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DAVANGERE UNIVERSITY

Shivagangotri, Davangere-577007 Karnataka.



Policy Document on Green and Energy
(An IQAC Initiative)

With effect from Jan 2020, Version 1.0

The Green Policy of Davangere University

PREAMBLE

Davangere University (DU) is fully committed to adhere to the principles of protection of environment and Sustainability. The University also ensures that its functions and routine acts does affect environment positively. Since its inception the University has shown its commitment and liability towards the protection of the environment at the level best and that is why the campus is Green and Clean with beautiful landscapes and variety of trees. To enhance the needs of rational environmental lex, the University is also entrusted to Environmental Compliance improvement and to achieve this, it has the following objectives:

1. Try to affix environmental concerns into all accordant dimensions of the teaching as well as research in the University.
2. To collaborate with regional, national and other agencies, encourage and elongate consciousness of benign environmental disposition policies and customs among teachers, students, and staff as well as among other stakeholders throughout the University.
3. To encourage buying up policy which approbate those goods and services which lead to less damage to the environment .
4. To extenuate the consummation of basic natural resources like petroleum products, water and energy as well as to insist more on the use of energy saving, low carbon measures, recyclable products and renewable (Solar energy, use of LED bulbs, power efficient equipment).
5. To execute good protracted waste management strategies to extenuate gross waste generation and to increase recycling and reuse of waste product (paper and stationary waste)
6. To restrict emission of carbon dioxide and control pollution, restricted entry of automobiles in the campus
7. To ensure maintenance of lush green campus. For this the University encourages use of bicycles, battery powered vehicles, pedestrian path ways, ban on use of plastic in the campus, landscaping with trees and plants.
8. To develop and maintain water conservation facility in university through Rain water harvesting, bore well/ open well recharge, maintenance of water bodies.
9. To formulate and ensure effective implementation of E-waste management policy

DU endeavors to achieve a human environment co-existence model which would promote society's welfare through environmental protection. The policy visualizes setting a national and international benchmark for a socially and environmentally sustainable campus, through action plans for environmental education, management and conservation. To fulfill this vision,

the University is obliged to institute a **Green Policy** which will:

- ❖ Be the fundamental consideration of the university in all its future endeavors. The university shall in the matters of future developments, infrastructure constructions and action plans refers to the green policy and abide with the green regulations set forth in this document. University shall integrate environmental concerns into its every day practice. In addition, University shall comply with all applicable legislation, regulation and codes of practice related to Green Protocol stipulated by the State Government.
- ❖ Endorse University's commitment to sustainable development through all means. Adopt best practices for environmental protection; observe conservation, environmental laws, regulations and standards. The University has a responsibility and desire to educate members of the University Community to engage effectively as global citizens, steward our natural resources in a responsible manner, foster a university culture that supports and promotes the values and principles of social and environmental sustainability, and work towards a sustainable and just future in cooperation with organizations at the local, state, national and global levels.
- ❖ Motivate University to maintain and increase the green cover area of the campus in the coming years. While increasing green area, native species of flora suitable for this ecosystem should be given importance. Periodic investigations into the spread of invasive species that tamper with the ecological balance of the university campus should be conducted and measures taken up to control the spread. The identity of the university campus could be built around a good ecosystem.
- ❖ Be a reminder for the university to take measures to protect and enrich the existing biodiversity spots within the university campus. All the future developmental plans of the university should be considerate towards the protection and development of these spots which has been created in university campus.
- ❖ University's commitment to reduce energy consumption and reduce wastage of energy. Explore renewable energy sources as far as possible. In order to do this, the university shall establish and maintain strategic partnerships with student and teaching communities, local governments, private companies and non-governmental organizations (NGOs) to develop and promote sustainable practices and to identify and address sustainability challenges in the energy sector.
- ❖ Stand for increasing, sharing and exchanging environmental awareness and protection among campus community and the society at large. A depository of studies done on the ecosystem of the university campus should be collected. This could be updated regularly. Trans-disciplinary attempts to improve the existing ecological knowledge and for promoting environmental awareness should be given prominence.
- ❖ Urge university to decrease the amount of waste generated by constantly

monitoring the sources and through the policy of Reduce, Reuse and Recycle. University should implement sound long-term waste management strategies to reduce overall waste production and increase the recycled component of the waste stream.

