



## COMPENDIUM ON SDG 11

2020-2021



**Make cities and  
human settlements  
inclusive, safe,  
resilient and  
sustainable**

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## **Introduction**

Cities are engines for sustainable development. It is where ideas, commerce, culture, science, and productivity thrives. Urban spaces offer opportunities for people to prosper economically and socially, but this is only possible in prosperous cities that can accommodate people in decent jobs and where land resources are not overwhelmed by growth. As cities spill beyond their formal boundaries, unplanned urban sprawl can be detrimental to national developmental planning and the global goals for sustainable development. Our urban areas are also emitters of greenhouse gases and contribute to climate change. Half of the global urban population breathes air 2.5 times more polluted than standards deemed acceptable by the World Health Organization.

India is urbanizing rapidly. Between 2001 and 2011, the country's urban population had increased by 91 million. India is projected to add 416 million urban dwellers between 2018 and 2050. By 2030, India is expected to be home to seven mega-cities with populations above 10 million. 68% of the country's total population live in rural areas, while 17% of the country's urban population live in slums. The Government of India's Smart Cities Mission, the Jawaharlal Nehru National Urban Renewal Mission, and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) are working to address the challenge of improving urban spaces. The prime minister's Pradhan Mantri Awas Yojana aims to achieve housing for all by 2022.

## Activities supporting SDG 11

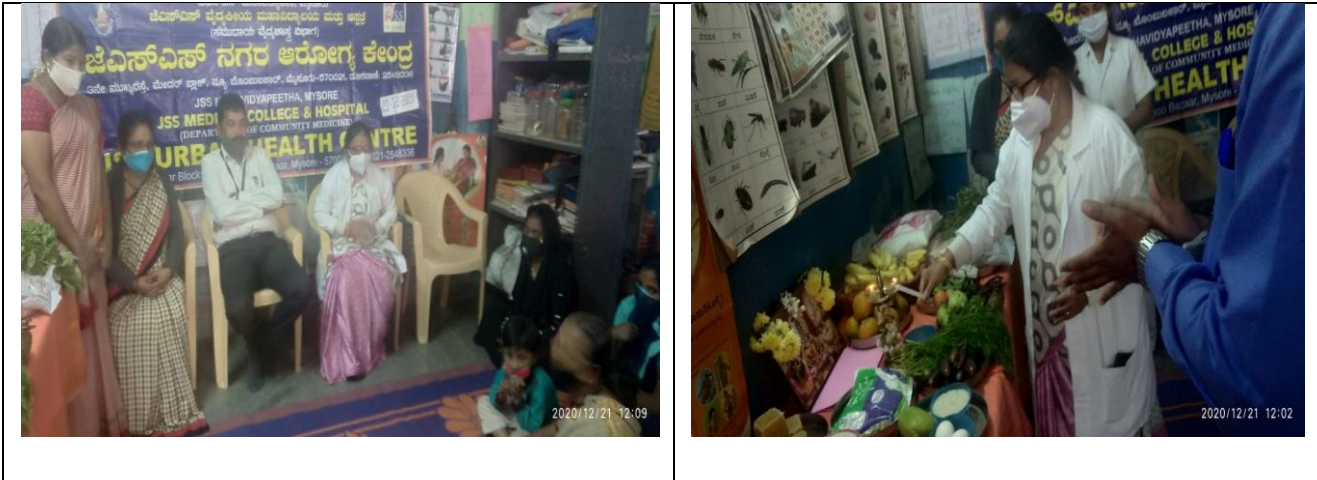
- Curriculum enriched with various health education concepts
- Various outreach programs to spread healthcare awareness among people of the community
- Adolescent health counseling and career guidance in urban communities
- NSS activities to serve the community
- Research activities

### Activities conducted aligning to this goal

<b>Academic Activities</b>	
<b>Curriculum</b>	<p>Curriculum is enriched with concepts related to Health Policy, Health Insurance, incorporating information relating to general and health insurance schemes. Students are also taught about concepts of Management Information Systems applied in healthcare</p> <p>Students are also given an orientation on Entrepreneurship skills with special emphasis on becoming Entrepreneurs and creating jobs for the society.</p> <p>The curriculum is designed by incorporating modules including laws on practice &amp; conduct of professionals in health care like Pre Conception and Pre Natal Diagnostic Technique Act , Medical Termination of Pregnancy Act , Birth &amp; Death Registration Act where the importance of the act to the society as well as professional development and for comprehensive learning by students. Few laws about cyber securities are also included in the curriculum</p>
<b>Teaching &amp; Learning</b>	Hospital postings being an integral component of curriculum helps students to get a real exposure and hands-on-experiential learning making them meet the needs of the industry
<b>Research Activities</b>	
<b>Student Dissertations</b>	Students are encouraged to take up various research projects on areas like insurance and health education.

## Activities at Urban Health Center

Suvarna Prashana program was conducted on a regular basis in JSS Urban Health Centre in collaboration with JSS Ayurveda Medical College for improving the immunity of children



### **Nutrition Education program at Anganwadi**

#### **Report on Health awareness program on NCD conducted in Medar block**

A health awareness program was held in Anganwadi premises (outdoor) about noncommunicable diseases on 8<sup>th</sup> January 2021. Nursing students of JSS Nursing college motivated surrounding people to visit the program, where they underwent screening for obesity, hypertension. Nursing students examined the height, weight, abdominal girth, temperature of the beneficiaries. Medical Interns did a systemic examination of participants, recorded their complaints, measured their blood pressure, pulse rate, and Spo2, and provided appropriate treatment and information. Among 26 participants, 21 were females, four among whom were ANCs in the second trimester. Patients requiring further investigation (7 out of 26) were referred to JSS UHC and JSS Medical College. People suffering from Non-communicable diseases were given Health education on a balanced diet, regular exercises, early diagnosis, and self-care. Anganwadi worker, UHC medical officer Dr. Krishnaveni YS, Medico-social worker Dr. Nagendra, Health inspector of UHC Mr. Shanthosh, Nursing college Assistant professors were present in the process.

