

## COMPENDIUM ON SDG 12

2020-2021

### RESPONSIBLE CONSUMPTION AND PRODUCTION



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## **1. INTRODUCTION**

Worldwide consumption and production are the driving forces of the global economy; they rest on the use of the natural environment and resources in a way that continues to have destructive impacts on the planet. The COVID-19 pandemic offers countries an opportunity to build recovery plans that will reverse current trends and change our consumption and production patterns towards a more sustainable future.

Sustainable consumption and production are about doing more and better with less. It is also about decoupling economic growth from environmental degradation, increasing resource efficiency, and promoting sustainable lifestyles. Sustainable consumption and production can also contribute substantially to poverty alleviation and the transition towards low-carbon and green economies.

### **COVID-19 RESPONSE**

The current crisis is an opportunity for a profound, systemic shift to a more sustainable economy that works for both people and the planet.

The emergence of COVID-19 has underscored the relationship between people and nature and revealed the fundamental tenets of the trade-off we consistently face: humans have unlimited needs, but the planet has limited capacity to satisfy them. We must try to understand and appreciate the limits to which humans can push nature before the impact is negative. Those limits must be reflected in our consumption and production patterns.

COVID-19 can be a catalyst for social change. We must build back better and transition our production and consumption patterns towards more sustainable practices.

Our planet has provided us with an abundance of natural resources. But we have not utilized them responsibly and currently consume far beyond what our planet can provide. We must learn how to use and produce in sustainable ways that will reverse the harm that we have inflicted on the planet.

It consists of implementing the 10-year framework of program on sustainable consumption and production, all countries acting, with developed countries taking the lead, taking into account the development and capabilities of developing countries. Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle. Promote public procurement practices that are sustainable, in accordance with national policies and priorities. Achieving economic growth and sustainable development requires that we urgently reduce our ecological footprint by changing the way we produce and consume goods and resources. Agriculture is the biggest user of water worldwide, and irrigation now claims close to 70 percent of all freshwaters for human use. The efficient management of our shared natural resources, and the way we dispose of toxic waste and pollutants, are important targets to achieve this goal. Encouraging industries, businesses, and consumers to recycle and reduce waste is equally important, as is supporting developing countries to move towards more sustainable patterns of consumption by 2030.

A large share of the world population is still consuming far too little to meet even their basic needs. Halving the per capita of global food waste at the retailer and consumer levels is also important for creating more efficient production and supply chains. This can help with food security and shift us towards a more resource efficient economy.

## 2. JSSAHER VISION ALIGNMENT TO SDG 12 TARGETS

<p>TARGET 12-1</p>  <p>IMPLEMENT THE 10-YEAR SUSTAINABLE CONSUMPTION AND PRODUCTION FRAMEWORK</p>	<p><b>Sustainable Consumption and Production Framework</b></p> <p>Sustainable Consumption and Production Patterns</p> <p><u><a href="#">FOOD AND SUPPLY POLICY OF JSSAHER</a></u>  <u><a href="#">DISTRIBUTION PATTERN OF FOOD AND RELATED PRODUCTS</a></u>  <u><a href="#">PURCHASE AT JSSAHER.</a></u></p>
<p><b>Sustainable management and use of natural resources</b></p> <p>Sustainable management and efficient use of natural resources.</p> <p><u><a href="#">ENERGY CONSERVATION &amp; RECYCLING POLICY OF JSSAHER</a></u>  <u><a href="#">SMART CAMPUS POLICY OF JSSAHER</a></u></p>	
<p>TARGET 12-3</p>  <p>HALVE GLOBAL PER CAPITA FOOD WASTE</p>	<p>Reduce food waste and losses along production and supply chains</p> <p><u><a href="#">FOOD POLICY OF JSSAHER</a></u></p> <p><u><a href="#">FOOD WASTE REDUCING MEASURES</a></u></p>
<p><b>Responsible management of chemicals and waste</b></p> <p>Environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil to minimize their adverse impacts on human health and the environment.</p> <p><u><a href="#">SMART CAMPUS POLICY OF JSSAHER</a></u>  <u><a href="#">BIOMEDICAL WASTE MANAGEMENT</a></u>  <u><a href="#">WASTE DISPOSAL POLICY OF JSSAHER</a></u></p>	<p>TARGET 12-4</p>  <p>RESPONSIBLE MANAGEMENT OF CHEMICALS AND WASTE</p>
<p>TARGET 12-5</p>  <p>SUBSTANTIALLY REDUCE WASTE GENERATION</p>	<p><b>Substantially reduce waste generation</b></p> <p>Reduce waste generation through prevention, reduction, recycling, and reuse.</p> <p>Waste Disposal Policy Of JSSAHER</p> <p><u><a href="#">ENERGY CONSERVATION &amp; RECYCLING POLICY</a></u></p>
<p>TARGET 12-7</p>  <p>PROMOTE SUSTAINABLE PUBLIC PROCUREMENT PRACTICES</p>	<p><b>Encourage companies to adopt sustainable practices and sustainability reporting</b></p> <p>Adopt sustainable practices and to integrate sustainability information into their reporting cycle.</p> <p><u><a href="#">ENERGY CONSERVATION &amp; RECYCLING POLICY OF JSSAHER</a></u>  <u><a href="#">SMART CAMPUS POLICY OF JSSAHER</a></u></p>

## Promote sustainable public procurement practices

Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

[SMART CAMPUS POLICY](#)  
[ENGAGING STAKEHOLDERS POLICY](#)  
[CONSULTANCY POLICY](#)  
[INFRASTRUCTURE & MAINTENANCE POLICY](#)  
[ENERGY CONSERVATION & RECYCLING POLICY.](#)



## Promote universal understanding of sustainable lifestyles

Relevant information and awareness for sustainable development and lifestyles in harmony with nature.

[SUSTAINABLE FARMING AT JSSAHER](#)  
[MEDICINAL PLANTS GARDEN AND NURSERY OF JSSAHER](#)



## Support developing countries' scientific and technological capacity for sustainable consumption and production

Scientific and technological capacity to move towards more sustainable patterns of consumption and production.

