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CHAPTER IV-

ECONOMICS OF THE ECOTOURISM.

The relationship between the environment and many forms of tourism is fundamental. From the earliest time, the enjoyment of 'environment'- whether defined in physical or in socio-cultural term has had a major impact in shaping succession of tourism geographies. As public tastes for different kinds of leisure environment have developed through time. E.g. through the formation of resorts or changing preferences of for scenic landscape in the 19th century..., or the quest for amenable climates or the attraction of historic heritage in the 28th century. So new spatial pattern of interaction between people and environment have been formed.

However, tourism environment relationships are not just fundamental, but also highly complex. There is a mutual dependence between the two that has often been described as 'symbiotic'. In simple terms, this means that tourism benefits from being located in good quality environment, those same

environments ought to benefit widely from measures of tourist resources.

To understand the economics of the ecotourism and its designing we have to study impacts of the development of ecotourism.

4.1 Impacts of the development of the ecotourism

1. Environmental impacts:

Ecotourism 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 tool to finance protection of natural areas and increase their economic importance.

- ✓ It increases the interest of the visitors in nature.
- ✓ Conservation and protection of the environment is possible.
- ✓ Development of parks and protected area takes place.
- ✓ Establishment of environmental education and study centers.

- ✓ Encourages conserving animals as attraction.
- ✓ Cleaning programs to protect the attractiveness of location to tourist.
- ✓ Tourism revenue to finance ground repair and site restoration.
- ✓ Development of ecotourism focuses primarily on experiencing and learning about nature.
- ✓ It makes aware about the use and importance of flora and fauna.

2. Physical and economic impact:

The physical development has closely related with economy. The development of ecotourism would help-

- ✓ To earn foreign currency, helps to increase its capacity to attract inward investment, without harming ecological aspects.
- ✓ It creates sustainable volume of employment.
- ✓ Tourism may promote development through the encouragement of new economic linkages and increases the GDP of an economy.

- ✓ Promote and finance infrastructural improvements.
 In the other words, finance can possible for the provision of necessary infrastructure.
- ✓ Revenue earned by entrance fees and similar sources can be use for the protection and management of environmentally sensitive areas.

3. Socio Cultural impact:

The socio cultural impacts of tourism described here are the effects on host communities of direct and indirect relations with tourists and of interaction with the tourism industry.

- ✓ It promotes contacts between hosts and visitors.
- ✓ It brings different regions and societies that are normally characterized by varying degrees of difference.
- ✓ Increases knowledge and understanding at host societies cultures.
- ✓ promotion of the cultural practices.
- ✓ Revitalization of traditional crafts, performing arts and rituals.

- ✓ .social empowerment that comes with employment.
- ✓ Socio-cultural development.

These are certain positive impacts, which can help in economic development of a particular area where the potentials are available. The selected area is one of the unique places where the potentials are ample and so there is a possibility of the development of ecotourism. It can uplift economic condition. Therefore, environmental management and sustainable tourism development are the two important aims can be achieved.

In previous chapters' significance of the place, identification of the spot with its ecological importance has been discussed. With the help of these important heading, we can study what are the requirements for the development of eco-tourism spot and how we can develop, what can be the cost and what can be the benefits for the local community and visitors. In addition to this how these benefits can help to the economic development.

4.2 Economic valuation for the development of ecotourism:

Economic valuation is important in determining the appropriate use of a resource area, government and other decision makers must determine the financial and socially acceptable use of the land for the development of ecotourism. It is helpful in associating costs and benefits, which will most, certainly differ in different settings. One of the most effective ways in which to decide on how best to develop or not to develop an area of land is through the implementation of a cost benefit analysis, which includes start up and operating cost. In the case of the environment, Munasinghe (1994) has categorized economic values attributed to ecological resources by examining the use and nonuse value of asset.

TEV= UV+NUV.

The option value:

It is an individual's willingness to pay for the option of preserving the asset for future use.

The Bequest value:

The value that people derived from knowing that other people will benefit the resolve in the future.