All participants were screened for temperature before entering, provided hand sanitization solutions. Wearing a mask and social distancing were ensured throughout the program.



## Health education program in Anganwadi

The Health education program was organized by Anganwadis number 70 and 71 as a part of the ICDS health awareness program. ICDS supervisor Mrs. Nagaveni, Medico-social worker of UHC Dr. Nagendra, health inspector of UHC Mr. Shanthosh, nursing staff of Kiosk clinic Mrs. Bharthi, ASHA worker Mrs. Shobha Anganwadi workers and Anganwadi were present in the program. Lactating mothers, along with their children, participated in the programs. Health awareness was given on the importance of exclusive breastfeeding, weaning, supplementary foods, growth monitoring, harmful effects of bottle feeding, and low-cost nutritious food. The suggestion was given to Anganwadi workers to distribute additional food packages at the earliest to avoid wastage due to expired dates. ICDS supervisor Mrs. Nagaveni addressed mothers and shared information on services available under ICDS, mathruvandana scheme, supplementary nutrition, growth monitoring, etc. Mothers fed their babies nutritious food.



### **Nutrition program in Anganwadi**

Nutrition program was organized on January 1<sup>st</sup>, 2021, along with the health inspector of the UHC Mr. Shanthosh. Anganwadi staff organized the program. Pregnant mothers, Lactating mothers, and mothers of under-five children, and Students of JSS nursing college participated in the program. Head of Community health nursing department Mrs. Nisha P Nair and Assistant professor of JSS Nursing College, ASHA worker Mrs. Shobha and Community leader Mr. A P Raj were present in the program. Various food items of nutritive values like cereals (ragi, rice, wheat) sprouted pulses, groundnut Green leafy vegetables, roots and tubers, egg, milk powder were exhibited in the program. Nursing college Assistant professor of nursing college addressed the gathering with information on the importance of nutritional programs. Orientation was given to nursing students on ICDS activities, and health education was provided to pregnant mothers on nutritious food required during pregnancy and lactation. Suggested to visit UHC for further information



### **Annaprashana program in Anganwadi**

Annaprashana program was organized in Anganwadi no 71 as a part of Bala Vikas Mahila Samithi program on January 1<sup>st</sup>, 2021. Community leader Mr. Shanmugham inaugurated the program. The nursing staff of the Kiosk clinic, Mrs. Bharathi, ASHA worker of the area Mrs. Shobha, were present in the program. Mr. Shanmugham addressed mothers regarding nutrition and suggested mothers avail of all the services available in Anganwadi. He inquired about the food distribution in the Anganwadi. Health education was given on Exclusive breastfeeding, weaning, supplementary foods, regular growth monitoring, and the harmful effect of bottle feeding. Mothers fed their babies with the nutritious food prepared by them.





Name of the event	Date and Venue	Details
Substance abuse awareness program	27/01/2021 Government High school, Medar Block, Bamboo bazaar, Mysuru	<p><b>Number of participants: 27</b></p> <ul style="list-style-type: none"> <li>• Introduction to the students about the purpose of the program was given. The role of peer groups in initiation, as well as termination of tobacco and alcohol use, was explained</li> <li>• Powerpoint presentation on Awareness on Tobacco smoking, tobacco chewing, and alcohol abuse</li> <li>• Pre and post-session evaluation by questionnaires. An interactive session on causes for initiation of tobacco/alcohol was conducted, and addressing those were discussed. Harmful health hazards of tobacco and alcohol on health were stressed</li> <li>• Motivated students to avoid smoking and alcohol. Regulatory approaches in tobacco control were explained. COTPA guidelines and laws on tobacco use were explained.</li> <li>• Coordinated by: Dr. Krishnaveni Y, MO-UHC</li> </ul>



Name of the event	Date and Venue	Details
Cancer awareness and Nutrition Education program	05/02/2021 Anganwadi code 70, Medar Block, Bamboo bazaar,	<ul style="list-style-type: none"> <li>• <b>Number of participants: 16</b></li> <li>• Powerpoint presentation on Breast cancer symptoms, self-examination, early diagnosis</li> <li>• Health education on Nutritional food</li> <li>• Breast cancer symptoms and signs, early diagnosis, self-examination, and Nutritious diet talk by Dr. Krishnaveni YS, MO, UHC, JSS and Low-cost nutritious food by Mr. Shanmugam, Local leader</li> </ul>



Name of the event	Date and Venue	Details
Oral health & Leprosy awareness program	19/02/2021 Anganwadi code 70, Medar Block, Bamboo bazaar,	<p><b>Number of participants: 21</b></p> <p>Dr. Srishti B, Postgraduate, Dermatology- Leprosy – causes, mode of spread, signs, early diagnosis, treatment, and prevention, to avoid social stigma</p> <p>Mr. Shanmugham, Local leader - Importance of Oral checkup and utilizing health services</p> <p>Dr. Krishnaveni YS, MO, UHC, JSS- Nutritious food</p>



