(15) "Habitat" includes land, water or vegetation which is the natural home of any wild animal;

(16) "Hunting", with its grammatical variations and cognate expressions, includes,-

   (a) Capturing, killing, poisoning, snaring and trapping of any wild animal and every attempt to do so,

   (b) Driving any wild animal for any of the purposes specified in sub-clause (a),

   (c) Injuring or destroying or taking any part of the body of any such animal or, in the case of wild birds or reptiles, damaging the eggs of such birds or reptiles or disturbing the eggs or nests of such birds of reptiles;
"Land" includes canals, creeks and other water channels, reservoirs, rivers, steamsand lakes, whether artificial or natural, [marshes and wetlands and also includes boulders and rocks];

"License" means a license granted under this Act;

"lives stock" includes buffaloes, bulls, bullocks, camels, cows, donkeys goats, horses, mules, pigs, sheep’s, yaks and also their young;

"Manufacturer" means a manufacturer of animal articles;

"Meat" includes blood, bones, sinew, and eggs, fat and flesh, whether raw or cooked, of any wild animal, other than vermin;

"National Park" means an area declared, whether under section 35 of section 38, or deemed, under sub-section (3) of section 66, to be declared, as a National Park;

"Notification" means a notification published in the Official Gazette;

"Permit" means a permit granted under this Act or any rule made there under;

"Person" includes a firm;

"Prescribed" means by rules made under this Act;

"recognized zoo" means a zoo recognized under section 38H;

"reserve forest" means the forest declared to reserved by the State Government under section 20 of the Indian Forest Act,1927 (16 of 1927);

"sanctuary" means an area declared, whether under section 2[26A] or section 66, to be declared as wild life sanctuary;

"specified plant" means any plant specified in Schedule VI;

"Special game" means any animal specified in Schedule II;

"State Government", in relation to a Union territory, means the Administrator of the Union territory appointed by the President under article 239 of the Constitution;

"Taxidermy", with its grammatical variations and cognate expressions, means the curing, preparation or preservation of trophies;

"territorial waters" shall have the same meaning as in section 3 of the Territorial Waters, Continental Shelf, Exclusive Economic Zoo and other Maritime Zones Act, 1976 (80 of 1976);

"Trophy" means the whole or any part of any captive animal or wild animal, other than vermin, which has been kept or preserved by any means, whether artificial or natural, and includes-

(a) rugs, skins and specimens of such animal mounted in whole or in part through a process of taxidermy, and

(b) antler, horn, rhinoceros horn, hair, feather, nail, tooth, musk, eggs and nests;

"Uncured trophy" means the whole or any captive animal or wild animal, killed wild animal, ambergris, musk and other animal products];
“Vehicle” means any conveyance used for movement on land, water or air and includes buffalo, bull, bullock, camel, donkey, elephant, horse and mule;

“Vermin” means any wild animal specified in Schedule V;

“weapon” includes ammunition, bows and arrows, explosives, firearms, hooks, knives, nets, poison, snares and traps and any instrument or apparatus capable of anaesthetizing, decoying, destroying, injuring or killing an animal;

“wild animal” means any animal found wild in nature and includes any animal specified in Schedule I, Schedule II, Schedule III, Schedule IV, Schedule V, wherever found;

“Wild life” includes any animal, bees, butterflies, crustacea, fish and moths; and aquatic or land vegetation which form part of any habitat;

“Wild Life Warden” means the person appointed as such under clause (b) of sub-section (1) of section 4;

“zoo” means an establishment, whether stationary or mobile, where captive animals are kept for exhibition to the public but does not include a circus and an establishment of a licensed dealer in captive animal.

CHECK YOUR PROGRESS - 1:

1) When did India government pass the forest protection act?

2) Which type of forest are mostly found in India?

3) What is “Vermin?”

17.3.2 AUTHORITIES TO BE APPOINTED OR CONSTITUTED UNDER THE ACT:

The chapter two of the forest protection act of India, describes the different authorities to be appointed or constituted under the act as follows-

1. Appointment of Director and other officers.-

   (1) The Central Government may, for the purposes of this Act, appoint,-

   (a) A Director of Wild Life Preservation;

   (b) Assistant Directors of Wild Life Preservation; and

   (c) such other officers and employees as may be necessary.

   (2) In the performance of his duties and exercise of his powers by or under this Act, the Director shall be subject to such general or special directions, as the Central Government may, from time to time, give.

   (3) The Assistant Directors of Wild Life Preservation and other oficers and employees appointed under this section shall be subordinate to the Director.
2. Appointment of Life Warden and other officers.-

(1) The State Government may, for the purposes of this Act, appoint,-
   (a) a Chief Wild Life Warden;
   (b) Wild Life Wardens;
   (bb) one Honorary Wild Life Warden in each district; and
   (c) such other officers and employees as may be necessary.

(2) In the performance of his duties and exercise of his powers by or under this Act, the Chief Wild Life Warden shall be subject to such general or special directions, as the State Government may, from time to time, give.

(3) The Wild Life Warden, the Honorary Wild Life Warden and other officers and employees appointment under this section shall be subordinate to the Chief Wild Warden.

3. Power to delegate.-

(1) The Director may, with the previous approval of the Central Government, by order in writing, delegate all or any of his powers and duties under this Act to any officer subordinate to him subject to such conditions, if any, as may be specified in the order.

(2) The Chief Wild Life Warden may, with the previous approval of the State Government by order in writing, delegate all or any of his powers and duties under this Act, except those under clause (a) of sub-section (1) of section 11, to any officer subordinate to him subject to such conditions, if any, as may be specified in the order.

(3) Subject to any general or special direction given or condition imposed by the Director of the Chief Wild Life Warden, any person authorized by the Director or the Chief Wild Life Warden to exercise any powers, may exercise those powers in the same manner and to the same effect as if they had conferred on that person directly by this Act and not by way of delegation.

“Sub-section (2) of section 5 of the Wild Life (Protection) Act, 1972 gives power to the concerned authority to delegate his powers to any of his subordinate officers. Therefore, it could not be said that another person except the Chief Wild Life Warden or such other officer who has been authorized by the State Government can file a complaint upon which cognizance can be taken; Jagdish Singh v. State of Bihar, (1985) Cri LJ 1314 (Pat).”

4. Constitution of Wild Life Advisory Board.-

(1) The State Government, or in the case of a Union territory, the Administrator, shall, as soon as may be after the commencement of this Act, constitute a Wild Life Advisory Board consisting of the following members namely :-

   (a) The Minister in charge of forests in the State or Union territory, or, if there is no such Minister, the Chief Secretary to the Government, or, as the
case may be, the Chief Secretary to the Government of the Union territory, who shall be the Chairman;
(b) Two members of the State Legislature or, in the case of a Union territory having a Legislature, two members of the Legislature of the Union territory, as the case may be;
(c) Secretary to the State Government, or the Government of the Union territory, in charge of forests;
(d) the Forest officer in charge of the State Forest Department by whatever designation called, ex officio;
(e) an officer to be nominated by the Director;
(f) Chief Wild Life Warden, ex officio;
(g) officers of the State Government not exceeding five;
(h) such other persons, not exceeding ten, who, in the opinion of the State Government, are interested in the protection of wild life, including the representatives of tribals not exceeding three.]
2[(1A) The State Government may appoint a Vice-Chairman of the Board from amongst the members referred to in clauses (b) and (h) of sub-section (1)].
(2) The State Government shall appoint 1[the Forest Officer in charge of the State Forest Department].
(3) The term of office of the members of the Board referred to in clause (g) of sub-section (1) and the manner of filling vacancies among them shall be such as may be prescribed.
(4) The members shall be entitled to receive such allowances in respect of expenses incurred in the performance of their duties as the State Government may prescribe.
5. Procedure to be followed by the Board.-
(1) The Board shall meet at least twice a year at such place as the State Government may direct.
(2) The Board shall regulate its own procedure (including the quorum).
(3) No act or proceeding of the Board shall be invalid merely by reason of the existence of any vacancy therein or any defect in the constitution thereof or any irregularity in the procedure of the Board not affecting the merits of the case.
6. Duties of Wild Life Advisory Board.-
It shall be the duty of the Wild Life Advisory Board to advise the State Government,-
(a) in the selection of areas to be declared as sanctuaries, National Parks 1[***] and closed areas and the administration thereof;
2[(b) in formulation of the policy for protection and conservation of the wild life and specified plants;]
(c) in any matter relating to the amendment of any Schedule; 3[* * *]
4[(cc) in relation to the measures to be taken for harmonizing the needs of the tribal’s and other dwellers of the forest with the protection and conservation of wild life; and]
(d) In any other matter connected with the protection of wild life which may be referred to it by the State Government.

