



VIGNAN's INSTITUTE OF INFORMATION TECHNOLOGY
(AUTONOMOUS)

(Approved by AICTE & Affiliated to JNTUK, Kakinada)

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A POLICY ON “ENVIRONMENT AND SUSTAINABILITY”



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Introduction

A pristine and hygienic environment aids effective learning. In order to address the environmental issues, various efforts have been put forward in different parts of the world. Environmental Management Systems (EMS) is very popular in the industrial sector and International environmental standards do not suit the existing Indian educational system. Therefore, **Vignan's Institute of Information Technology (Autonomous)** has come up with a compatible system by developing locally-applicable techniques for sustainable environment. An indigenized system that is simple has been devised in order to monitor environmental performance of our institution. The system comes with a set of questions that are to be answered on a regular basis. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance. This highly innovative scheme is user- friendly and also voluntary. This monitoring system aids the institution to set environmental examples for the community and also to instruct young learners.

Green and Environment audit

Green and Environment Audit plays a vital in the environmental sustainability and creates awareness among staff and students about suitable use of resources.

- It's a process that involves analyzing the different components of environmental diversity that includes systematic identification, quantification, recording, reporting and analysis which will lead to various establishments.
- It brings an eco-friendly inside to outside ambience through the environmental practices.
- It is crucial for the conservation of resources by making an estimate of how and where they are using the major amount of energy and water resources.
- It also works on the recycling plans in which it determines the volume and the type of the waste along with the waste minimization plan.
- It helps every individual to take part in knowing the importance of health consciousness and environmental awareness along with the ethics and values.

The environmental sustainability is paving its way in the current world and educational institutions should make their contribution towards it. Vignan's Institute of Information Technology (Autonomous) should make its own contributions towards a sustainable future.

Concept of a Green campus.

VIIT believes that **Concept of a green campus** advocates a model for global environmental sustainability where all the processes and operational functions of the campus are closely knit, providing educational and practical value to the institution and the surrounding environment as there is an urgent need to address these fundamental problems. Being a visionary institution with a slogan of technology with human face, the institute has initiated Green Campus' initiative measures which include biogas generation, vermi-compost production, and herbal garden development. The Green campus embraces optimum land use, energy efficiency and conserving resources. Advancing the system in order to inculcate the Green Campus ideology for the institute leads to sustainable development. It ensures that the practices followed in the campus are according to the initiatives of the Environmental Policy of the institution.

VIIT Environmental Principles :

The VIIT is committed to conserve natural environment, develop sustainable solutions, innovations and startups, promote rural technologies and control energy consumption, incorporating **Environmental principles** for building Environmentally sustainable society that satisfies the basic needs of its people without depleting or degrading its natural resources and thereby preventing current and future generations of humans and other species from meeting their basic needs.

The Following **Environmental principles** are guiding us in making Environmental policy decisions

- 1.The Humility Principle:** Our understanding of Nature and consequences of our actions is quite limited.
- 2.The Reversibility Principle:** Try not to do something that cannot be reversed later if the decisions turn out to be wrong.
- 3.The Precautionary Principle:** When much evidence indicates that an activity threatens human health or the environment, take measures to prevent or reduce harm.
- 4.The Prevention Principle:** Whenever possible, make decisions that help prevent a problem from occurring or becoming worse.
- 5.The Polluter Pays Principle:** Develop regulations and use economic tools such as full cost pricing to ensure that polluters bear the cost of the pollutants and wastes they produce.
- 6.The Integrative Principle:** Make decisions that involve integrated solutions to environmental and other problems
- 7.The Public Participation Principle:** Citizens should have open access to environmental data and information and the right to participate in developing, criticizing and modifying environmental policies.

8.The Human Rights Principle: All people have a right to an environment that does not harm their health and well-being.

9.The Environmental Justice Principle: Establish environmental policy so that no group of people bears on unfair share of the harmful risks from operations or from the education of the environmental laws, regulations and policies. Environmental justice means that every person is entitled to protection from environmental hazards regardless of race, gender, age, national origin, income, social class, or any other factor.

Environment policy

An Environment policy of our institute consists of Laws, rules and regulations related to an environment problems that are developed, implemented and enforced by VIIT, includes educating students and employees on environmental concerns and sustainability; Research and Development programs that could turn an institute into a carbon-negative institute; environment concerns in planning and decision making; encouraging collaborations among institutes & also with International environment related organization such as UNEP, WHO, UNDEP,FAO, WORLD BANK, GEP, GEF, IUCN and so on.

VIIT Management strategy

VIIT is entering into a new era by shifting to something more flexible that is quite adaptable. The new model is that of a network instead of a hierarchy. In this network model, the Management is playing a vital role in leading the organization by developing the Vision, Values and Objectives for VIIT Environment policy and promoting feedback from employees, encourage innovation and adaptation, and establishing employee performance goals. An important aspect of emerging network organization is its use of adaptive management strategies to cope with new information and changing conditions, to learn from experience, and to modify plans quickly as needed. This approach uses the basic techniques of Science and Systems analysis to develop computer models for examining alternative plans and projecting possible outcomes or scenarios. The primary goal is to anticipate problems rather than simple react to them.

