

# JAMIA HAMDARD, NEW DELHI

AQAR 2019-20

## Institutional Best Practices

### Best Practice No. 1

#### Name of the Cell: Environment Quality Cell (EQC)

#### 1. Title of the Practice: Plantation Drive

#### 2. Objectives of the Practice:

- 1) To sensitize, encourage and engage students, staff, all stake holders of the university and community about scientific tree plantation for increasing the green coverage.
- 2) To create interest among the students regarding the values of trees & plants.
- 3) To inculcate the idea and thoughts that the programme of plantation can conserve environment and improve ozone layer by adopting energy conservation methods to protect flora and fauna on earth.

#### 3. Context:

Jamia Hamdard is located in a sprawling area of nearly 200 acres in Tughlakabad in South Delhi, which has extended forest portion of 'Jahan-Panah Forest'. The flora of Jamia Hamdard campus revealed a great diversity of plant life. The campus has lot of vegetation and diversified ecosystem, which encourages a number of faunal species residing or visiting the campus. To assess the flora and avifauna of the campus, a survey was conducted, which yielded a good number of plant and bird species. The plants included all types; native to naturalized, medicinal to ornamental, creepers to lofty trees and herbs to trees. The shade plants such as royal palm, toddy palm, false Ashoka, Maul sari, Hingon; hedge plants such as white Cedar, Harsingar; Ornamental plants such as Monks cress, champa methi, marigold; and medicinal plants such as Nim, Safeda, Amla, Mulberry, Giloe, Gudhal, Makoi are found in abundance. Besides herbs, shrubs and trees that are spread over in Jamia Hamdard campus, it also an herbal garden on a total of 6 acres of land with about 150 species of important medicinal and aromatic plants. The green cover of the university campus, mainly consisting of lawn grass, is more than 70% of the total area making a truly lush green campus. It covers faculty lawns, residential blocks, hospitals, parks, road sides, hostels and others subsidiaries of the university.

#### **4. The Practice:**

##### 1) Plantation Drive

Jamia Hamdard in partnership with the Rotary Club of South Delhi Tree Plantation Drive to promote the motto of green campus and greenery all around. A total of 400+ saplings belonging to different species were planted by the horticulture department of Jamia Hamdard. As part of this initiative, the university is committed to plant 2000 tree saplings this year.

##### 2) Observation of World Environment Day on the theme: "Ecosystem Restoration"

On the 5<sup>th</sup> June, 2021 World Environment Day was celebrated.

##### 3) Observation of World Energy Conservation Day and 'Earth Hour'

Jamia Hamdard observed "World Energy Conservation Day" on 17<sup>th</sup> December. Jamia Hamdard keeping in view the commitment towards saving the planet earth, observed "Earth Hour" on 27<sup>th</sup> March by switching off lights from 8.30 pm to 9.30 pm, except emergency lights to support the Government of Delhi and to join in the world-wide initiative.

#### **5. Evidence of Success:**

The mass plantation drive initiative by Jamia Hamdard is yet another environmental initiative to address climate change and contribute in reduction of carbon footprint. We have 7000 trees planted within Jamia Hamdard campus and outside the campus over the year. The trees are well grown and have key impacts on the climatic change control and more oxygen is there inside the campus and the carbon limit is brought to a minimal level. During this deadly pandemic era, the campus was indeed a place of refuge and rejuvenation for the residents and helped the inhabitants to cope up with the depressing environment and contributed positively towards their health. The energy conservation practices were adopted by all Jamia Hamdard residents, faculty, students and staff enthusiastically.

#### **6. Problems Encountered and Resources**

The campus usually attracts heavy rains as compared to the surrounding terrain and seems a lush green patch which lead to a student's misunderstanding that the campus is not in need of such drives and it was indeed difficult to impress upon them and ask them to enthusiastically participate in this drive, However, it is worth mentioning that the dedicated efforts of the NSS coordinator, Dr Khursheed Ansari along with his student volunteers helped to engage many students, faculty and residents and helped overcome this prominent hurdle. The university facilitates these activities by posting the gardeners, special workforce and indeed invests both time and resources to accomplish this very important activity of the EQC.