Name of the event	Date and Venue	Details
Breast Feeding and Cancer awareness program	19/02/2021 Anganwadi code 122, Medar Block, Bamboo bazaar	<ul style="list-style-type: none"> <li>• <b>Number of participants: 26</b></li> <li>• Dr. Krishnaveni YS, MO, UHC, JSS- Breast cancer symptoms and signs, early diagnosis, self-examination Importance of breastfeeding, EBF, breastfeeding technique Audience participated actively; Mothers got their height and weight of their children checked</li> </ul>






Name of the event	Date and Venue	Details
Breast Feeding and Cancer awareness program	05/02/2021 19/02/2021 Anganwadi code 122, Medar Block, Bamboo bazaar	<ul style="list-style-type: none"> <li>• <b>Number of participants: 26</b></li> <li>• Dr. Krishnaveni YS, MO, UHC, JSS- Breast cancer symptoms and signs, early diagnosis, self-examination Importance of breastfeeding, EBF, breastfeeding technique Audience participated actively; Mothers got their height and weight of their children checked</li> </ul>



Name of the event	Date and Venue	Details
Dental health camp	<b>10/02/2021</b> <b>12/02/2021</b> Government Higher Primary school, Medar Block, Bamboo bazaar, Mysuru	<ul style="list-style-type: none"> <li>• <b>Number of participants: 44</b></li> <li>• Dr. Sunitha S and Dr. Maurya Reader Department of Public Health Dentistry, JSSDC- Introduction was given to students on Oral health and oral hygiene</li> <li>• Dr. Shivani and Dr . Prashanthi, Interns JSSDC Powerpoint presentation on Oral anatomy, oral hygiene, and brushing techniques</li> <li>• Dr. Yashmin, Interns JSSDC, Demonstration of Brushing technique</li> </ul> Students participated in the program actively. Interacted with the health educators and participated in an Oral checkup camp



Name of the event	Date and Venue	Details
Health checkup of Anganwadi children	11/02/2021, Anganwadi code 122 Medar block, Bamboo bazaar,	<p>Among ten children examined, two were moderately malnourished. Anganwadi workers were informed about the conditions</p> 
Name of the event	Date and Venue	Details
Poshan Abhiyan nutrition program	17/03/2021, Anganwadi code 71 and Anganwadi code 122	<p>Dr. Nagaveni, Supervisor Importance of ayurvedic medicinal plants Mr. Santhosh Health Inspector- Nutritional food; food hygiene; use of clean water</p> 
Oral health awareness and nutrition program	05/03/2021 Anganwadi 71 and Anganwadi 70	<p>Dr. Akshatha, Intern- Oral health and oral hygiene Mr. Santhosh, Health Inspector- Nutritional food; food hygiene; use of clean water</p> 

Name of the event	Date and Venue	Details
Adolescent health education on Anemia	16-03-2021, Anganwadi code122	<ul style="list-style-type: none"> <li>• Home visit of adolescents</li> <li>• Nutritional education to adolescents</li> <li>• Distribution of one month Iron supplements</li> </ul>



Adolescent health program	08/03/2021 Government High school, Medar Block, Bamboo bazaar, Mysuru	<p><b>Total number of participants: 51</b></p> <ul style="list-style-type: none"> <li>• Introduction to the students about the purpose of the program was given. The role of peer groups in initiation, as well as termination of tobacco and alcohol use, was explained</li> <li>• An interactive session on causes for initiation of tobacco/alcohol was conducted, and addressing those was discussed. Harmful health hazards of tobacco and alcohol on health were stressed</li> <li>• Interactive session for girls on Menstrual cycle, menstrual hygiene, reproductive health, and sexual abuse</li> </ul>
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Name of the event	Date and Venue	Details
Corona vaccination awareness program	05/04/2021 Urban Health Centre	<ul style="list-style-type: none"> <li>• Total no. of participants: 15</li> <li>• Information provided on details of Covid vaccination doses, side effects, registration</li> <li>• Queries on vaccination were cleared</li> </ul>

		<ul style="list-style-type: none"> <li>Volunteers willing for vaccination were taken to a nearby vaccination center and vaccinated</li> </ul>
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Larva survey program	21/04/2021 Urban Health Centre A block Medar block	<ul style="list-style-type: none"> <li>Larva survey done</li> <li>Emptying of containers containing larvae/pupae</li> <li>Health education on vector-borne diseases</li> </ul>
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Name of the event	Date and Venue	Details
Under-five clinic	10 /06/2021  an 08/07/2021 JSS Urban Health Centre,	<b>Number of participants: 10</b> <ul style="list-style-type: none"> <li>Short videos and movie presentations on child care and nutrition</li> <li>Health education to each family on child growth and nutrition</li> <li>Anthropometric and clinical examination of children</li> <li>Referral of patients requiring further treatment to UHC/ Higher center</li> </ul>



<p>SWACHATHA PAKWAD</p>	<p>17/07/2021  JSS UHC</p>	<ul style="list-style-type: none"> <li>• Health education is given on sanitation and hygiene</li> <li>• Sanitation pledge was taken by all participants and the audience</li> <li>• Distribution of course completion certificates</li> <li>• Participants were actively involved in the program and took the sanitation pledge</li> </ul>
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Name of the event	Date and Venue	Details
<p>Health screening camp</p>	<p>16/07/2021, JSSUHC</p>	<ul style="list-style-type: none"> <li>• Clinical examination ( bp, saturation, weight, HR, RR) of volunteers</li> <li>• Diagnosis and treatment of communicable diseases( URTI, UTI, GE, viral fever) and NCD( HYPERTENSION, Anemia, COPD)</li> <li>• Distribution of iron supplements and deworming</li> <li>• Health education is given on a balanced diet, physical exercise, periodic screening, and treatment adherence.</li> <li>• Patients requiring further investigations and treatment were referred to UHC and higher center</li> </ul>