Objectives:

- To sustain Natural resources, Environmental quality in VIIT campus includes Biodiversity, Water, Soil, Food, Renewable energy resources and Human society.
- To sustain Biodiversity by converting VIIT campus into Terrestrial Ecosystem with species approach and promoting environmental management and conservation with enhancement of awareness among students & staff of the campus.
- To develop green economy by using sustainable agriculture, building sustainable communities and eliminating poverty.
- To make an assessment, document on Green area of the campus, the waste minimization & recycling, ambient environmental condition of air, water and noise in the campus periodically and make a report on the status of the environmental compliance.

Methodology:

1. Travel & Transport: Introducing Bicycles and battery operated trolleys as alternatives to the motor vehicles in the campus. Advantages include Pollution free and quite campus that ultimately promotes for resource conservation. Use of common transport like buses by the staff and students for long distance transport is advantages which are already implemented by VIIT. It can be extended to other routes also as needed and can greatly reduce individual's contribution towards pollution loads.

2. Solid Waste Recycle & Reductions:

A. Recycling is an important way to collect waste materials and turn them into useful products that can be sold in market place. Five major types of materials that can be recycled – Paper products (includes newspapers, magazines, office paper & card boards), glass, aluminium, steel and some types of plastics.

b. Composting bio-degradable organic waste mimics nature by recycling plant nutrients to the soil.

C. Hazardous waste is any discarded solid or liquid material that is toxic, ignitable, corrosive, or reactive enough to explode or release toxic fumes. We can burn, bury, detoxify, reuse, recycle, or not produce hazardous waste.

Develop and implement waste management practices that prioritize disposal in line with the waste hierarchy to reduce the institutions waste output to landfill.

3. Water Management: We are withdrawing groundwater which is good source of water for drinking & irrigation. Advantages are: Available year-round, renewable, no evaporation losses and cheaper. Summer storage tanks can be constructed as alternative source of water during summer period. Drip & Sprinkler systems can be used to conserve the water. Treated sewage water can be used for irrigation. We waste about two-thirds of the water we use but using water more efficiently could reduce wastage to about 15%.

Reducing water wastage by developing landscape yards with plants that require little water, using of Drip & Sprinkler irrigation, fixing water leaks, using water meters and charging, using waterless composting toilets (Bio toilets / Water Saving toilets), Collecting and using water to irrigate lawns & non-edible plants, purifying and reusing water for irrigation by constructing sewage treatment plants.

- Underground drainage system, Sewage Treatment Plant (STP) and Effluent Treatment Plant (ETP) to be established in the VIIT campus.
- Additional number of noise testing meters (05 No.) and Respirable Dust Samplers (05 No.) are required for continuous monitoring of noise and Total Suspended Particles (TSP).

Drinking water through RO Systems has to be periodically monitored related to Physico-chemical & Microbiological quality at source & different distribution points.

4. Biodiversity & Conservation:

VIIT campus is spread out over an area of 16.64 hectares. that consists of about 125000 variety of flora that includes trees, shrubs, herbs, climbers and some exotic plants. A major part of the vegetation includes the native varieties of trees, shrubs and herbs that are grown naturally. Apart from these natives, some are planted to abate the pollution loads and for beautification purpose. Over the campus covers a wide variety of flowering, ornamental, medicinal and air purifying plants.

Recently a Raasi Vanam was created, to make the students aware of our sanathan dharma which entangles with worshipping plant species based on our Zodiac signs. Apart from this, students were made to adopt a plant and look after them. It is regular practice of VIIT to add some more plants for every special occasion. Making the guests plant a sapling within the campus and also gifting them with a sapling are some of the best practices our institute is following since long. Furthermore, the institute would focus on building a detailed report on the flora and fauna and the impact of developmental activities on their existence. As this would help us focus on the impacts the areas of improvement for a more sustainable future ahead.

5. E-Waste :

The VIIT has committed towards the maintenance of the friendly ecosystem of its campus. In order to maintain the wellbeing and healthy environment in the campus, the standard process for e-waste Management is put in practice for proper disposal of end of life, and non-functioning electronic computing equipment's after reducing, reusing and refurbishing to the maximum.

The broad policy guidelines are:

- Each department to consolidate the end of life and non-functioning electronic and computing equipment.
- To minimize the new procurement of IT Assets, the centralized IT department initiates the process for reusing through refurbishment/recycling of electronic and electrical components, replace the spares and repairing the non- functioning the IT assets to reduce the e-waste to the maximum.
- The centralized IT department to consolidate the final non- functioning electronic and computing components and put forward the proposal to purchase committee once in a year for proper disposal of e-waste without causing any environmental problems.