CHECK YOUR PROGRESS - 2

1) Director of Wild Life Preservation is appointed by:……………………………

2) List any three national parks of north India.

3) Which of the wild animal species are in danger in India?

17.3.3 HUNTING OF WILD ANIMALS:

5[9. **Prohibition of hunting.** - No person shall hunt any wild animal specified in Schedule I, II, III and IV except as provided under section 11 and section 12.]

11. **Hunting of wild animals to be permitted in certain cases.**-

(1) Notwithstanding anything contained in any other law for the time being in force and subject to the provisions of Chapter IV,-

(a) the Chief Wild Life Warden may, if he is satisfied that any wild animal specified in Schedule I has become dangerous to human life or is so disabled or diseased as to be beyond recovery, by order in writing and stating the reasons therefore, permit any person to hunt such animal or cause such animal to be hunted;

(b) the Chief Wild Life Warden or the authorised officer may, if he is satisfied that any wild animal specified in Schedule II, Schedule III, or Schedule IV has become dangerous to human life or to property (including standing crops on any land) or is so disabled or diseased as to be beyond recovery, by order in writing and stating the reasons therefore, permit any person to hunt such animal or cause such animal to be hunted.

(2) The killing or wounding in good faith of any wild animal in defence of oneself or any other person shall not be an offence:

Provided that nothing in this sub-section shall exonerate any person who, when such defence becomes necessary, was committing any act in contravention of any provisions of this Act or any rule or order made there under.

(3) Any wild animal killed or wounded in defense of any person shall be Government property.

12. **Grant of permit for special purposes.**-

Notwithstanding anything contained elsewhere in this Act, it shall be lawful for the Chief Wild Life Warden, to grant 1[* * *] a permit, by an order in writing stating the reasons therefore, to any person, on payment of such fees as
may be prescribed, which shall entitle the holder of such permit to hunt subject to such conditions as may be specified therein, any wild animal specified in such permit, for the purpose of,-

(a) education;
(b) scientific research;
(bb) scientific Management.

17.3.3.1 Protection of specified plants:

17A. Prohibition of picking, uprooting etc. of specified plant - Save as otherwise provided in this Chapter, no person shall-

(a) Willfully pick, uproot, damage, destroy, acquire or collect any specified plant from any forest land and any area specified, by notification, by the Central Government;

(b) Posses, sell, offer for sale, or transfer by way to gift or otherwise, or transport any specified plant, whether alive or dead, or part or derivative thereof;

Provided that nothing in this section prevent a member of a Scheduled tribe, subject to the provisions of Chapter IV, from picking, collecting or possessing in the district he resides any specified plant or part or derivative thereof for his bona fide personal use.

17B. Grants of permit for special purposes - The Chief Wild Life Warden may, with the previous permission of the State Government, grant to any person a permit to pick, uproot, acquire or collect from a forest land or the area specified under section 17A or transport, subject to such conditions as may be specified plant for purpose of-

(a) education;
(b) scientific research;
(c) collection, preservation and display in a herbarium of any scientific institution; or

17C. Cultivation of specified plants without license prohibited –

(1) No person shall cultivate a specified plant except under and in accordance with a license granted by the Chief Wild Life Warden or any other officer authorized by the State Government in this behalf:

Provided that nothing in this section shall prevent, who immediately before the commencement of the Wild Life (Protection) (Amendment) act, 1991, was cultivating a specified plant from carrying on such cultivation for a period of six months from such commencement or where he has made an application within that period for the grant of a license to him, until the license is granted to him or he is informed in writing that a license cannot be granted to him.

(2) Every license granted under this section shall specify the area in which and the conditions, if any, subject to which the licensee shall cultivate a specified plant.
17D. Dealing in specified plants without license prohibited.-

(1) No person shall, except under and in accordance with a license granted by the Chief Wild Life Warden or any other officer authorized by the State Government in this behalf, commence or carry on business or occupation as a dealer in a specified plant or part or derivate thereof:

17E. Declaration of stock –

(1) Every person cultivating, or dealing in, a specified plant or part or derivative thereof shall, within thirty days from the date of commencement of the Wild Life (Protection) (Amendment) Act, 1991 declare to the Chief Wild Life Warden or any other officer authorized by the State Government in his behalf, his stocks of such plants and part or derivative thereof, as the case may be, on the date of such commencement.

17G. Purchase etc. of specified plants - No person shall purchase, receive or acquire any specified plant or part or derivative thereof otherwise than from a licensed dealer:

Provided that nothing in this section shall apply to any person referred to in section 17B.

17.3.5 SANCTUARIES, NATIONAL PARKS AND CLOSED AREAS:

18. Declaration of sanctuary- 2[(1) The State Government may, by notification, declare its intention to constitute any area comprised within any reserve forest or the territorial waters as a sanctuary if it considers that such area is of adequate ecological, faunal, floral, geomorphologic, natural or zoological significance, for the purpose of protecting, propagating or developing wild life or its environment.]

(2) The notification referred to in sub-section (1) shall specify, as nearly as possible, the situation and limits of such area.

19. Collector to determine rights.- 3[When a notification has been issued under section 18] the controller shall inquire into, and determine, the existence, nature and extent of the rights of any person in or over the land comprised within the limits of the sanctuary.

20. Bar of accrual of rights.- After the issue of a notification under section 18, no right shall be acquired in, on or over the land comprised within the limits of the area specified in such notification, except by testamentary or intestate.

21. Proclamation by Collector.- When a notification has been issued under section 18, the collector shall publish in the regional language in every town and village in or in the neighborhood of the area comprised therein, a proclamation-

(a) Specifying, as nearly as possible, the situation and the limits of the sanctuary; and

(b) requiring any person, claiming any right mentioned in section 19, to prepare before the Collector, within two months from the date of such
proclamation, a written claim in the prescribed form, specifying the nature and extent of such right with necessary details and the amount and particulars of compensation, if any, claimed the respect thereof.

35. Declaration of National Parks.-

(1) Whenever it appears to the State Government that an area, whether within a sanctuary or not, is, by reason of its ecological, faunal, floral, geomorphologic or zoological association or importance, needed to be constituted as National Park for the purpose of protecting, propagating or developing wildlife therein or its environment, it may, by notification, declare its intention to constitute such area as a National Park:

38. Power of Central Government to declare areas as sanctuaries or National Parks.-

(1) Where the State Government leases or otherwise transfers any area under its control, not being an area within a sanctuary, to the Central Government, the Central Government may, if it is satisfied that the conditions specified in section 18 are fulfilled in relation to the area so transferred to it, declare such area, by notification, to be a sanctuary and the provisions of sections 18 of 35 (both inclusive), 54 and 55 shall apply in relation to such sanctuary as they apply in relation to a sanctuary declared by the State Government.

(2) The Central Government may, if it is satisfied that the conditions specified in section 35 are fulfilled in relation to any area referred to in subsection (1), whether or not such area has been declared, to be a sanctuary by the Central Government or the State Government, declare such area, by notification, to be a National Park and the provisions of sections 35, 54 and 55 shall apply in relation to such National Parks as they apply in relation to a National Park declared by the State Government.

(3) In relation to a sanctuary or National Park declared by the Central Government, the powers and duties of the Chief Wild Life Warden under the sanctions referred to in subsections (1) and (2), shall be exercised and discharged by the Director or by such other officer as may be authorized by the Director in this behalf and references, in the sections aforesaid, to the State Government shall be construed as references to the Central Government and reference therein to the Legislature of the State shall be construed as a reference to Parliament.

17.4 INDIAN FOREST ACT, 1927:

The Indian Forest Act, 1927 was largely based on previous Indian Forest Acts implemented under the British. The first and most famous was the Indian Forest Act of 1878. Both the 1878 act and the 1927 one sought to consolidate and reserve the areas having forest cover, or significant wildlife, to regulate movement and transit of forest produce, and duty leviable on timber and other
Tourism Impacts

It also defines the procedure to be followed for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest. It defines what is a forest offence, what are the acts prohibited inside a Reserved Forest, and penalties leviable on violation of the provisions of the Act. Reserved Forest is an area of land duly notified under the provisions of India Forest Act or the State Forest Acts having full degree of protection. In Reserved Forests all activities are prohibited unless permitted. Reserved Forest is notified under section 20 of the Indian Forest Act, 1927 [Act 16 of 1927] or under the reservation provisions of the Forest acts of the State Governments of the Indian Union. The manner in which a Reserved Forest, shortly written as RF, has to be constituted is described in section 3 to 20 of the Act. It is within power of a State Government to issue a preliminary notification under section 4 of the Act declaring that it has been decided to constitute such land, as specified in a Schedule with details of its location, area and boundary description, into a Reserved Forest. such a notification also appoints an officer of the State Government, normally the Deputy Commissioner of the concerned district, as Forest Settlement Officer. The Forest Settlement Officer fixes a period not less than three months, to hear the claims and objections of every person having or claiming any rights over the land which is so notified to be reserved. He conducts inquiries into the claims of rights, and may reject or accept the same. He is empowered even to acquire land over which right is claimed. For rights other than that of right of way, right of pasture, right to forest produce, or right to a water course, the Forest Settlement Officer may exclude such land in whole or in part, or come to an agreement with the owner for surrender of his rights, or proceed to acquire such land in the manner prescribed under the Land Acquisition Act, 1894 [Act 1 of 1894]. Once the Forest Settlement Officer settles all the rights either by admitting them or rejecting them, as per the provisions of the Act, and has heard appeals, if any, and settled the same, all the rights with the said piece of land [boundaries of which might have been altered or modified during the settlement process] vest with the State Government. Thereafter, the State Government issues notification under section 20 of the Indian Forest Act, 1927 declaring that piece of land to be a Reserved Forest.