		<ul style="list-style-type: none"> <li>Totally 21 people were examined, among whom three were known hypertensives, four known diabetics on treatment. Among 21 people looked five had high normal, 03 had grade 1, 05 had grade 2, 04 had grade 3, and 1 had isolated hypertension. Among these <b>eight were newly diagnosed</b>.</li> </ul>
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Name of the event	Date and Venue	Details
Health check up camp	23/07/2021 Maramma temple, A block , Bamboobazar	<ul style="list-style-type: none"> <li>Clinical examination ( BP, saturation, weight, HR, RR, CBG) of volunteers</li> <li>Diagnosis and treatment of communicable diseases ( URTI, UTI,GE,viral fever) and NCD( HYPERTENTION,Anemia, DM, COPD)</li> <li>Distribution of iron supplements and deworming</li> <li>Health education is given on a balanced diet, physical exercise, periodic screening, and adherence to treatment.</li> <li>Patients requiring further investigations and treatment were referred to UHC and higher center</li> </ul> <p>Totally 20 people were examined, among whom five were known hypertensives, five known diabetics on treatment. Among 20 people looked 04 people had high normal, five people had grade 1, 2 people had grade 2,1 had grade 3 and 5 had Isolated hypertension. Among these, <b>four were newly diagnosed</b>. In Random blood sugar examined, <b>one was diabetic recently detected</b>, 07 had impaired glucose tolerance.</p>



Name of the event	Date and Venue	Details
World Population day program	13/07/2021, F block, Bamboobazar	<ul style="list-style-type: none"> <li>• Health education is given on CONTRACEPTIVE methods available in the FP program</li> <li>• Exhibition of contraceptive devices ( IUCD 375, OCP, NIRODH, Anthara, chaya)</li> <li>• PPT presentation on the importance of family planning services. Unmet needs</li> </ul>



## **COVID-19 CONTROL AND PREVENTION PROGRAM: HEALTH EDUCATION AND SURVEY**

### **Activities conducted:-**

- House to house visit
- Collection of information of Covid incidences, co-morbid conditions, and socio-economic status of family
- Health education to each family on appropriate covid behavior
- Motivating for corona vaccination
- Anthropometric and clinical examination of symptomatic
- Referral of patients requiring further treatment to UHC/ Higher center

<b>Date</b>	<b>Area covered</b>	<b>No. of houses visited</b>	<b>Population covered</b>
21 /06/2021	Block C, Yeshwanthnagar, Medar block	22	62
22 /06/2021	Block C, Yeshwanthnagar, Medar block	35	86
23 /06/2021	Block B, RR colony	32	94
24 /06/2021	Block B, RR colony	32	82
25 /06/2021	Block 05, RR colony	16	52
28 /06/2021, 29/06/2021	Block G, behind Janatha sawmill	57	158
01/07/2021	<b>Block F, RMC</b>	21	67
02/07/2021	Block F, RMC	27	77
03/07/2021	Block F, RMC	22	57
12/07/2021	Block F, RMC	30	73



## **Awareness on Sanitation, Addiction, Nutrition and Environmental protection in adolescents: S.A.N.E campaign**

**Dates:** 01/07/2021 to 14/07/2021

**Areas covered:** F block, RMC colony, Bamboobazar

Number of sessions conducted: 12

Number of adolescents covered: 55

### **Activities conducted:-**

- House to house visit
- Health education is given on Sanitation, Addiction, Nutrition and Environmental protection in adolescents through ppt
- Interactive sessions with children and adolescents to determine their KAP
- Demonstration of nutritious food, waste segregation, and disposal
- Distribution of fruits to children
- Assessment of differences in Knowledge, attitude, and practices after health education

### **Responses from the Participants:-**

Children actively participated and interacted with staffs

### **Effect of the program:-**

Improvement in knowledge and a positive attitude was seen after the health education program





### Urban Health Centre, Medar Block



JSS urban health centre was established on 29<sup>th</sup> August 2002 on 87<sup>th</sup> birth anniversary of his holiness Dr. Shivaratri Rajendra Mahaswamiji, in Medar’s block, Bamboo Bazaar, Mysore. The centre works under Department of Public Health Dentistry, JSS Dental College & Hospital, Mysuru. The aim of the centre is to achieve the goal of oral health for all the people residing in urban slums. The centre provides comprehensive oral 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,

- 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

### **JSS Dental OPD KSRTC**



Based on strategic recommendations and willingness from KSRTC, JSS Dental College and Hospital established an outreach center to the employees of KSRTC on 1<sup>st</sup> July 2006 after entering into an MOU. Screening and referral services are offered to the employees of KSRTC. Screening camps to the dependents of KSRTC are organized through divisional offices.

### **Rotary Jeevodaya Dental Clinic, Central prison**



Dental unit was established at Central Prison, Mysuru in collaboration with Rotary Club of Mysore on 27<sup>th</sup> March 2002 to extend basic oral health services to the needy population in Jail who are otherwise are deprived of such services.. This was a pioneering project that served as a model which eventually led to the establishment of several such centers in other parts of the state and country. JSS Dental College and Hospital extends the dental manpower in the form of faculty Post graduate students and interns on regular basis. Dental check up, counseling and basic dental services are offered to the inmates while referring the cases requiring specialist services to the hospital.

