

# **Canopy Tourism: Concept and Practices in the Indian Context**

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# Forms of canopy tourism

## 1. **Canopy Walkways**

Canopy walkways are bridges between and in the canopy of a forest; mostly linked up with platforms inside or around the trees.



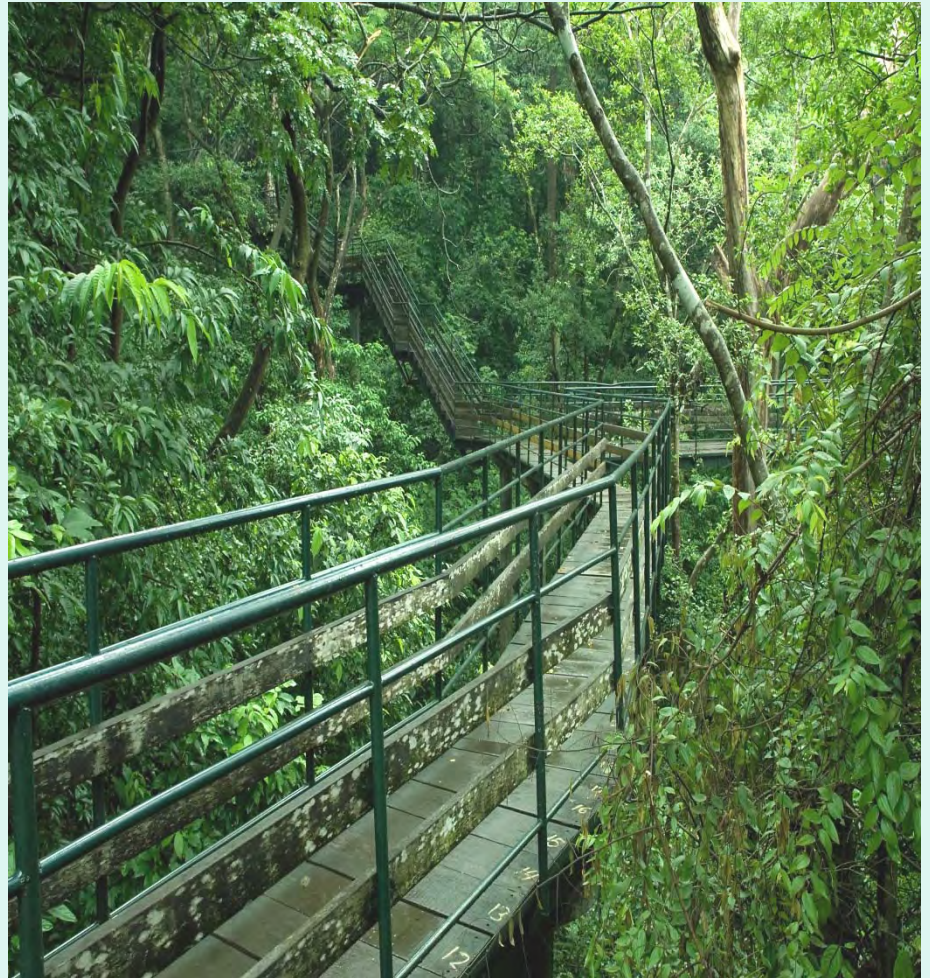
## **Mangrove Canopy Walkway, Baratang, Andamans**

- The “walk” includes 240 metres long bamboo bridge, through thick mangroves.
- No mangrove branch pruned nor any tree felled during the construction of the path.
- Tourists are acquainted with various aspects of mangroves, its morphology, salt water adaptations and its services while walking on this path

# Forms of canopy tourism

## 2. Elevated Walkways

Walkways built across the canopy at different levels so that tourists are able to get a close look at the canopy from the walkways at different heights.



**Elevated walkway at Thenmala, Kerala**

# Forms of canopy tourism

## 3. Tree Houses

- Houses constructed in the trees just below the canopy.
- Tribal communities, Kerala used to construct houses in trees- to protect from animals.
- Tree houses for tourists were modelled on original tree houses.



**Tree house, Waynad**

# Forms of canopy tourism

## 4. Zip Line

- Pulley suspended on a cable mounted on an incline.
- The user is propelled by gravity to traverse from the top to the bottom of the inclined cable, made of stainless steel, by holding on / attaching to the freely moving pulley.
- Other names - flying fox, zip wire, aerial runway, aerial rope slide, death slide or tyrolean crossing



**Flying Fox**

# Forms of canopy tourism

## 5. Aerial Ropeways

- An arrangement of overhead cables suspended from towers and supporting travelling buckets used for transporting people, over rough terrain.
- Similar to “sky trams”- high technology cableway that gives the opportunity of intermediate ride with short stops to observe the cloud forest biodiversity.