To consolidate the law relating to forests, the transit of forest produce and the duty livable on timber and other forest produce. Section 1 – Short title and Extent i) The act is called Indian Forest Act, 1927 ii) Extends to whole of India except the territories which, immediately before the 1st November, 1956 were comprised in part B states. iii) It applies to territories which, immediately before the 1st November, 1956 were comprised in the states of Bihar, Bombay, Coorg, Delhi, Madhya Pradesh, Orissa, Punjab, Uttar Pradesh and West Bengal but the Government of any state may by notification in the official gazette bring this Act.
into force in the whole or any specified part of the state to which this Act extends
and where it is not in force. Applicability of the Act- Preamble and other
provisions of the Act is intended to cover all categories of forests. Extent of Act-
Act extends to whole of territories specified in first schedule of constitution and
such other territories as may be acquired.

Section 2
Interpretation Clause:-

(1) ‘Cattle’ includes elephant camels, buffaloes, horses, mares, geldings,
ponies, colts, fillies, mules, asses, pigs, rams, ewes, sheep, lambs, goats and kids.

(2) Forest officer- Forest officer means any person whom the State
Government or any officer empowered by the State Government in this behalf,
may appoint to carry out any purpose of the Act.

(3) Forest offence – Offence punishable under this Act or rule made there
under.

(4) Forest Produce- includes:- a. The following whether found in or brought
from a forest or not i.e. timber, charcoal, caoutchoue, catechu, wood-oil, resin,
natural warnish, bark, lac, mahua flowers, mahua seeds, kuth and mayrobalans.

Section (3) Powers to reserve Forests
State Government may constitute any forest land or wasteland which is the
property of Government or over which the Government has 3proprietary rights or
to the whole or any part of the forest produce of which the Government is entitled,
a reserved forest in the manner provided in the Act. (viz sect. 4 to 20)

Section (4) Notification by State Government

(i) Notification by State Government for constituting any land as reserved
forest.

a) Declaring intention to constitute such land as reserved forest.
b) Specifies limits of lands to be notified as RF
c) Appoints Forest Settlement Officer (FSO) to inquire and determine any
right by any individual over such land or over any forest produce
(ii) Officer appointed as FSO shall originally be a person not holding any
forest officer except that of Forest settlement officer.

(iii) No. of FSO appointed shall be decided by State Government but
should not exceed three.

Section (20) Notification declaring forest reserved When the following events
have occurred namely:-

(1) The period fixed under section 6 for preferring claims has elapsed, and
all claims, if any, made under that section or section 9 have been disposed of by
the Forest settlement officer;

(2) If any such claims have been made, the period limited by section 17
for appealing from the orders passed on such claims has elapsed, and 4all appeals
(if any) presented within such period have been disposed of by the appellate officer or Court; and

(3) All lands (if any) to be in included in the proposed forest, which the Forest Settlement Officer has, under section 11, elected to acquire under Land Acquisition Act, 1894, have become vested in the Government under section 16 of the Act.

(4) Until the conditions mentioned in sec. (20) of IFA have been fulfilled a forest can not be deemed to be a RF. The date of notification is taken as deemed date for an area as RF under Sec. 20 (2) of IFA.

(5) In Janu Khan Vs State AIR 1960, Supreme court held that notification issued by central government or state government or by a department of government is a public document, and a certified copy of it may be produced in court for proof is a secondary evidence under sec. 65 of Indian Evidence Act and is taken as relevant document under sec. 78 of IEA 1872.

Section (29) Protected Forests

(1) The State Government may by notification in the Official Gazette declare the provisions of this Chapter applicable to any Forest – land or wasteland which is not included in a reserved forest, but which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest – produce which the Government is entitled.

(2) The forest – land and wastelands comprised in any such notification shall be called a “protected forest”.

(3) No such notification shall be made unless the nature and extent of rights of Government and of private persons in or over the forest land or wasteland comprised therein have been inquired into and recorded at a survey or settlement or in such other manner as the State Government thinks sufficient. Every such record shall be presumed to be correct until the contrary is proved.

Section (41) Power to make rules to regulate transit of forest produce

(1) The control of all rivers and their banks as regards the floating of timber, as well as the control of all timber and other forest produce in transit by land or water, is vested in the State Government, and it may make rules to regulate the transit of all timber and other forest produce.

(2) In particular and without prejudice to the generality of the foregoing power such rules may:-

a. Prescribe the routes by which alone timber or other forest produce may be imported, exported or moved into, from or within [the State];
b. Prohibit the import or export or moving of such timber or other produce without a pass from an officer duly authorized to issue the same, or otherwise than in accordance with the conditions of such pass.
17.4.1 FOREST CONSERVATION ACT, 1980:

An Act to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto. There are five main clauses in Forest Conservation Act which guides through the use of forest resources and limit the harm to forest reserves. This act is extended to all the states of India except Jammu and Kashmir and it came into existence on 25th October, 1980.

Be it enacted by Parliament in the Thirty-first Year of the Republic of India as follows:

(Short title, extent and commencement)

(1) This Act may be called the Forest (Conservation) Act, 1980.
(2) It extends to the whole of India except the State of Jammu and Kashmir.
(3) It shall be deemed to have come into force on the 25th day of October, 1980.

2. Restriction on the de-reservation of forests or use of forest land for non-forest purpose. Notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing-

(i) that any reserved forest (within the meaning of the expression "reserved forest" in any law for the time being in force in that State) or any portion thereof, shall cease to be reserved;
(ii) that any forest land or any portion thereof may be used for any non-forest purpose.
(iii) that any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organisation not owned, managed or controlled by Government;
(iv) that any forest land or any portion thereof may be cleared of trees which have grown naturally in that land or portion, for the purpose of using it for reafforestation.]

(a) the cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horticultural crops or medicinal plants;
(b) any purpose other than reafforestation, but does not include any work relating or ancillary to conservation, development and management of forests and wild life, namely, the establishment of check-posts, fire lines, wireless communications and construction of fencing, bridges and culverts, dams, waterholes, trench marks, boundary marks, pipeline or other like purposes]

3. Constitution of Advisory committee. The Central government may constitute consisting of such number of persons as it may deem fit to advise that Government with regard to-

(i) the grant of approval under section 2; and
(ii) Any other matter connected with the conservation of forests which may be referred to it by the Central Government.

3A. **Penalty for contravention of the provisions of the Act.**

Whoever contravenes or abets the contravention of any of the provisions of section 2, shall be punishable with simple imprisonment for a period which may extend to fifteen days.

3B. **Offences by authorities and Government departments.**

(1) **Where any offence under this Act has been committed-**

(a) by any department of Government the head of the department; or

(b) by any authority, every person who, at the time the offence was committed, was directly in charge of, and was responsible to, the authority for the conduct of the business of the authority as well as the authority; shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly: Provided that nothing contained in this sub-section shall render the head of the department or any person referred to in clause (b), liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) **Notwithstanding anything contained in sub-section (1),**

where an offence punishable under the Act has been committed by a department of Government or any authority referred to in clause (b) of sub-section (1) and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the head of the department, or in the case of an authority, any person other than the persons referred to in clause (b) of sub-section (1), such officer or persons shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.]

4. **Power to make rules.**

(1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act.

(2) Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.
5. Repeal and saving.

(1) The Forest (Conservation) Ordinance, 1980 (17 of 1980) is hereby repealed.

(2) Notwithstanding such repeal, anything done or any action taken under the provisions of the said Ordinance shall be deemed to have been done or taken under the corresponding provisions of this Act.

CHECK YOUR PROGRESS-3:
1) When was the Indian forest conservation act passed?

2) In which states tropical rain forest mostly found?

3) How many clauses are there in forest conservation act, 1980?

