

Climate Action Plan



Learn Lead Serve

Sri Sri University

Cuttack, Odisha

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Preface

Given the challenges of climate change, the time has come to develop adaptability to it at the individual, institution, national and global levels. In this direction, the government, scientists, educational institutions, civil societies, etc. are making efforts under the guidelines of the United Nations. Understanding its responsibility, Sri Sri University as an institution is ready and committed to contribute towards combating the adverse effects of climate change.

The implementation and follow-up of the present climate action plan of Sri Sri University is our commitment, therefore, we have been striving towards developing a green campus for a long time. Sri Sri University has followed the green, environmental, and energy auditing processes in the campus. I hope that the present climate action plan will not only fulfill its objectives at the university level but will also create awareness and a new sense of responsibility among students, teachers and other staff.

Executive Registrar

Date: 4/02/2022



General

Climate change is one of the biggest problems in the world. Climate change has the potential to have huge consequences on the world's economy, environment, and social systems. To overcome these consequences, the governments, scientists, and civil societies across the world are engaged in their efforts. The issue of climate change is the most debatable aspect and has been discussed at various United Nations' forums, conferences, and conventions. The Climate Change action is one of the goals of Sustainable Development Goals, to be achieved by 2030. Given the seriousness of climate change, many nations and institutions of the world have made their own climate change action plans. India's National Action Plan for Climate Change was launched in 2008 aiming to mitigate and adapt the adverse impacts of climate change. The National Action Plan for Climate Change includes 8 missions.

Sri Sri University as an institute is committed to address all the issues related to the adverse impacts of climate change. The Climate Action Plan of Sri Sri University has been made on the lines of the National Action Plan for Climate Change with slight modifications.

Plan of Action

The plan action comprises 8 goals

- i). Use of renewable source of energy
- ii). Efficient use of energy
- iii). Green campus
- iv). Water conservation and clean water
- v). Plantation and biodiversity conservation
- vi). Sustainably farmed food practices
- vii). Climate change education



i). Use of renewable source of energy

The university has a plan to gradually convert the conventional source of energy into solar energy. Solar panels of 8Kw have already been installed in the campus. Nearly 35 units of electricity per day and approximately 13000 units per year are harnessed from these panels. The university is committed to enhance the capacity of renewable source of energy. Due to availability of adequate space, University campus is suitable to install the solar panels. University has an energy conservation pledge and a commitment to use 100% renewable energy by 2030 for all existing buildings by generating its own solar power. Sri Sri University would enhance its outreach on skill training on solar PV installation and commissioning. With the passage of time, the university may also plan for other sources of renewable energy. The university has a cow farm. With the help of cow farm there is a fair possibility of installing a biogas Plant in future.

ii). Efficient Use of Energy

University administration has a deep understanding of energy conservation and responsible consumption. All the electric appliances installed in the buildings and other places of the campus are energy efficient. These appliances include grundfos pupms for water applications, solar street lights and pumps, use of LED lights in buildings, streets, corridors, etc., IOT based washing machines, variable refrigerant flow technology, etc. The buildings are designed in such a manner that we can harness the advantage of natural light, which in turn save the energy. All the stakeholders of university are well aware of the importance of the energy conservation. They fully understand the responsibility of turning off all electrical appliances, bulbs, and machines when the working places are not in use. Also a central operating system has been developed in the academic buildings so that the air conditioner can be switched off during the off time. Improvement is a gradual and continuous process. Therefore, the University is committed to further improve the existing system in future.



The equipment purchasing process has included the policy of purchasing of energy efficient energy star appliances. The appliances include copiers, printers, computers, projectors, refrigerators, air conditioners, etc. The University has Energy conservation pledge and energy conservation policy in place.

iii). Green campus

The activities pertaining to the clean environment, green technologies, reduction in carbon foot printing, reduction in emission, and use of renewable source of energy are characteristics of a green campus. The eco-friendly actions related to the waste water disposal, solid waste management, way of energy conservations, etc. in the university campus contribute significantly to the green campus.

In order to reduce the emission and to manage the carbon foot printing, the university encourage the public transport or pool transport in the campus. This development has considerably reduced the number of private vehicles and motor cycle in the campus. The university has a well-developed waste management system. The solid waste is segregated at the source and dry wastes are sent to recycling through municipality vehicle. A sanitary napkin incinerator is installed in the girl hostel. The raw kitchen waste are sent to the composting or used in the in-house cow farm while cooked food wastes are supplied to the pig farms. A sewage treatment plant is installed in the campus. The plant has 100% efficiency to treat the waste water. After the treatment, the water is used for the horticulture and silviculture purposes.

