



JSS Academy of Higher Education & Research
(JSS AHER), Mysore, India

Compendium

SDG Goal 15



SDG-15

Life on Land

1. Introduction to the goal

Land and forests are the foundation of sustainable development. Forests, in addition to providing food security and shelter, are key to combating climate change, protecting biodiversity and are home to the indigenous population. Forests are home to more than 80% of all terrestrial species of animals, plants, and insects. At the same time, around 1.6 billion people also depend on forests for their livelihood, including some 70 million indigenous people.

Human life depends on the earth as much as the ocean for our sustenance and livelihoods. Plant life provides 80 percent of the human diet, and we rely on agriculture as an important economic resource. Forests cover 30 percent of the Earth's surface, provide vital habitats for millions of species, and important sources for clean air and water, as well as being crucial for combating climate change.

While 15 percent of land is protected, biodiversity is still at risk. Nearly 7,000 species of animals and plants have been illegally traded. Wildlife trafficking not only erodes biodiversity, but creates insecurity, fuels conflict, and feeds corruption.

This necessitates, urgent action to be taken to reduce the loss of natural habitats and biodiversity which are part of our common heritage and support global food and water security, climate change mitigation and adaptation, peace and security. Hence Goal 15 aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combating desertification, halt and reverse land degradation and halt biodiversity loss, contributing in flourishing life on earth.

2. A glance at efforts

- Roof water collection systems
- Land surface catchments of water
- Green campus initiatives
- Plant nursery in the campus

The Institution also has included a subject Environmental Sciences in all courses as stipulated by UGC and organizes Environment Day and Water Day. The Institution believes in preserving traditional medicine and has established medicinal plants garden and promotes eco-friendly cultivation practices by organizing medicinal plants exhibition in JSS Urban Health Centre.

To meet the needs and sustainable management of fresh water, the rainwater harvesting, and utilisation systems have been established in all the campuses of the university to aid towards the greater objectives of water management and conservation and increasing recharge of groundwater by capturing and storing rainwater, rainwater harvesting from rooftop run-offs and natural waterbodies and the community development. The below mentioned models are established in the various buildings based on the size of the building and the extent and topography of the land.

- Simple roof water collection systems - Most of the rooftop rainwater harvesting has been completed by constructing five water storage structures with a storage capacity of 1000 m³.
- Land surface catchments – a simple way of collecting rainwater by retaining the flows (including flood flows) of small creeks and streams in small storage reservoirs (on surface or underground) created by low-cost dams
- Collection of storm water – The surface runoff collected in stormwater ponds/reservoirs is subject to a wide variety of contaminants and every effort is made to keep these catchments clean.



3. Eco friendly campus initiatives

- Rain water harvesting and retention facility in the campus
- Collection of storm water and every effort is made to keep these catchments clean.
- Save water reminders



Rain water harvesting and retention facility in the campus



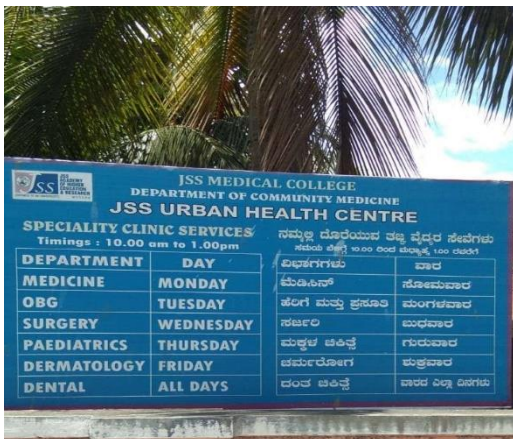
Plant nursery in the campus

4. URBAN HEALTH CENTRE, MEDAR BLOCK

JSS urban health centre was established in the year 2002 on 87th birth anniversary of his holiness Dr. Shivaratri Rajendra Mahaswamiji, in Medar's block, Bamboo Bazaar, Mysore. The centre works under Department of Community Medicine, JSS Medical College, Mysore. The aim of the centre is to achieve the goal of health for all for the people residing in urban slum. The centre provides comprehensive health care services to the people that include preventive, promotive, curative and rehabilitative aspects. The JSS UHC caters to the population of 5294 of which 53% are males and 47% are females.

The centre provides a spectrum of services to the people mainly,

1. Out patient services
2. Provision of essential drugs at affordable costs.
3. Basic laboratory facilities.
4. Maternal and child health services including family planning.
5. Immunization.
6. Dental care
7. Referral services
8. Specialist services on weekly basis
9. Health education activities
10. Observation of National and International health days
11. Women empowerment
12. Training of Undergraduate and Post graduate students
13. DOTS centre



Total number of patients who received care in Urban health centre : 4266

Various activities conducted by JSS Urban Health Centre, Medar's Block, Bamboo bazar, Mysuru



Health education for Pregnant woman



Counseling sessions for alcoholics



Personalized counseling on Diabetes and Hypertension



Health check up and counseling for adolescent girls



Anganwadi Health check up 650 children across various Angawadis are covered



Anganwadi Health check up 650 children across various Angawadis are covered



Awareness session on Tuberculosis on the occasion of world TB Day



Counseling for adolescent boys on substance abuse



Swarna Prashana for children from JSS Ayurveda Medical College



Focused group discussion with pregnant and lactating women



Immunization sessions for under five children



Health education to school children



The centre provides a spectrum of services to the people mainly,

- a. Out patient services
- b. Comprehensive Oral Care
- c. Provision of essential drugs at affordable costs.
- d. Basic laboratory facilities.
- e. Referral services
- f. Specialist services on weekly basis
- g. Health education activities
- h. Observation of National and International health days
- i. Women empowerment
- j. Training of Undergraduate and Post graduate students

5. Poor Patient Fund at JSS Hospital

The Hospital has created Poor Patients fund to help the poor patients. Donations are collected from JSS Staff, allied institutions, general public and philanthropists. The fund is used to meet the treatment expenses of the poor patients. Apart from this the hospital also offers discounts/concessions in the treatment charges incurred to the deserving patients.

6. Initiatives taken by the institution to align with the goal

The Institution has included a subject Environmental Sciences in all courses as stipulated by UGC and organizes Environment Day and Water Day.

- The Institution believes in preserving traditional medicine and has established medicinal plants garden and promotes its use by display of medicinal plants in exhibition at Suttur Jatra.
- To meet the needs and sustainable management of fresh water ,the rainwater harvesting, and utilisation systems have been established in the girls hostel of JSSAHER to aid towards the greater objectives of water management and conservation and increasing recharge of ground water by capturing and storing rainwater, rainwater harvesting from roof top run-offs and natural water bodies and the community development.



Greenery at Campus

Human life depends on the earth as much as the ocean for our sustenance and livelihoods. Plant life provides 80 percent of the human diet, and we rely on agriculture as an important economic resources. Forests cover 30 percent of the Earth's surface, provide vital habitats for millions of species, and important sources for clean air and water, as well as being crucial for combating climate change. Every year, 13 million hectares of forests are lost, while the persistent degradation of dry lands has led to the desertification of 3.6 billion hectares, disproportionately affecting poor communities.