17.5 SUMMARY:

With the rapid modernization and development of various types of infrastructure the British Indian government passed the forest act in 1927. The Indian Forest Act, 1927 was largely based on previous Indian Forest Acts implemented under the British. The first and most famous was the Indian Forest Act of 1878. Both the 1878 act and the 1927 one sought to consolidate and reserve the areas having forest cover, or significant wildlife, to regulate movement and transit of forest produce, and duty leviable on timber and other forest produce. It also defines the procedure to be followed for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest. It defines what is a forest offence, what are the acts prohibited inside a Reserved Forest, and penalties leviable on violation of the provisions of the Act. Forest Conservation Act is an act to provide for the conservation of forests and for matters connected with protection of trees from illegal felling and destruction. This act covers all aspects of forests including reserve forests, protected forests or any forest land irrespective of its ownership.

There are five main clauses in Forest Conservation Act which guides through the use of forest resources and limit the harm to forest reserves. This act is extended to all the states of India except Jammu and Kashmir and it came into existence on 25th October, 1980.

17.6 GLOSSARY:

- **Ayurveda**: medicine is a system of traditional medicine native to the Indian subcontinent and a form of alternative medicine
- **IBWL**: the Indian board of wildlife
• **Vermin:** are pests or nuisance animals, especially those that threaten human society by spreading diseases

• **Delegate:** A delegate is someone who speaks or acts on behalf of an organization at a meeting or conference between organizations of the same level.

• **Constitution:** a set of fundamental principles or established precedents according to which a state or other organization is governed

17.7 **CHECK YOUR PROGRESS:**

**Check your progress-1**

1) 1927
2) Tropical deciduous forest
3) Pests or nuisance animals, especially those that threaten human society by spreading diseases or destroying crops

**Check your progress-2**

1) Central government
2) Jim Corbett National Park, Gangotri National Park, Nanda Devi National Park
3) White-bellied Heron, Himalayan Quail, Himalayan Wolf

**Check your progress-3**

1) 1980
2) Arunachal Pradesh, Assam, Meghalaya
3) 5 clauses

17.8 **REFERENCES:**

• **Handbook of Environment, Forest & Wildlife Protection Laws in India**, Natraj Publishers in collaboration with Wildlife Protection Society of India

• **Preservation of Wildlife in India by BNHS**

• **Writings on Human Rights, Law and Society in India: A Combat Law Anthology** edited by Harsh Dobhal

• **Environmental Protection, Law and Policy in India by Kailash Thakur**

• **Envfor.nic.in/legis/forest/forest4.html**

• **WWW.vanashakti.in/resources_law3.html**
17.9 SUGGESTED READINGS:

- Handbook of environment, forest & wildlife protection laws in India, Natraj Publishers in collaboration with Wildlife Protection Society of India
- ENVFOR.NIC.IN/LEGIS/FOREST/FOREST4.HTML
- WWW.VANASHAKTI.IN/RESOURCES_LAW3.HTML

17.10 MODEL QUESTIONS:

**Short answer type questions:**

1) What was the need of wild life protection? Explain
2) What do you understand by the term wild life?
3) What is the importance of Ayurveda? How it related to forests?
4) Write short notes on the followings-
   (a) Wildlife Protection Act
   (b) Types of Forests
   (c) Hunting
   (d) Sanctuary

**Long answer type questions:**

1) What is the importance of wildlife? Discuss the objectives and preliminaries of wild life protection act of India, 1972.
2) Discuss the need of national parks and sanctuaries. Describe any three national parks of India with the related detail.
3) How the forest protection act was formed in India? What are the main objectives of this act?
UNIT 18: WATER AND AIR PROTECTION ACTS

Structure:
18.1 Introduction
18.2 Objectives
18.3 protections of water and air resources
   18.3.1 Water protection act, preliminaries
   18.3.2 Powers of the central and state boards
   18.3.3 Prevention and control of water pollution
   18.3.4 Air protection act, preliminaries
   18.3.5 Central and state boards for the prevention and control of air pollution
   18.3.6 Powers and functions of boards
   18.3.7 Prevention and control of air pollution
18.4 Summary
18.5 Glossary
18.6 Check your progress
18.7 References
18.8 Suggested readings
18.9 Model questions

18.1 INTRODUCTION:

Water and air the two most valuable resources of our surrounding environment. With the rapid economical development and industrialization these resources are polluted rapidly. Water and air protection acts were designed to conserve and protect their usage and from different types of pollution including mass tourism activities. Tourism activities around the natural environment depend much on these two valuable resources.

Water protection act is an act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith. Whereas it is expedient to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for
the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution and for conferring on and assigning to such Boards powers and functions relating thereto; the air protection act is An Act to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connecting therewith. Whereas decisions were taken at the United Nations Conference on the Human Environment held in Stockholm in June, 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution: And whereas it is considered necessary to implement the decisions aforesaid in so far as they relate to the preservation of the quality of air and control of air pollution. With the increasing industrialization and the tendency of the majority of industries to congregate in area which is already heavily industrialized, the problem of air pollution has begun to be felt in the country. The problem is more acute in those heavily industrialized areas which are also densely populated. Short-term studies conducted by the National Environmental Engineering Research Institute, Nagpur, have confirmed that the cities of Calcutta, Bombay, Delhi, etc. are facing the impact of air pollution on a steadily increasing level. The presence in air, beyond certain limits, of various pollutants discharged through industrial emission and from certain human activities connected with traffic, heating, use of domestic fuel, refuse, incinerations, etc, has a detrimental effect on the health of the people as also on animal life, vegetation and property.

In the United Nations Conference on the Human Environment held in Stockholm in June, 1972 in which India participated, decisions were taken to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution. The government has decided to implement these decisions of the said Conference in so far as they relate to the preservation of the quality of air and control of air pollution.

The Air Act is implemented by the Central and State Governments and the Central and State Boards. Over the past few years, the implementing agencies have experienced some administrative and practical difficulties in effectively implementing the provisions of this Act and have brought these to the notice of Government. The ways and means to remove these difficulties have been thoroughly examined in consultation with the concerned Central Government departments, the State Government and the Central and State Boards. Taking into account the views expressed. Governments have decided to make certain amendments to the Act in order to remove such difficulties.
18.2 OBJECTIVES:

After reading this unit carefully, learners will be able to understand-

- Basics of water and air protection acts
- Preliminaries and governing authorities of these acts
- Provisions for controlling the usage and prevention of pollution
- Other miscellaneous facts about

18.3 PROTECTIONS OF WATER AND AIR RESOURCES:

All the sustainable development activities related to tourism development need to protect the water and air resources from get polluted. Water resources are sources of water that are useful or potentially useful. Uses of water include agricultural, industrial, household, recreational and environmental activities. Virtually all of these human uses require fresh water. 97 percent of the water on the Earth is salt water. However, only three percent is fresh water; slightly over two thirds of this is frozen in glaciers and polar ice caps. The remaining unfrozen fresh water is found mainly as groundwater, with only a small fraction present above ground or in the air. Fresh water is a renewable resource, yet the world's supply of groundwater is steadily decreasing, with depletion occurring most prominently in Asia and North America, although it is still unclear how much natural renewal balances this usage, and whether ecosystems are threatened. The framework for allocating water resources to water users (where such a framework exists) is known as water rights. Air pollution is a problem for all of us. The average adult breathes over 3,000 gallons of air every day. Children breathe even more air per pound of body weight and are more susceptible to air pollution. Many air pollutants, such as those that form urban smog and toxic compounds, remain in the environment for long periods of time and are carried by the winds hundreds of miles from their origin. Millions of people live in areas where urban smog, very small particles, and toxic pollutants pose serious health concerns. People exposed to high enough levels of certain air pollutants may experience burning in their eyes, an irritated throat, or breathing difficulties. Long-term exposure to air pollution can cause cancer and long-term damage to the immune, neurological, reproductive, and respiratory systems. In extreme cases, it can even cause death.

18.3.1 WATER PROTECTION ACT, PRELIMINARIES:

The Water (Prevention and Control of Pollution) Act, 1974 is an act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to
carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

Whereas it is expedient to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution and for conferring on and assigning to such Boards powers and functions relating thereto; and whereas Parliament has no power to make laws for the States with respect to any of the matters aforesaid except as provided in articles 249 and 250 of the Constitution; and whereas in pursuance of clause (1) of article 252 of the Constitution resolutions have been passed by all the Houses of the Legislatures of the States of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal to the effect that the matters aforesaid should be regulated in those States by Parliament by law; BE it enacted by Parliament in the Twenty-fifth year of Republic of India as follows:-

1. **Short title, application and commencement**

   (1) This Act may be called the Water (Prevention and Control of Pollution) Act, 1974.

   (2) It applies in the first instance to the whole of the States of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal and the Union Territories; and it shall apply to such other State which adopts this Act by resolution passed in that behalf under clause (1) of article 252 of the Constitution.

