



Development of Biodiverse College Campus through the Student Power

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Abstract- The ability of youth to create revolutionary changes at the institution level is vital. Student's contributions at different levels have carried out the biodiverse college campus development. Students who work under Karmaveer Bhaurao Patil Earn and Learn Scheme by Savitribai Pune University play an important role in campus beautification. College campus have conserved medicinal, endangered, indigenous, and rare plants. On the other hand, NCC and NSS students having a significant role in campus environmental sustainability. College administrations also used the power of Nursery Development and Management and Vermicompost Technology Students to maintain greenery. Many improvements have been possible through donations by the alumni, donations in the form of soil, organic fertilizers, sand, gravel, silt, availability of plants through the donation of nature lovers, acceptance of different innovative concepts through plant-loving groups and individuals. The college can succeed in sustaining Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms, Angiosperms diversity, which is of prime importance to maintain the eco-friendly surrounding. The diversity of cactus and succulent plants is the main attraction of visitors and the prime source of funding for the college and also for conservation of species.

Keywords- Biodiversity, Students Power, Earn and Learn Scheme, Donations, NCC, NSS

Introduction

Loknete Ramdas Patil Dhumal Arts, Science, and Commerce College is located in Rahuri tehsil, District Ahmednagar, Maharashtra, 413705, Latitude-19.4113780, Longitude- 74.6365760 India. The college infrastructure facilities are developed with the help of student's active participation. The power of youth is essential to make revolutionary changes at the institute level. For this purpose, we have used our student's power for the development of the college.



Fig. 1. College Campus Aerial View



Fig. 2. Beautifying Entrance of College

In this research paper, we have included our activities on campus beautification through the students and different social groups.

The goal of sustainable development is to meet the requirements of the present without jeopardizing the needs of future generations. If we want to exist as a species, we must learn to live sustainably and work our way out of current social and environmental difficulties (Ramadoss & Poyya Moli, 2011). Sustainability is becoming an increasingly central element of many institutions' organizational philosophy. While colleges with a sustainability plan have primarily focused on operational improvements, staff and student participation are critical components of establishing a sustainable campus (Too et al., 2013). "Sustainable development" is an

ecological objective encompassing economic, social, and environmental elements. This concept was unusual because it provided a way to progress while retaining ecological sustainability (Alam, 2018).

Students Power is enormous; if used for each campus development, it will be a revolutionary concept. Involvement of college youths' involvement in biodiversity enrichment of campus is of prime importance and fundamental concept to revolutionize the greenery of every social, educational institute. The efforts taken to inculcate the concept of greenery development in the college campus is an example of our college's great success.

Inclusion of learners from different groups of students of Earn and Learn, Environmental Awareness, NSS, NCC, local social groups, and overall need-based students of different classes. Revenue for the concept can be generated from institution, alumni, common people, concerned certificate courses fees, voluntary water supply to the college flora during water scarcity.

Role of Earn and Learn Students in Developing Green and Clean Biodiverse Campus Development

Karmaveer Bhaurao Patil Earn and Learn Scheme – This scheme is run by Savitribai Phule Pune University, formerly University of Pune. Students are involved in day-to-day cleaning activities of lush green campus vegetation and digging of pits, filling the pit with the proper proportion of soil medium for plantation of different trees plantation, maintenance (Which includes plants of all plant groups).

The college mainly focuses on conserving medicinal, endangered, endemic, rare flora in the 17.5-acre campus. Every day, students are involved in the maintenance of this flora. Because of the conservation of the flora, ultimately, fauna dependent on the flora has been maintained very effectively. Therefore, we have succeeded in the conservation of flora, fauna, and funga as well. College is uplifting these needy students by implementing their idea in innovative creations like landscaping, roadside avenue development, training, and pruning of plants. Karmaveer Bhaurao Patil Earn and Learn Scheme is for the poor and needy students who cannot manage their basic educational needs. College is always giving work facilities to these students while learning so that they can cope with their educational needs as well as helping hand for their family.

College Earn and Learn Scheme is limited to work, but these students learn different gardening skills and moral values through these schemes. College is always focusing on their developments and recognizes their problems whether they are personal level, family level, or education. College staffs arranging for them “Thursday Refreshment Program’ so that the poor students who are space in their life of love and affection and not possible having a good diet, college doing these activities since from 10 years continuously without any single interruption.