JSSAHER ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

The JSS College of Pharmacy (JSSCP), Ooty is a constituent college of JSS Academy of Higher Education & Research, Mysuru, is dedicated to excellence in Pharmacy Education, Research, Training and Practice. Whilst, the existing infrastructure endorse our institution as a conducive place for academic learning which provides a quality education in a clean, safe and comfortable environment, since the inception, JSSCP has been working very active in establishing the state of the art, SMART campus.



7. Medicinal Plant Garden

JSSAHER enhances inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries and strengthens efforts to protect and safeguard the world's cultural and natural heritage. Our college has 37 medicinal plant in our campus. We also participating yearly in the medicinal plants exhibition conducted by Nilgiri Horticulture Department for promoting the medicinal plants values for the public



Medicinal Plant Garden



Medicinal Plant Garden

JSSAHER helps in reducing the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management. And provides universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

The JSSAHER campus possesses a lush green campus with seasonal trees and maintenance of garden has been done from time to time to keep it neat and clean. For promoting green environment resilience we initiated car and scooter pooling for the staff and students who resides in same locality.

8. NSS Activities

- NSS Volunteers participated in the “Swachh Bharat Mission” at the Nanjanad village. The students were briefed at the DRDA office latter they went for field work to Nanjanad village and created an awareness in the village people on cleanness, sanitization, defecation and various swachh initiatives.
- Celebrated the 5th International Yoga day at the campus. The NSS volunteers participated in the event and were celebrated on the importance of meditation and yoga in our day to day life by the principal of the college by Dr.S.P.Dhanabal.The event was organized jointly with Nehru yuvakendra and Brahmakumaris Dhyana nilayam of ooty.
- NSS Volunteers participated in the “Drug abuse rally” to create an awareness on the use of various from of drug abuse in ooty town. The event was jointly carried out with local police officials. The volunteers had slogans and placards on drug abuse by society. The rally was flaged of by the District Superintendent of police Madam Shanmuga priya

- NSS Volunteers along with the official of the Forest Department organized the “Tree Plantation Program” under the scheme of “Jalasakthi Abiyan” to create an awareness on tree plantation in Thalaikunda forest area which was initiated by The Nilgiris District Collector Miss. Innocent Dhivya and Assistant Conservative Forest officer
 - World Pharmacist day was celebrated by our college. NSS volunteers were took part in the human chain, rally with awareness decorative vehicle demonstrating the profession of pharmacist initiated from our college campus to ATC bus stand, Ootacamund via commerical road. The symbol of Hygeia was displayed by the NSS volunteers at Shanthi Vijay school ground, Ootacamund.
 - The awareness and plantation of indigenous and solar grass varieties in The Nilgiris Library, Ooty which was organized by the Youth Red Cross. Thirty of JSSCPO NSS Volunteers were took part in that event and planted the indigenous and solar grasses in The Nilgiris Library.
 - Dental screening program was conducted at PUM School in association with the JSS Dental College, Mysuru at Mayor. About 7 of our JSSCPO NSS volunteers actively participated in this outreach program. Around 100 members of that village were benefited the dental screening program.
 - The Nilgiris District celebrated the “National Voters Day” by conducting the awareness rally, essay writing, speech and drawing on “Electoral Literacy of Stronger Democracy”. Thirty JSSCPO NSS volunteers were took part in the rally which was initiated by The Nilgiris District Collector Miss. Innocent Dhiya and NSS volunteers were actively participated in the event.
 - The NSS Volunteers were participated in the Drama event on “Tea Promotion Campaign” organized by the Tea Board India which was held at Tribal Resource Centre and we have got third prize in the event. This event was initiated by the District Assistant Collector.
 - Volunteers were participated in the Thaippoosam at Elk Hill Murugan temple in an attempt to regularize the traffic, pilgrims and distributing the prasadam. About 35 NSS Volunteers participated in the event.
 - In accordance with Thiapoosam in Ekhil Murugan Temple there was undhiyal counting has been take place. In that event, ten of our JSSCPO Volunteers were took part in counting the money donated by the people.
 - The Nilgiris District police were organized an awareness program on “Friend of Police” in Police gym near Ayyappan Temple, Ooty. Thirty of our JSSCPO Volunteers were took part in the event.
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9. JSS Senior Citizens' Homes

<http://jssonline.org/our-institutions/supportive-institutions/jss-old-age-home-mysore-a-home-for-elderly-in-mysuru/>

Owing to the declining values of intra-family relations and the societal values in general, many elderly persons who are in the evening of their lives have to undergo physical and mental stress. Those who once lived a joyful, and healthy life in a family are now devoid of affection and care. It was necessary to provide a roof on their head to help them gain mental poise and peace and lead a peaceful, anxiety-free, dignified life.

With the blessings of Jagadguru Sri Shivaratri Deshikendra Mahaswamiji, JSS Hiriya Mane was started on 11th August 2000 at Mysore. There are two free units of senior citizens' homes in Mysuru and the inmates are provided with free lodging, boarding, and medical care. Physically fit inmates are trained in the manufacturing of chalk piece, garlands using silk cocoons, etc., to keep them engaged. Every day, in the morning and the evening, the inmates perform mass prayers. They also spend time in the well-equipped library, reading newspapers, magazines, and books peacefully. On the occasions of national and religious festivals' days, feasts are arranged, and games are organized to entertain them and also, prizes are awarded. The home is taken care of by a Manager and seven supporting staff.



JSS Old Age Home, Suttur

For senior citizens seeking to spend their twilight years in a peaceful and comfortable place, JSS Hiriya Mane is the place to be. There are two senior citizens' homes built in the tranquil surroundings of Suttur Srikshetra, out of which one is a free home. The free home can accommodate fifty people. Here, all the services are available free of cost. In addition to this, another Old Age Home, available on a paid basis which can house about ten inmates is also run. The home is equipped with all modern amenities. About five personnel maintain the home, which also includes a manager.

Senior Citizens' Home, Kethohalli, Thavarekere Hobli

JSSMVP has started an old age home for the senior citizens at Kethohalli in Thavarekere Hobli, Bangalore South Taluk. The home is located on a beautiful farm near the famous Big Banyan Tree (Dodda Alada Mara) on the premises of the Math's Kethohalli branch. It is a paid home and offers excellent facilities for senior citizens to enjoy a comfortable stay. The centre fulfils the unique needs and special care required by the senior citizens.

Facilities available

- Well-furnished building.
- Prayer Hall.
- Rooms with necessary furniture.
- Two-bed and Three-bed rooms.
- Entertainment Centre (Radio and TV facility).
- 24×7 water and electricity facility.
- Modern kitchen with well-equipped steam cooking facility.
- Well-equipped dining hall.
- Doctors on call.
- Vehicle facility during emergencies.