   (3) It shall come into force at once in the States of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal and in the Union territories; and in any other State which adopts this Act under clause (1) of article 252 of the Constitution on the date of such adoption and any reference in this Act to the commencement of this Act shall, in relation to any State or Union territory, mean the date on which this Act comes into force in such State or Union territory.

2. **Definitions** - In this Act, unless the context otherwise requires:

   (a) "Board" means the Central Board or a State Board,

   (b) "Central Board" means the Central Pollution Control Board constituted under section 3;

   (c) "Member" means a member of a Board and includes the chairman thereof;

   (d) "Occupier", in relation to any factory or premises, means the person who has control over the affairs of the factory or the premises, and includes, in relation to any substance, the person in possession of the substance;
(3) [(dd) "outlet" includes any conduit pipe or channel, open or closed, carrying sewage or trade effluent or any other holding arrangement which causes or is likely to cause, pollution;]

(e) "pollution" means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms;

Image: Water Quality Trend in India

(f) "Prescribed" means prescribed by rules made under this Act by the Central Government or, as the case may be, the State Government;

(g) "Sewage effluent" means effluent from any sewerage system or sewage disposal works and includes sullage from open drains;

(4) [(gg) "sewer" means any conduit pipe or channel, open or closed, carrying sewage or trade effluent;]

(5) [(h) "State Board" means a State Pollution Control Board constituted under section 4;]

(i) "State Government" in relation to a Union territory means the Administrator thereof appointed under article 239 of the Constitution;

(j) "Stream" includes –

(i) Water course (whether flowing or for the time being dry); (ii) inland water (whether natural or artificial);

(iii) Subterranean waters;
(iv) Sea or tidal waters to such extent or, as the case may be, to such point as the State Government may, by notification in the Official Gazette, specify in this behalf;

(k) "Trade effluent" includes any liquid, gaseous or solid substance which is discharged from any premises used for carrying on any (6) [industry, operation or process, or treatment and disposal system], other than domestic sewage.

18.3.2 POWERS OF THE CENTRAL AND STATE BOARDS:

3. Constitution of Central Boards -

1. The Central Government shall, with effect from such date (being a date not later than six months of the commencement of this Act in the States of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal and in the Union territories) as it may, by notification in the Official Gazette, appoint, constitute a Central Board to be called the(7)[Central Pollution Control Board] to exercise the powers conferred on and perform the functions assigned to that Board under this Act.

2. The Central Board shall consist of the following members, namely:-

(a) a full time chairman, being a person having special knowledge or practical experience in respect of (8)[matters relating to environmental protection] or a person having knowledge and experience in administering institutions dealing with the matters aforesaid, to be nominated by the State Government:

(b) (9) [such number of officials, not exceeding five,] to be nominated by the Central Government to represent that Government;

(c) such number of persons, not exceeding five, to be nominated by the Central Government from amongst the members of the State Boards, of whom not exceeding two shall be from those referred to in clause (c) of sub-section (2) of section 4;

(d) (10)such number of non-officials, not exceeding three] to be nominated by the Central Government to represent the interest of agriculture, fishery or industry or trade or any other interest which, in the opinion of the State Government, ought to be represented;

(e) Two persons to represent the companies or corporations owned, controlled or managed by the Central Government, to be nominated by that Government;

(f) a full-time member-secretary, possessing qualifications, knowledge and experience of scientific, engineering or management aspects of pollution control, to be appointed by the Central Government.]

3. The Central Board shall be a body corporate with the name aforesaid having perpetual succession and a common seal with power, subject to the
provisions of this Act, to acquire, hold and dispose of property and to contract, and may, by the aforesaid name, sue or be sued.

4. Constitution of State Boards -

1. The State Government shall, with effect from such date (12) as it may, by notification in the Official Gazette, appoint, constitute a (State Pollution Control Board), under such name as may be specified in the notification, to exercise the powers conferred on and perform the functions assigned to that Board under this Act.

2. A State Board shall consist of the following members, namely:-

(a) (chairman, being a person having special knowledge or practical experience in respect of matters relating to environmental protection or a person having knowledge and experience in administering institutions dealing with the matters aforesaid, to be nominated by the State Government:

(b) (such number of officials, not exceeding five,) to be nominated by the State Government to represent that Government;

(c) (such number of persons, not exceeding five,) to be nominated by the State Government from amongst the members of the local authorities functioning within the State;

(d) (such number of non-officials, not exceeding three) to be nominated by the State Government represent the interest of agriculture, fishery or industry to trade or any other interest which, in the opinion of the State Government, ought to be represented;

(e) Two persons to represent the companies or corporations owned, controlled or managed by the State Government, to be nominated by that Government;

(f) a full time member-secretary, possessing qualifications, knowledge and experience of scientific, engineering or management aspects of pollution control, to be appointed by the State Government.

3. Every State Board shall be a body corporate with the name specified by the State Government in the notification under sub-section (1), having perpetual succession and a common seal with power, subject to the provisions of this Act, to acquire, hold and dispose of property and to contract, and may, by the said name, sue or be sued.

4. Notwithstanding anything contained in this section, no State Board shall be constituted for a Union territory and in relation to a Union territory, the Central Board shall exercise the powers and perform the functions of a State Board for that Union territory:
Provided that in relation to a Union territory the Central Board may delegate all or any of its powers and functions under this sub-section to such person or body of persons as the Central Government may specify.

5. Terms and conditions of service of members -

(1) Save as otherwise provided by or under this Act, a member of a Board, other than, a member-secretary, shall hold office for a term of three years from the date of his nomination: Provided that a member shall, notwithstanding the expiration of his term, continue to hold office until his successor enters his office.

(21) [(2) The term of office of a member of a Board nominated under clause (b) or clause (e) of sub-section (2) of section 3 or clause (b) or clause (e) of sub-section (2) of section 4 shall come to an end as soon as he ceases to hold the office under the Central Government or the State Government or, as the case may be, the company or corporation owned, controlled or managed by the Central Government or the State Government, by virtue of which he was nominated.]

(3) The Central Government or, as the case may be, the State Government may, if it thinks fit, remove any member of a Board before the expiry of his term of office, after giving him a reasonable opportunity of showing cause against the same.

(4) A member of a Board, other than the member-secretary, may at any time resign his office by writing under his hand addressed -

(a) in the case of chairman, to the Central Government, or as the case may be, the State Government; and

(b) in any other case, to the chairman of the Board; and the seat of the chairman or such member shall thereupon become vacant.

(5) A member of a Board, other than the member-secretary, shall be deemed to have vacated his seat if he is absent without reason, sufficient in the opinion of the Board, from three consecutive meetings of the Board,(22) [or where he is nominated under clause (c) or clause (e) of sub-section (2) of section 3 or under clause (c) or clause (e) of sub-section (2) of section 4, if ceases to be a member of the State Board or the local authority or, as the case may be, of the company or corporation owned, controlled or managed by the Central Government or the State Government and such vacation of seat shall, in either case, take effect from such date as the Central Government or, as the case may be, the State Government may, by notification in the Official Gazette, specify.]

(6) A casual vacancy in a Board shall be filled by a fresh nomination and the person nominated to fill the vacancy shall hold office only for the remainder of the term for which the member in whose place he was nominated.

(7) A member of a Board (23) [shall be eligible for re-nomination].

(8) The other term and conditions of service of a member of a Board, other than the chairman and member-secretary, shall be such as may be prescribed.
(9) The other terms and conditions of service of the chairman shall be such as may be prescribed.

6. Disqualifications -

(1) No person shall be a member of a Board, who -
(a) is, or at any time has been adjudged insolvent or has suspended payment of his debts or has compounded with his creditors, or
(b) is of unsound mind and stands so declared by a competent court, or
(c) is, or has been, convicted of an offence which, in the opinion of the Central Government or as the case may be, of the State Government, involves moral turpitude, or
(d) is, or at any time has been, convicted of an offence under this Act, or
(e) has directly or indirectly by himself or by any partner, any share or interest in any firm or company carrying on the business of manufacture, sale or hire of machinery, plant, equipment, apparatus or fittings for the treatment of sewage or trade effluents, or
(f) is a director or a secretary, manager or other salaried officer or employee of any company or firm having any contract with the Board, or with the Government constituting the Board or with a local authority in the State, or with a company or corporation owned, controlled or managed by the Government, for the carrying out of sewerage schemes or for the installation of plants for the treatment of sewage or trade effluents, or
(g) has so abused, in the opinion of the Central Government or as the case may be, of the State Government, his position as a member, as to render his continuance on the Board detrimental to the interest of the general public.

(2) No order of removal shall be made by the Central Government or the State Government, as the case may be, under this section unless the member concerned has been given a reasonable opportunity of showing cause against the same.