The existence value:

The perceived value of the asset.

For the development of ecotourism analysis may use a number of nonuse market valuation techniques to quantity the above values, including the travel cost method and the contingent valuation method.

The travel cost method:

It estimates ecotourism benefits of a protected area based upon observed travel expenses by visitors to an area.

Contingent valuation method:

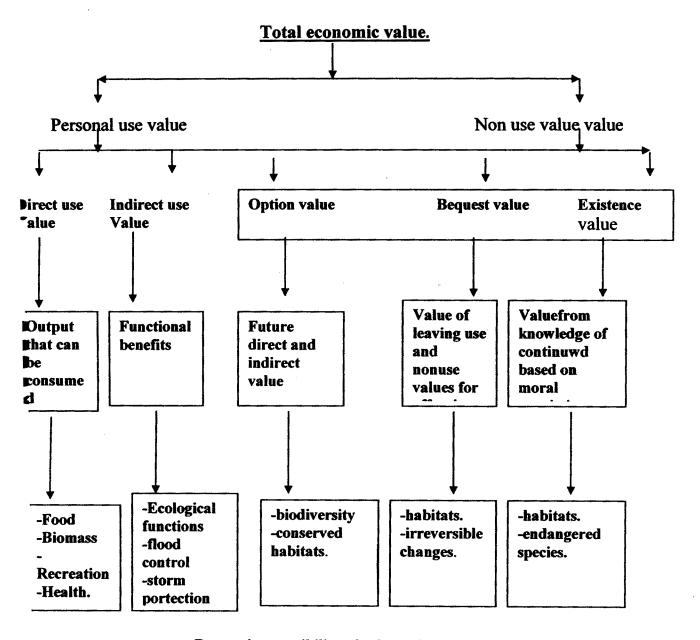
In this individuals are asked directly about their willingness to pay for some improvement in a resource or for additional use of a resource. This can take the form if an assessment of the willingness of tourist to pay for habitat protection.

WTA= Willingness to pay (for loss)

WTP= Willingness to accept.(for profit)

To avoide pollution we can implement an effective instrument and that is 'polluter's pay principle'. Those who pollute the environment, have to pay the cost of polluting the environment.

iii Catagories of economic values attributed to environment:



Decreasing tangibility of value to individuals

4.3 Requirements for the development of the ecotourism on a selected area:

After selecting the area first, we have to consider the availability of land and resources. Then we have to plan for its development starting from the cleaning of the area.

1. Improving the quality of the environment / site development:

The conservation and protection of environment is the need of the hour. Site development with the help of botanical garden, environmental or ecological study centre can also contribute in improving the quality of the environment

2. Environmental / ecological study center:

The centre can provide the information and importance of available ecological aspects viz. plants and species, place which is environmentally potential. So that one can get the information and realize regarding the protection of their surrounding.

3. Construction of eco-lodges:

Rather than constructing the cement concrete building, construction of eco-lodges for the visitors is always in favor of the environmental protection. Basic concept behind this is he construction of eco-lodges will not harm environment. So that one can get the natural feelings and feel fresh air with the comfort. Where one can find-

- o comfortable basic needs:
- o unique character style:
- o focus on environmental education:
- o nature based activities:
- o Integrated development with local environment.
- o Low/ moderate investment
- Key attractions are surroundings and facality.
- Good and healthy environment and service cultural influence:
- Guides and nature interpreters to focus its operation:

4. Transportation facilities:

Government can take the responsibilities of providing transportation for the visitors who come to visit the district place kolhapur and around places. Transportation facilities should include provision of minibus, rented cars, than central buses. So that one can enjoy the visit and feel comfortable.

5. Guides:

Local community is very important in the development of ecotourism. Local people should be involved in protection of their immediate environment and culture. It will be a way of giving back to nature. It is away of showing appreciation of all that we have around us. Ecotourism should be incorporated with public culture. By making younger generation more aware of this issue, options for job opportunities can also be increased in this field.