10. Training on certification of organic farming



Mysuru (H.D.Kote), Nov. 20, 2020: Agriculturists and consumers are preferring organic farming and organic products for better health. Increased use of chemicals has resulted in declining soil health and human health. It is also resulting in increased production costs and decrease in income of farmers. As a result, farmers are incurring losses and are unable to repay loans and hence are preferring organic farming. In order to reduce the production cost and gain better profits a few farmers have started adopting organic farming methods. At the same time they are also worried as they are unable to get a proper price for their hard earned produce. They will get a good price if organic farming is certified, it will help them to fetch international market too. Organic farming can become profitable only when this becomes true. Farmers will get attracted towards organic farming only when they get a good price for the crop. Otherwise there are all chances of returning to chemical farming.

Hence, in order to make organic farming more profitable, noticing the need of proper guidance and certification, the ICAR JSS Krishi Vignan Kendra, had organised a one-day training programme on organic farming certification, at Chaakahali Village in H.D. Kote Taluk, under the Paramparika Krishi Vikas Yojane, on dt: 19.11.2020.

Addressing the farmers on the occasion, Sri Prasanna, Deputy Director, Karnataka State Seed and Organic Certification Institute provided information about the points that farmers need to follow to get organic certification. He opined that organic certification can be done in groups or individually. The first step is to submit an application and pay the stipulated fee, along with documents like address proof, PAN card copy, Aadhar card, telephone number, e-mail address, RTC and field map. A transformation period of 2 years have been fixed for annual crop and 3 years for perennial crop. Plant and animal based manure should be used in organic farming, he explained.

Usage of tobacco decoction, solid metals, city compost, chemical weed-killer, pesticides and fungicides are not allowed. Machinery that is used for chemical farming can be used for organic farming only after cleaning it properly. Burning of organic produce has been prohibited, especially in sugarcane fields. Water should be used proportionately and proper measures should be followed for saline and non-saline soil. All the organic crop should be stored in separate godowns and labelled separately as IC-1,2 during first and second years. From third year it will be certified as organic produce, he explained.

Sri Shareef, Karnataka State Organic Certification Institute officer explained about the method of forming organic farmers group. "In the first step the group should be registered. There will be 25-500 members in each group, comprising a manager, field officer, storage officer and sales officers. The members should be small land holding farmers. In case of large land holding farmers (above 10 acres) it should not be more than 50%. The field will be visited twice a year and inspected to certify it. The group members shall avail training as per their requirements, from experts. The stipulated fee for 5 acres is Rs. 5,000; Rs. 6,000 for 6 acres; and Rs.8,000 for above 20 acres. A sum of Rs.30,000 fee has been stipulated for more than 250 acres. The certification should be renewed once in every three years by paying the stipulated fee. This way the farmers can earn more profits through the international market," he explained.

Sri Shamraj, Cultivation scientist, KVK expressed his view that it is very important to improve the quality of soil first in order to undertake organic farming. "Soil germs and earthworms should be increased. Usage of compost, green manure, jeevamrutha, beejamrutha, bio fertilizers, panchagavya can be used in order to enhance soil health. You can get a better yield only when you follow this," he added.

Smt. Divya, Seed Technology Scientist, KVK said that it is impossible to educate farmers about organic farming without providing them knowledge of bio pesticides that needs to replace chemical pesticides. She advised the farmers to commence treatment of disease and pests through treatment of sowing seeds and following various cultivation methods, dry pits, and conserve soil and water. Pest management should be done using nets, decoctions in an integrated way. She explained how to prepare Brahmastra, Panchagavya and Agniastra using locally available leaves like neem leaves, akada leaves, marigold flowers, lakki, guava, pomegranate, orange, seethaphal, lantana and other sour leaves and cow urine. She also informed how to prepare different types of decoctions using cow urine, neem, chilli, garlic, ginger and asafoetida and its applications.

About 40 farmers from Chaakahalli village, in H.D. Kote Taluk took part in the training. The programme commenced with an invocation by Guruswamy, Smt. Divya welcomed and Manjunath compered.

11. Say No to Plastic' campaign



Dr. Devaraj, Medical Officer, JSS Hospital, Mysuru, flagged off the 'Say No to Plastic' campaign, organised by the NCC Land Army unit of the JSS High School, Suttur, as part of the Govt. of India's 'Swachh Pakvad' campaign, in Suttur, on December 11, 2019. Headmasters Sri G. Shivamallu, Smt. C.P. Nirmala and Smt. Lakshmi were present. The NCC Cadets visited all the shops in the village and requested the shopkeepers, customers and villagers not to use plastic.

12. Publications supporting SDG 15

- Assessment of different types of malocclusion using IOTN Index and Geographic Information System- A cross-sectional observational study
First Author: Dr Bhagyalakshmi A [Journal Article] [**Year:** 2020]
- Impact of COVID 19 on Global Economy- A study on Econometrics Model using R software
First Author: Dr Mamatha H.K [Journal Article] [**Year:** 2020]
- Treatments and Prophylactics for a Global Emergency Alert: COVID 19 using Allopathic and Indian Phytomedicine
First Author: AravindV [Journal Article] [**Year:** 2020]
- The novel coronavirus and its possible treatment by vaccines, therapeutics and drug delivery systems: Current status and future perspectives
First Author: Madhurya [Journal Article] [**Year:** 2020]
- Malaria incidences prognosis using climatic factors in Mysore, India: A time series approach
First Author: Mrs Stavelin Abhinandithe K [Journal Article] [**Year:** 2020]
- NUTRITIONAL SIGNIFICANCE OF INDIAN BORAGE (PLECTRANTHUS AMBOINICUS) : A REVIEW
First Author: Dr Nagalambika Prasad [Journal Article] [**Year:** 2020]
- **Journal:** Plant Archives **Factor:** 0.062 **Volume #:** 20 **Issue #:** 2 **Page #:** 3727 - 3730
- Medicinal values and pharmacological activities of vitexnigundo Linn.
First Author: Vinutha T [Journal Article] [**Year:** 2020]
- **Journal:** Journal of Global Trends in Pharmaceutical Sciences **Factor:** 0.18 **Volume #:** 11 **Issue #:** 1 **Page #:** 7412 - 7415
- Laron Syndrome A Disorder Associated with a Reduced Risk of Cancer: A Review on the Molecular Aspects
First Author: Dr Raghu N [Journal Article] [**Year:** 2020]
- **Journal:** International Journal of Innovative Medicine and Health Science **Factor:** 2 **Volume #:** 12 **Issue #:** 2 **Page #:** 123 - 132
- C-PHYCOCYANIN OF SPIRULINA PLANTESIS INHIBITS NSP12 REQUIRED FOR REPLICATION OF SARS-COV-2: A NOVEL FINDING IN-SILICO
First Author: Kiran Raj T [Journal Article] [**Year:** 2020]
- **Journal:** International Journal of Pharmaceutical Sciences and Research **Factor:** 2.6 **Volume #:** 11 **Issue #:** 9 **Page #:** 1000 - 1009
- Cholinergic control of bone development and beyond
First Author: Janine Spieker [Journal Article] [**Year:** 2020]
- **Journal:** International Immunopharmacology **Factor:** 2.654 **Volume #:** 83 **Issue**
- A Review on Significance of Carica Papaya LINN: A Promising Medicinal Plant
First Author: Nandini G [Journal Article] [**Year:** 2020]