(3) Notwithstanding anything contained in sub-sections (1) and (7) of section 5, a member who has been removed under this section shall not be eligible for re-nomination as a member.

7. Vacation of seats by members –

If a member of a Board becomes subject to any of the disqualifications specified in section 6, his seat shall become vacant.

8. Meetings of Boards –

A Board shall meet at least once in every three months and shall observe such rules of procedure in regard to the transaction of business at its meetings as may be prescribed: Provided that if, in the opinion of the chairman, any business of an urgent nature is to be transacted, he may convene a meeting of the Board at such time as he thinks fit for the aforesaid purpose.
9. Constitution of Committees -

(1) A Board may constitute as many committees consisting wholly of members or wholly of other persons or partly of members and partly of other persons, and for such purpose or purposes as it may think fit.

(2) A committee constituted under this section shall meet at such time and at such place, and shall observe such rules of procedure in regard to the transaction of business at its meetings, as may be prescribed.

(3) The members of a committee (other than the members of Board) shall be paid such fees and allowances, for attending its meetings and for attending to any other work of the Board as may be prescribed.

10. Temporary association of persons with Board for particular purposes -

(1) A Board may associate with itself in such manner, and for such purposes, as may be prescribed any person whose assistance or advice it may desire to obtain in performing any of its functions under this Act.

(2) A person associated with the Board under sub-section (1) for any purpose shall have a right to take part in the discussions of the Board relevant to that purpose, but shall not have a right to vote at a meeting of the Board, and shall not be a member for any other purpose.

(24)[(3) A person associated with the Board under sub-section (1) for any purpose shall be paid such fees and allowances, for attending its meetings and for attending to any other work of the Board, as may be prescribed.]

11. Vacancy in Board not to invalidate acts or proceedings –

No act or proceeding of a Board or any committee thereof shall be called in question on the ground merely of the existence of any vacancy in or, any defect in the constitution of, the Board of such committee, as the case may be.

(25)[11A. Delegation of power to chairman - The chairman of a Board shall exercise such powers and perform such duties as may be prescribed or as may, from time to time, be delegated to him by the Board.]

12. Member-secretary and officers and other employees of Board –

Terms and conditions of service of the member-secretary shall be such as may be prescribed.

1. The member-secretary shall exercise such powers and perform such duties as may be prescribed or as my, from time to time, be delegated to him by the Board or its chairman.

2. Subject to such rules as may be made by the Central Government or, as the case may be, the State Government in this behalf, a Board may appoint such officers and employees as it considers necessary for the efficient performance of its functions.

(26) ***
(27) [(2A) The method of recruitment and the terms and conditions of service (including the scales of pay) of the officers (other than the member-secretary) and other employees of the Central Board or a State Board shall be such as may be determined by regulations made by the Central Board, or as the case may be, by the State Board:

Provided that no regulation made under this sub-section shall take effect unless -

(a) in the case of a regulation made by the Central Board, it is approved by the Central Government; and

(b) in the case of a regulation made by a State Board, it is approved by the State Government.]

(28) [(2B) The Board may, by general or special order, and subject to such conditions and limitations, if any, as may be specified in the order, delegate to any officer of the Board such of its powers and functions under this Act it may deem necessary.]

3. Subject to such conditions as may be prescribed, a Board may from time to time appoint any qualified person to be a consulting engineer to the Board and pay him such salaries and allowances and subject him to such other terms and conditions of service as it thinks fit.

CHECK YOUR PROGRESS-1:

1) What is BOD related to water pollution

2) In village and towns which chemical is used to purify the drinking water?

3) In which year Indian parliament passed the water protection act

4) The Ganga action plan was, launched by …………………….., the then Prime Minister of India on ………………………..

5) What is the percentage of fresh water, out of total available water on the earth?
18.3.4 AIR PROTECTION ACT 29 MARCH 1981:

An Act to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connecting therewith. “Whereas decisions were taken at the United Nations Conference on the Human Environment held in Stockholm in June, 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution: And whereas it is considered necessary to implement the decisions aforesaid in so far as they relate to the preservation of the quality of air and control of air pollution.

Statement of objects and reasons:

1. With the increasing industrialization and the tendency of the majority of industries to congregate in areas which are already heavily industrialized, the problem of air pollution has begun to be felt in the country. The problem is more acute in those heavily industrialized areas which are also densely populated. Short-term studies conducted by the National Environmental Engineering Research Institute, Nagpur, have confirmed that the cities of Calcutta, Bombay, Delhi, etc. are facing the impact of air pollution on a steadily increasing level.

2. The presence in air, beyond certain limits, of various pollutants discharged through industrial emission and from certain human activities connected with traffic, heating, use of domestic fuel, refuse, incinerations, etc, has a detrimental effect on the health of the people as also on animal life, vegetation and property.

3. In the United Nations Conference on the Human Environment held in Stockholm in June, 1972 in which India participated, decisions were taken to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution. The government has decided to implement these decisions of the said Conference in so far as they relate to the preservation of the quality of air and control of air pollution.

4. It is felt that there should be an integrated approach for tackling the environmental problems relating to pollution. It is, therefore, proposed that the Central Board for the Prevention and Control of Water Pollution constituted under the Water (Prevention and Control of Pollution) Act, 1974, will also perform the functions of the Central Board for the Prevention and Control of Air Pollution and of a State Board for the Prevention and Control of Air Pollution in the Union Territories. It is also proposed that the State Boards constituted under that Act,
separate State Boards for the Preservation and Control of Air Pollution are proposed to be constituted.

18.3.4 AIR PROTECTION ACT, PRELIMINARIES:

1. Short title, extent and commencement. –

(1) This Act may be called the Air (Prevention and Control of Pollution) Act, 1981.

(2) It extends to the whole of India.

(3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

2. Definitions. – In this Act, unless the context otherwise requires, -

(a) “Air pollutant” means any solid, liquid or gaseous substance [(including noise)] present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment;

(b) “Air pollution” means the presence in the atmosphere of any air pollutant;

(c) “Approved appliance” means any equipment or gadget used for the burning of any combustible material or for generating or consuming any fume, gas or particulate matter and approved by the State Board for the purposes of this Act;

(d) “Approved fuel” means any fuel approved by the State Board for the purpose of this Act;

(e) “Automobile” means any vehicle powered either by internal combustion engine or by any method of generating power to drive such vehicle by burning fuel;

(f) “Board” means the Central Board or a State Board.

(g) “Central Board” means the [Central Pollution Control Board] constituted under Sec. 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);

(h) “Chimney” includes any structure with an opening or outlet from or through which any air pollutant may be emitted;

(i) “Control equipment” means any apparatus, device, equipment or system to control the quality and manner of emission of any air pollutant and includes any device used for securing the efficient operation of any industrial plant;

(j) “Emission” means any solid or liquid or gaseous substance coming out of any chimney, duct or flue or any other outlet;

(k) “Industrial plant” means any plant used for any industrial or trade purposes and emitting any air pollutant into the atmosphere;
(l) “Member” means a member of the Central Board or a State Board, as the case may be, and includes the Chairman thereof;

(m) “Occupier”, in relation to any factory or premises, means the person who has control over the affairs of the factory or the premises, and includes, in relation to any substance, the person in possession of the substance;

(n) “Prescribed” means prescribed by rules made under this Act by the Central Government or, as the case may be, the State Government;

(o) “State Board” means: (i) in relation to a State in which the Water (Prevention and Control of Pollution) Act, 1974), is in force and the State Government has constituted for that state a [State Pollution Control Board] under sec. 4 of that Act, the said State Board; and (ii) in relation to any other State, the State Board for the Prevention and Control of Air Pollution constituted by the State Government under Sec. 5 of this Act.

CHECK YOUR PROGRESS-2:

1) When did the air protection act come into existence?

2) What is the percentage of nitrogen in the air?

3) What is the normal percentage of oxygen in the earth’s atmosphere?

CENTRAL AND STATE BOARDS FOR THE PREVENTION AND CONTROL OF AIR POLLUTION:

6 [3. Central Board for the Prevention and Control of Air Pollution.

The Central Board for the Prevention and Control of Water Pollution constituted under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974), shall, without prejudice to the exercise and performance of its powers and functions under this Act, exercise the powers and perform the functions of the Central Board for the Prevention and Control of Air Pollution under this Act.

7[4. State Boards for the Prevention and Control of Water Pollution to be, State Boards for the Prevention and Control of Air Pollution.

In any State in which the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974), is in force and the State Government has constituted for that State a State Board for the Prevention and Control of Water Pollution under section 4 of that Act, such State Board shall be deemed to be the State Board for the Prevention and Control of air Pollution constituted under section 5 of this Act
and accordingly that State Board for the Prevention and Control of Water Pollution shall, without prejudice to the exercise and performance of its powers and functions under that Act, exercise the powers and perform the functions of the State Board for the Prevention and Control of Air Pollution under this Act.]