**Fig. 3. Thursday Refreshment Program****Fig. 4. Teachers with Earn and Learn Students****Fig. 5. Earn and Learn Students Transferring Yucca Plant**

(Saidel et al., 2010) said that, educate people for planetary citizenship and sustainability is the challenge that this work faces in today's society, which has been forced to rethink its very existence and associated environmental impacts, in order to initiate a much-needed discussion on sustainable education based on conscious consumption through scientific information and sensitization, which is the first step toward sustainability (Ferreira et al., 2021).



Fig. 6. Green and Clean Ladies Hostel Building

Contribution of National Service Scheme (NSS) Students in mega plantation drives on the college campus

For plantation drives on campus to enrich biodiversity, these students participate enthusiastically in preparing pits on this hard rocky substratum, plantations, and cleaning activity during national festivals and other activities. This healthy mindset up having students serves for the campus without any remuneration. Affinity about lush green campuses makes them work hard for the improvement of vegetation.

National Cadet Corps (NCC) in service of campus

‘Completing concepts within stipulated time’ is our motto for achieving success; healthy and sturdy youths of NCC remain ready to serve for the given opportunity. Special drives during national festivals and other circumstances, these student’s power become very useful. Mega Campus Cleaning drives are performed by the NCC group, particularly during national festivals.



Fig. 7. NCC students cleaning the college campus

Effective Use of Certificate Courses students in the development of College Campus

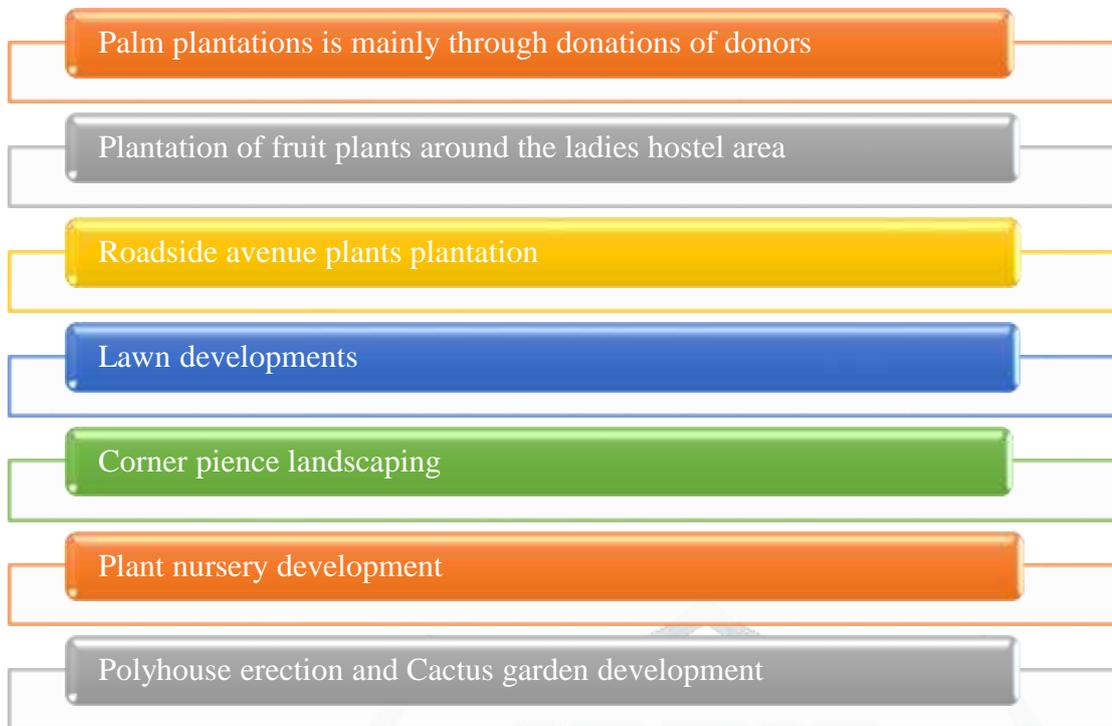
The college has been running different certificate courses for the student's extra-curricular activities. Courses used to run are Nursery Development and Management, Vermicompost Technology, Soil, and Water analysis; these certificate courses give a new way to success in the future to start up self-business and inculcating entrepreneurship among the students. Students overall development is taking place through these courses. During the syllabus, structuring practicals are formulated to convert different corners and land pieces into attractive landscapes. The manure prepared through the activity of the Vermicompost Technology course is used as an organic fertilizer for the better growth of college vegetation. (Patel & Patel, 2012) proposed that approximately 46 percent of the entire area of Clari's campus is dedicated to green belt development, which improves the flow of fresh air and maintains a steady temperature. This has a significant impact on generating a dust-free atmosphere and helping to carbon reduction.