- ❖ Pave way toward implementing use of eco-friendly technologies for utilizing natural resources efficiently. The purchasing policy of the university should be altered to promote those products and services which cause the least harm to the environment. This should include supporting alternative eco-friendly, products made locally. The purchase policy should also reflect the fair trade commitments. Repair and reuse, setting aside maintenance funds and ensuring long term use of products purchased should be given priority be foregoing in for new products.
- ❖ Establish **Environmental Consciousness and Sustainability** Committee (ECSC) which will be empowered to advice University, take decisions and execute them regarding the sustainable environment management of the university campus. The committee will be accountable to the university statutory regulatory bodies and also shall abide by the laws and regulations existing in our country. Committee shall endeavor to reduce harmful effects on the environment, human health and safety.
- ❖ Create awareness regarding the environmental impact and the carbon footprints that the university generate this universe and towards this end shall carry out annual environmental auditing in consultation with the experts and with the participation of the university community and take necessary measures to address the issues raised by such inquiries.
- ❖ University will hereafter explore the possibilities of adopting eco-friendly architecture and green buildings. As a university campus dedicated to the disciplines of Arts, Science, Management and Education, the built environment of the university should also reflect university's commitment towards ecology as far as possible.
- ❖ University's commitment towards ensuring the quality of food purchase, preparation and serving in university canteens and hostel messes towards enhancing the health of the campus community and the environment.

The structure and functions of the Environmental Consciousness and Sustainability Committee

- ❖ ECSC will be constituted with representatives from among faculty, student's council, and students from environmental groups in the campus, administrative staff, engineering staff, and the sanitation /cleaning staff,

nominated by the Vice Chancellor. The committee would be constituted for a period of two years.

- ❖ The committee will be entrusted with the task of creating action plans according to the green policy of the campus and would give necessary support to the various departments in the university to implement the action plans. The green policy of the university should be sensitive towards the changing ecological requirements of the society and of the university campus and therefore the action plan should be modified, after a thorough review, as and when required.
- ❖ The committee should be empowered with the task of ensuring that environmental sustainability of university is considered as of utmost importance and with approving the university development plans with minimum harm done to the existing biodiversity and ecology of the campus.
- ❖ The committee will also be in charge of designing and implementing various awareness campaigns in association with University NSS Unit and Environmental Science department to achieve the Green Campus status.
- ❖ The committee shall ensure that interdisciplinary courses that address ecological concerns are designed and taught in the university at different levels. The committee shall also work towards promoting interdisciplinary research that promotes ecological concerns.
- ❖ Special invited guests from outside the university like Panchayat members; environmental activists; Forest department officials, and members from research institutes shall be allowed to attend meetings as consultants as and when considered necessary by the ECSC, especially while considering development plans that could affect the society at large. But, the decisions shall be taken with the consent of the two third majorities of the members in the committee, IQAC and the University authorities.

Environment Management Fund

The university should constitute an environment management fund, which could be utilized for the recurring maintenance expenditures for ensuring a sustainable campus, with in the obligations and for the functions of the ECSC listed as preamble in this policy document. This fund could be utilized for the ensuring a green area of the campus, for the maintenance of alternative energy sources like solar panels, the rain water harvesting system, biogas plants and for the repair of the furniture's and reusable assets of the university. The decisions regarding the utilization of the funds should be taken by the ECSC. Proactive efforts should be taken by the university to find

funds through CSR collaborations or through different government projects for more investment in infrastructures that would lead to the university becoming more sustainable in the long run.

Some of the key areas that the ECSC will be addressing in adherence to the Green Policy guidelines are given below.

● **Energy management**

- The University will try and meet its energy needs by using local and renewable energy sources.
- Reduce electricity consumption; Awareness should be given to the staff and students regarding the energy wastage.
- In 2020- 25 the dependence on solar energy should be increased. For this, the university should explore the possibilities of obtaining CSR funds. University has large roof top area which could be fitted with solar energy panels. University should thrive to become completely self-reliant for its energy requirements.
- In hostels solar heating technology can be used to boil water for various cooking purposes.
- As an academic input for better energy management, interdisciplinary curriculum in human ecology could be introduced. This will prepare students to be-come advocates for the ecological integrity of the climate of the planet and give them tools to influence change in their chosen professions and communities.