Steel tumblers and areca leaf plates are used in the dining hall to avoid the use of plastic and papers. The plastic carry bags are totally prohibited in the outlets located inside the campus. The jute carry bags are used as alternatives.

In the offices the use of papers is minimized through various ways. Soft copies are used in all offices for the general communications. While using the photo copiers, two side printing is preferred.



In order to develop a green campus, University has various policies like Waste Management Policy, Plastic Use Policy, and Hazardous Waste Policy in place.

iv). Water Conservation and Clean water

The fittings of water supply appliances in the offices, toilets, bathrooms, kitchens, and public places have been done keeping the water conservation into account. There is regular monitoring water supply system and appliances.

University has developed a rainwater treatment system playing a vital role in the water conservation. The use of dual flush toilets, dish washers at common kitchen, water level controllers and IOT based washing machines in the campus conserve more than 67% of the water. Water aerators attached to the taps reduce splashing while washing utensils and hands. It breaks the water flow into fine droplets to maintain 'wetting effectiveness' while consuming 80% less water.

In all hostels and offices ROs are installed for the purpose of drinking water. There a regular monitoring of drinking water. The drinking water quality is maintained as per Bureau of Indian Standards (BIS). The testing of important parameters like BOD, pH, hardness, etc. are taken into account. Regarding the water conservation, the University has various policies like water Reuse Policy and Waste Water Policy in place.

In the campus a sustainable farmed practice is adopted. The drip irrigation and micro irrigation water sprinklers are used in the campus, which save about 40-50% of the water.

v). Plantation and biodiversity conservation

Plantation is a continuous process in the Sri Sri University campus. The plantation drive for many years has changed the land use/land cover of a barren land into a healthy landscape. Due the restoration process, presently the university campus supports more than 80 birds and 30



butterfly species. Local biodiversity is considered in the planning and developmental activities in the campus. University has clear policy, and commitment to give priority to degraded and abandoned land for construction work so that the adverse impacts on the local biodiversity can be avoided or minimized. The campus is connected with other landscape patches like agricultural land and wetlands in the surroundings. Considering the movement of a few mammalian, reptilian and pheasant bird species, adequate corridors have been facilitated to the species in the campus. The university has Alien Species Reduction Policy in place. The policy encourages to plant the native species. The objectives of this policy are to create awareness about the ill-effects of alien species, discourage the planting of exotic species, and protect native plant species on the premises.

vi). Sustainably Farmed Food Practices

To achieve food security and meet the demands of the ever-growing human populations, farming systems have assumed unsustainable practices to produce more from a finite land area. The major challenge in the modern agricultural landscapes is to meet the ever-growing demand for agricultural products while simultaneously sustainably managing the productive soils with no use of chemical inputs (fertilizers and pesticides). Further, economic and physical environments characteristic also define sustainable production of food. A long-term plan has been initiated on campus to build healthy soils by applying the principles of restoration ecology and natural farming to cultivate seasonal, annual and perennial crops. For crop cultivation management, non-use of synthetic fertilizers and pesticides is encouraged to prevent any residual toxicity in soil and water. Develop and practice *in-situ* composting mechanisms/methods/protocols to effectively recycle the farm biomass, kitchen waste and leaf litter to produce value added compost with improved nutrients content and composition.

A animal farm has been developed with organic principles to produce nutritionally healthy milk and milk products. The cow milk is distributed among the student boarders as a nutrient supplement. In addition, the cow dung and urine are utilized to produce formulations with variable nutrient content intended for applying to soil to sustain the productive capacity, crop



growth and immunity booster to overcoming yield losses, which support the concept of regenerative agriculture. Soil health and quality is sustainably managed by applying the principles of natural farming applicable to location specific needs, utilization of farm yard manure to supplement nutrients to the crop and maintain the fertility status of the soil in subsequent cropping seasons.

vii). Climate Change Education

Sri Sri University offers B.Sc. (Hons) course in Environmental Science. Climate change is an essential part of the course curriculum of Environmental Science. In addition, Environmental Science/studies has been included in many other courses like Physics, Computer Science, Agriculture, B. Tech., Yogic Science, BBA, etc. as a subject. The concerns of climate change are covered under Environmental Science/studies. Given the alarming issue of climate change, there is fair scope to include Climate Change as a full course in the future. In addition, the university conducts various activities through various clubs, seminars, exhibitions and outreach programs, which are related to environment and climate change. Such activities are important, and essentially create awareness and provide education to the people.