[SMART CAMPUS POLICY](#)  
[ENGAGING STAKEHOLDERS' POLICY](#)  
[CONSULTANCY POLICY](#)  
[INFRASTRUCTURE & MAINTENANCE POLICY](#)  
[OUTREACH ACTIVITIES OF JSSAHER](#)



## Develop and implement tools to monitor sustainable tourism

Tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

[CURRICULUM DEVELOPMENT & TRAINING](#)



## A GLANCE AT EFFORTS OF JSSAHER TOWARDS SDG 12:

- Abiding by JSS AHER Green policy supporting "SMART CAMPUS"
- Ensuring greenery in the college and hospital campus
- Rainwater harvesting
- Signboards on efficient use of water and energy
- Kitchen garden in the campus
- Scientific disposal of biomedical waste from all health centres
- Regular training of health care workers and students on biomedical waste management

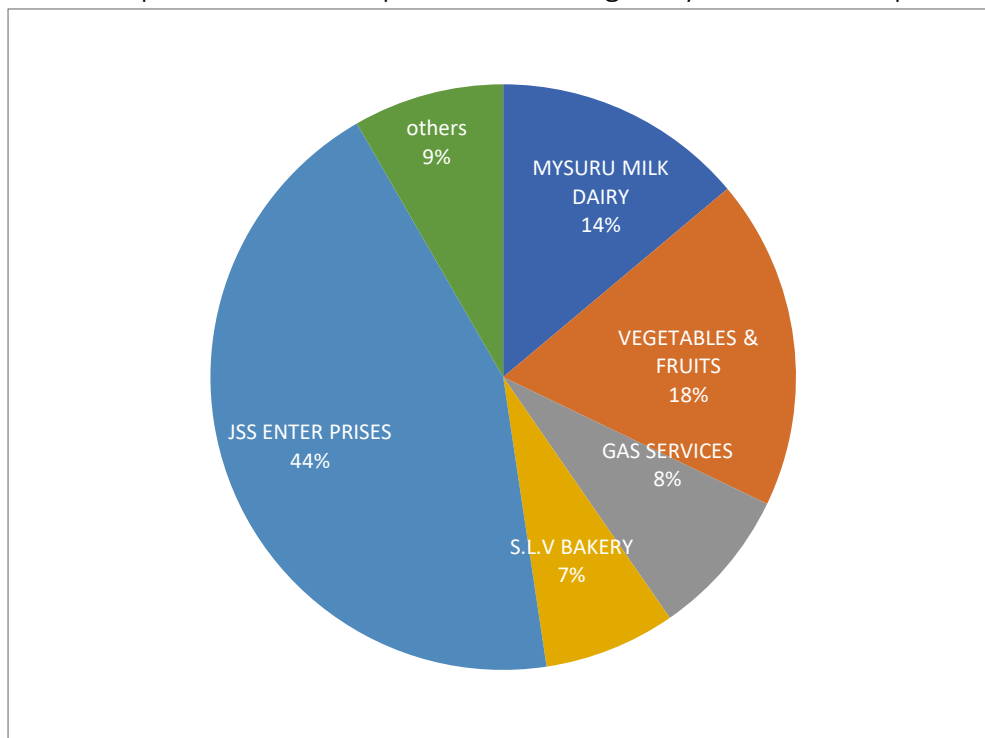
**3. PROMOTE PUBLIC PROCUREMENT PRACTICES THAT ARE SUSTAINABLE, IN ACCORDANCE WITH NATIONAL POLICIES AND PRIORITIES.**

**i. Distribution Pattern of Food and related products purchase at JSSAHER.**

The Hostels functioning under the ambit of JSSAHER ensures responsibility in providing hygienic nutritious vegetarian food at very nominal rates and purchases the required food grains, Milk, Fruits, Vegetables Bakery items in the following pattern:

- ✓ with the sister concerned institutes (JSS Enterprises -groceries)
- ✓ with local trusted suppliers (Fruits, Vegetables, Bakery Items)
- ✓ Govt identified agencies (Gas, Milk & related Product)

The distribution pattern of hostel purchases during the year 2020 is depicted below in %.



JSS AHER has obtained FSSAI License for the mess being managed by the academy.

Sl. No.	License Applied for hostels at	License No	Period
1	JSSAHER Hostels JSSMI Campus Hostels	11219335000510	25.09.2019 to 24.09.2022
2	JSS AHER Hostels for Men & Women JSSCPM Campus	11219335000513	
3	JSS AHER PG Hostel for Men & Women JSSH Campus	11219335000512	
4	JSS College of Pharmacy Ooty Campus Girls Hostel	12417021000069	28.03.2018 to 23.04.2023
	Boys Hostel	12417021000070	13.04.2018 to 23.04.2023

## ii. FOOD AND SUPPLY POLICY OF JSSAHER



# Food & Supplies Policy JSS Academy OF Higher Education & Research

## Preamble:

JSS Academy of Higher Education & Research (JSSAHER) is committed to “JSSAHER Social Responsibility Statement ” in providing sustainable, eco friendly campus. The “Food & Supplies Policy” is related to procurement, storage and maintenance of food at JSSAHER and its constituent colleges and departments. This policy is a part of “Smart Campus Policy” of JSSAHER. All stakeholders shall assist JSSAHER in meeting the sustainable food & supply policy.

JSSAHER and its constituent colleges and departments are responsible in working with suppliers, contractors and partners to minimize environmental effects related to food services and supports local suppliers, ensuring that all procurements represent value for money. This policy is focused on but not limited to provision and procurement of food at JSSAHER, it applies to all aspects of sustainable food, including procurement, provision preparation, waste management, education, awareness and services related to food and consumables.

## Objective:

JSSAHER ensures that:

- Procurement, storage and maintenance of food is reliable, safe and represent value for money.
- Environmental and social responsibility is factored in to all tenders and contracts .
- Suppliers are committed to sustainable use of transport, packaging, storing etc.
- Communication on progress made during the contract period.
- Recycling and reuse where applicable
- Usage of biodegradable packaging whenever possible.
- Effective waste reduction and minimizing wastage while procurement, storage, maintenance and deliver.
- Serving sustainable food and to reduce plate waste.

## Approval & Implementation of the Policy:

This policy shall be approved by Board of Management and shall be reviewed annually by Registrar & Deputy Registrar to ensure that continued progress is being made. The Campus maintenance committee shall advise on the sustainability agenda affecting food procurement and provision.