### **Oral health education and Free Primary Dental Care Services for children with special needs**



This program was initiated by JSS Dental College, Mysuru in the year 1997, since then this outreach program has been delivered to the children of Sri Sairanga School for Speech and Hearing Impairment, Mysuru. This

Programme includes oral health education but also provides Primary, Preventive and Comprehensive Dental services under free oral health scheme with the support of JSS Mahavidyapeetha and Jagadguru Sri Shivaratreeshwara Academy of Higher Education and Research, Mysuru. This program is unique in its kind that after the initial orientation toward oral hygiene measures the children would be reinforced with same instructions by the care givers and teachers at the school.



JSS Dental College and Hospital, JSS Academy of Higher Education and Research, Mysuru organized a free dental check up and treatment camp at JSS Polytechnic for the Differently Abled, Mysuru on the occasion of “Eunice Kennedy Shriver Day “on 26<sup>th</sup> July 2018.

### **Baby oral health promotion clinic**



This clinic specifically focuses on extending basic oral health information to the mothers of new born babies and infants. The clinic was initiated in November 2014 and offers requisite services on fixed days in a week at Department of Pediatrics, JSS Hospital, Mysore.

### **Pit and fissure sealant programme for residential school children**





## JSS SMILE

JSS Smile –A Multidisciplinary Cleft Lip & Palate Clinic was established on 9<sup>th</sup> November 2012 to provide free treatment to cleft lip & palate children.

Starting of the Multidisciplinary Cleft Lip & Palate Clinic at JSS Dental College & Hospital is a drive towards special care dentistry and becoming a premier institute in this field of Dental Science including hospital practice with the objective of strengthening the health care of the country. A Multidisciplinary approach in treating Cleft patients with a team of doctors which includes Cleft Surgeon, anesthetist, Paediatrician, Paedodontist, Orthodontist, Prosthodontist, Speech therapist, ENT surgeon, Psychologist. This special clinic is a major initiative which scores high on our University's social responsibility.

## Cleft Lip & Palate Multidisciplinary Out Patient Clinic



## Oral Health Care in Pregnancy Clinic



JSS Hospital caters to the oral health needs of pregnant women. Department of Periodontology and Department of Obstetrics and Gynecology collaborate to provide complete oral care for pregnant women. This special clinic was inaugurated at JSS Hospital Mysuru on 20-6-2019 by Dr. Basavana Gowdappa, Principal, JSSMCH.

Dr. Dayanand, Director, JSS Hospital, Dr. Guruswamy, M, Medical Superintendent, JSS Hospital and Dr. Ravindra, S, Principal, JSS Dental College graced the occasion. Heads of the Department with staff of JSS Dental College and Medical college were present.

As preterm low birth weight accounts for about 2/3<sup>rd</sup> of neonatal deaths and has a tremendous impact both financially and emotionally, this clinic is instated to provide comprehensive oral care during pregnancy. Escalating evidence has suggested the role of periodontal disease in triggering pre-term low birth weight babies. Hence it is important to eliminate the disease to ensure positive pregnancy experience for all women.

Though, ante natal protocol WHO recommends treating infections to combat pre term low birth weight outcomes oral health is given a low priority. Therefore, this initiative of "oral care in pregnancy" clinic will function to create awareness among people on oral health and also to treat the existing oral infections during pregnancy.

This clinic will work on Mondays, Wednesdays and Fridays from 9:00am to 4:00 pm.

#### **Various social activities carried out in the last one year.**

- Free Primary Dental Care Services through camps, outreach programmes and Mobile Dental Services in cities
- Urban peripheral centers (Dental unit-JSS Hospital Suttur, Central prison, KSRTC, Urban health centre)
- Oral health exhibitions
- Oral health education and Free Primary Dental Care Services for residential school children
- Oral health education and Free Primary Dental Care Services for children with special needs.
- Baby oral health clinic – JSS Hospital, Agrahara
- Pit and fissure sealant program for residential school children
- Free/Subsidized Specialist Services at JSS Hospital for referrals
- Cleft lip and palate – JSS Smile, JSS Dental College and Hospital
- Public awareness campaigns such as World Health Day, World No Tobacco day, World Environment day, World AIDS day, National tooth brushing day, oral hygiene day

## Various Awareness Campaigns

Faculty of the institution actively takes part in various social media campaigns like radio talks, interviews in television besides writing health education messages to leading newspapers in the region.

**World Oral Health Day:** World Oral Health Day provides an opportunity to raise awareness and encourage individuals, families, communities and governments to take measures to lower the incidence of oral disease. The first line of oral health care starts with individual through prevention, especially good brushing habits, and regular check-ups.

**World Health Day:** The institution organizes lectures, demonstrations, camps and awareness campaigns to spread the vital information related to the world health day theme for the respective year.

**World AIDS Day:** The institution in collaboration with other constituent colleges of University participate in the awareness campaigns, screening camps, rallies and street plays to highlight the importance of preventing the spread of HIV infection.

**World Environment Day** has been a flagship campaign for raising awareness on emerging environmental issues, for the benefit of both environment and humans. Planting trees, being the easiest and most sustainable way to positively affect the environment, we conceptualized “Plant a tree, save a life” campaign.

**World diabetes day** is commemorated to emphasize the importance of oral hygiene in diabetics and also the bidirectional relationship between the two. Camps with patient interactive sessions are undertaken to promote coordinated and concerted actions to confront diabetes.

**Oral hygiene day in India** marks the birth anniversary of Dr G B Shankwalkar, a renowned Periodontist. Its primary objective is to spread the message of Oral health and its importance to public for their well-being. Oral Screening and treatment is carried out at various schools and colleges to draw attention of young population alongside, the escalating systemic illness caused by poor oral hygiene is highlighted.