6. Activities to be conducted:

Conduction of various types of activities like yoga and the art of living etc.. Can keep the environment peaceful, fresh, and pleasant. These activities can be conducted in the form

of camps. So that, people can come, stay there and attend the camp. With this they can become aware about the environment and their duty and responsibility towards the protection of environment.

4.4 Economically important plants around the selected area.

1. Cereal crops:-

Eleusine coracana, oryza sativa, pennisetum americanum, sorghum spp., triticum aestivum and Zea Mays are the important cereal taken of the region.

2. Pulses:

Important pulses cultivated in the region include-arachis hypogoea, cajanus cajan, cicer arietinum, glycine max, lablab purpureus, lahtyrus sativus, macrotyloma unifloram, etc....

3. Fruit vegetables:

Abelmoschus esculentus, benincasa hispida, canavalia gladiata, capsicum annuum, citrullua lanatus var, lanatus, coccinia grandis, cucumis melo var. melo. C. sativus, cucurbita maxima, C. pepo, cyamposis tetragonoloba etc.....

4. Leaf vegetables:

amarnathus cruentus, A. roxburghianus, A. spinosus, A. tricolor, A. viridis, atriplex hortensis, bvrassica pleracea, cicer arientinum, colocasia esculenta etc....

5. Root and tuber vegetables:

beta vulgaris, daucus carota, dioscorea alata, D.
bulbifera, ipomiea batatas, nelumbo nucifera, nymphaea
spp.,and solanum tuberosum.

6. Fruits:

Anacardium occidentale, annona muric ata, A. reticulate, A squamosa, artocarpus heterophyllus, averrhoa bilimbi, A carambola, etc...

7. Road side and garden trees:

Acacia longifolia, adansonia digitata, albizia lebbeck, A. odoratissima, A. procera, alstonia macrophylla, A. scholaris, bauhinia purpurea, B. variegate, etc....

8. Medicinal plants:

In kolhapur there are over 600 plant species of therapeutic value. Few important are- abutilon indicum, acacia concinna, achyranthes aspera, acorus calamus, adansonia digitata, alangium salvifolium, var. salvifolium, anacardium occidentale, andrographis paniculta, etc....

4.5 Economics of the ecotourism of the place:

[a] Kaneri math

- 1. Improving the quality of the environment / site development:
 - → Number of botanical gardens and area: One(
 500 x 500 meter)
 - → Plants to include: which are having medicinal importance and rarely available.

 - **♣ Number of employees requires :** six.
 - **♣ Entry fee:** Rs. 25/-
 - **★** Remuneration to the employees:(monthly)

-Manager:

-Rs 6000-8000/-

-Assistant manager: -Rs 5000-6000/-

-Plant caretaker:

-Rs. 3000/-.

-Plant feeder:

-Rs. 2000/-

- Safaiwala:

-Rs.1500/-

-Chawkidar:

-Rs2000/-.

- Ticket booker:

-Rs. 2500/-

2. Environmental / ecological study center:

♣ Number of study centers with its area: One (25

x 25 meter.)

↓ Cost of establishment: five lakhs

↓ Number of employees requires: 20

★ Entry fee: Rs. 25/-

♣ Remuneration to the employees:(monthly)

-Manager:

-Rs 8000-10000/-

-Assistant manager: -Rs 7000-8000/-

- Caretaker:

-Rs. 3000/-.

- Safaiwala:

-Rs.1500/-

-Chawkidar:

-Rs2000/-.

- Ticket booker:

-Rs. 2500/-

3. Construction of eco-lodges:

- ♣ Number of eco-lodges: three
- **♦** Cost of construction: 7-8lakhs
- Number of employees requires 25 +10
 (construction + maintenance.)
- ♣ Remuneration to the employees:(monthly)
- -Employee who maintain the area:

Rs 3000-4000/-

- Eco-lodge manager: Rs. 7000-9000/-

- Food manager: Rs. 5000-6000/-

♣ Rent for eco-lodges: Rs. 300 per day.