## **Roles and responsibilities:**

- JSSAHER and its constituent colleges and departments shall procure food in a sustainable manner in accordance with the "JSSAHER Social Responsibility Statement, Smart Campus Policy", which are available from the JSSAHE's website <https://jssuni.edu.in>.
- Registrar and Deputy Registrar shall have overall responsibility for the implementation and delivery of the policy within the University's catering department. However, constituent colleges and departments shall have particular responsibility for managing aspects relevant to food service.
- Responsibility for application of the principles and practical delivery of this policy within the college in general lies with the Principal, Administrative Officers & Warden.
- Responsibility for application of the principles and practical delivery of this policy within catering services lies with the catering managers.
- JSSAHER shall promote sustainable food to customers to increase awareness and sales through meetings and workshops.
- Any changes to sustainable food practices will be communicated on an annual basis as a summary report.
- The summary report will be produced by the Campus Maintenance Committee following an annual review by the Registrar and Deputy Registrar.
- Promote and supply seasonal fruit and vegetables.
- Engage suppliers to measure the amount of local and seasonal fruit and vegetables and use to help with procurement decisions.
- Increase the procurement and consumption of organic food, focusing on the health, well-being and environmental benefits.
- Move all disposable products to biodegradable alternatives where possible and reduce the amount of disposables used.
- Ensuring tap water and drinking water is available at every catering outlet and colleges
- Use of eco friendly and effective cleaning materials.
- Send zero food waste to landfill directly and recycle all waste.
- Encouraging sustainable food: Contribute to thriving local economies and sustainable livelihoods. Protect the diversity of both plants and animals and the welfare of farmed and avoid damaging natural resources.
- Support a culture of healthy eating.
- Sustainable procurement which is partly about buying and sourcing green products but and also ensuring energy and resource efficiency as well as long term cost effectiveness. Saving costs measured across the whole lifecycle of a product
- Fair-trade on better prices, decent working conditions and local sustainability.
- Decisions on procurement and accreditation shall be made on the basis of a rational assessment of value, ethics and market trends.

## **The Policy Supports:**

- The Swachh Bharat Mission (Urban) guidelines, Government of India.
- National conservation strategy and policy statement on environment and development, Government of India.
- National Cyber Security Policy, Ministry of Communication and Information Technology, Government of India.



## Supporting Documents:

1. Food Safety and Standards Authority of India –License Number: 11218335000095
2. Food Safety and Standards Authority of India –License Number: 11218335000105
3. Food Safety and Standards Authority of India –License Number: 11218335000107
4. Food Safety and Standards Authority of India –License Number: 11218335000108
5. Food Safety and Standards Authority of India –License Number: 11218335000109
6. Agreements with vendors and suppliers.

- All the documents related to agreements made with suppliers & vendors and license from food and safety standards authority of India 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.

## The policy Effective Date

The Food & Supply Policy of JSS Academy of Higher Education & Research, Mysuru shall be effective from 1<sup>st</sup> May, 2019. 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 affecting food procurement and provision.

### **iii. SUSTAINABLE FARMING AT JSSAHER**

#### **Sustainable farming at JSSAHER helps in supporting the following SDGs**

##### **JSS ACADEMY OF HIGHER EDUCATION & RESEARCH JSSAHER Hostel**

List of vegetables and green leaves grown in our hostel premises during the period from 01.01.2020 to 30.10.2021 Coriander

- Spinach
- Curry leaves
- Amaranth
- Brinjal
- Tomato
- green chili
- Moringa
- Sapota
- Banana

##### **JSSAHER SUSTAINABLE FARMING SUPPORTS THE FOLLOWING SDGs**

**SDG 12 (Responsible Production & Consumption)** JSSAHER promote public procurement practices that are sustainable, in accordance with national policies and priorities.

**SDG 15 (Life on land)** Kitchen garden & farming is developed by our inhouse team voluntarily and growing organic ,garden fresh ,quality greens, vegetables and fruits for the inhouse consumption of hostel inmates and visitors is helping the life on land

**SDG 12 (Responsible consumption and production)** Kitchen garden & farming is developed by our inhouse team voluntarily and growing organic -garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates. This small initiative has boosted up their potentiality, imbibed confidence to do better, think out of box concept for optimal utilization of all sorts of energy. This selfless work and keenness exhibited is the exemplary work of the hostel workers in taking care of their inmates.)

**SDG 2 (Zero hunger)** Kitchen garden and farming is developed by our inhouse team voluntarily and growing organic -garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates.

**SDG 3 (Good health and well being)** - The team of dedicated workers take care of the Good health and well being of the hostel inmates by preparing and serving healthy nutritious food; but also exhibits their sense of moral responsibility of taking care of the health of the hostel inmates by voluntarily and growing organic -garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates.

**SDG 4 (Quality education)** - **The act of selflessness of the** inhouse team voluntarily growing the organic garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates itself indirectly bringing the culture of developing kitchen garden at the houses in course of time and imbibe the essence of inclusiveness, moral responsibility re the intangible benefits in bringing up Quality Education.

### iii. VERMICOMPOST ACTIVITIES OF JSS AHER

The green wastes from the garden are processed in the in-house vermicomposting pits. Two vermicompost pits are established in the isolated area of the campus which can accommodate 250 kg of green wastes. The green wastes such as grass, leaves, straw, other plants/trees shreds are collected and lined/ dumped in the pit. These materials are covered with manure sand and worms were added and allowed to decompose for a period of one month. The vermicompost are collected and used as organic manure for the garden, which helps to maintain the natural ecosystem of the garden. Thus, JSSAHER contribute for the sustenance and revitalization of terrestrial living system



### iv. **SUSTAINABLE PRACTICES IN JSSAHER'S HOSTELS**

**JSSAHER Hostels and Campus Maintenance Committee understands that sustainability is a way of life and practices organic inhouse farming to cater the need of fresh vegetables and fruits of the staff and students.**

- JSSAHER grows own organic vegetables and fruits and source them from organic farmers from the village and is used to produce biogas and bio compost.
- 80% of the energy the hostel uses comes from renewable sources, both solar and biogas energy and biogas heating system that produces zero CO2 emissions.
- Low energy lighting inside the hostel and activated lighting sensors in common areas such as corridors and garden.
- JSSAHER offers reusable bottles to buy/ borrow, thus reducing the use of plastic in campus.
- JSSAHE constantly raising awareness about the importance of sustainability in hostel campus.
- Kitchen waste, dead leaves from trees and food waste is composted on-site for making fertilizer, compost manure for the garden and farm.
- Tissues, paper napkins, toilet papers and cleaning products are completely biodegradable
- Bicycle facilities in hostel campus, promoting sustainability among students by helping them find ecological means of transport like cycling and walking .