**Smile Torch Campaign** was launched to spread awareness among public about the importance of orthodontic correction of teeth and creating a beautiful smile. This was observed on the occasion of Golden Jubilee year celebration of Indian Orthodontic society.

**World No tobacco day** is observed around the world to address the widespread use of tobacco and its negative health effects. Rallies, screening camps and interactive talks are organized to draw public attention.

**National Tooth brushing day** is observed to educate the children and general public about the importance of adopting appropriate tooth brushing methods through demonstrations using models and videos. Tooth brushing drills are organized in schools to motivate students and teachers to adopt the correct methods of brushing.

**National Public Health Dentistry Day** On this day, campaigns will be organized to highlight the importance of oral health in general health. We organize multispecialty camps in underprivileged areas to commemorate the event.

**Pedodontist's day:** The institution organizes various competitions such as drawing, essay, quiz etc to create awareness among school children on various health and oral health related issues. The prize winning students are felicitated in the institution in a formal program organized on this day.

## National Public Health Dentistry Day



Department of Public Health Dentistry, JSS Dental College and Hospital, JSS Academy of Higher Education and Research, Mysuru conducted a dental check up and treatment camp at Government School, Koorgalli in view of **“National Public Health Dentistry Day”** on 21<sup>st</sup> June 2019 in association with Grassroots Research And Advocacy Movement (GRAAM). The camps benefited a total of 235 school students were offered dental check up and one to one counseling. A total of 45 received basic treatments such as oral prophylaxis, restorations and extractions at the camp site and those who required further treatment were referred to JSS Dental College and Hospital. Free Oral Health Kit and oral hygiene instruction pamphlets were distributed, screening and demonstration of proper brushing technique was done to all the school children.

## World Environment Day observed at JSS Dental College and Hospital



Faculty and students of JSS Dental College and Hospital actively participated in various events organized in view of World Environment Day 2019. General Public visiting the hospital was offered health education through educational videos highlighting the importance of preventing environment pollution and by providing simple tips on how they can substantially contribute to environmental sanitation. Students and faculty planted saplings in the campus on 6<sup>th</sup> June 2019. Planting of saplings was done at BR Hills as part of NSS Program.

On the occasion, Dr. Divya, Assistant Professor, Division of Environmental Science, Department of Water and Health, JSS Academy of Higher Education and Research was felicitated for delivering a series of guest lectures on environmental science and health for third BDS students. These lectures were delivered specifically to create awareness among the students on growing concerns of environmental pollution and global warming. The lecture series also included topics highlighting the importance of rain water harvesting and green dentistry.

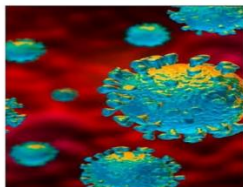
## World No Tobacco Day



On the occasion of “World No Tobacco Day – 31<sup>st</sup> May 2019” JSS Dental College & Hospital, Department of Public Health Dentistry in association with Bharat Hospital and Institute of Oncology and Indian Dental Association, Mysore Branch organized an Awareness Campaign at the Out-patient section, Bharat Hospital. Dr M S Vishveswara, Chief Radiation Oncologist, addressed the gathering with a Welcome note and stressed on the risks posed by tobacco smoking and second-hand smoke exposure.

Dr Prasanna Srinivas Deshpande, Lecturer, Dept. of Oral Medicine & Radiology, delivered a talk on - Early signs and symptoms of Cancer in Oral cavity, the negative impact that tobacco has on people’s lung health and oral health in pre and post cancer treatment patients.

Oral health care products and instruction pamphlets were distributed for the public present on this occasion. Faculty present were Dr N Raghunath, Prof & Head, Dept. of Orthodontics, Dr Ganesh S, Reader, Dept. of Prosthodontics, Dr Brinda S Godhi, Reader, Dept. of Paedodontics, Dr Maurya M, Lecturer, Dept. of Public Health Dentistry and Dr Sandeep T K, President -Elect, IDA Mysore Branch along with IDA members.



Dr Chandrashekar BR , Professor & Head, Dept of Public Health Dentistry participated in All India Radio phone in program. The topic of discussion was “Covid-19 Impact on Dentistry”.

## Go Green – safer, cleaner and sustainable climate

Campus at JSS College of Pharmacy is surrounded with lush green environment. This adds up to the safer environment reducing the pollution. Campus also has herbal vegetation that has medicinal value.



Every year college participates in the “Best Garden competition” which is religiously held during the month of October as part of Dasara Celebration. Garden at college has won the best garden award during the year 20-21 as well.

## World Environment Day

“World environment day” on 05th June 2020 with the theme “Time for Nature”. Dr. B. Manjunatha, Registrar, JSS AHER, Dr. P.A. Kushalappa, Director-Academics, JSS AHER, Dr. T.M. Pramod Kumar, Principal, JSSCPM along with other dignitaries planted about 25 plants as a mark of World Environment Day.

## Plastic Free campus

Cloth bags were distributed to the staffs which are reusable and reduce plastic use and therefore preventing plastic pollution.



This activity was taken up to realise the society how small change in our day-to-day activity can contribute to a better place to live and ultimately to the global safety

**substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.**

The JSSCPO 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

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**

## Contribution of college during COVID-19 pandemic for the community health

**Preparation of sanitizer:** College took initiative in preparing and distribution of the hand sanitizer solution. Many constitute colleges of JSS AHER availed our service for the procurement of sanitizer. Around 200 l of sanitizer were prepared and distributed among the constituent college and hospital. This service was started during the lock down when there was shortage of supply and the demand was at the peak. Teaching staff and research scholars took initiative and prepared the required product at most care.