● **Waste Management**

- **Building up a system** though university has implemented Green Protocol and started segregation of wastes, it has still not become fully functional. Efforts should be taken for building up a fully functional system for waste management which should rest on the principles of reduce, reuse, repair, redesign, replenish, refuse, reconsider and recycle.
1. **Awareness** should be given to the entire university community on waste management and waste segregation.
 1. **Waste auditing:** wastes generated by the university should be audited to

ascertain the source, type and amount of waste generated in a year. The yearly action plans should address ways to reduce this waste.

2. The cleaning staff should be authorized to report the increase or decrease in the waste generated by each department and the departments who are able to demonstrate reduction in their levels of waste produced should be honored.
3. The system for **waste segregation** and storing should be put firmly in place. Segregations should be reorganized into different chambers for storing plastic wastes, e-wastes and other non biodegradable wastes, which could be sold to the vendors during periodic intervals.
4. A **panel of vendors**, including those who are capable of managing e-waste should be contacted and their periodic removal should be ensured.
5. The fine arts college departments could be approached to find out possibilities of **creating works of art from the waste** generated from within the university like, installations, gardens which would ensure the up-cycling of solid wastes.
6. Start reducing the paper wastes (**paper recycling unit**) through relying more on electronic devices at all levels including governance, examinations, admission, and finance etc. **e-governance should be ensured.**
7. **Bio-gas plants** established at the canteen and university hostel premises should be well maintained. The staffs who are managing those plants should be given training about its maintenance. The capacity to create gas from degradable wastes should be explored fully and used in the canteen or hostels.
8. **Thumburmuzzi Model Aerobic composting pit** could be constructed to man-age the biodegradable waste that could not be put into biogas plants.
9. **Incinerators** should be installed into all women's toilets and properly maintained. The female students should be given awareness on the use of alternative eco friendly ways of managing menstruation.

● Water Management

The geographic location of the university provides it with unique opportunities and constraints. Being situated in a wetland ecosystem where the rainwater level is very high means plenty of water during the monsoon seasons, presence of rich wetland ecosystem, but with possibilities of flooding and

contamination of the existing water sources. At the same time the university faces water shortage during the summer season. The water management policy of the university should reflect these dilemmas.

1. **Rainwater harvesting** – the buildings constructed in the university should be provided with rain water harvesting facilities and after proper filtration the rainwater could be utilized for ground water recharging and could be stored in shallow ponds. Decentralized storage should be attempted for a university like ours where large underground storage tanks would become impractical.
2. **Drainage map** of the university should be prepared which would be basis for water shed management and landscaping.
3. **Awareness campaigns** on reducing the water wastage in the university.
4. **Waste water** generated by the university should be calculated and treatment plants should be installed. As a beginning, temporary waste water treatment ponds could be constructed for treating grey water, which could be used for gardening purposes.
5. **Toilet waste treatment plants** should be there in the long terms plans of the university. The presently used concrete toilet pits are unsustainable in this geography and any crack in this construction would lead to the contamination of fresh water sources leading to serious health hazards for the students and staff.
6. **The ponds** within the campus and the ecosystem around them should be protected. Nets could be installed over the ponds to avoid falling of dead leaves.

● **Ensuring Bio Diversity**

1. Establishment of **sanctuaries** for bio-diversity conservation.
2. Conducting **Bio Blitz (Flora & Fauna)** for mapping the bio diversity within the university campus to ascertain the decline or increase in the species within the campus. This should also lead to steps for protecting such species.
3. **Green cover area** of the campus shall be maintained and increased in this year by at least 20%. While increasing green area, native species of flora suitable for this ecosystem should be given importance. The sides of the roads should be planted with tress and especially native fruit trees which would delight the students in future.
4. **Miyawaki technique** could be applied to increase biodiversity in limited space which could be the green lungs of the campus.

• Other measures

1. Transportation – staff and students should be advised to use public transport system and vehicle pooling.
2. Walking pathways and seats at different locations within the campus so that students are open to the effects of environment in their daily interaction.
3. No vehicle except for cycles within the campus.
4. Mosquito traps and regular inspection of mosquito breeding areas need to be carried out.

REVIEW POLICY

The policy shall be reviewed after every five years or earlier, as need arises.



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