- JSSAHER's Nature Club offers ecological hiking, cycle rides, book exchanges, and guided picnics, camps, outreach programs to nearby farm and villages to support eco-friendly activities.
- JSSAHER Hostels supporting SDG 15 (Life on land) - Kitchen garden & farming is developed by our inhouse team voluntarily and growing organic ,garden fresh ,quality greens, vegetables and fruits for the inhouse consumption of hostel inmates and visitors is helping the life on land
- JSSAHER Hostels supporting SDG 15 SDG 12 (Responsible consumption and production - Kitchen garden & farming is developed by our inhouse team voluntarily and growing organic -garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates. This small initiative has boosted up their potentiality, imbibed confidence to do better, think out of box concept for optimal utilization of all sorts of energy. This selfless work and keenness exhibited is the exemplary work of the hostel workers in taking care of their inmates.)
- JSSAHER Hostels supporting SDG 15 SDG 2 (Zero hunger)- Kitchen garden and farming is developed by our inhouse team voluntarily and growing organic -garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates
- JSSAHER Hostels supporting SDG 15 SDG 3 (Good health and wellbeing) - The team of dedicated workers take care of the Good health and wellbeing of the hostel inmates by preparing and serving healthy nutritious food; but also exhibits their sense of moral responsibility of taking care of the health of the hostel inmates by voluntarily and growing organic -garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates.
- JSSAHER Hostels supporting SDG 15 SDG 4 (Quality education) - The act of selflessness of the inhouse team voluntarily growing the organic garden fresh -quality greens, vegetables, fruits for the inhouse consumption of hostel inmates itself indirectly bringing the culture of developing kitchen garden at the houses in course of time and imbibe the essence of inclusiveness, moral responsibility are the intangible benefits in bringing up Quality Education.
- Reverse osmosis and filtration system are used and no chemicals are used for water treatment .

**v. JSSAHER provides nutritious food to staff & students in a safe and secured manner and ensures that food on campus is sustainably farmed.**

JSSAHER is having an exclusive kitchen and mess blocks for students wherein, dedicated staff are provided for cooking and providing food in time as per the food menu.

Students are encouraged not to waste food and the extra / excess food left out at hostels / food courts are served to the needy people outside the campus or will be given to piggeries. All kitchen, mess and hostels staff are provided food for free of cost. JSSAHER Food Court Services are provided at a discount / concessional rate to the staff though most of the staff working at JSSAHER reside in the considerable distance, all of them carry food along with them.

The Department of Nutrition and Dietetics of JSSAHER takes care of the Food Hygiene and Good Food Practices carried out at JSSAHER Hostels and its Food Court in the campus by having regular checks and by orienting the staff who work at kitchen and dining. The Department of N & D is having International standard food lab and it analyses the nutrient values of various food varieties and moderates depending upon the requirement with a check on the health status of all inmates and guide them for maintenance of fitness and

to orient them to have balance diet. The Department advises and orient the students about the Do's and Don'ts to be followed, by organizing workshops / programmes and the public's during out camps.

The JSS AHER provide the Vegetarian and Hygienic food and ensures good food practices and carries FSSAI registration licence under FSSAI Act 2006 rules and regulations.

During the Induction /Orientation program, the students are made aware of all the facilities available in the campus, along with the hostel and food court.

Students of Medical, Dental, Pharmacy and Life Sciences college maintain their independent hostel facilities, where the students are provided decent accommodation and hygienic mess facilities to its inmates. Students are given the opportunity for deciding the menu of the hostel.

Students are served with hot, tasty, hygiene and nutritious food. In a day 3 meals (*breakfast, lunch, & dinner*), 2 – 3 times beverages, one evening snack is served. The options given in the menu include Indian cuisine and all food groups. For the day scholars (who are not residing in hostel) Food Court and kiosk facility are available in Main campus for Medical, Dental, and Life Sciences. Two more Food court at Pharmacy College Campus at Mysuru and Ooty respectively. And in the Main Hospital Big Canteen facility and multiple kiosk are provided.

The Food court is open in all constituent colleges. Depending upon the requirement services are being extended. In food court, all varieties of vegetarian foods including all food groups are served during college working hours and especially in breakfast, lunch, and evening snack time the food court is crowded. The food provided at food courts, kiosk and mess are cost effective and at affordable charges for the students. The Food court also serves as food bank.

Regularly orientations are being given to the Mess Supervisors, Cooking Staff and Additional Staff (*predominately hands on training*) on keeping up good mess service.

## **4. 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 remodelling 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.

## **5. 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 water bodies 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 m<sup>3</sup>.

- 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.



**Rain water harvesting and retention facility in the campus**



## **6. ACHIEVE THE SUSTAINABLE MANAGEMENT AND EFFICIENT USE OF NATURAL RESOURCES- MEDICINAL PLANTS CULTIVATION.**

- 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.
- To meet the needs and sustainable management of fresh water, the rainwater harvesting, and utilization 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 water bodies 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 m<sup>3</sup>.
- 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 storm water ponds/reservoirs is subject to a wide variety of contaminants and every effort is made to keep these catchments clean.
- Conservation of Ecosystems by cultivating rare and endangered species of medicinal Plants. The Department of Pharmacognosy was established i to keep abreast of the rapid developments in the knowledge and utilization of medicinal plants. There is an ever-increasing acceptance for the past three decades for herbal drugs all over the world. The universal role of plants in the treatment of disease is exemplified by their employment in all the major systems of medicine. The department is involved in the protection of endangered medicinal species and the isolation of new drugs and lead compounds from traditional remedies.

JSSAHER has established an impressive garden with collection of over 500 plant species in a total plinth area of one acre and we practice soil stewardship by not using pesticides on in the garden.





Gardening, with any kind of plants life, should be viewed as a relaxing and fulfilling activity. It is not only bringing you closer to the earth, but also allows you to have a somewhat intimate relationship with it. There's different kind of satisfaction and bring close to the nature, understanding working of this life form and forging a symbiotic relationship with the elements.

