Potential of Protected Area and Ecotourism in Green Open Space of Jakarta

Yui Takase, Chiba University
Usually, I study about green open space conservation in Japanese cities.

Plans to realize Sustainable use of biodiversity and symbiotic society in urban
Jakarta

Natural Resources Management
Topics of green open space of Jakarta
Result of research about young people attitude toward ecotourism and green open space of Jakarta
I suggest potential of protected area and ecotourism that satisfy people’s expectations in a populous city.
TOPICS OF GREEN OPEN SPACE OF JAKARTA
Indonesia has about 18,110 islands. Population is 237,641,326.

50 national parks (include 3 world heritage)
• The most populous city in Indonesia (9.608 million people)

• The land area is 660 square kilometers or more

• A hot climate during day
  32.7° C - 34° C

night
  23.8° C - 25.4° C
• Green open space is about 9-10% in Jakarta
• 6.8 square meters per person
For example, Puncak

Concerned about excessive utilization
• Deforestation due to increase of the villa
• Risk of landslides
• The air pollution caused by traffic congestion

Impact on Other Area

About 100 km
In the center of city, a large green open space is required. If we have familiar nature area in the city, it also leads to preserve the surrounding nature area.

In order to get the interest from users and local residents, we may want to balance use and preserve. The case of economy and preserve is also same. Ecotourism can be good chance to be realized natural resources management and regional development.
ATTITUDE TOWARD ECOTOURISM AND GREEN OPEN SPACE OF JAKARTA

Result of Research
A questionnaire survey

An attitude survey was conducted with university students at Bogor Agriculture University (n=210).

Attitude toward Ecotourism and Green open space in Jakarta

IPB students will become human resources that take part in natural resources management of Indonesia in the future. It is significant for sustainable development to research their attitude.
Do you know the word of “Ecotourism”? 

- Yes: 98% 
- No: 2%
<table>
<thead>
<tr>
<th></th>
<th>Eco tour has the effect that tourist’s awareness toward environmental protection is increased.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Eco tour has the effect that local resident’s awareness toward environmental protection and local culture is increased.</td>
</tr>
<tr>
<td>3</td>
<td>Tourist begins to choose the sightseeing that has a minimum impact on environment.</td>
</tr>
<tr>
<td>4</td>
<td>Eco tour produces a chance to make the rule of environmental protection by local residents.</td>
</tr>
<tr>
<td>5</td>
<td>Eco tour has the effect of increasing number of tourists.</td>
</tr>
<tr>
<td>6</td>
<td>A hands-on experience in nature is matched to the demand of travelers in a eco tour.</td>
</tr>
<tr>
<td>7</td>
<td>Eco tourism has economic ripple effect to other industry in a local.</td>
</tr>
<tr>
<td>8</td>
<td>Eco tourism produces vitality of a local community.</td>
</tr>
<tr>
<td>9</td>
<td>Eco tour has the effect of environmental education for tourists.</td>
</tr>
<tr>
<td>10</td>
<td>Eco tour has the effect of environmental education for local residents.</td>
</tr>
</tbody>
</table>

What do you think about Ecotourism?
3. Tourist begins to choose the sightseeing that has a minimum impact on environment.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pantai Indah Kapuk (include Muara Angke)</td>
<td>26.2%</td>
</tr>
<tr>
<td>2</td>
<td>Taman Mini Indonesia Indah</td>
<td>17.9%</td>
</tr>
<tr>
<td>3</td>
<td>Hutan kota Universitas Indonesia</td>
<td>13.1%</td>
</tr>
<tr>
<td>4</td>
<td>Taman Monas</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Which is suitable for eco tour in Jakarta?
We should note that the opinion "Tourist begins to choose the sightseeing that has a minimum impact on environment" is less. It may be related potential of protected area and ecotourism.

They think the potential of ecotourism to abundant nature place. Perhaps, they feel that it is importance that natural resource is rich. If we can balance use and preserve, of course, the value of green open space is improved.
RESULT OF RESEARCH

CASES OF PROTECTED AREA
IN JAKARTA
About Pantai Indah Kapuk

Total 327.70 Ha

Jakarta agriculture and forestry office
About Pantai Indah Kapuk
About Pantai Indah Kapuk

Ecotourism Zone

Protected mangrove’s zone

Resort Zone

Ecotourism Zone

Pantai Indah Kapuk area map (include Muara Angke)
Protected Mangrove’s Zone
Ecotourism Zone
Ecotourism Zone

Tour
- Photography
- Photo wedding
- Family travel
- Education and research

Conservation
- Mangrove planting activity
Resort Zone
Pantai Indah Kapuk became a protected area since 1995. Resort zone and Ecotourism zone were designed in 2010.

Prohibited matter
Dumping of garbage, illegal hunting, illegal fishing, using fire, destroying mangrove
Relations with local residents

Pantai Indah Kapuk has produced the employment of local residents.

- 50% is civil servants, 50% is employees
- Repair of facility, cleaning, shop staff
It is possible to balance use and preservation in the city because we zone green open space by the level of use. We can preserve a nature under certain rules because we put management staff in protected areas. This thing conduct to produce the employment of local residents.

This case has a problem that point harmony between preservation and usage behavior is a little. Visitors just make use of green open space while they follow the rule. Usage behavior isn't designed to have interest in conservation. For example, it doesn't have nature interpretation guide...
Conclusion

POTENTIAL OF PROTECTED AREA AND ECOTOURISM
If we have familiar nature area in the city, it also leads to preserve the surrounding nature area.

If the city has large green open space a little, zoning into preservation and use in one green open space is important.

In order to take advantage of the zoning of use and preservation, ecotourism has an important role.
Regard to result of survey, person who feels "tourist begins to choose the sightseeing that has a minimum impact on environment" was few. In the case of Pantai Indah Kapuk, the point harmony between preservation and usage behavior is a little.

We have acquired the know-how about balance of use and preservation in National Park. Is it possible to apply the know-how for green open space in the city?

It is estimated that about 70% people of the world (about 6.5 billion people) will live in urban areas in 2050. So, we need to find potential of protected area and ecotourism in the city.
Where have you ever visited?

1. Taman Monas 72.4%
2. Taman Mini Indonesia Indah 67.6%
3. Taman Menteng 51.0%
4. Taman Suropati 50.5%
5. Gelora Bung Karno 37.6%
6. Hutan Kota Universitas Indonesia 15.7%
7. Pantai Indah Kapuk 13.8%
Where have you ever visited?