**Ropeway to Mansa Devi Temple,  
Haridwar, Uttarakhand**



**Sky tram at Monteverde**

# Canopy tourism and its linkages to ecotourism

## Conservation

- Natural resources and biodiversity.
- Rational utilisation of resources: land, water, conventional & non-conventional energy.
- Cumulative impact assessments

Infrastructure heavy, requires high investment thus mass tourism necessary –financial viability.

- Dehradun-Mussoorie ropeway is expected to cost Rs.800 crores.

# Canopy tourism and its linkages to ecotourism

## Community participation & benefit sharing

- Involvement of local communities in planning, implementation and monitoring.
  - understanding projects
  - plan tourism in line with traditional customs, practises and governance.
  - channeling benefits to local community

In canopy tourism, participation & benefit sharing is limited due to scale of operation of project.

# Canopy tourism and its linkages to ecotourism

## Institutional mechanisms

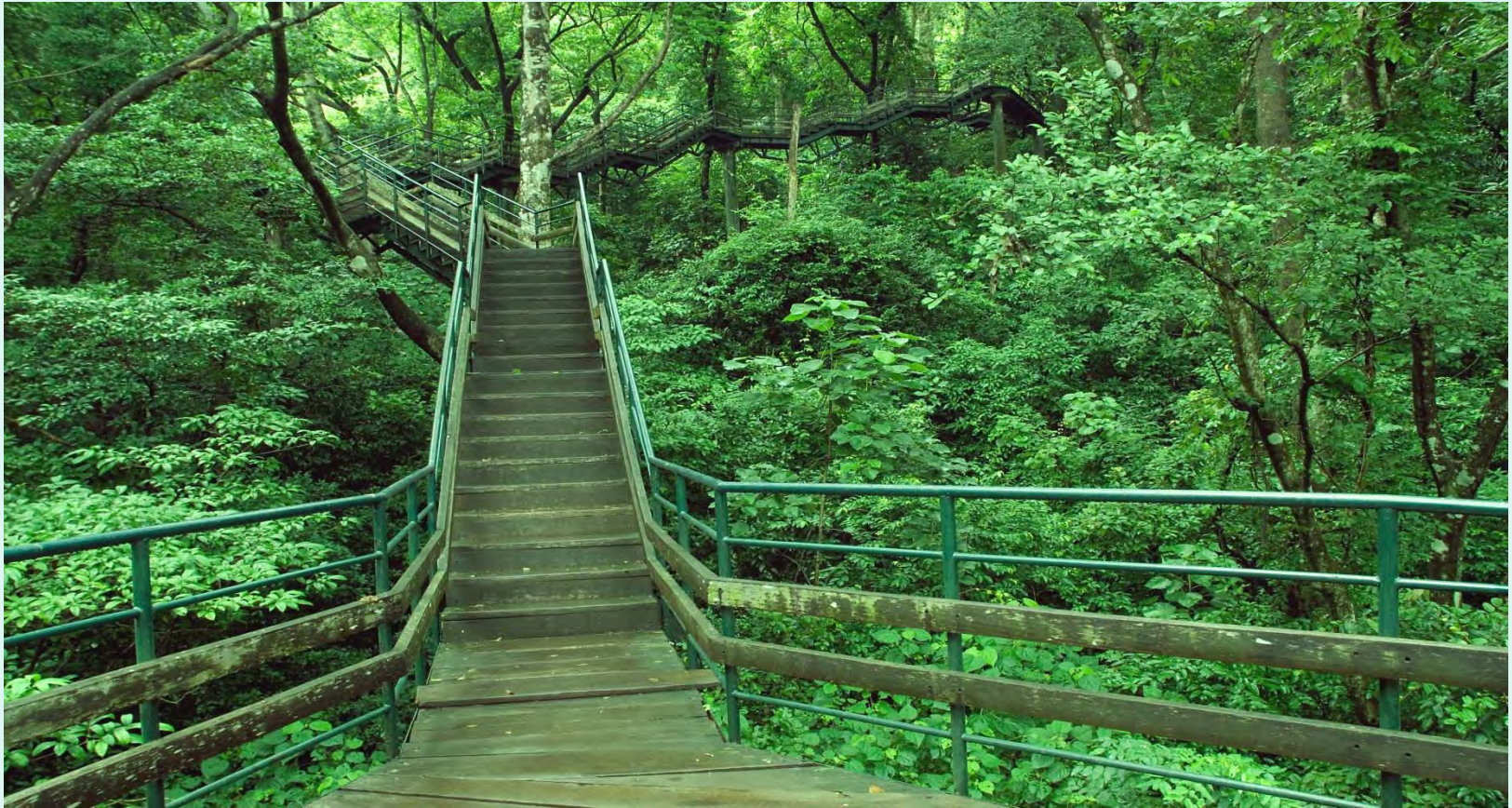
- Multi-stakeholder platform (local communities, panchayats, tourism industry & government) to regulate tourism in existing laws and regulations-make project sustainable.
- Create space for discussion on
  - objectives of tourism development
  - benefit sharing mechanisms
  - monitoring mechanisms
  - addressing people's concerns
  - decision making

# Canopy tourism and its linkages to ecotourism

## Education & Interpretation

- Educating tourists about fragile ecosystems and their links to lives of local communities.
- Canopy Tourism has the scope to educate tourists on the importance of the canopy and enjoy nature in a more environmentally sensitive manner.