### Face Mask for Protection

Option 2

Adults	
XL	185-195 cm
L	175-185 cm
M	165-175 cm
S	155-165 cm

Kids	
-	10-15 cm

Sizes

An Invention of  
**JSS**  
JSS AHER  
JSS COLLEGE OF PHARMACY  
JSS COLLEGE OF NURSING  
JSS COLLEGE OF EDUCATION  
JSS COLLEGE OF ENGINEERING

# Musuku™

Protects from **Respiratory Infections** caused by airborne **Bacteria & Viruses**

**3-layer Fabric Face Mask** coated with **safe natural phytochemical** from plants

**GERMICIDAL FABRIC FACE MASK**  
Kills or inactivates bacteria and viruses upon contact

- Designed to cover from base of eyes to chin bone as per WHO guidelines
- Comfort breathing with nose clip for adjusting
- Inner and outer fabric layer coated with active ingredient; Inner layer kills germs released by the wearer; Outer layer protects the wearer from germs released by others
- Besides general public, especially recommended for Healthcare, Police, Business, Municipal Personnel & Commuters

*Wearing is Caring*

Germicidal herbal mask developed by JSS AHER team - Dr Rajesh T, JSSCMC, Dr G V Pujar, JSS College of Pharmacy and Dr Kiran Kumar, Faculty Life Sciences. The product is very comfortable and many of our JSS AHER officials are using it.



The Photo represents the social work undertaken by our NSS volunteers at a tribal school. As a part of Jayanthi celebration we provided free blankets and grocery items for tribal families.



## MASK DAY



As directed by the Karnataka State Government to observe June 18, 2020 as “Mask Day” in order to create awareness among the public on the importance of using face masks, JSS College of Pharmacy, Mysuru in association with NSS Unit of the college took out Jatha in the college premises keeping in mind the COVID guidelines. Dr. T.M. Pramod Kumar, Principal, JSSCPM along with all the teaching and non-teaching staff wore mask and took part in the awareness jatha on using masks. Dr. T.M. Pramod Kumar emphasized on the importance of wearing mask to prevent coronavirus spread. It is a routine practice in the college premises to wear masks, use of sanitizers and maintaining social distance.

**Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.**

To provide a safe access on improving road safety various events and awareness programs are continuously conducted for general public by our NSS, Youth Red Cross and Rotract club.

**Pictures represents the various activities carried out by our college**



## **Biomedical waste management**

The hospital develops a process 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, patients and visitors

### **SCOPE**

The procedure for collection, segregation, treatment, and disposal of biomedical waste generated during routine work inwards, OPDs, OTs, laboratories, and other places where biomedical waste is generated.

### **RESPONSIBILITY**

Safety Committee, Quality Assurance Team, Bio Medical Waste Management Department, Laboratory, Clinical and Non clinical 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 the 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 the 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.

### **COLOUR CODING AND TYPE OF CONTAINER FOR DISPOSAL OF BIO-MEDICAL WASTES-2018**

COLOUR CODING	TYPE OF CONTAINER	TYPE OF WASTE	TREATMENT OPTIONS
Yellow	Plastic bag	(a) Human Anatomical Waste: Human tissues, organs, body parts, and fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time (b)Animal Anatomical Waste :	Incineration

		<p>Experimental animal carcasses, body parts, organs, tissues, including the waste generated from animals used in experiments or testing in veterinary hospitals or colleges, or animal Houses.</p> <p>(c) Soiled Waste: Items contaminated with blood, body fluids like dressings, plaster casts, cotton swabs</p> <p>(d) Expired or Discarded Medicines: Pharmaceutical waste like antibiotics, cytotoxic drugs including all items contaminated with cytotoxic drugs along with glass ampoules, vials etc</p> <p>(g) Discarded linen, mattresses, beddings Contaminated with blood or body fluid.</p>	
Red	Red-colored non-chlorinated plastic bags or containers	<p>Contaminated Waste (Recyclable)</p> <p>(a) Wastes generated from disposable items such as tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes (without needles and <i>fixed needle syringes</i>) and vacutainers with their needles cut) and gloves. Microbiology cultures in plastic containers, Vacutainers with blood samples.</p>	<p>Autoclave &amp; Shredding Autoclaving or microwaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent to registered or authorized recyclers or for energy</p>

			recovery or plastics to diesel or fuel oil or for road making, whichever is possible
White	Puncture proof, Leakproof, tamper-proof containers	Waste sharps including Metals: Needles, syringes with fixed needles, needles from needle tip cutter or burner, scalpels, blades, or any other contaminated sharp object that may cause puncture and cuts. This includes both used, discarded and contaminated	Autoclaving or Dry Heat Sterilization followed by shredding or mutilation or encapsulation in a metal container or cement concrete; a combination of shredding cum autoclaving, and sent for final disposal to iron foundries(having consent to operate from the State Pollution Control Boards or Pollution Control Committees) or sanitary landfill or designated concrete waste sharp pit.
Blue	Cardboard box with blue marking /covers	(a) Glassware: Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic wastes. (b) Metallic Body Implants	Disinfection (by soaking the washed glass waste after cleaning with detergent and Sodium Hypochlorite treatment) or through autoclaving or microwaving and then sent for recycling.