(1) In any State in which the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974), is not in force, or that Act is in force but the State Government has not constituted a State Board for the Prevention and Control of Water Pollution] under that Act, the State Government shall, with effect from such date as it may, by notification in the Official Gazette, appoint, constitute a State Board for the Prevention and Control of Air Pollution under such name as may be specified in the notification, to exercise the powers conferred on, and perform the functions assigned to, that Board under this Act.

(2) A State Board constituted under this Act shall consist of the following members, namely:-

(a) A Chairman, being a person, having a person having special knowledge or practical experience in respect of matters relating to environmental protection, to be nominated by the State Government:

Provided that the Chairman may be either whole-time or part-time as the State Government may think fit;

(b) Such number of officials, not exceeding five, as the State Government may think fit, to be nominated by the State Government to represent that government;

(c) such number of persons, not exceeding five, as the State Government may think fit, to be nominated by the State Government from amongst the members of the local authorities functioning within the State;

(d) such number of non-officials, not exceeding three, as the State Government may think fit, to be nominated by the State Government to represent the interest of agriculture, fishery or industry or trade or labor or any other interest, which in the opinion of that government, ought to be represented;

(e) Two persons to represent the companies or corporations owned, controlled or managed by the State Government, to be nominated by that Government;

9[(f) a full-time member-secretary having such qualifications knowledge and experience of scientific, engineering or management aspects of pollution control as may be prescribed, to be appointed by the State Governments provided that the State Government shall ensure that not less than two of the members are persons having special knowledge or practical experience in, respect of matters relating to the improvement of the quality of air or the prevention, control or abatement of air pollution.]
(3) Every State Board constituted under this Act shall be a body corporate
with the name specified by the State Government in the notification issued under
sub-section (1), having perpetual succession and a common seal with power,
subject to the provisions of this Act, to acquire and dispose of property and to
contract, and may by the said name sue or be sued.

6. Central Board to exercise the powers and perform the functions of a
State Board in the Union territories. No State Board shall be constituted for a
Union territory and in relation to a Union territory; the Central Board shall
exercise the powers and perform the functions of a State Board under this Act for
that Union territory. Provided that in relation to any Union territory the Central
Board may delegate all or any of its powers and functions under this section to
such person or body of persons as the Central Government may specify.

7. Terms and conditions of service of members.
8. Disqualifications.
9. Vacation of seats by members.
10. Meetings of Board.
12. Temporary association of persons with Board for particular purposes.
13. Vacancy in Board not to invalidate acts or proceedings.
14. Member-secretary and officers and other employees of State Boards.
15. Delegation of powers.

18.3.6 POWERS AND FUNCTIONS OF BOARDS:

16. Functions of Central Board.

(1) Subject to the provisions of this Act, and without prejudice to the
performance, of its functions under the Water (Prevention and Control of
Pollution) Act, IL974 (6 of 1974), the main functions of the Central Board shall
be to improve the quality of air and to prevent, control or abate air pollution in the
country.

(2) In particular and without prejudice to the generality of the foregoing
functions, the Central Board may-

(a) Advise the Central Government on any matter concerning the
improvement of the quality of air and the prevention, control or abatement of air
pollution;

(b) Plan and cause to be executed a nation-wide programme for the
prevention, control or abatement of air pollution;

(c) Co-ordinate the activities of the State and resolve dispute among them;

(d) Provide technical assistance and guidance to the State Boards, carry
out and sponsor investigations and research relating to problems of air pollution
and prevention, control or abatement of air pollution;
(dd) perform such of the function of any State Board as may, be specified in and order made under sub-section (2) of section 18;

(e) Plan and organize the training of persons engaged or to be engaged in programmes for the prevention, control or abatement of air pollution on such terms and conditions as the Central Board may specify;

(f) Organize through mass media a comprehensive programme regarding the prevention, control or abatement of air pollution;

(g) collect, compile and publish technical and statistical data relating to air pollution and the measures devised for its effective prevention, control or abatement and prepare manuals, codes or guides relating to prevention, control or abatement of air pollution;

(h) Lay down standards for the quality of air.

(i) Collect and disseminate information in respect of matters relating to air pollution;

(j) Perform such other functions as may be prescribed.

(3) The Central Board may establish or recognize a laboratory or laboratories to enable the Central Board to perform its functions under this section efficiently.

(4) The Central Board may-

(a) Delegate any of its functions under this Act generally or specially to any of the committees appointed by it;

(b) Do such other things and perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes Of this Act.

18.3.7 PREVENTION AND CONTROL OF AIR POLLUTION:

19. Power to declare air pollution control areas.

(1) The State Government may, after consultation with the State Board, by notification in the Official Gazette declare in such manner as may be prescribed, any area or areas within the State as air pollution control area or areas for the purposes of this Act.

(2) The State government may, after consultation with the State Board, by notification in the Official Gazette,-

(a) Alter any air pollution control area whether by way of extension or reduction ;

(b) Declare a new air pollution control area in which may be merged one or more existing air pollution control areas or any part or parts thereof.

(3) If the State Government, after consultation with the State Board, is of opinion that the use of any fuel, other than an approved fuel, in any air pollution control area or part thereof, may cause or is likely to cause air pollution, it may,
by notification in the Official Gazette, prohibit the use of such fuel in such area or part thereof with effect from such date (being not less than three months from the date of publication of the notification) as may be specified in the notification.

(4) The State Government may, after consultation with the State Board, by notification in the Official Gazette, direct that with effect from such date as may be specified therein, no appliance, other than an approved appliance, shall be used in the premises situated in an air pollution control area: provided that different dates may be specified for different parts of an air pollution control area or for the use of different appliances.

(5) If the State Government, after consultation with the State Board, is of opinion that the burning of any material (not being fuel) in any air pollution control area or part thereof may cause or is likely to cause air pollution, it may, by notification in the Official Gazette, prohibit the burning of such material in such area or part thereof.

20. Power to give instructions for ensuring standards for emission from automobiles.

With a view to ensuring that the standards for emission of air pollutants from automobiles laid down by the State Board tinder clause (g) of sub-section (1) of section 17 are complied with, the State Government shall, in consultation with the State Board, give such instructions as may be deemed necessary to the concerned authority in charge of registration of motor vehicles under the Motor Vehicles Act, 1939 (Act 4 of 1939), and such authority shall, notwithstanding anything contained in that Act or the rules made there under be bound to comply with such instructions.

21. Restrictions on use of certain industrial plants.

15[(/)] Subject to the provisions of this section, no person shall, without the previous consent of the State Board, establish or operate any industrial plant in an air pollution control area: provided that a person operating any industrial plant in any air pollution control area, immediately before the commencement of section 9 of the Air (Prevention and Control of Pollution) Amendment Act, 1987, for which no consent was necessary prior to such commencement, may continue to do so for a period of three months from such commencement or, if he has made an application for such consent within the said period of three months, till the disposal of such application.]

(2) An application for consent of the State Board under sub-section (1) shall be accompanied by such fees as may be prescribed and shall be made in the prescribed form and shall contain the particulars of the industrial plant and such other particulars as may be prescribed: provided that where any person, immediately before the declaration of any area as an air pollution control area, operates in such area any industrial plant, such person shall make the
application under this sub-section within such period (being not less than three months from the date of such declaration) as may be prescribed and where such person makes such application, he shall be deemed to be operating such industrial plant with the consent of the State Board until the consent applied for has been refused,

(3) The State Board may make such inquiry as it may deem fit in respect of the application for consent referred to in sub-section (1) and in making any such inquiry, shall follow such procedure as may be prescribed.

(4) Within a period of four months after the receipt of the application for consent referred to in sub-section (1), the State Board shall, by order in writing, 17[and for reasons to be recorded in the order, grant the consent applied for subject to such conditions and for such period as may be specified in the order, or refuse consent;]

18[Provided that it shall be open to the State Board to cancel such consent before the expiry of the period for which it is granted or refuse further consent after such expiry if the conditions subject to which such consent has been granted are not fulfilled: provided further that before cancelling consent or refusing a further consent under the first provision, a reasonable opportunity of being heard shall be given to the person concerned.]