# Case Studies



**Elevated Walkway at Thenmala, Kerala**

# Elevated Walkway at Thenmala, Kerala

## Features

### History

- Started in 2002 - Thenmala Ecotourism Promotion Society, Government of Kerala.
- Land was reserve forest earlier.

### Technical details

- Total Length of walkway: 120 metres connecting 11 trees
- Maximum elevation point: 21 feet.
- Supported by 11 reinforced concrete pillars.
- Steps and platforms are made of large quantity of wood – ‘Kambakam’.
- Cost: Rs.25 lakhs.

### Tourism

- 25,000 tourists (approximately) per year. Not uniform and during certain holidays, the number exceeds 250 tourists per day.
- All the trees in the zone are named to help the tourists identify the trees.
- Entry charges: Rs.20 – Adults, Rs.10 – children.

# **Elevated Walkway at Thenmala, Kerala**

## **Concerns**

- Tourist number at some points of time goes beyond 50, making it unsafe.
- Excessive number of tourists limit the scope for enjoying the canopy peacefully and limits understanding of ecosystem.
- No participation of local community in the project.

## **Impacts**

- Nesting of birds has reduced.
- Behavioural change in the monkeys with tourists feeding them. Monkeys snatch food items from tourists.

# Tree Houses at Wayanad, Kerala



**Jungle Park, Green Magic-1**

# Jungle Park, Green Magic-1

## History

- Started in late 90s.
- Adapted from the tribals building huts in trees to keep safe from elephants.

## Technical details

- The property has two tree houses.
- Tree houses constructed in a coffee and cardamom plantation areas.
- Certain types of trees- 'Koli' are selected for the construction of tree houses due to their strength.
- Tree houses are at a height of 90 feet and 135 feet.
- Cost of the construction between Rs.15-20 lakhs.

## Tourism

- Visitor profile: 95% foreigners.
- Needs 5 to 6 support staff in addition to ground infrastructure like kitchen, restaurant etc.
- Financial viability is higher as it is a part of a conventional resort.
- High maintenance – Platforms, ropes, water bags -lift system.
  - Maintenance cost high as everything has to be carried from town (Vythri) to the resort and then from the base of the tree to the top.
  - Location is very remote and the road access to be maintained.
- Element of risk - tourists prohibited from drinking and children are not allowed, prohibition on smoking – fire.

# Jungle Park, Green Magic-1

## Concerns

- No element of education or interpretation about the canopy ecosystem or flora and fauna.
- Participation of local community is limited to construction of tree huts and maintenance.

# Tree House at Vythiri Resort



# Tree House at Vythiri Resorts

## History

- 2008 – Constructed.
- Demand for tree houses as the Jungle Park Resort was closed down for some time.
- 2 tree houses were constructed within a span of 4 months

## Technical details

- Investment: around Rs.35 lakhs.
- Area: 150 acres, resort area 30 acres and rest is plots and plantations.
- Tree houses built at heights of 90 feet and 60 feet.

## Tourism

- Tourist profile: 95% foreigners.
- Charges: Rs. 12000 per day - Expensive to stay.
- Occupancy rate: 300 days per year.
- Tree house needs 6 support staff to serve the guests.
- Tourists are taken for morning and evening trails and naturalist accompanies them.
- High maintenance - every year the bamboo roof and bamboo ply require changing and repainting.
- Element of risk
  - Prohibition on Liquor, smoking.
  - Children below 12 not permitted.

# Tree House at Vythiri Resorts

## Concerns

- No element of education or interpretation about the canopy ecosystem.
- Participation of local community limited to construction and maintenance of tree huts.



Tree house, Vythiri Resorts

# Analytical view of case studies

- High investment models – around Rs. 25 lakhs.
- Negative impacts on fauna- Decrease in nesting habitats and change in animal behaviour
- Unsustainable models- No element of conservation due to high requirement of natural resources.
- Limited Education and interpretation component
  - Scope for peaceful watching and understanding canopy is limited in elevated walkway.
- Community participation and benefit sharing mechanisms are missing.
- Absence of institutional mechanisms:
  - Lack of a multi-stakeholder platform to regulate tourism impacts and to address people's concerns.

# Recommendations

- Ensure constructions as per existing legislations and building norms.
- Ensure community participation either through employment, sustainable local sourcing of raw material that contributes to local economy.
- Measure cumulative environmental impacts of new projects in ecologically sensitive areas.