Fig. 8. Nursery Saplings made by Nursery Development and Management Students

Development through donations

Donations from alumni, donations in the form of soil, organic fertilizers, sand, gravel, silt, availability of plants through the donation of nature lovers, and earning different innovative concepts through plant-loving groups and individuals. Micro-irrigation facilities for the campus are mainly due to donors. (Sharp, 2009) imagined campuses with green buildings, renewable energy systems, local organic food, organic landscaping, enhanced native biodiversity, low-pollution transportation systems, bicycle paths, onsite rainwater tanks, grey and black water treatment systems, socially invested endowments, green chemistry practices, zero solid waste laboratories, green cleaning products, and low greenhouse gas emissions. (Anis et al., 2018) described how they developed the setting and infrastructure management at the Universitas Indonesia (UI) as a continuous effort towards a green and sustainable campus; these things showed how landscaping plays an important role in campus development.



Fruitfulness Results and Eye Catching Results

Campus vegetation includes representatives from each plant groups like Algae, Funga, Bryophytes, Pteridophytes, Gymnosperms, and Angiosperms due to flora includes xerophytes different habit having plants belonging to groups like herbs, shrubs, climbers, twiners, and trees are growing luxuriantly in hard strata substratum having campus. Ecologically different plant groups are growing xerophytes, and succulents are well flourished in the cactus garden. Hydrophytes are growing healthy in different ponds. Terrestrial plants give a marvelous look to the campus throughout the year. The pollution-free oxygen rich campus is attracting the visitors for jogging and yoga activities.



Fig. 9. Inside View of Cactus Garden

Conclusion- With the active involvement of students, the college's biodiverse campus is developed. The ability of youth to create revolutionary changes at the institution level is admirable. We have utilized our students' power for the college's growth for this goal. In this research piece, we will look at how students and social organizations may beautify college campuses. If used for campus growth, students' power is enormous. College students must be involved in campus biodiversity enrichment to convert greenery in all social, educational institutions. Our college's efforts to instill the concept of vegetation growth on campus is a huge success. Based on need, students from Earn and Learn, Environmental Awareness, NSS, NCC, local social organizations, and general students are included. Donations are taken from alumni, different plant lovers, social groups for the sustainable conservation of campus beauty. The Karmaveer Bhaurao Patil Earn and Learn Scheme is administered by Savitribai Pune University. Students maintain the beautiful green vegetation on campus and create holes and pits for tree planting (Including plants of all plant groups). On-campus, one will find medicinal, endangered, indigenous, ornamental, aromatic and rare plants. Students contribute to the preservation of attractive plants. As a result, we have protected plants, animals, and fungi.

The college continues to offer these students jobs to allow them to study and support their families. Students learn gardening skills and moral values through the College Earn and Learn Plan. College is continually cognizant of students' personal, familial, and academic concerns. "Thursday Refreshment Program" for disadvantaged children who lack love and affection and cannot purchase nutritious food. The initiative has been in operation for a decade. 'Completion of concepts within specified time frames' is our success slogan. These students' abilities come in helpful at national festivals and other special events. During national holidays, the NCC organizes massive campus clean-up efforts. Xerophytes and succulents thrive in a cactus garden. Diverse ponds support a diverse range of hydrophytes. Terrestrial plants enhance the campus's beauty throughout the year. The pollution-free campus draws visitors and promotes exercise such as jogging and yoga.

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