Introduction

The United Nations World Tourism Organization (UNWTO) defines tourism more generally as "beyond the common perception of tourism as being limited to holiday activity only", as people "traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes".

Globally, the tourism sector accounts for 30% of the world's services and generates one in twelve jobs worldwide. With more than one billion tourists travelling to an international destination every year, tourism has become a leading economic sector, contributing 10% of global GDP and 6% of the world's total exports (UNWTO Annual Report, 2015). UNWTO has estimated that there will be 1.6 billion international tourists by the year 2020, an annual growth rate of 4.1 percent. In the Asia-Pacific region, it is forecasted that an average growth rate of 4.9% a year growth to reach 535 million international tourist arrivals by 2030 (UNWTO Annual report 2015). It is expected that tourism has the potential to provide 7 million new jobs worldwide, provided that the potential of tourism resources is effectively exploited. India, being rich in cultural and natural heritage, is likely to have its share in global tourism.

In modern times, tourism has evolved into different dimensions such as sustainable tourism, farm tourism, educational tourism, medical tourism, etc. The UNWTO recently introduced silk route tourism and spice route tourism into the list.

One potential addition to the above list is ‘Medicinal Plant Conservation Area Tourism’, suggested to not only promote the sector but also to commemorate the International Day for Biological Diversity on 22 May with the theme 'Biodiversity and Sustainable Tourism'.
Why 'Medicinal Plant Conservation Area Tourism'?

The Kerala state in India was the first one to introduce “Spice Route Tourism” by linking 31 countries in Asia, Africa and Europe. In the year 2013, Government of Kerala convinced UNWTO to promote “Spice Route Tourism” and in 2014 by tying-up with UNESCO, Kerala initiated “Spice Route Tourism”. Spice tourism is already fetching economic benefits formally to countries like Sri Lanka, China and others.

In 1993, India led a novel initiative through an NGO called Foundation for Revitalisation of Local Health Traditions (FRLHT) along with State Forest Departments to establish *in situ* conservation sites for medicinal plants known as Medicinal Plant Conservation Areas (MPCAs).

Considered as a pioneering *in situ* conservation effort, currently a network of 108 MPCAs are operational across 12 states in India. *In situ* conservation sites for medicinal plants are also established in other countries such as Sri Lanka, Zimbabwe, Jordan, Ethiopia, Egypt, Central America and Caribbean (See box 2). But these sites in India and elsewhere in the world merely act as conservation sites, where medicinal plants are merely preserved. To conserve and manage these sites, active involvement of local community is very essential. Therefore, economic incentives for such participation are important not only to help communities but also to secure revenues for long-term management of these Areas.

**Opportunities for MPCAs as potential sites for sustainable tourism in India**

The average area of an MPCA site ranges from 50 hectares to 200 hectares. It spans across divergent vegetation types and biogeographic zones. Most of these have one or more rare, endangered and threatened (RET) species, as flagship species apart from being able to capture the diversity of medicinal plants in the region.

The MPCAs are established in areas that are rich in biological diversity such as the Western Ghats, Himalayas and parts of North-East India. Apart from their rich biodiversity and natural heritage, some MPCA sites have cultural, historical and religious importance as well. Apart from these significances, MPCA sites also link local health traditions.

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**Box 1: Green Economy Report**

Tourism is one of ten economic sectors identified in the Green Economy Report, whose greening would increase prosperity, create employment and reduce poverty.

Under a scenario of green investments, tourism would make an even larger contribution to GDP, with significant environmental benefits including reductions in water consumption (18%), energy use (44%) and CO₂ emissions (52%).

New Form of Sustainable Tourism Medicinal Plant Conservation Areas

Box 2: Global initiatives on *in situ* conservation of medicinal plants

**Sri Lanka:** Five *in situ* conservation sites known as Medicinal Plants Conservation Areas (MPCAs) were established to secure the active conservation of globally and nationally significant medicinal plants, their habitats, species and genomes, and promote their sustainable use. These MPCAs also helped in preservation of indigenous knowledge related to medicinal plants and promotion of policy and legal reforms.

**Egypt:** *In situ* conservation sites in arid and semi-arid ecosystems of Egypt aims at conservation of targeted species, processing and marketing of wild resources and protection of local traditional health knowledge.

**Zimbabwe:** The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) is an approach to development and conservation of traditional medicinal plants in Zimbabwe. *In situ* conservation sites were established in 4 districts. These sites act as preservation sites for endemic and threatened medicinal plant species. From these sites, seed and seeding materials are collected and planted in degraded lands.