The herb garden is often a separate space in the garden, devoted to growing a specific group of plants known as herbs. These gardens may be informal patches of plants, or they may be carefully designed. Herb gardens may be purely functional, or they may include a blend of functional and ornamental plants.



**List of Medicinal Plants maintained by the Department of Pharmacognosy, JSS College of Pharmacy in the Medicinal plant garden in the college campus**

Common name	Botanical name	Family
ALOE	<i>Aloe vera L</i>	Liliaceae
ALOE	<i>Aloe barbadensis L</i>	Liliaceae
ARTEMISIA	<i>Artemisia drawunculus Linn</i>	Asteraceae
BERBERRY	<i>Berberis tinctoria</i>	Berberidaceae
CALAMUS	<i>Acorus calamus L</i>	Araceae
CHAMOMILE	<i>Matricaria chamomilla</i>	Asteraceae
DIGITALIS	<i>Digitalis purpurea</i>	Scrophularaceae
FENNEL	<i>Foeniculum vulgare Mill</i>	Umbelliferae
GERANIUM	<i>Pelargonium graveilens L</i>	Geraniaceae
HORSE RADISH	<i>Cochlearia armoracia</i>	Cruciferae
LAVENDER	<i>Lavendula angustifolia</i>	Labiatae
LEEKS	<i>Allium ampeloprasum</i>	Amaryllidaceae
LEMON BALM	<i>Melissia officinale</i>	Lamiaceae
LEMON GRASS	<i>Cymbopogan citratus</i>	Poaceae
LEMON VERBENA	<i>Lippia utriodera</i>	Verbenaceae
OREGANUM	<i>Origanum vulgare L</i>	Labiatae
PARSLEY	<i>Petroselinum crispum mill</i>	Umbelliferae
PEPINO	<i>Solanum muricatum</i>	Solanaceae
PEPPER	<i>Piper nigrum</i>	Piperaceae
PEPPERMENT	<i>Mentha piperita</i>	Labiatae

	PYRETHRUM	<i>Chrysanthemum cinerarifolium</i>	Asteraceae
	RHUBARB	<i>Rheum australe</i>	Polygonaceae
	ROSEMARY	<i>Rosemarinus officinalis L</i>	Labiatae
	RUE	<i>Ruta graveolens L</i>	Rutaceae
	SAGE	<i>Salvia officinalis</i>	Lamiaceae
	SANTOLINE	<i>Santoline chamaelyparissus</i>	Asteraceae
	SATAVARI	<i>Asparagus racemosus</i>	Liliaceae
	SILVER RAG WORT	<i>Cineraria martima</i>	Compositae
	SPEARMINT	<i>Mentha spicata L</i>	Labiatae
	STRAWBERRY	<i>Fragaria vesca</i>	Rosaceae
	SWEET VIOLET	<i>Viola odorata</i>	Violaceae
	THULASI	<i>Ocimum sanctum L</i>	Lamiaceae
	THYME	<i>Thymus vulgaris Linn</i>	Labiatae
	VASAKA	<i>Adhatoda vasica</i>	Apocyanaceae
	VETIVER	<i>Vetiveria Zizanioides</i>	Graminaceae
	WORM WOOD	<i>Artemisia absinthium L</i>	Asteraceae
	YARROW	<i>Achillia millifolium.</i>	Asteraceae

### Medicinal Plants Cultivation in JSSAHER , OOTY CAMPUS

S. No	General name of the plant	Biological source	Family	Uses
	Acalypha	Acalypha indica	Euphorbiaceae	Coughs, diarrhoea, flatulence, haemorrhages.
	Agnimantha	Premna mucronata	verbanaceae	Lactation
	Aloes	Aloe Vera	Liliaceae	Laxative and purgative
	Amla	Embelica officinalis	Euphorbiaceae	Cooling, diuretic, as general tonic
	Apamarga	Achyranthus aspera	Amerantnaceae	Diarrhoea, giddiness, nausea, and vomiting
	Arjuna	Terminalia arjuna	Combretaceae	Cardio tonic, astringent, gastric ulcer
	Artemisia	Artemisia abrotanum	Asteraceae	Immunosuppressant, Anti-microbial
	Artemisia	Artemisia annua	Asteraceae	Antimalarial
	Artemisia	Artemisia nilgirica	Asteraceae	Anthelmintic, flavour
	Artichoke	Cyanara scolymus	Compositae	Bitter tonic, diuretic
	Artocarpus	Artocarpus integrifolia	Moraceae	Ediblefruit
	Ashoka	Saraca indica	Combretaceae	
	Aswagandha	Withania somnifera	Solanaceae	Diuretic, immunostimulant, aphrodisiac
	Bahama grass	Cynodon dactylon	Gramineae	Cholera, ulcerative colitis, flatulence
	Bandadamara	Diospyros peregrine	Ebenaceae	Anti-diabetic, antioxidant, anti-stress.
	Basil	Ocimum basilicum	Lamiaceae	Tonic, Skin Care, Analgesic, Antidepressant, Antiseptic, Antispasmodic, Antivenomous, Aphrodisiac, Bactericide, Carminative, Cephalic, Digestive,
	Bauhinia	Bauhinia racemosa	Fabaceae	Antioxidant and Anti-microbial
	Bilva	Aegle marmelos	Rutaceae	Digestive tonic, laxative
	Blood flower	Asclepias currasavica	Asclepiadiaceae	Insecticidal