- **Journal:** International journal of recent Scientific Research **Factor:** 5.971 **Volume #:** 11 **Issue #:** 02 **Page #:** 37602 - 37607
- A Review on significant of Carica papaya Linn: A promising Medicinal plant.
First Author: Nandini G [Journal Article] [**Year:** 2020]
- **Journal:** International journal of recent Scientific Research **Factor:** 5.971 **Volume**
- Guduchi Its Medicinal Properties
First Author: Dr Raghu N [Journal Article] [**Year:** 2019]
- Cell signaling in yeast A mini review
First Author: SHIPINGANA [Journal Article] [**Year:** 2019]
- **Journal:** Journal of Biomedical Sciences **Factor:** 1.9 **Volume #:** 5 **Issue #:** 2 **Page**
- IPL Sublamination in Chicken Retinal Spheroids Is Initiated via Muller Cells and Cholinergic Differentiation and Is Disrupted by NMDA Signaling
First Author: Dr Gopenath T.S [Journal Article] [**Year:** 2019]
- **Journal:** Investigative Ophthalmology and Visual Science **Factor:** 3.452 **Volume**
- Multivariate response surface methodology assisted modified QuEChERS extraction method for the evaluation of organophosphate pesticides in fruits and
First Author: Narenderan ST [Journal Article] [**Year:** 2019]
- S. T. Narenderan Veera Venkata Satyanarayana Reddy Karri
Experimental design in pesticide extraction methods: A Review Food Chemistry, Volume: 289
- Myocarditis Complicating Viper Snake Bite in a Child .
First Author: Dr Jagadish Kumar K [Journal Article] [**Year:** 2017]
- Biochemical and pharmacological characterization of three toxic phospholipase A2s from Daboia russelii snake venom
First Author: Dr J R Kumar [Journal Article] [
- Purification and biochemical characterization of l-amino acid oxidase from western region indian cobra (naja naja) veno
First Author: Neema K N [Journal Article] [**Year:** 2015]
- **Journal:** International Journal of Pharmacy and Pharmaceutical Sciences **Factor:** 0.609 **Volume #:** 7 **Issue #:** 1 **Page #:** 167 - 171
- Biochemical and pharmacological characterization of three toxic phospholipase A2s from Daboia russelii snake venom
First Author: Dr J R Kumar [Journal Article] [**Year:** 2015]
- **Journal:** Comparative Biochemistry and Physiology, Part C **Factor:** 2.536 **Volume**
- Isolation and characterization of Reprotoxin a novel protein complex from Daboia russelii snake venom
First Author: Dr J R Kumar [Journal Article] [**Year:** 2008]
- **Journal:** Biochimie **Factor:** 3.019 **Volume #:** 10 **Issue #:** 90 **Page #:** 1545 - 1559

- **First Author:** Dr Shivaraju H P [Journal Article] [**Year:** 2020]
- A Study on Traditional Knowledge and Medicinal Applications of the Endemic Herbal Species in the Western Ghats of Shimoga Region, Karnataka, India,
First Author: Dr Anil Kumar K M [Journal Article]
- Medicinal plants of the Western Ghats as possible inhibitors of oxidation in various biological lipid
First Author: Ms Namratha PK, Research Scholar, DOS in Food Science & Nutrition, University of Mysore. [Journal Article] [**Year:** 2016]
- Review of pesticide residue analysis in fruits and vegetables. Pre-treatment, extraction and detection techniques
First Author: S.T.Narendran [Journal Article] [**Year:** 2020]
- Bio-Analytical Method Development and Validation of Dichlorvos Pesticide by RP-UFLC Method
First Author: Dr Chandan R S [Journal Article] [**Year:** 2020]
- Analytical and Bio-Analytical Method Development and Validation of Dichlorvos Pesticide Using RP-HPLC Method
First Author: Dr Chandan R S [Journal Article] [**Year:** 2020]
- Culturable diversity of bacterial endophytes associated with medicinal plants of the Western Ghats, India
First Author: Gordon Webster [Journal Article] [**Year:** 2020]
- Isolation and characterization of p-Coumaric acid from Diospyros melanoxylon medicinal plant endemic to Western Ghats, India
- A Profile of Fatal Snakebite Cases in Rural Mandya A Retrospective Study
First Author: Dr Vinay J [Journal Article] [**Year:** 2018]
- S. Ponnusankar and Anjana Mohan: Evaluation of therapeutic efficacy and health related quality of life of anthracyclines regimen and taxanes with anthracyclines regimen in node positive breast cancer. Journal of Young Pharmacists, 2019; 11(2): 177- 181.
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- S Ponnusankar. Assessment of poisoning pattern, severity and clinicaloutcome using clinical scoring systems in secondary care public hospital inSouth India, Research Journal of Pharmacy and Technology, 2019; 12 (10):1 – 4.
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- S Ponnusankar, ElmutazBelah Mohammed, Navamani G, Raja D. Storage and safe disposal of unwanted/unused and expired medicines: a descriptive cross-sectional survey among Indian rural population. Journal of Young Pharmacists 2019; 11(1): 97-100.
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- Roopa BS, Hema S, Tsundue Tenzin, Rayes Ahmed, Raja D, S Ponnusankar. Alirocumab in combination with statins for CVD risk reduction: an evidential review. Systematic Reviews in Pharmacy 2019; 10(1): 32-41.
- Roopa BS, Tenzin T, Hema S, Anju Rose, S Ponnusankar. Vitamin D supplementation in patients with iron deficiency anaemia: a systematic review and a meta-analysis. Systematic Reviews in Pharmacy 2019; 10 (1): 01-10.

13. RESEARCH PROJECTS SUPPORTING SDG 15:

Funded Research

S.No	Principal Investigator	Research area
1	Dr. S Ponnusankar	Screening of Siddha Medicinal Plants for its acetyl and butyryl cholinesterase inhibitory activity
2	Dr. S Ponnusankar	Screening of Siddha Medicinal Plants for its acetyl and butyryl cholinesterase inhibitory activity
3	Dr. D Raja	Developing Smart Phone Application for Drug and Poison Information service
4	Dr. P R Anand Vijayakumar	Tribal research
5	Ms. Roopa B S	Open Prospective Observational Study to evaluate the prevalence of pregnancy complication and its outcome in Nilgiris tribal Population

S.No	Principal Investigator	Research area
6	Dr. P R Anand Vijayakumar	A Clinical Study on the effect of metabolic syndrome on cognition across different age groups using MMSE scale and C - reactive protein as predictive biomarker
7	Mrs. M. Deepalakshmi	Optimization and monitoring of anticoagulation therapy in Outpatients
8	Dr D Raja	Revamping and promoting the Drug Info Service & Web App
9	Dr Khayati Moudgil	Assessment and evaluation of quality of life associated among COPD patients with depression at a secondary care hospital : A prospective study

14. Consultancy/Clinical trails

Department of Pharmacy Practice is actively involved in industrial and hospital consultancy. Further, it has actively contributed to conduct of clinical trials in the past and has the potential to prepare the protocol, management and execution of the clinical trial.

