7.2.1

BEST PRACTICE -1

1. **Title of the Practice: - Ecological Conservation Park.**

2. **Objectives of the Practice:**

The college aims to conserve flora and fauna, using them for research and experiments, countering ecological imbalance caused by pollution and resource exploitation. Emphasizing recycling, renewable energy, and conservation, it maintains 7 botanical gardens, a medicinal herb garden, net-house, and butterfly park. These spaces serve as both leisure spots and research centers, benefiting diverse life forms and scholars.

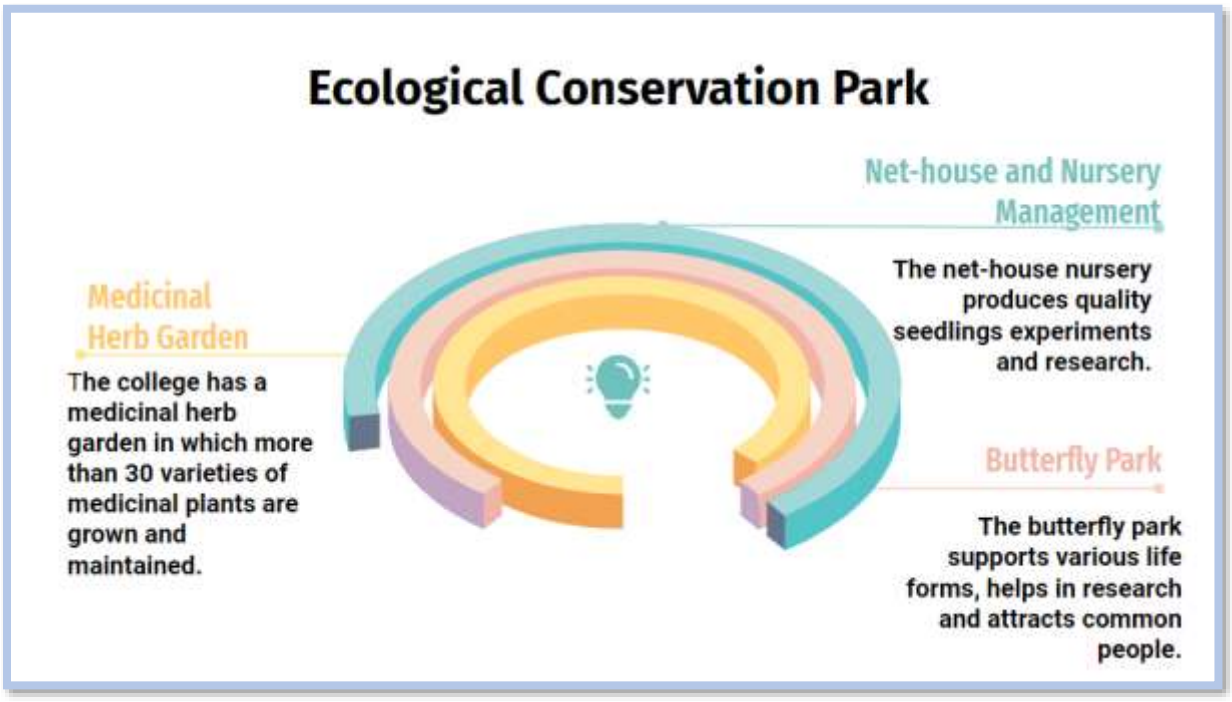
3. **The Context:**

Ecological conservation parks have gained importance in safeguarding diverse life forms from threats like habitat loss, global warming, and pollution. They not only protect flora and fauna but also support vital food chains and webs, restoring ecological balance. The COVID-19 pandemic has highlighted the value of herbal medicines with historical use in India, addressing drug supply shortages, costs, and resistance issues.

4. **The Practice:**

The college's ecological parks captivate students, researchers, and local naturalists. Planting medicinal and selected species lures diverse pollinators, migratory birds, spiders, and more,

alleviating ecosystem pressure while aiding biodiversity, animal behaviour, and medicinal plant studies. Geotagging age-old trees safeguards their conservation on campus.



A. <u>Medicinal Herb Garden:</u> -

The college's medicinal herb garden nurtures over 52 medicinal plant varieties, including easily cultivable healing herbs. Botany, Horticulture, and Seed department students and gardeners maintain the habitat, providing researchers ample opportunities for experimentation.

B.<u>Net-Greenhouse and Nursery Management:</u>

The Botany Department maintains a well-kept net house and an open nursery, serving as a controlled environment for raising crops, vegetables, fruit plants, flowers, and forest saplings.

Annually, the net-green house nursery generates high-quality seedlings for seed technology and aids the horticulture department in experiments and research.

<u>C.Butterfly Park:</u>

Butterflies, as crucial pollinators, hold a significant role in global agriculture, second only to bees and wasps. A decline in butterfly populations can cascade to affect predators like wasps, spiders,

reptiles, and birds, disrupting the ecological chain. The butterfly park serves not only as a haven for diverse life forms but also engages research students and the public.

The ecological conservation park at Govt. Holkar Science College transcends being a mere garden; it stands as a living-open museum that educates students and nature enthusiasts. It functions as a research field station, delving into animal-plant diversity, environmental impact, and pollution. Butterflies act as vital biological indicators, reflecting environmental health. The park boasts around 65 butterfly species and 200 invertebrate and vertebrate types year-round. Insectivorous migratory birds like Flycatchers and Wagtails thrive due to abundant food sources. Vermiculture and bio-decomposer plants aid in organic waste bioremediation, bolstering soil fertility. These efforts maintain ecological equilibrium, reduce energy consumption, and leave no carbon footprint. Additionally, the park fosters indigenous plant and animal species, enriching diversity. Notably, despite proximity to a national highway, nearly 65 butterfly varieties grace the park each September.

5. Evidence of Success:

When you develop the concern, you will begin to act at your level to protect the environment:

Evidence of Success

- **Research papers published** in the journals.
- Apart from research scholars butterfly garden has **attracted the attention of students and common people**.
- **Popular articles** in newspapers and magazines.
- **Photography contest** for faculty on butterflies.
- **Special plantation drive** with NGO for medicinal herbs and butterfly support plants.
- **Nationally awarded documentary** on butterflies in 2020 during Butterfly Big Month video competition.

6. Problems Encountered and Resources Required:

A. Maintenance of the park.

B. Constant water supply on summer days.

C. Soil fertility maintenance.

D. Regular plantation drive to replace dried and infected plants.

Govt. Holkar (Model Autonomous) Science College, Indore

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[Vasudhaiva Kutumbakam]

FINISHING GOAL

STARTING GOAL

Our SDG-2030 Goals Tree

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