	Bougainvillea	Bougainvillea spectabilis	Nyctaginaceae	Headache, diuretic
	Butea	Butea monosperma	Fabaceae	Astringent
	Castor oil	Ricinus communis	Euphorbiaceae	Laxative and purgative
	Cocos	Cocos nucifera	Palmaceae	Anti-bacterial, anti-viral
	Coleus	Coleus aromaticus	lamiaceae	Aromatic, carminative, emmenagogue
	Cotton	Gossypium herbaceum	Malvaceae	Abortion, amenorrhea, sterility
	Croton	Croton tiglium	Euphorbiaceae	Cholera, colds, cough, ear disorders
	Curry leaves	Murraya koenigii	Rutaceae	antidiabetic, antioxidant, antimicrobial, anti-inflammatory, hepatoprotective
	Cycas	Cycas revoluta	Cycadaceae	Toxic, Causes GIT irritation, liver failure
	Datura	Datura stramonium	Solanaceae	Asthma, sedative, expectorant, antispasmodic
	Euphorbia	Euphorbia cotonifolia	Euphorbiaceae	Schistosomiasis
	Fig	Ficus carica	Moraceae	Blood purifier, laxative
	Geranium	Pelargonium graveolens	Geraniaceae	Flavouring agent
	Ginger	Zingiber officinalis	Zingiberaceae	Stimulant, carminative, flavouring agent
	Guava fruit	Psidium gujava	Myrtaceae	Diarrhoea, astringent, antimicrobial, diabetes
	Guduchi	Tinospora cordifolia	Menispermaceae	Hepatoprotection, immunomodulator, antioxidant
	Hemidesmus	Hemidesmus indisus	Apocyanaceae	Alternative, demulcent, diaphoretic and diuretic
	Henna	Lawsonia inermis	Lythraceae	Natural dye, skin disorders
	Hibiscus	Hibiscus rosa sinensis	Malvaceae	Anti-spasmodic, astringent aphrodisiac, emollient
	Horse raddish	Cochlearia armoracia	Cruciferae	Diuretic, antiseptic, cataract, spots on cornea
	Hourse chestnut	Aesculus hippocastanum	Sapindaceae	Anal problems, cough, constipation, headache.
	Ixora	Ixora coccinea	Rubiaceae	Anti-inflammatory
	Jamun	Syzygium cumini	Myrtaceae	Diabetes, controlling blood pressure
	Jujube	Zizuphus jujube	Zingiberaceae	Insomnia, anxiety, oedema, congestive heart failure, asthma, and throat diseases.
	Kalakantala	Agave Americana	Agavaceae	Gonorrhoea, scurvy, gastritis
	Kapittha	Feronia elephantum	Rutaceae	Edible, astringent, in diarrhoea and dysentery
	Karanja	Pongamia glabra	Leguminosae	Anorexia, piles, worm infestations, and flatulence and liver diseases
	Kasaundi	Cassia sophera	Caesalpiniaceae	Anxiety, depression, bronchitis, malaria
	kundru	Coxccinil indica	Cucurbitaceae	Improving digestion, laxative and stimulant
	Kurchi	Holerina antidisentirca	Apocyanaceae	Astringent, anti-diarrhoeal

	Lebbeck	Albizia lebbek	Fabaceae	Astringent, cough, flu. Abdominal tumors
	Lemon	Citrus limon	Rutaceae	Scurvy, convulsion, dropsy, diarrhoea, sunstroke
	Lemon grass	Cymopogon citrates	Graminae	Oil is bactericidal, insect repellent
	Lemon verbena	Lippia citriodora	Verbenaceae	Flavouring agent, insecticide,
	Mango	Manfigera indica	Anacardiaceae	Dietary, Antioxidants
	Milfoil	Achillea millefolium	Compositae	Diaphoretic, stimulant, tonic
	Neem	Azadirechta indica	Meliaceae	Bitter tonic, antiseptic, anthelmintic
	Nerium	Thevetia nerifolia	Apocynaceae	Narcotic poison, cardiac stimulant in mild doses
	Nirgundi	Vitex negundo	Lamiaceae	Reduce inflammation, swelling of joints due to rheumatism and injuries
	Pansi	Viola tricolor	Violaceae	Diaphoretic, diuretic, anti-epileptic
	Papaya	Carica papaya	Caricaeae	Dyspepsia, fevers,
	Passion fruit	Passiflora edulils	Passifloraceae	Lower BP, flavouring agent
	Pepper	Piper longam	Piperaceae	Constipation, diarrhoea, earache, insomnia
	Phyllantus	Phylanthus niruri	Euphorbiaceae	Diuretic, liver diseases
	Pongam tree	Pogamia pinnata	Fabaceae	Nutrient, antiseptic, lubricant
	Punarnava	Boerhavia diffusa	Nyctaginaceae	Headache, diuretic, dropsy
	Rauwolfia	Rauwolfia serpentina	Apocynaceae	Sedative, anti-hypertensive
	Rosemary	Rosmarinus officinalis	Labiatae	For nervous disorders, carminative, stimulant
	Rue	Ruta graveolans	Rutaceae	Bitter tonic, anti-dysenteric
	Sage	Salvia officinalis	Labiatae	Astringent, aromatic, stimulant,
	Sandal wood	Santalum album	Santalaceae	Anti-inflammatory, urinary disorders
	Shankapushpi	Evolvulus alsionides	Convolvulaceae	Bitter tonic, vermifuge, chronic bronchitis
	Teak	Tectona grandis	Verbenaceae	cooling, laxative, sedative, piles, leukoderma, and dysentery
	Thuja	Thujaoccidentlais	Cupressaceae	Disinfectants, cleaners, insecticides
	Tulasi	Occimum sanctum	Lamiaceae	Earache, urinary disorders
	Turmeric	Curcuma longa	Zingiberaceae	Anti-septic and anti-bacterial
	Vaj	Acorus calamus	Araceae	Dyspepsia, for colic pain, nervine tonic.
	Vasaka	Adathoda vasica	Apocynaceae	Chronic bronchitis, asthma
	Vetiver	Verivera zizanioides	Graminae	Refrigerant, stimulant, diaphoretic
	Vinca	Cathranthus roseus	Apocynaceae	Anti –cancer, diarrhoea
	Vitis	Vitis quadrangularis	Vitaceae	Astringent, aromatic, stimulant,

## **7. ENSURING THAT PEOPLE EVERYWHERE HAVE THE RELEVANT INFORMATION AND AWARENESS FOR SUSTAINABLE DEVELOPMENT AND LIFESTYLES IN HARMONY WITH NATURE.**

The JSSCPO NSS Volunteers along with the official of the Forest Department organized the “Tree Plantation Program” under the scheme of “Jalaskathi Abiyan” to create an awareness on tree plantation in Thalaikunda forest area which was initiated by The Nilgiris District Collector Ms. Innocent Dhivya and Assistant Conservative Forest officer.

The JSSCPO NSS Volunteers along with the official of the Forest Department organized the “Tree Plantation Program” under the scheme of “Jalaskathi 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

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.