Sl. NO	Name of the consultant (Faculty Name)	Name of the consultancy project	Consulting/sponsoring agency with contact details	Year	Revenue generated (amount in rupees)
1	Dr. P. R. Anand Vijaya kumar	Saliva test for probiotic	M/s. Tablets India Limited, Chennai	2014	2 Lakhs

Sl. NO	Name of the Candidate	Title of Thesis
1	Ms. Swati Som	Isolation, characterization and Neuroprotective evaluation of lead compounds on Hemidesmus indicus (L.) R.Br., Vernonia anthelmintica (L.)Willd, Saussurea lappa Clarke.
2	Ms. Mohsina Hyder	A prospective study on insulin resistance and interventional strategies by clinical pharmacist
3	Mrs. BS Roopa	A study to assess the effect of Vitamin D3 supplementation on iron status among iron and 25 (OH) D deficient pregnant women : A randomized placebo control study
4	Mrs. M. Deepalakshmi	Building community pharmacy work system capacity for cognitive pharmaceutical services
5	Ms. Anagha P P	Haemovigilance: An Initiative study on blood transfusion reactions at public hospital
6	Mr. Sanesh Prasad Jose	Optimization of drug therapy of selected drugs using pharmacokinetics and pharmacogenetics
7	Mrs. Sreedevi Vanapalli	Influence of folate and vitamin B12 on homocysteine level, cognition and quality of life in elderly Indian population
8	Mr. Narayanankutty Nair PN	A retrospective approach of metabolic syndrome and cognitive dysfunction
9	Mr. Menge Denis Mingate	Association of high density lipoprotein and mild cognitive impairment in south Indian population
10	Ms. Treesa P Varghese	Comparison of inflammatory biomarkers, platelet factors in acute coronary syndrome and its influence on depression
11	Mr. C. Muhas	Prevalence and Impact of lung cancer on Pharmacoeconomics and Quality of life of patients in a rural area of North Malabar region of Kerala
12	Dr. Swathi Swaroopa B	A Study on Influence of Genetic Polymorphism on Pharmacokinetics and or Pharmacodynamics of a selected drug - A Population approach

Sl. NO	Name of the Candidate	Title of Thesis
13	Dr. Sadagoban GK	Modeling and Simulation of treatment alternatives of a selected disease - Pharmacoeconomic and pharmacometric approach
14	Dr. Keerthana C	Dosage optimization of Gentamicin and Amikacin in South Indian Paediatric Population - A Pharmacometric approach
15	Ms. Jyothikrishna P	Pharmacometrics for optimization of treatment effect of selected antibiotics and minimization of bacterial drug resistance an effective tool in transitional research
16	Ms. Aswathy V S	Dosage optimization of Clopidogrel in south indian patients by pharmacogenetics and pharmacometric approach

Anti snake Venom Animal Study Project

Principal Investigator: Dr J R Kumar **Duration:** 1 Year(s)

Institute: Faculty of Life Sciences [FLS] **Department:** Biochemistry-General [BICHEM]

JSS ACADEMY OF HIGHER EDUCATION & RESEARCH

Energy Conservation & Recycling Policy

Introduction

JSS Academy of Higher Education & Research (JSSAHER) is conscious of its responsibility and role in materialising its green policy using renewable energy, management of its water resources, and disposal of waste.

Purpose

In order to minimize energy usage, improve the efficiency of all energy/ resources (natural resources, water, electricity) consuming systems and equipment, and improve the environment in all facilities, JSS Academy of Higher Education & Research has adopted an energy / resources conservation and recycling policy.

Definitions

- Energy conservation : Energy conservation is a practice of decreasing the quantity of energy used and achieved through efficient energy use.
- Recycle: Recycle is a process of collecting and reprocessing materials that would typically be considered waste.

Policy

Conservation of energy and natural resources and recycling process is an integral part of JSS Academy of Higher Education & Research (JSSAHER) facilities' design and usage. The JSSAHER employs a variety of energy conservation, recycling, and other techniques to lessen the consumption of resources and achieve the lowest feasible life cycle costs. However, occupant health, safety, comfort, and program requirements shall always be the primary concerns. Energy conservation measures will be achieved by using the most cost-effective, energy-efficient approach with consideration given for flexibility of use and future remodeling convenience. Recycling efforts are encouraged at the Institution/department level.

Responsibilities

- All faculty, staff, students, design consultants, and construction contractors must observe energy and resource conservation measures employed by the campus.
- The Campus Facilities Maintenance & Management Authority- Deputy Registrar shall be the principal coordinator of all design disciplines, which includes responsibility for the implementation of this policy.
- Constituent Colleges & Departments shall be responsible for internal energy conservation, recycling efforts.

Related Policies

The energy conservation and recycling policy of JSS Academy of Higher Education & Research (JSSAHER) supports:

- Smart Campus Policy of JSSAHER
- The Swachh Bharat Mission (Urban) guidelines- Government of India.
- National conservation strategy and policy statement on environment and development- Government of India.

Energy conservation measures:

Light Bulb Replacement

- It is estimated that replacing traditional incandescent bulbs with CFLs/LED can cut lighting costs by up to 75%. JSSAHER, Constituent Colleges & Departments shall exchange such traditional incandescent bulbs across campus with CFLs/LED in a phased manner. Thus 75 % of the bulbs shall be changed with CFLs/LEDs by 2017.
- Sticker Reminders as part of their 'Energy Awareness Campaign' shall be placed on switch boards to remind everyone to conserve energy by turning off the lights.
- Small pamphlets emphasizing the importance of energy saving shall be prepared and circulated to all the staff and students of the college.
- Solar water heaters installed in colleges and hostels and especially for cooking, solar energy is utilized in the hostels and in guest houses. Step shall be taken to replace use of LPG completely with solar energy by 2020.

Water conservation

- Awareness program shall be held in campus once in 3 months for Sensitizing the staff and students
- The students in hostels shall be sensitized about water conservation in their orientation meetings.
- Printed stickers / labels with the slogan 'Save Water' to be fixed in strategic places of the college and hostels.
- Reducing car washing and the vehicles on the campus shall be washed based on the real needs rather than regular washing.
- The gardens shall be irrigated only with sprinklers and drip irrigation systems to save the wastage of water in plantations.
- All the existing flushes in the toilets to be changed into dual flush system in a phased manner.
- Sticker Reminders as part of the 'Energy Awareness Campaign' shall be placed near taps to

remind everyone to conserve water by reducing wastage and closing the tap.

Recycle

- Green wastes shall be composted and reused as composts manure.
- All the waste bins to be replaced with dual bins with tag and pictorial signs “biodegradable waste” & nondegradable waste”.
- The biowaste disposal shall be only through Government approved disposal service contracts.

Rainwater harvest

To meet the needs and sustainable management of fresh water, the rainwater harvesting and utilisation systems have been established in all the campuses of the JSSAHER to aid towards the greater objectives of water management and conservation and increasing recharge of groundwater by capturing and storing rainwater, rainwater harvesting from rooftop run-offs and natural waterbodies and the community development. The below-mentioned models are established in the various buildings based on the size of the building and the extent and topography of the land.