## **7. Notes(optional)**

It is an important duty of students to plant more and more trees, herbs and climbers because these are the carriers of rain and cloud. Only the nature has an inherent capacity to turn up the balance of nature to produce more and more oxygen, but it is only possible when our surroundings are full of trees and plants. This type of tree plantation programme is only possible when our new generation becomes more & more sincere and active towards such tree plantation programmes. This tree plantation makes the points of success, it is sure and certain that our nature will be in balance and the life of the people would take a positive turn with presence of disease free, e happy & prosperous environment.

## **8. Coordinator/In-charge/Group who has been assigned to the above Best Practice (optional)**

a) Name: Prof M.Z Abdin

Designation: Chairman, Environmental Quality

Cell. b Name: Dr. Khursheed Ansari, NSS,

Coordinator Designation: Chairman,

Environmental Quality Cell.

c) Name: Mr. Syed Furqan Ahmad Designation: Estate Officer, Jamia Hamdard

## **BEST PRACTICE No. 2**

**Name of the School, if applicable:** School of Chemical and Life Sciences

**Name of the Department/Centre/Cell/Section/Division/Unit:** Botany

**1. Title of the Practice:** Maintenance of herbal garden (under the aegis of Department of Botany).

### **2. Objectives of the Practice:**

- a). To introduce medicinal plants of commercial importance from different geographical zones
- b). To design the agro-techniques for the cultivation and propagation of medicinal plants and standardize them.
- c). To document and inventorise all the medicinal plants growing in the herbal garden on the basis of their passport data.
- d). To raise the biomass (ex-situ conservation) for research and teaching departments and for exchange programs.
- e). To study and assess the various environmental stresses on the medicinal plants affecting their secondary metabolites
- f). To establish germplasm bank, seed bank/gene bank for all the accessions collected and transplanted from various agro-climatic zones.

**3. The Context:** The Department of Botany is involved in maintenance and conservation of medicinally important plants in Herbal Garden. The herbal garden serves as a perennial source of experimental material which are utilised by researchers across the campus. Also, it serves as a live herbarium which facilitates study by students of UG and PG in botany and allied sciences.

**4. The Practice:** A faculty member supervises maintenance and conservation of medicinally important plants. Several medicinal and aromatic plants from north-west regions of India have been introduced for their diversity assessment. Methods of cultivation of medicinal and aromatic plants have been developed. The herbal garden at Jamia Hamdard serves as a repository for future research and teaching.

**5. Evidence of Success:** The herbal garden at Jamia Hamdard serves a model for several universities and research institutes who are interested in establishing one in their respective places of work. Spread over 3 acres of land, the herbal garden boasts of 150 species of important traditional medicinal and aromatic plants which include herbs, shrubs, climbers and trees. Several students who have graduated with post-graduate and doctorate degrees in botany, pharmacy and Unani medicine from Jamia Hamdard are beneficiaries of the herbal garden as a source of the experimental material. During May 2019, Jamia Hamdard celebrated the Fascination of Plants Day (an international event that involved faculty members of Botany and school students).

**6. Problems Encountered:** None

**7. Resources required**

- A functional phytotron, green-house and glass-house for facilitating *ex-situ* conservation.
- Proper support system for ensuring the proliferation and growth of climbers.
- Functional and modern irrigation facility for ensuring uninterrupted supply of water to the plants.
- Personnel (atleast 1 supervisor and 2 helpers) to carry out routine works towards the maintenance of the herbal garden

**7. Notes (optional)** Hamdard National Foundation (HNF) was highly supportive of this practice and was generous enough to erect an iron fence on all the four sides to protect it from grazing by herbivores like Neelgai.

**8. Coordinator/In-charge/Group who has been assigned to the above Best Practice (optional)**

- a) Name (s): Dr. Md. Salik Noorani Khan
- b) Designation(s): Assistant Professor
- c) Period/tenure involved in conduct of the best practice: 2 years