**Glimpses of tree plantation program**



## **8. REDUCE FUEL CONSUMPTION AND POLLUTION BY USING SUSTAINABLE COMMUTING**



**JSS Academy of Higher Education & Research**  
(Deemed to be University)  
Accredited "A" Grade by NAAC

**JSS**  
JSS ACADEMY OF HIGHER EDUCATION & RESEARCH  
(DEEMED TO BE UNIVERSITY) MYSURU

JSSDU/GAD-1(3)/UNI/604/SMT/2018-19, DATED:06.07.2018

**CIRCULAR**

Sub: "Go Green Grow Green"-Providing Bicycles facilities at JSS MI Campus-Reg.  
Ref: Approval of the Secretary to Chancellor vide Para (14) on 23.06.2018

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As a part of green initiative campus and to develop physical fitness among the students and to ensure low carbon footprint in the premises of JSS, it is decided to provide 50 no's of Bicycles on trail basis. The said Bicycles will be kept (docking center) at the identified places as below:-

- Main entrance
- JSS AHE&R admin entrance
- Boys Hostel Mess block
- Girls Hostel Mess block
- 'D' Block girls Hostel/sports ground

**Users Guidelines:-**

1. Users shall be employees or staff of University or its constituent Colleges
2. The Bicycles shall used only within the premises of JSS MI Campus
3. Users shall Register their names with the employee/students ID or No and record the earmarked (docking center) destination place.
4. On entering the personal details as desired in the Register, users may collect the Bicycle key from the security guards who will be given incharge of such bicycles
5. The Bicycles shall be handed over only at the earmarked place by the user soon after using the Bicycles at the Registered destiny
6. Each Bicycle is serially numbered and security at the front & Back gate shall ensure that such bicycles are not taken out of the premises nor kept out of the earmarked area.
7. All the users shall adhere to the said guidelines & report the untoward incidents if any in the Register or Mail.

Note: Suggestions if any may be given to "[dr@jssuni.edu.in](mailto:dr@jssuni.edu.in)/[registrar@jssuni.edu.in](mailto:registrar@jssuni.edu.in)" under the banner of "Go Green Grow Green"-BiCycles" which helps in stream lining the process on or before 30<sup>th</sup> July 2018.

*[Signature]*  
**REGISTRAR**

Sri Shivarathreshwara Nagar, Mysuru - 570 015, Karnataka, India  
T: 081-821-2548400 F: 081-821-2548394 E: registrar@jssuni.edu.in W: www.jssuni.edu.in



## **9. SUBSTANTIALLY REDUCE WASTE GENERATION THROUGH PREVENTION, REDUCTION, RECYCLING AND REUSE- BIOMEDICAL WASTE MANAGEMENT IN HOSPITAL**

### ***PLEDGE taken by all the staff at JSS Hospital***

- Especially in hospitals, cleanliness can save lives. Every healthcare worker needs to understand this and also educate the visitors to the hospital with a lot of concern and patience.
- We the staff of JSS hospital take this pledge of keeping our hospital very clean, meaning to say that we would like to keep the hospital germ free as far as possible.
- This can be accomplished by following the international/national guidelines for Bio-Medical waste (BMW) management. This not only protects the patients, but health care workers and patient attendants too.
- We are committed in giving safe and quality service to our patients as described by the founder of our hospital Jagadguru Sri Shivarathri Rajendra Mahaswamiji as “PATIENTS ARE OUR RELATIVES” (Rogigale Namma Bandhugalu).
- To keep the hospital safe and germfree, we also need the cooperation of patients and attendants.
- We consider our hospital as a place of worship because we hear more prayers in the hospital for the good health of the patients than what we hear in temple/churches/mosques etc.
- It's a process is developed by the hospital for safe handling and disposal of infectious and hazardous materials.

### **PURPOSE**

- To minimize the health and equipment hazard in any related process
- To provide a safe and healthy environment for staff, patient and visitors

### **SCOPE**

The procedure for collection, segregation, treatment and disposal of biomedical waste generated during routine work in wards, OPDs, OT's, laboratories and other places where biomedical waste is generated.

### **RESPONSIBILITY**

- Safety Committee, Quality Assurance Team, Bio Medical Waste Management Department, Laboratory, Clinical and Nonclinical staff.
- Document of BMW management approval from state Pollution control available with management

### **BIOMEDICAL WASTE MANAGEMENT**

- Biomedical Waste management HIC-8b
- The SOP has been based on the policy direction issued in Gazette of India notification of 2018 Environment Protection Act guidelines
- All wards and departments will follow the under mentioned instructions meticulously
- Heads of departments and hierarchy of wards will be legally and morally responsible for effective functioning of health care waste management system at JSS Hospital.

- HIC members during rounds ensure appropriate disposal of BMW. If any deviation from the protocol is noticed, photographs are clicked and discussed with the concerned personnel to take necessary corrective measures.

Segregation, containment and packing of hospital waste in wards and departments HIC-8c. The waste should be segregated at source, all health care personnel – doctors, nurses, interns medical and nursing and paramedical students, lab personnel, helper staff, patients, attendants of patients are responsible for this. Clinical and nursing staff apart from meticulous exertion needs to oversee proper operation.

Waste collection is done in each ward / department in colour coded labelled bins of capacity 20 to 35 litres of each category and placed at the points of generation in respective wards/departments at accessible, user friendly and safe location.

Sharps will be collected in white puncture proof containers in each department / ward. Sharps should be decontaminated with 1% sodium hypochlorite solution after disfiguring the same, the hypochlorite solution should be changed every 24 hours. Once 2/3rd full the container should be dispatched for disposal.

Intact glassware will be collected in the cardboard boxes lined with blue boxes and can be handed over to the common treatment facilities.

The waste collected by housekeeping staff is stored in colour coded rooms situated in the back yard of the hospital.

The waste is transported to Shree consultancy in closed vans within stipulated time limits in a secure manner.

#### **STAFF SAFETY CONSIDERATIONS:**

To ensure the safety of personnel involved in Bio-medical waste treatment and disposal, we follow certain policies and guidelines.

1. There are dedicated trolleys for transporting waste within the hospital.
2. All workers involved in this work are aware of the hazardous nature of this work.
3. The workers are provided with gumboots, rubber aprons, caps, masks and thick rubber gloves.
4. All workers are immunized against Hepatitis B.

#### **TRAINING**

1. JSSH hospital has a well-designed awareness and training program for all categories of workers involved in Bio-medical waste disposal and management.
2. Regular pre induction training shall be conducted for appropriate categories of staff before joining to the concerned department.
3. We have charts displayed at strategic points in all patient care areas depicting our Bio-medical waste management policy.
4. We have frequent workshops and training programs to promote awareness of our Bio-medical waste management policy.