The systems include –

- Simple roof water collection systems - Most of the rooftop rainwater harvesting has been completed by constructing five water storage structures with a storage capacity of 1000 m³.
- Land surface catchments – a simple way of collecting rainwater by retaining the flows (including flood flows) of small creeks and streams in small storage reservoirs (on surface or underground) created by low-cost dams
- Collection of storm water – The surface runoff collected in stormwater ponds/reservoirs is subject to a wide variety of contaminants and every effort is made to keep these catchments clean

JSSAHER and the constituent colleges shall continue to establish a combination of the above techniques to have meet the groundwater needs.

Response of JSSAHER towards conservation of energy:

The staff and students of JSSAHER shall be aware of the following response of JSSAHER towards conservation of energy to support its activities:

- Green Policy to be strictly followed in all its campuses
- Maintenance of clean, green and smart campus – waste segregation and planned disposal of waste through authorized agencies only
- Disposal of biomedical waste, Chemicals, and e-waste as per the norms of the Government
- Pollution control Board
- No Smoking campuses
- Energy conservation strategies – use of CFL/LED lights
- Solar heaters and Air source heat
- Pumps in the hostels
- Plastic-free campuses
- Conservation of water resources - Rainwater harvesting and wastewater treatment
- Reducing paper communication
- Organizing Swachh Bharat Abhiyan and creates awareness and consciousness amongst students.

- Including a subject “Environmental Sciences” in all courses
- Organizing Environment Day and Water Day.
- Preserving traditional knowledge and herbal medicine. Established medicinal plants garden and promotes eco-friendly cultivation practices by organizing medicinal plants exhibition.

Responsible Office

Office of the Vice Chancellor, Registrar & Deputy Registrar
Office of Principal, Administrative Officer & Warden.

Approval& Implementation of the Policy

This policy has been approved by the Registrar and shall be reviewed annually by Deputy Registrar and shall ensure that continued progress is being made. The Campus maintenance committee shall advise on the sustainability agenda related conservation of energy.

The policy Effective Date

The energy conservation and recycling policy of JSS Academy of Higher Education & Research shall be effective from 1st December 2016. The revision of policy shall take place once in two years and (or) as per the suggestions made by campus maintenance committee on the sustainability agenda on conservation of energy.

Related Documents

- 1.Approval for bio waste disposal and E waste disposal at JSSAHER by Government approved disposal service contract.
- 2.Memorandum of understanding between service provider and JSSAHER.
- 3.Membership certificate from society for biomedical waste management.
- 4.Rainwater harvest plan.
- 5.Standard operating procedure for waste disposal

All the documents related to agreements made with service providers shall be maintained in the office of Registrar and Deputy Registrar , JSS Academy of Higher Education & Research, Mysuru.

Questions related to the daily operational interpretation of this policy shall be directed to Registrar and Deputy Registrar, JSS Academy of Higher Education & Research, Mysuru.

The Vice Chancellor, Registrar and Deputy Registrar of JSSAHER shall be the officials responsible for the interpretation and administration of this policy.

STATEMENT SHOWING THE DETILS OF DIFFERENT TYPES OF TREES EXISTING AT JSS AHER CAMPUS

Sl. No	Scientific name	Common name	Total no's	Uses
1	Morinda coreia	Indian mulberry ಮಡ್ಡಿ ಮರ	10	The bark is tonic, astringent, febrifuge and antiseptic.
2	Roystonea regia	Royal palm ರಾಯಲ್ ಪಾಮ್	67	Landscape usages
3	Pithecellobium dulce	Monkey pod ಬೆಟ್ಟದ ಹುಣಸೆ	25	Leaf decoction is taken for leprosy, jaundice and for proper growth of hairs. Plant paste is applied for poisonous bites.
4	Terminalia arjuna	White murdah ಅರ್ಜುನ್ ಮರ	05	Bark decoction is the best cardiac tonic and highly recommended for nervous debility. It also helps to reduce high blood pressure.
5	Terminalia catappa	Indian almond tree ಕಾಡು ಬಾದಾಮಿ	07	Bark powder is used as tooth powder in case of gum diseases, mouth ulcers and thrush in tongue. Leaves cooked with rice are eaten for gastritis.
6	Araucaria columnaris	Christmas tree ಕ್ರಿಸ್ತಮಸ್ ಮರ	04	Landscape usages
7	Pongamia pinnata	Hongay oil tree ಹೊಂಗೆ ಮರ	64	Bark cooked with rice is eaten for three days in case of uterine diseases and conception failure. Bath with leaf decoction is recommended for arthritis and rheumatism.
8	Grevillea robusta	Southern silky oak -ಸಿಲ್ವರ್ ಮರ	56	Ornamental Fuel
9	Azadirachta indica	Neem ಬೇವಿನ ಮರ	52	Bark powder is recommended for septic wounds. Neem oil is applied for healing wounds and ulcers.
10	Albizia lebbek	East Indian walnut ಬಾಗೆ ಮರ	28	Seed decoction is given for piles and to stop purgation. Leaf and bark powder are applied for ulcers as well as snake bite.
11	Swietenia mahagoni	West Indian mahogany ಮಹಾಗನಿ ಮರ	14	Timber
12	Cocos nucifera	Coconut ತೆಂಗಿನ ಮರ	70	Tender coconut water is the antidote for indigestion caused by beaten rice. Paste of leaf ash fried with ghee is applied for old chronic ulcers and wounds
13	Areca catechu	Arecanut palm ಅಡಿಕೆ ಮರ	20	Decoction made of its root, Cocos nucifera root and salt are used as a gargle for toothache. Young fruit (ground) is given as a sour agent for thrush in tongue.
14	Delonix regia	Royal gulmohur ಕತ್ತಿಕಾಯಿ ಮರ	17	Antispasmodic and antirheumatic.