The following examples provide an overview of the significance of these areas from both conservation and tourism potential:

- The MPCA in Agumbe, Karnataka, is an evergreen forest that records the highest rainfall in Karnataka and provides shelter to species such as the King cobra. Tourists visit this place to witness natural beauty. Near this MPCA, the Karnataka Forest Department has constructed a park and a lake. The park houses many endemic and endangered plant and animal species, besides the lake has boating facility too.

- The MPCA in Savanadurga in Karnataka attracts many visitors to the temples (the famous Lakshmi Narasimha Temple, Veerabhadra Temple) and the Kempegowda fort that was built during 5th Century AD, Asia’s biggest monolithic rock is also an attraction nearby. Karnataka Forest Department has established tree a park and a lake with boating facility.
• Kumbhalgarh MPCA in Rajasthan is a historical place, where the royalty of Rajasthan had built a fort. This MPCA is the abode for many species that are endemic to desert and semi arid regions. This MPCA is also a potential site for rock-climbing.

• The MPCA in Ziro in Arunachal Pradesh is a classic example for sustainable living and management of nature. The local community in Arunachal Pradesh practices self-sustaining methods such as water conservation techniques, sustainable agriculture and aquaculture methods and others. These practices have been woven into their traditional way of life. All the 7 MPCAs in Arunachal Pradesh have cultural and traditional importance.

• The MPCA in Parashuramkund, Arunachal Pradesh has religious and cultural importance. Every year on Makara Sankranti day, many pilgrims and tourists throng this place to have a holy dip in the Kund in River Lohit.

• The MPCAs in Chhattisgarh have traditional local healing culture. The folk-healers attached to each of the MPCAs have carried forward the rich traditional healing system.

Every year, the respective State Forest Department earmarks funds for maintenance and management of MPCAs. The Karnataka Forest Department had allocated Rs. 20,00,000 for 17 MPCAs during 2016-17 (as per personal communication). This allocation is very meager for management of MPCAs. Similarly, other State Forest Departments also allocate minimal funds every year. This compromises the ability to manage the MPCAs, making several of them insignificant after establishment.

Guidelines for responsible tourism at MPCAs

Considering current management of MPCAs as largely 'no go zones', it is important for us to change the mindset of those managing these MPCAs (the State Forest Departments) to tap the potential of these areas as responsible tourist sites with a set of principles and guidelines to support such actions.

First, the tourism at MPCAs should be restricted with premium pricing, supported by services that promote conservation, traditional health and integrated medical system based health management. Second, the MPCAs can attract researchers and those prospecting medicinal plants that can enhance sustainable use of the resources and generate benefits for local people and the state. Third, tourism in MPCAs will promote India’s efforts for in situ conservation by showcasing management as well as offer short-term training in sustainable use and harvesting, an issue countries around the world are grappling with. Fourth and last, tourism in MPCAs can promote ‘citizen science’ that encourages conservation and house-hold health care systems – a niche area completely overlooked thus far.
Case Study: Savanadurga as potential site for developing Eco-tourism

The MPCA in Savanadurga has been established in 'Dry Deciduous Scrub Jungle' where the medicinal plants diversity is high. Savanadurga is a historical tourist place in Ramanagara district. It is situated around 64 km from Bengaluru and about 11 km from Magadi and at an altitude of 800-970m from Mean Sea Level. The following table provides an estimate of economic gains of Sustainable tourism in Savanadurga.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Details</th>
<th>Income (Rs.) per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parking (1500 vehicles/month)</td>
<td>3,42,000</td>
</tr>
<tr>
<td>2</td>
<td>Guide @ Rs. 100 per head for explaining the significance of the place (average visitor: 500 persons per month)</td>
<td>6,00,000</td>
</tr>
<tr>
<td>3</td>
<td>Technical guide @ Rs. 50 per person to explain the MPCA and its activities (average 100 persons per month)</td>
<td>60,000</td>
</tr>
<tr>
<td>4</td>
<td>Camps, trekking and rock climbing on per camp basis (10 members) for three days – At least one camp per month (Rs. 10,000/camp)</td>
<td>1,20,000</td>
</tr>
<tr>
<td>5</td>
<td>Collection of raw materials, preparation and marketing of herbal products</td>
<td>6,00,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17, 22, 000</strong></td>
</tr>
</tbody>
</table>

Conclusions

Given the potential of MPCAs to promote 'citizen science', support conservation and encourage niche tourism, the State Governments in India should initiate actions to make MPCAs as key flagship for nature based tourism. At the same time, efforts should be made to request UNWTO to designate 'MPCA Tourism' as a mainstream tourism activity. With the focus on biological diversity and sustainable tourism receiving global attention, such an opportunity should not be missed.

References:

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