#### **HIC-9a:**

HIC-9a: The management provides manpower, money and materials to carry out Infection control programmes. Regularly classes are conducted by ICNs and members of HIC committee to all the staff of the Hospital. Induction programme for newcomers includes sessions on HIC

HIC-9b: BUDGET: The organization earmarks an annual budget for Infection control programme. Based on the scope of HIC activities and the previous years' experience, this budget is allocated.

HIC-9c & d: TRAINING: Organization provides induction training and In-service training sessions for all staff in regular sessions.

For doctors, medical education unit conducts induction programme with HIC as one of the topics.

For nurses and other para medical staff, training is conducted by ICNs and HIC members.

All the policies and protocols defined and approved by the HIC committee is being taught repeatedly and any change in the protocol also is immediately informed to all the concerned staff. Pop up messages on HIS are flashed to enforce the new changes into action.

**BIO-MEDICAL WASTE STATUS JANUARY TO DECEMBER 2020**

Month	Yellow Bags in Kgs/Month	Red Bags in Kgs/Month	White Bags in Kgs / Month	Blue Bags Kgs / Month
January 2020	3388	3529	179	1336
February 2020	3813	4059	193	1064
March 2020	3409	3040	99	755
April 2020	2853	4025	145	574
May 2020	3194	4037	113	811
June 2020	4511	3940	170	763
July 2020	5117	3269	320	917
August 2020	5129	3286	111	832
September 2020	3376	3254	211	1155
October 2020	5266	3544	157	872
November 2020	5385	4209	74	1079
December 2020	5426	4092	86	855
<b>Total</b>	<b>50867</b>	<b>44284</b>	<b>1858</b>	<b>11013</b>

## **10.GREEN POLICY**

JSS AHER has its Green Policy which emphasizes on the following 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 Karnataka State Pollution control Board
- Energy conservation strategies – For e.g. use of CFL/LED lights and 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
- The HEI actively organizes Swachh Bharat Abhiyan and creates awareness and consciousness amongst students.
- Provision for natural light in all its buildings

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 m<sup>3</sup>.
- 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.



## CLEAN AND GREEN CAMPUS



















## **11.CURRICULUM RELATED TO SDGS**

JSS AHER has also 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.

The University supports green practices in all its initiatives. It has well-defined policies for its sustainable green practices which include its energy conservation policy, water conservation policy, transport policy, the SMART and Green campus policy and many such policies and practices that inculcate the importance of conserving the present for the future generations. Towards the same some of the practices include - Students, staff using Bicycles – the staff and students are encouraged to use bicycles on its campuses and students residing in the hostels of the university are discouraged from having automobiles and live on campus. Battery operated vehicles too are available on the campus to help students transport their belongings. Public Transport – the university maintains a fleet of buses that are available to the students for travel between campuses and public places at fixed timings. Pedestrian friendly roads – all roads are paved and landscaped and are pedestrian friendly Plastic-free campus – All its campuses are plastic free Paperless office – the utilization of papers for administrative purposes is minimized and ecommunications are encouraged. Green landscaping with trees and plants – all the campuses are beautifully landscaped which have won appreciation, admiration, and awards for the aesthetic and green environment of its campuses. The Green campus committee ensures that the above principles are strictly complied with and provides feedback to the university on its efforts and the future directions.

## 12. SIGN BOARDS SUPPORTING SDG 12



### Initiation by the institution

- 10% reduction in water use
- Recycling of water
- Reduce natural Gas/fuel usage
- Reduce electricity usage
- Reduce waste generation
- Preventing or minimizing the generation of hazardous wastes
- Reduce generation of chemical wastes in the laboratories, and during teaching activities
- Reduce/control the use of metallic mercury, Arsenic
- Distillation of used solvents
- In pesticide studies, it is advisable to establish the practice of returning any unused material to the research sponsor
- Treatment of laboratory waste before being released into the sewage
- Increase knowledge about environmental impact

### **13. DEVELOP AND IMPLEMENT TOOLS TO MONITOR SUSTAINABLE DEVELOPMENT IMPACTS FOR SUSTAINABLE TOURISM THAT CREATES JOBS AND PROMOTES LOCAL CULTURE AND PRODUCTS.**

Tourism development hastens a natural process of environment pollution. Tourism related construction, recreational facilities, waste disposal etc. make no effort to avoid disturbances of natural systems. Rapid growth of tourism has created enormous strains on the infrastructure of Ooty town. Our students particularly NSS volunteers create awareness on such issues and also they will actively participate in the tree plantation program to minimize the adverse impact on the environment created by over-tourism. JSSCP, Ooty has a water well in the campus and it is used to harvest the rain water. Ooty experiences water scarcity during the summer months of April and May. During these seasons the harvested water will be used. JSS Academy of Higher Education & Research (JSSAHER) is committed to its “JSSAHER Social Responsibility Statement & Vision” to provide sustainable, eco friendly smart campus. The “Food & Supplies Policy” is related to procurement, storage and maintenance of food at (JSSAHER), which is a part of “Smart Campus Policy”. This policy provides provisions through which food to be procurement, stored, maintained and delivered to all the constituent colleges and departments of JSSAHER.

JSSAHER and its constituent colleges and departments are responsible in working with suppliers, contractors, and partners to minimize environmental effects related to services and supports local suppliers and that all procurements represent value for money. All stakeholders shall assist JSSAHER in meeting the sustainable food & supply policy.

This policy is focused on but not limited to provision and procurement of food at JSSAHER. It applies to all aspects of sustainable food, including procurement, provision preparation, waste management, education, awareness, and services.

#### **JSSAHER ensures that:**

- ✓ Procurement, storage, and maintenance of food is reliable, safe and represent value for money.
- ✓ Environmental and social responsibility is factored into all tenders and contracts and encourages small sized businesses.
- ✓ Suppliers are committed to sustainable use of transport, packaging, storing etc. Communication on progress made during the contract period.
- ✓ Recycling process for quantities and effective waste reduction.
- ✓ Usage of biodegradable packaging whenever possible.
- ✓ Recycling and reuse where applicable.
- ✓ Minimizing wastage while procurement, storage, maintenance and deliver.