15	Ficus benghalensis	Banyan tree ಆಲದ ಮರ	02	White terminal portion of prop root ground in milk is given for burning sensation and is a general tonic. Paste prepared from its bark, castor oil, bee wax and turmeric are used as a quick healer for cracks in feet.
16	Ficus racemosa	Cluster fig ಅತ್ತಿ ಮರ	02	Fruit juice is used for gastritis. Bark paste is applied to ulcers or boils on body due to excessive heat.
17		ರೈಟ್ಟು ಮರ	10	
18	Wrightia tinctoria	Pala indigo ಬೆಪ್ಪಲ ಮರ	02	Leaf paste is filled into dental cavities for toothache and cavities. Leaf paste in coconut oil is applied for skin diseases.
19	Bauhinia purpurea	Butterfly tree ಬಸವನ ಪಾದ ಮರ	03	Stem bark decoction is given for diarrhoea, ulcers, swellings, leprosy, cough and menstrual irregularities
20	Lagerstroemia microcarpa	Virgin tree of the forest ನಂದಿ ಮರ	02	Leaf or young shoot tip paste is applied for cuts, wounds and for skin diseases
21	Albizia amara	Bitter albizzia ಸುಜಲ್ ಮರ	02	Medicinal and agroforestry
22	Ficus religiosa	Peepal tree ಅರಳಿ ಮರ	08	Young shoot tip ground and boiled in milk is given for dysentery and amoebiasis
23	Millingtonia hortensis	Indian cork tree ಆಕಾಶ್ ಮಲ್ಲಿಗೆ	42	Bark decoction is recommended internally for fever, cold, indigestion and diarrhoea
24	Acacia catechu	Red cutch ತಾರೆ ಮರ	01	Twig is used as toothbrush for strengthening teeth and gums. Bark decoction is used as a gargle for mouth ulcers
25	Plumeria rubra	Temple tree ದೇವಗಣಗಲೆ	32	Bark cooked with rice is taken for jaundice, venereal diseases and joint pain
26	Saraca asoca	Asoka tree ಅಶೋಕ ಮರ	171	Bark decoction is used for menstrual problems, dysentery, diarrhoea and as a blood purifier
27	Ficus benamina	Golden fig ಜಾವ ಹತ್ತಿ ಮರ	01	Medicinal and agroforestry
28	Artocarpus heterophyllus	Jack fruit tree ಹಲಸಿನ ಮರ	07	Fruit is nutritive and it clears excretory system. Seeds are sweet with aphrodisiac action
29	Aegle marmelos	Bael fruit ಬಿಲ್ವಪತ್ರ ಮರ	03	Leaf juice is given to children suffering from stomach-ache. Leaf is eaten for diabetes.
30	Sapindus laurifolia	Soapnut ಅಂಟವಾಳ ಮರ	01	Folk medicine and insecticide
31	Thespesia populnea	Cork tree ಬುಗರಿ ಮರ	05	Fruit and bark decoction is much used to wash for septic wounds and ulcers
32	Prosopis cineraria	Indian mesquite ಬನ್ನಿ ಮರ	02	Astringent and coolant
33		ತಬ್ಬುಬಿಯ ಮರ	28	

34	Tabebuia aurea	Caribbean trumpet-tree ಹಳದಿ ಪಾದಿ	40	Ornamental and timber
35	Tamarindus indica	Tamarind tree ಹುಣಸೆ ಮರ	09	Leaf decoction is poured over the body parts to relieve rheumatic pain. Steam of boiled fruit juice is given for pain.
36		ಯಾಒ ಮರ	02	
37	Cassia javanica	Pink shower ಕ್ಯಾಸಿಯ ಮರ	06	Widely planted as an ornamental. The wood is used for general construction, furniture and cabinet making
38	Cassia fistula	Indian laburnum ಕಕ್ಕೆ ಮರ	09	Bark paste is applied for skin diseases. Juice collected from heated fruit is taken to expel intestinal worms
39		ನೀಲಿ ಪಾದ್ರಿ ಮರ	02	
40	Alstonia scholaris	Indian devil tree ಹಾಲೆ ಮರ	01	Bark is used to treat asthma, heart disease, for chronic ulcers, and other ailments. Powder mixed with ginger is given to new mothers the first day after birthing to cleanse the blood and promote lactation.
41	Santalum album	Indian sandalwood ಗಂಧದ ಮರ	08	Sandalwood oil was used traditionally to treat skin diseases, acne, dysentery, gonorrhea,
42	Callistemon	Bottlebrush tree ಬರಲ ಬ್ರಶ್	17	Antibacterial and ornamental
43	Holoptelea integrifolia	Indian elm ತಾವನೆ ಮರ	04	Oil prepared from its bark is used for chronic ulcers. Bark paste is applied to the spot of pit viper bite and to arrest bleeding from wounds
44	Hevea brasiliensis	Rubber ರಬ್ಬರ್ ಮರ	04	Rubber and timber
45	Mangifera indica	Mango tree ಮಾವಿನ ಮರ	06	Bark cooked with rice is given for gastritis. Seed kernel ground in butter milk is applied on head for dandruff
46	Michalea cham paca	Golden champa ಸಂಪಿಗೆ ಮರ	18	Agroforestry, fuels and oil
47	Elaeocarpus ganitrus	Woodenbegar ರುದ್ರಾಕ್ಷಿ ಮರ	02	Ground seed is given to small children for increasing intellect and memory power. Wearing its seeds as necklace is said to control CNS.
48	Melia dubia	Malabar neem wood ಹೆಬ್ಬೆ ಬೇವು ಮರ	18	Leaf juice or extract is used both externally and internally as a haemostatic agent
49	Annona reticulata	Bullock's heart ರಾಂಪಾಲ್ ಮರ	01	Fruit is beneficial for tuberculosis. Dried fruit extract is given for dysentery
50	Syzygium cumini	Black plum ನೇರಳೆ ಮರ	02	Seed powder or bark decoction is much used for diabetes. Bark decoction is recommended for ulcers in the mouth, diabetes, and liver disorders
51		ಗೋಲ್ಡನ್ ಸ್ಟೆಫಿನ್	35	
52	Tectona grandis	Teak ಟೀಕ್	1450	Fresh leaf and fruit extract are applied for mouth ulcers and itches in the body. Seed and flower decoctions are diuretic

Various trees available in JSS College of Pharmacy, Ooty campus

Sl No.	Name of the Tree	Nos. available
1.	Acacia	39
2.	Cypress	10
3.	Eucalyptus	21
4.	Jacaranda	06
5.	Silver Oak	17
6.	Pynes	01
7.	Plums	31
8.	Peaches	10
9.	Bottle Brush	19
10.	Photo Creeper	20
11.	Jungle Wood	75
TOTAL		249

Sd/-
PRINCIPAL

GREEN, CLEAN, SAFE AND ECO FRIENDLY CAMPUS

1. Sustainable development practices of JSS AHER / Green campus maintenance in JSS AHER

JSSAHER has published books or compendium with respect to sustainable development practices / green campus maintenances followed by JSSAHER and its constituent colleges. Following practices are in place and is updating itself with growing requirement and changing environmental behaviour as the day to day activities.

- a) SDG's is being aligned with the Smart Campus initiative documents.
- b) **Tree Survey Report** – **JSSAHER is having 2828+ trees viz.,**
 - a. 2,397+ trees with 52 varieties at JSSAHER Main Campus,
 - b. 182+ of trees with 28 varieties at Mysuru Pharmacy College Campus and
 - c. 249 of trees with 11 varieties at Ooty Campus.
- c) Initiated for 3rd party evaluation of the green certification of JSSMI Campus, Mysuru.
- d) JSSAHER is having rainwater harvesting tank and connectivity of about 30,000 ltrs storage. 10 no's of ground water and bore well recharge pits / points and 02 no. of infiltration tank of 15,000 ltrs capacity. One tank of 10,000 ltrs capacity is made for re-use of RO rejected water for gardening purpose. Water sprinklers are in place.