4. Transportation facilities:

- ♣ Number of vehicles require(with its capacity):
 minibus and cars-10 (capacity-15+5), rate-Rs
 20/-
- ♣ Number of employees require:10+10 (drivers and conductors)
- ♣ Cost of transportation: Bus-7to8 lakhs; car- 3to
 4lakhs. Fuel- Rs 100 per vehicle.
- ★ Remuneration to the employees:(monyhly)
- -Drivers: Rs 5000-6000/-

-Conductors: Rs 4000-5000/-

5. Guides:

- ♣ Number of guides require: four
- ♣ Remuneration to the employees: commission basis (40%)

6. Activities to be conducted:[art of living and yoga]

- **★** Employees require: five
- ♣ Remuneration to them:(monthly) Rs.1500/-

[b] Amba pass / Ghat.

1. Environmental / ecological study center:

- Number of study centers with its area: One (25 x 25 meter.)
- **♦ Cost of establishment:** five- seven lakhs
- **♣ Number of employees requires:** 20
- **★ Entry fee:** Rs. 25/-
- **♣** Remuneration to the employees:(monthly)

-Manager:

-Rs 8000-10000/-

-Assistant manager: -Rs 7000-8000/-

- Caretaker:

-Rs. 3000/-.

- Safaiwala:

-Rs.1500/-

-Chawkidar:

-Rs2000/-.

- Ticket booker:

-Rs. 2500/-

2. Construction of eco-lodges

♣ Number of eco-lodges: four

♦ Cost of construction: 8-10 lakhs

♣ Number of employees requires 30 +10 (construction + maintenance.)

★ Remuneration to the employees:(monthly)

-Employee who maintain the area:

Rs 3000-4000/-

- Eco-lodge manager:

Rs. 7000-9000/-

Food manager

Rs. 5000-6000/-

♣ Rent for eco-lodges: Rs. 500 per day.

3. Transportation facilities:

- ♣ Number of vehicles require(with its capacity):
 minibus and cars-10 (capacity-15+5), ticket-Rs
 70/-
- ♣ Number of employees require:10+10 (drivers and conductors)
- ♣ Cost of transportation: Bus-7 to 8 lakhs; car- 3to 4lakhs. Fuel- Rs 300 per vehicle.
- **♣** Remuneration to the employees:(monthly)
- -Drivers: Rs 5000-6000/-
- -Conductors: Rs 4000-5000/-

4. Guides:

- ♣ Number of guides require: six
- ♣ Cost of their training: Rs 2000/-
- ♣ Remuneration to the employees: commission basis (40%)

5. Activities to be conducted

- a. Nature camping-
- b. Bird watching-
- c. Trekking and hiking-
- d. Wildlife viewing-

- e. Animal safari-
- f. Yoga-
- g. Art of living-
- h. Visit to sacred groves-
 - ♣ Cost of conducting the activity and hobby centre:
 Rs one lakh /-
 - **♦** Employees require: five for per activity.
 - ♣ Remuneration to them:(monthly) Rs.3000-4000/-
 - [c] Radhanagari dam- dajipur forest
- 1. Improving the quality of the environment / site development:
 - ♣ Number of botanical gardens and area: One(
 500 x 500 meter)
 - ♣ Plants to include: which are having medicinal importance and rarely available.

 - **↓** Number of employees requires : six.
 - **♣ Entry fee:** Rs. 25/-
 - **↓** Remuneration to the employees:(monthly)

-Manager:

-Rs 6000-8000/-

-Assistant manager: -Rs 5000-6000/-

-Plant caretaker:

-Rs. 3000/-.

-Plant feeder:

-Rs. 2000/-

- Safaiwala:

-Rs.1500/-

-Chawkidar:

-Rs2000/-.

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- ♣ Number of employees require:10+10 (drivers and conductors)
- ♣ Cost of transportation: Bus-7to 8 lakhs; car- 3 to 4lakhs. Fuel- Rs 100 per vehicle.

