JAIPUR NATIONAL UNIVERSITY

Jaipur –Agra Bypass near RTO office, Jagatpura, Jaipur



BEST PRACTICE-II ENVIRONMENTAL FRIENDLY CAMPUS

(Prof. D K Mathur)
Registrar
Jaipur National University
Jaipur



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Best Practice-II

1. Title of the Practice: Environmental Friendly Campus

2. Objectives of the Practice

- Creating peaceful learning environment and ambiance for learners.
- Making Campus eco-friendly though regular plantations
- Promoting sustainability by assessing and reducing the environmental and social footprints.
- Energy conservation
- Installation of solar panels in all campuses to meet power requirement though renewable energy resources.
- Effective management of water resources in the University.
- · Facility of Rain Water Harvesting.

3. The Context

The climate crisis is accelerating at an unprecedented rate at the global level. Jaipur National University since its inception has always made the effort to make the campus environment friendly. University deals with numerous environmental issues. These issues are complicated by the fact that University has many separate buildings and a transient population of students. It was initially absolutely a barren land where all the four campuses have been set up. The area is also dry zone. It has been the vision of the founders that this barren area be developed into lush green campus, so that besides the students the nearby habitants may also get good surrounding environment. This also fulfils the University's commitment towards the society.

4. Practice:-

The University has taken many initiatives for setting up environmental friendly campuses.

Green Landscaping with Trees & Plants

(Prof. B K Mathur)
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Entire campus is made green by use of different varieties of trees, plantations, lawn etc. For achieving this, the following efforts have been made:

- Different varieties of medium size and tall trees have been planted all over the campuses including the medical campus.
- Besides above plants many other specific plants have been planted in all the four campuses like Alstonia, scholaris, Bauhinia purpurea, Bougainvillea spectabilitis, Callistemon, Cassia Cycas, , Delonix etc. have been planted for the purpose of carbon neutrality.

All the four campuses comprise of big grounds with rolling grasslands and beautiful flower beds where students and staff can relax in their free time. The whole boundary of the university is maintained by huge trees. The orchard of fruit trees is well maintained and comprises of different varieties of Guava, Amla, Karonda, Jamun, Pomegranate and Sandal Wood trees.

- Rain water Harvesting: University has the solid system of rain water harvesting. It is one of the most effective methods of water management and water conservation. Most of the buildings in the University have rainwater harvesting structure and the rainwater is allowed to go underground through these structures. The runoff rooftop rainwater from the terrace of the buildings is channelized into different recharge pits to recharge the ground water. The run-off water collected on the roads is drained into wells for giving recharge to the bore well sources located inside the campus. Three plants of rainwater harvesting are available in the campus. Two plants are installed in the main campus and one in East/North corner of SADTM campus. This rainwater is used for the ground water and bore wells.
- Waste water: The waste water generated from different buildings of the University is treated with modern technology based Sewerage Treatment Plant. The University has installed and commissioned STP at different locations of the campus. In STP liquid waste is being treated and water generated though this process is used for flushing water toilets and gardening purpose. Total capacity of STP in all the four campuses is 1200KLD.
- Energy Conservation:
- (A) Use of Solar Water Heating System in all the Hostels
- (B) Fixing of LED Street lights in the Campus. The University is using CFl, LED and other devices which consume lesser electricity vis-àvis illumination and result in lesser energy utilization.



buildings which is continuously increasing the share of renewable energy in total consumption of power in the University. The present renewable energy source consists of:

(1)	Main Campus / Medical-	NDS	<u></u>	1070kw
		DS	-	86kw
(2)	SADTM Campus			390kw
(3)	SIILAS Campus	-		40kw

The entire generated renewable energy is used and no part of this is supplied to grid. Installation of solar panels has also enabled Jaipur National University to be a user of clean and green energy and helps in reducing carbon footprint and preservation of natural resources of the country

<u>Smoking Free Campus</u>: The Campus is Smoking Free. The University has the policy of making environment clean in and around the campus. If anyone is found smoking within the campus he/she is fined. At many places the posters, typed notices have been pasted. Such activities create awareness amongst the staff members, students and outsiders visiting the campus and the hospital against harmful effects of smoking.

<u>Plastic Free Campus:</u> The University has also made efforts to make the campus plastic free. In accordance with the government directions use of plastic, such as plastic bags, bottled water, bottled cold drinks, forks, straws, spoon etc. is restricted in the mess, canteens and campus etc. Time to time interactive sessions are being organized in the campus to create awareness among students focused on the hazardous effects of plastic pollution.

<u>Paperless Office</u>: The minimum use of paper imitative is followed by JNU to reduce cost and to increase productivity and work flow for staff, faculty and students through technology. Most of the communication between administration, staff and faculty members are through electronic mails. Papers if at all used are recycled to keep the university clean.

In 2019, The University has adopted ERP System to promote transparency in every sphere whether it is students admission data, examination or administration. Through this software, students can access the time table, classes held, attendance, marks status, hostel information etc. Before installation of ERP system, university's functioning was also computerized and many of the work was being undertaken through JNU Software.

(Prof. K Mathur)
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Jaipur National University
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5. Evidence of Success-

Success in the creation of environment friendly campus can be judged from the following:-

- The greenery of the all campus is the result of the plantation programs organized under Go Green Campaign to make the campus green. Plants of various varieties have been grown for the purpose of Carbon neutralities. These plants are properly maintained all the year round under the expert guidance of a Horticulturist and his trained malis. Recycled water is used for maintaining the lawns and gardens.
- STP plants are installed and commissioned where liquid waste is being treated and water generated. The area where the University is located comes under dark zone and in such type of circumstances water reservoirs are properly managed.
- Proper structure of rain water harvesting has been developed to make optimum use of water reservoir.
- Roof top solar panels have been installed in most of the building which is continually increasing the share of renewable energy in total consumption of power
- The university has created proper system of collection of solid waste both in three campuses and the medical campus so that the entre environment may be kept clean.

6. Problems Encountered and Resources Required

While the opportunities to explore environment friendly possibilities are evident, it is an expensive task. Plantation programmes are also expensive one. The area has severe problem of water shortage. Most of the water requirement is met though Tankers from outside. University has few bore wells but these do not fulfill the complete requirement of all campuses, as the campuses have large number of staff quarters, boys & girls hostels, 1000 bedded hospital, Nursing staff quarters, Doctors quarters, Guest-Houses etc.

Installation of solar panels is successful but its maintenance is also a costly affair, although in near future this will reduce the University's dependence on supply of Government power. Thus, more financial resources are required for the upkeep of all these good practices.

(Prof. D K Mathur) Registrar Jalpur National University Jaipur