The Rainwater harvesting survey has been made



e) **Solar Roof Top project** has been completed in all respect and have started yielding power generation and presently more than 50% of the electricity requirement from electricity board.

f) **RO Waste Management:**




Sl. No.	Name of the Institutions	Capacity
1	JSS Medical Institutions Campus, Mysuru	3,000 Lph
2	JSS College of Pharmacy Campus, Mysuru	1,000 Lph
3	JSS College of Pharmacy Campus, Ooty	2,000 Lph





- g) **Vermicompost:** Our Institute maintains a very good green carpet area and around 60% - 70% of the campus carries green environment. With a number of trees within the campus, accumulation of fallen leaves and other plant materials account to around 50 – 100 Kg of bio-waste which is being dumped and finally removed by external agencies. With the smart campus initiative gearing up, it is worthwhile to consider our own strategies to handle the waste generated within the campus. In this connection the vermicompost unit would come handy to handle the plant waste materials which not only will help us manage waste but also serves as a student centered project to produce bio-manure.



2. Smart Campus / Green Campus Activities - Published Report

Sl. No.	Greenery Initiative	Respective Pictures
1	Greenery / Plantation	
2	Prohibition on use of Plastic bags and bottles	
3	E – scrape	

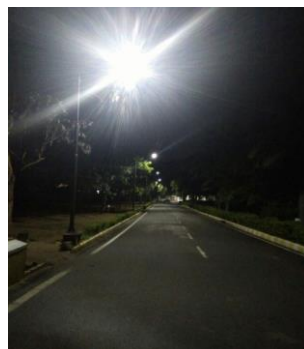
4	Use of Incinerators	
5	Solar - Power, Water Heater	

3. Detail on Security Services.

- a) **Security Agreement:** JSSAHER is availing security services from M/s. Classic Protection Force Pvt., Ltd., at Mysuru and M/s. Supreme Security Solutions at Ooty. Security personnel's work round the clock 24 x 7 with a combination of male and female security personnel's as per the requirement. Security work will be monitored through CCTV, and through whats app group on daily basis to ensure vigilance.
- b) **CCTV Surveillance** JSSAHER is having **more than 300+** of CCTV surveillance installed **no's** (*Mysuru campus – 219 no's. + Ooty Campus - 90 no's*) to ensure the safety and security round the clock. Almost all the CCTV cameras will have around **one month back up**.
- c) **High Raised Compound** – all the campuses of JSS AHER are having full protected with High Raised Compound and gated with security check point. Photos



- d) **Proper / LED Lightnings:** All the institutions campus of JSSAHE&R at Mysuru and Ooty are provided with LED lightings to promote security in the campus and to increase the quality of life by artificially extending the hours in which it is light and for the safety of hostel students.



4. Details on Fuel Consumption

Sl. No.	Particulars	Amount (FY 2017 - 2020)
1	Electricity Charges	
	a) KEB	3,06,08,875
	b) Generators	26,26,044
2	LPG	51,45,000
3	Petroleum - Vehicles	9,82,265
4	Biogas	-
5	TOTAL	3,87,70,506

5. Waste Disposal Practice & Process - *Biodegradable / Non-Degradable / Hazardous/ Chemical / Biological Waste Etc.*

- [Bio – Medical Waste Management Service](#) is being availed since May 2003 (Dental & Medical) from M/s. Shree Consultants.
- Bio – medical waste management service is being availed (JSSCPM) from M/s. Gips
- Segregation and collection of dry and wet garbage is in practice.
- Color coded dustbins are provided across the campus.



6. Quantity of Waste Disposal & Agreement Copy of The Vendor –

- **All Bio Medical Wastes** generated in the campus is being disposed through the Bio Medical Disposable Certified Agencies.
- **ETP:** Environmental safety is matter of concern for all. These are the practices, policies and the procedures that we follow to ensure the safety and wellbeing of everyone around us. The safety concern from health professional point of view may include proper waste disposal, storage of toxic chemicals, prevention of water contamination with toxic chemicals and much more. Effluent treatment plant cleans this contaminated water from rivers and lakes and makes it available for safe use. The treatment method followed by ETPs includes the elimination of toxin from the water in order to generate safe and clean water which is released into the nature. In this process the influent contaminated water is treated to remove the sludge to produce effluent water which is safe enough to be released to our environment. Health sectors is also one such area that produces this water contaminated with chemicals and biological particles that needs to be treated with various methods to produce the water that can be reused for certain purposes like gardening. This is one initiative to be taken towards conservation of Mother Nature and thereby make this place safer for our near and dear ones.



- **Green & Garden Waste:** The dried / wet plants materials such as leaves, stem, trunk, roots, flowers or cut or shred etc from the garden are collected in the pits and treated. Approximately 20 tonnes per year green waste is generated from the campus. The collected materials are processed in pits and approximately 12 tonnes of manure are prepared from the green wastes which are used once in 2 – 3 months for gardening purpose spread over in different locations of the campus.
- **Food Wastes:** Food wastes from the hostels are collected in closed containers in respective collection area and are taken to piggery to feed the pigs. Food waste is disposal ensured through third party contract. Pilot trials under process to convert food waste in to organic manure and biogas
- **General Waste** – disposed through local municipal authority duly segregating as per the procedure.

- Paper waste –

Details of Disposal of Paper Waste (<i>shredded answer sheets and other materials</i>)					
Cycle	Year	Name of Contract	No. of Kg (Approximately)	Amount received by selling of scrap	Amount spent on daily wages to Labour
1 st Cycle	2016	M/s. Syed Mansoor	9000	75,800	49,000
2 nd Cycle	2019	M/s. SI & Son's Traders	6200	68,318	41,700
3 rd cycle	2020	M/s. SI & Son's Traders	3200	31,600	25,700

7. Food Safety and Food Procuring Details and Documents (January 2019 to June 2020)

JSSAHER has [registered all its hostel under FSSAI](#) and has ensured that the Food Court Service Provider in all the campuses of JSSAHER is also registered under FSSAI.

Name of the Campus	FSSAI Registration No.	Period of License
JSS Medical Institutions Campus, Mysuru	11219335000510	25.09.2019 to 24.09.2022
JSS College of Pharmacy Campus, Mysuru	11219335000513	
JSS Hospital Campus, Mysuru	11219335000512	

Meanwhile, all the cooks, assistant cooks, helpers are oriented on maintenance of hygiene. The Chief Wardens, Wardens and Supervisors of the all the hostel blocks ensures that all food products that are purchased has ISI / fssai marks.

Following are the details of expenditure incurred by JSSAHER Hostels towards procurement of provisions and other necessary items for the Hostels.

Rupees in Lakhs

Sl. No.	Particulars	JSSMI Campus		JSSCPM Campus		JSSCPO Campus		TOTAL
		Girls Hostel	Boys Hostel	Girls Hostel	Boys Hostel	Girls Hostel	Boys Hostel	
1	Mysuru Milk Dairy	16.53	18.09	9.93	11.26	8.33	7.49	71.63
2	Vegetables & Fruits	21.54	18.55	23.65	26.51	19.28	20.12	129.65
3	Gas Services	7.47	7.71	8.54	8.47	8.88	9.36	50.43
4	S.L.V Iyengar Bakery	10.06	6.04	14.05	9.69	4.83	8.97	53.64
5	Jss Enterprises	30.07	36.48	31.34	34.65	38.70	38.75	209.99
6	Others	14.34	13.11	12.49	9.41	15.56	15.30	80.21
7	TOTAL	100.01	99.98	100.00	99.99	95.58	99.99	595.55