(5) Every person to whom consent has been granted by the State Board under sub-section (4), shall comply with the following conditions, namely -

(i) the control equipment of such specifications as the State Board may approve in this behalf shall be installed and operated in the premises where the industry is carried on or proposed to be carried on;

(ii) The existing control equipment, if any, shall be altered or replaced in accordance with the directions of the State Board;

(iii) The control equipment referred to in clause (i) or clause (ii) shall be kept at all times in good running condition;

(iv) chimney, wherever necessary, of such specifications as the State Board may approve in this behalf shall be erected or re-erected in such premises; and

(v) Such other conditions as the State Board, may specify in this behalf,

(vi) The conditions referred to in clauses (i), (ii) and (iv) shall be complied with within such period as the State Board may specify in this behalf- provided that in the case of a person operating any industrial plant 19*** in an air pollution control area immediately before the date of declaration of such area as an air pollution control area, the period so specified shall not be less than six months:

provided further that-

(a) After the installation of any control equipment in accordance with the specifications under clause (i), or
(b) After the alteration or replacement of any control equipment in accordance with the directions of the State Board under clause (ii), or

c) After the erection or re-erection of any chimney under clause (iv), no control equipment or chimney shall be altered or replaced or, as the case may be, erected or re-created except with the previous approval of the State Board.

(6) If due to any technological improvement or otherwise the State Board is of opinion that all or any of the conditions referred to in sub-section (5) require or requires variation (including the change of any control equipment, either in whole or in part), the State Board shall, after giving the person to whom consent has been granted an opportunity of being heard, vary all or any of such conditions and thereupon such person shall be bound to comply with the conditions as so varied.

(7) Where a person to whom consent has been granted by the State Board under sub-section (4) transfers his interest in the industry to any other person, such consent shall be deemed to have been granted to such other person and he shall be bound to comply with all the conditions subject to which it was granted as if the consent was granted to him originally.

22. Persons carrying on industry, etc., and to allow emission of air pollutants in excess of the standard lay down by State Board.

No person operating any industrial plant, in any air pollution control area shall discharge or cause or permit to be discharged the emission of any air pollutant in excess of the standards laid down by the State Board under clause (g) of sub-section (1) of section 17.

21[22A. Power of Board to make application to court for restraining person from causing air pollution.

(1) Where it is apprehended by a Board that emission of any air pollutant, in excess of the standards laid down by the State Board under clause (g) of sub-section (1) of section 17, is likely to occur by reason of any person operating an industrial plant or otherwise in any air pollution control area, the Board may make an application to a court, not inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class for restraining such person from emitting such air pollutant.

(2) On receipt of the application under sub-section (1), the court may make such order as it deems fit.

(3) Where under sub-section (2), the court makes an order restraining any person from discharging or causing or permitting to be discharged the emission of any air pollutant, it may, in that order,-

(a) Direct such person to desist from taking such action as is likely to cause emission;
(b) Authorize the Board, if the direction under clause (a) is not complied with by the person to whom such direction is issued, to implement the direction in such manner as may be specified by the court.

(4) All expenses incurred by the Board in implementing the sections of the court under clause (b) of sub-section (3) shall be recoverable from the person concerned as arrears of land revenue or of public demand.

23. Furnishing, of information to State Board and other agencies in certain cases.

(1) Where in any area the emission of any air pollutant into the atmosphere in excess of the standards laid down by the State Board occurs or is apprehended to occur due to accident or other unforeseen act or event, the person in charge of the premises from where such emission occurs or is apprehended to occur shall forthwith intimate the fact of such occurrence or the apprehension of such occurrence to the State Board and to such authorities or agencies as may be prescribed.

(2) On receipt of information with respect to the fact or the apprehension of any occurrence of the nature referred to in sub-section (1), whether through intimation under that sub-section or otherwise, the State Board and the authorities or agencies shall, as early as practicable, cause such remedial measure to be taken as are necessary to mitigate the emission of such air pollutants.

(3) Expenses, if any, incurred by the State Board, authority or agency with respect to the remedial measures referred to in sub-section (2) together with interest (at such reasonable rate, as the State Government may, by order, fix) from the date when a demand for the expenses is made until it is paid, may be recovered by that Board, authority or agency from the person concerned, as arrears of land revenue, or of public demand.


(1) Subject to the provisions of this section, any person empowered by a State Board in this behalf shall have a right to enter, at all reasonable times with such assistance as he considers necessary, and any place---

(a) For the purpose of performing any of the functions of the State Board entrusted to him:

(b) for the purpose of determining whether and if so in what manner, any such functions are to be performed or whether any provisions of this Act or the rules made there under or any notice, order, direction or authorization served, made, given or granted under this Act is being or has been complied with;

(c) for the purpose of examining and testing any control equipment, industrial plant, record, register, document or any other material object or for conducting a search of any place in which he has reason to believe that an offence under this Act or the rules made has been or is being or is about to be committed.
and for seizing any such control equipment, industrial plant, record, register, document or other material object if he has reasons to believe that it may furnish evidence of the commission of an offence punishable under this Act or the rules made there under.

**25. Power to obtain information.**

For the purposes of carrying out the functions entrusted to it, the State Board or any officer empowered by it in its behalf may call for any information (including information regarding the types of air pollutants emitted into the atmosphere and the level of the emission of such air pollutants) from the occupier or any other person carrying on any industry or operating any control equipment or industrial plant and for the purpose of verifying the correctness of such information, the State Board or such officer shall have the right to inspect the premises where such industry, control equipment or industrial plant is being carried on or operated.

**26. Power to take samples of air or emission and procedure to be followed in connection therewith.**

**27. Reports of the result of analysis on samples taken under section 26.**

**28. State Air Laboratory.**

**29. Analysis.**

(1) The State Government may, by notification in the Official Gazette, appoint such persons as it thinks fit and having the prescribed qualifications to be government analysts for the purpose of analysis of samples of air or emission sent for analysis to any laboratory established or specified under sub-section (1) of section 28.

**30. Reports of analysis.**

**31. Appeals,**

(1) Any person aggrieved by an order made by the State Board under this Act may, within thirty days from the date on which the order is communicated to him, prefer an appeal to such authority (hereinafter referred to as the Appellate Authority) as the State government may think fit to constitute:

**CHECK YOUR PROGRESS-3**

1) The chairman of state board can be nominated by?

2) Which industry is responsible for the air pollution around the tourist destinations?

3) Under which section the state governments can operate State Air Laboratory.
18.4 SUMMARY:

The rapid industrialization and growth of other sectors like travel and tourism, transportation, infrastructural development etc has polluted the natural environment significantly. Water and air the two most important components of our surrounding natural environment. To protect the Fresh water and fresh air from various types of pollutants and industries water and air protection act were formed by the Indian parliament.

Decisions were taken at the United Nations Conference on the Hum an Environment held in Stockholm in June, 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution.

Water and air protection acts have various legal provisions and articles to ensure the protection of these valuable resources. All the necessary regulations, governing and operating bodies, powers of central and state governments and all the related definitions are described in detail.

Air protection act may be called the Air (Prevention and Control of Pollution) Act, 1981. The water protection act is an act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution.

18.5 GLOSSARY

- **Stockholm**: Stockholm is the capital of Sweden
- **Sustainability**: capacity to endure
- **Union territory**: A Union Territory is a sub-national administrative division of India,
- **BOD**: Biochemical oxygen demand or B.O.D is the amount of dissolved oxygen
- **Coil form**: a broad class of bacteria found in our environment

18.6 CHECK YOUR PROGRESS:

Check your progress-1

1) Biochemical oxygen demand or B.O.D is the amount of dissolved oxygen needed by aerobic biological organisms
2) Chlorine and potassium chlorate (Lal dava )
3) 1974
4) Rajiv Gandhi in April 1986
5) About 3%
Check your progress-2
1) 29 march 1981
2) About 78 %
3) About 21%

Check your progress-3
1) State government
2) Transportation industry
3) Section number 28

18.7 REFERENCES:
- Environmental Jurisprudence in India, By C. M. Abraham, 67-70
- Environmental Protection, Law and Policy in India, By Kailash Thakur, 239-245
- http://www.medindia.net as retrieved on 12 June 2013
- WATER POLLUTION IN INDIA: LAW AND ENFORCEMENT, BHARAT DESAI

18.8 SUGGESTED READINGS:
- Environmental Protection, Law and Policy in India, By Kailash Thakur, 239-245
- http://www.medindia.net as retrieved on 12 June 2013
- Water pollution in India: law and enforcement, Bharat Desai
- RIVER POLLUTION IN INDIA: A CASE STUDY OF GANGA RIVER, BINODA CHANDRA SABAATA, M. P. NAYAR

18.9 MODEL QUESTIONS:
Short answer type questions:
1) Name any three water pollutants.
2) How tourism industry can cause water pollution around the tourist destination?
3) Define the various types of water available on the planet earth.
4) Define the following terms:
   (a) BOD
   (b) Coil from
   (c) PH Value
5) Which industry is responsible for most of the air pollution in India and why?
6) How the tree plantation can reduce the impact of air pollution?
7) List any three salient features of air protection act of India.

Long answer type questions:
1) Briefly describe the various water pollutants from different sectors including tourism. Also give the distribution of different types of water on earth.
2) Write a short essay on ‘water protection act of India’.
3) What is the need and importance of air protection act?