7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

BEST PRACTICE 1 1. Title of the Practice: Sustainable Development of Botanical Garden and College Garden

1. <u>Title of the practice:</u> Sustainable Development of Botanical Garden and College Garden

2. Objectives of the practice:

- 1. Establishment of Departmental Nursery
- 2. Renovation and maintenance of Botanical garden
- 3. Getting monetary fund by selling nursery plants.
- 4. Giving consultancy to the herbal growyers/terrace garden/kitchen garden.
- 5. Participation of students in nursery development/plantation/maintainace of College/Botanical Garden

6.

3. The Context:

Life styles are ever changing and rural people are migrating to urban areas. As a result, Villages are shrinking and cities are expanding. Demand for the production of goods required for the growing populations is also increasing at alarming rate. Besides these global warming, environmental disturbances, over exploitation of forest resources leads to increase the green house gases which shows multiples hazardous effects on both living and non-living things. Most of the Indian metropolitan cities are highly polluted, especially New Delhi. The major solution for these problems is plantation only. Plants can reduce all types of pollution. Land scaping and greenery gives pleasantness and extra beauty to the institute. Hence, we have selected this aspect as one the best weapon against pollution. Educational institutions are the best platforms to inculcate the habitat of plantation. It will be regular process in the department. We have attempted to show how to develop greenery in shot period and suggest the plant species and their growth requirements. Most of the ornamental species are vegetatively propagated and students will be trained in this aspect. We encourage our students to grow terrace garden/Kitchen Garden.

4. The Practice:

- We are maintaining departmental nursery.
- In our College Department of Botany look after the establishment and maintenance of College garden and Botanical Garden.
- We grow ornamentals, medicinal herbs, tree species. We multiply plants species vegetatively.

- We collect plastic covers, plastic cans, disposed plastic glasses and clean them. After cleaning depending upon the plant species we use plastic glasses/covers/bottles/cans. It help to reduce the plastic pollution.
- We are producing compost manure from the dried fallen leaves in the college premise.
- We prepare soil mix with clay, red soil and vermicompost or compost at 1:1:1 ratio
- Nursery pots are filled with fertile soil and sow the stem cuttings/plant lets and kept under shade and frequently watered
- We sell nursery plants for nominal rates for the staff and public

Describe the practice and its uniqueness in the context of Indian higher education. What were the constraints of limitations, if any faced

Nature is a part in our regular life. But due to modernization present human beings far away from nature. This is our small attempt to bring back nature into the urban areas. Busy life makes them to isolate from nature. By sparing little time every day for promoting greenery, each and every house will be filled by plants. Now every one is facing stress due to job tensions. Gardening and plantation are the best tools to over come stress. Besides this garden work makes body fit. The educational institutions must give extra credits to the students who participated in greenery promotion works. And the municipal corporations must bring a rule that each house must have proportionate greenery and rain water harvesting system. Then urban area filled with greenery. Besides this municipal corporations must give incentives and awards for the people who practice this type of greenery promotions works. Present day students are not aware of these greenery promotion activities. It is suggested that this must be include in the curriculum in schools. Maintaining nurseries and gardens is very difficult task. Because it need regular inspection, care and man power. Since Government educational institutions are having vast unusable are this activity will be successfully implemented. We can grow all types of plant species can make them mini biodiversity centres. Students must know all the botanical names and their uses.

The important plant species:

<u>Medicinal Herbs:</u> *Gymnema sylvestris* (Podapathri), *Cympopogon citrates* (Lemon grass), *Ocimum sanctum* (Thulasi), *Emblica officinalis* (Amla), Aloe vera, *Phyllanthes acidissima*,

<u>Tree Species:</u> Tectona grandis (Teak), Pterocarpus santalinus (Red Sandars), Tabubia areus, Albezia lebec, Samania saman, Morus alba, Terminalia catappa, Sapindus emarginatus (Soap nut), Holoptelia integrifolia, Kigelia Africana, Jacarandra mimosifolia, Aegel marmelos, Etc.

OrnmentalPlants: Nymphea nowchali (water lily), Hibiscus rosa sinesis , Jasminuma utumnale (Jasmine), Jatropha integerima, Pedilanthes tythimaloides, Bignonia, Tobernamontana divaricata, Agave sisalana , Alamanda, Bougainvillea , Pothos , etc.

Fruit trees: Jack fruit, Clustard apple, Coconut, mango, Guava

5. Evidence of success:

We have established a beautiful botanical garden and college within short span of time. We have multipled so many palnt species and distributed to staff and public. Presently we are conserving xxxx plant species in our college premise. We are maintaining separate sector for

desert pants, floral plants, fruit plants and forest tree species. We are maintaining aquatic flora in our botanical garden. Students are trained to propagate plants through stem cutting, bulbs and tubers etc. Our garden is considered as self sustainable. We multiply our plants and generate money by selling nursery plants.



Students preparing nursery plants





Dr. P.Amrutha Lakshmi, In-charge of the Department showing nursery plants



Nursery plants with Dr. B. Manohar Reddy, Lecturer in Botany



Dr. Soughandika, Lec.in Botany with nursery plants.



Staff members of the Department of Botany in the Botanical Garden



Students involving garden work



Students planting Sanseveria plants at the boarders



Dr. Sougandhika Lec. In Botany. guiding the students



Nursery plants ready to plant



Tecoma capensis







Cycas plant with male cone