- **♦** Remuneration to the employees:(monthly)
- -Drivers: Rs 5000-6000/-
- -Conductors: Rs 4000-5000/-

5. Guides:

- ♣ Number of guides require: six
- **♦** Cost of their training: Rs 2000/-
- ★ Remuneration to the employees: commission basis (40%)

6. Activities to be conducted

- Nature workshop
- Bird watching
- Wildlife viewing
- Animal safari
- ♣ Cost of conducting the activity: Rs 35000-40000/-
- **★** Employees require: five
- ♣ Remuneration to them:(monthly) Rs.1500/-

The lake-Rankala.

1. Improving the quality of the environment / site development:

→ Number of botanical gardens and area: One(
500 x 500 meter)

→ Plants to include: which are having medicinal importance and rarely available.

↓ Cost of establishing botanical garden: two lakhs approximately.

♣ Number of employees requires : six.

♣ Entry fee: Rs. 25/-

♦ Remuneration to the employees:(monthly)

-Manager: -Rs 6000-8000/-

-Assistant manager: -Rs 5000-6000/-

-Plant caretaker: -Rs. 3000/-.

-Plant feeder: -Rs. 2000/-

- Safaiwala: -Rs.1500/-

-Chawkidar: -Rs2000/-.

- Ticket booker: -Rs. 2500/-

2. Environmental / ecological study center:

♦ Number of study centers with its area: One (25

x 25 meter.)

↓ Cost of establishment: five- seven lakhs

↓ Number of employees requires: 20

♣ Entry fee: Rs. 25/-

♣ Remuneration to the employees:(monthly)

-Manager:

-Rs 8000-10000/-

-Assistant manager: -Rs 7000-8000/-

- caretaker:

-Rs. 3000/-.

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-Rs.1500/-

-Chawkidar:

-Rs2000/-.

- Ticket booker:

-Rs. 2500/

3. Guides:

♣ Number of guides require: six

→ Cost of their training: Rs 2000/-

♣ Remuneration to the employees: commission basis(40%)

4. Activities to be conducted:

Nature workshop

- ★ Cost of conducting the activity and hobby centre:
 Rs 20000/-
- **♦** Employees require four.
- ♣ Remuneration to them:(monthly) Rs.3000-4000/-

4.4 Benefits derive from the development of ecotourism:

- 1. Quality of the environment improves.
- 2. It helps to reduce the environmental problem.
- 3. Creation pf pollution free environment of the place.
- 4. Increases awareness regarding the environment/ecology.
- 5. Environmental education can take place.
- 6. Popularity of the place increases.
- 7. It generates employment opportunity.
- 8. The living standard of the local people improves because of the development of area.
- 9. It contains educational and interpretation features.
- 10. It generates economic benefits for host communities organizations and authorities managing natural areas with conservation purpose.

- 11. It minimizes negative impact upon the natural and sociocultural environment.
- 12. It provides alternative employment and income opportunities of local communities.
- 13. it promotes foreign exchange of successful experience in the field of ecotourism.
- 14. Increases opportunities for the efficient making and promotion of ecotourism destinations.

In this way we can study the economics of the ecotourism. We can implemented the ideas for other places and can get the benefits as stated above. By protecting and conserving biodiversity, we are saving the life of not only flora and fauna, wild animals but the human life too. The development of ecotourism can lead to economic diversity is promoted it avoid single sector dependence. It leads to sector interact and reinforce each other. The returns / net revenues from it are proportionately higher and money circulates within the community. Above all, major jobs and economic activity are generated because of the development of ecotourism.

from it are proportionately higher and money circulates within the community. Above all, major jobs and economic activity are generated because of the development of ecotourism.

Moreover, there are so many plants viz.. Medicinal, endemic, threatened etc... Which are beneficial economically. Therefore, the protection of these plants is the prime duty in the development of ecotourism as it has tremendous potential to contribute economically, environmentally, and socially sustainable development in both developed countries and emerging nations.