

INSTITUTIONAL BEST PRACTICES

GREEN INITIATIVES IN COLLEGE CAMPUS

Environmental degradation is the major issue throughout the world. Indian culture and traditions had always been aware and motivational towards the management and conservation of flora and fauna for the sustainable development of mother earth. PG students and staff members have taken initiative for plantation in campus. Each PG student has been given charge of a particular plant. He/she waters it and takes care of it. When he leaves the college after the completion of his study, the newly entered boy is given charge of the particular tree. Plantation and environmental awareness committee, NSS, NCC and YDC monitor this process and provide necessary help and guidance to the Students.

2. GOAL

Inculcating Indian values in students.

Making them aware of the advantages of plantation.

Making students think that environment saving efforts need to be carried out by every generation.

3. CONTEXT:

College wants to utilize the potential of youth for environment protection.

Most of the boys are from rural background and have good knowledge about how to take care of the tree.

Using the leisure time of boys for a healthy purpose.

4. PRACTICE:

Students of M.Sc. Zoology (Final and Previous year) participate in plantation programme under the aegis of Zoology association by contributing their efforts in growing plants. Discarded/preserved animal containers are cut apart and used as tree planters. Abandoned sinks are also sealed and used as planters.

Few perennial trees like Margosa, Banyan, Ficus, and Karanj are also planted in tree guards. Usually admissions are done during rainy season. Faculty members of different departments, NSS/NCC/YDC officers and senior boys introduce the newly admitted students of the college to this practice. They are guided and provided the required help. Boys water trees at regular interval and thus contribute to environmental protection.

5. EVIDENCE OF SUCCESS:

Trees have grown up now, and Jaya Park, Bhagat Singh Park and Botanical Garden have been developed and maintained duly. The practice has motivated the other students as well and they make small efforts on their own to save the environment. Students are acquainted of the need to protect the environment through the activities conducted by various committees.

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:

The whole process is based on self-motivation. The trees are donated by the Forest Department. The tree guards have been donated by Shree Cement Ltd., a leading local company.

PREPARATION OF GARBAGE ENZYME AN ENVIRONMENT FRIENDLY FERTILIZER

Mother earth is getting warmer day by day, due to the depletion of ozone blanket & green house effect. In present era, garbage enzyme seems to be a most effective way to fight these challenges because during the production of this ecofriendly enzyme, Ozone, Nitrates, Carbon dioxide are generated, which reduce green house gases & heavy metals trapped in atmosphere, thus bringing down the global temperature.

CONTEXT-

Keeping in view the alarming situation of increasing pollutions & depleting soil profile, students are briefed about an alternative to enrich our soil and generate an alternative which could well substitute a few chemicals from our daily life. This enzyme uses daily Kitchen vegetable & fruit peels and a little amount of brown sugar which is well affordable by everyone & needs negligible efforts to prepare; hence the project is chosen by the students of our Zoology Association. Involvement of youth is wisely done so as to spread the knowledge of this environmental friendly enzyme among common man.

PRACTICE-

Students of M.Sc. and faculty members initiated the project on 9th November 2016. A container of 50 kg was taken as pilot sample, which was followed by a poly tank of 500 liters. Garbage enzyme was prepared by using jaggery sugar, fresh kitchen wastes [fruits & vegetable peels] & water. The ratio of these three ingredients was 1:3:10. All the contents were put in a broad mouth container and stirred well daily for first thirty days. Later, the container was tightly packed and left undisturbed for next 60 days. The fermented contents were filtered to remove residue. The residue was used as fertilizer while the filtrate was used for fertilizer, as insecticide, as deodorant, for vegetable wash, as floor cleaner and other purposes.

EVIDENCE FOR SUCCESS-

Primarily, the fertilizer was added to the barren soil in department and the filtrate were added to plants and also used for cleaning the department and as toilet cleaner.

BEST PRACTICE- 3

BHUNGROO: AN EFFECTIVE, INEXPENSIVE METHOD OF RAINWATER HARVESTING

M.S.J. College , Bharatpur constructed first “Bhungroo” (literal meaning: “pipe”) for rainwater harvesting under RUSA scheme under the direction of Dr. Sarita Singh, Director, Rajputana Society , Ramnagar(Bharatpur) in college campus whose results are very encouraging.

CONTEXT:

Rajasthan is an arid state, and thus every drop of water is precious in the state. Rainfall is the primary source of drinking water, and therefore rainfall harvesting is of utmost importance in the region. Bharatpur region has been suffering from water shortage for almost two decades now: the water sources have dried up, the groundwater level has drastically gone deep, and due to lack of rainfall, the TDS of soil has gone upto 5000-20000, thus rendering the remaining water sources unfit for consumption. Discussions with the forest department revealed that due to the shortage of rainfall for a long time, a thick, impervious layer of salt has formed at approximately ten feet below the ground level. This further worsens the condition as the rainwater cannot seep through the layer and is thus unable to recharge groundwater level. On the other hand, the rainwater, unable to seep into the ground, remains stagnant on the surface and thus becomes a breeding ground for diseases. Therefore, there was a need for research into effective and inexpensive rainwater harvesting methods.

PRACTICE:

“Bhungroo” (literal meaning: “pipe”) is a widespread technique used in Gujarat for rainwater harvesting. In this technique, the slope for the ground runoff was analyzed, and a sandy layer (conducive for rainwater seeping) was found forty feet below the surface. Thus, a forty-foot borewell was installed at one location within the campus , and a two-feet long porous pipe was installed at the top of the setup. Further, a bed of bricks and gravel was constructed around the pipe to serve as a natural filter for rainwater seeping through the structure into the ground. This was an experimental setup and, if successful, could prove as a milestone for solving the rainwater harvesting problem.

EVIDENCE OF SUCCESS:

Fortunately, Bharatpur received ample rainfall in July that year. Despite initial apprehensions about the success of such a simplistic approach, the “Bhungroo” singlehandedly ensured the seepage of rainwater on its surrounding fifty-foot area and proved to be an effective way of rainwater harvesting. We were successful in recharging groundwater level by using otherwise stagnant rainwater and surface runoff. Another critical fact to note here is that installing one “Bhungroo” costs around 5000 INR and is thus an inexpensive rainwater harvesting method. Therefore, the installation of “Bhungroo” can solve the soil-saline problem and could be of immense help during summers in the region. This method could prove to be a milestone in “Hariyalo Rajasthan.”