### 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 the proper operation.

Waste collection is done in each ward/department in color-coded labeled bins of capacity 20 to 35 liters of each category and placed at the points of generation in respective wards/departments at an 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 is complete, the container should be dispatched for disposal. Intact glassware will be collected in 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 color-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.

HIC-8d: - Biomedical waste treatment is outsourced to Shree Consultancy(which has a license from the state pollution control board), and representatives from Hospital Infection Control Committee visit the same once in 6 months to ensure waste disposal according to Biomedical Waste Management guidelines.

### HIC-8e: 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 staff categories before joining 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: The management provides manpower, money, and materials to carry out Infection control programs. Regular classes are conducted by ICNs and members of the HIC committee to all the staff of the Hospital. The induction program for newcomers includes sessions on HIC

HIC-9b: BUDGET: The organization earmarks an annual budget for the Infection control program. 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, the Medical education unit conducts an induction program with HIC as one of the topics. For nurses and other paramedical staff, training is conducted by ICNs and HIC members.

All the policies and protocols defined and approved by the HIC committee are 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.

## **JSSAHER Strengthen efforts to protect and safeguard the world's cultural and natural heritage.**

<https://jssuni.edu.in/JSSWeb/WebShowFromDB.aspx?MID=17604&CID=0&PID=10005>

### **MYSORE -THE HERITAGE CITY**



Mysore city is a mid sized South Indian city with a population of about 8.87 lakh (887 thousand) and spanning an area of 128 sq km (about 50 sq miles). This is the second largest city in Karnataka after Bangalore which is the state capital. With about 2.5 million visitors every year, Mysore is one of the most visited cities in India.

#### **Orientation:**

Mysore sits in the south Indian plane ( often referred as the Deccan plateau). Bangalore is some 140km (87miles) northeast of Mysore.

#### **Tourism:**

Mysore is one of the top tourism destinations in India. This city itself is a major attraction with numerous popular sites like the Mysore Palace, St. Philomena`s Church, Chamundi Hill, Mysore Zoo, Sri Jayachamarajendra Art Gallery, Rail Museum and so on. There are close to 200 structures in the city with a heritage tag.

In addition Mysore city serves is an ideal gateway/ base for exploring the numerous places around Mysore which are popular tourism destinations. For example the historic Srirangapatna, Somnathpur known for the Hoysala era temple, the Brindavan Gardens at KRS, the ancient Jain center of Shravanabelagola, Bandipur National Park, the Ranganathittu Bird Sanctuary, the Tibetan center of Bylakuppe , the Coorg district etc are some of the attractions that can be easily accessed from Mysore city.

Distance from JSS AHER - Mysore

- Mysore Suburban Bus Stand - 5 KM
- Mysore City Bus Stand - 7 KM
- Mysore Railway Station - 5 KM
- Ring Road - 2 KM
- Bangalore - 141 KM
- Ooty - 125 KM
- Mangalore - 200 KM

## JSS Spiritual and Cultural Centre



JSS Spiritual and Cultural Centre at Saket, in New Delhi, sponsored by the “Jagadguru Sri Veerasimhasana Samasthana Math ” – popularly known as Sri Suttur Math, Mysuru, is a non-profit organization. The center is established to preserve the rich Indian tradition of arts and culture, besides promoting, peace, harmony and human values amongst all the people. This center is dedicated to promoting the rich tradition, culture, and knowledge gained over thousands of years and recorded in many forms. The center will serve as a guiding force to help people in this part of the country, to understand the true essence of spirituality and to inculcate the values of humanity and religiosity, so as to ‘ enhance the inherent spark’ in their everyday life. The center has a library, a prayer hall, a community hall to accommodate community events and concerts and meeting rooms to hold seminars and workshops. The center promotes youth activities by organizing camps. Adults and children can participate in various Yoga and Sanskrit classes offered on a regular basis. The center will promote music and dance by inviting famous artists from all over the country and world. The center welcomes one and all without discrimination to race, religion, national origin and economic status

### JSS Spiritual and Cultural Centre

- Sri Suttur Veerasimhasana Math – enhancing the inherent spark!
- Sri Shivarathreeshwara Dharmika Datti (SSDD)
- Vedic Schools and Gurukulas
- Bharatiya Samskruthika Parishath
- JSS Spiritual Mission, USA
- JSS Academy of Higher Education , Mauritius
- JSS International School , Dubai

<https://jssmission.org/>



## Medicinal Plants Conservation and preserving tribal knowledges

JSSAHER promotes medicinal plant in campus and participating yearly in the medicinal plants exhibition conducted by Nilgiris Horticulture Department for promoting the medicinal plants values for the public.

Outreach program are regularly conducted at the adopted village Nedugalcombai and Veeracombai by the NSS volunteers from JSSCP, Ooty.



**Figure represents the Medicinal plant garden located in our campus**

**Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.**

Dustbins are placed on every floor of the building. Bio-degradable wastes will be collected separately and disposed by Municipality, Ooty.

**Provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.**

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 .

## **JSSAHER MUSEUM**

The renovated Anatomy museum was inaugurated with the blessings of His Holiness Jagdguru Sri Shivarathri Deshikendra Mahaswamiji on 28th July 2020 by chief guest Sri SP Manjunath sir, Secretary & Dr.CG Betsurmth, Executive secretary, JSS Mahavidyapeetha by lighting the lamp.

The museum was open to public in 2020 & 2021 except during lockdown but due to covid 19 protocol no school & college students visited the museum after march 2020. Only FLS students (30 no's) of JSSAHER visited the museum in August 2021.



**Renovated, well illuminated Anatomy Museum**



**Inauguration of “Anatomy Museum- A Sanctum of Dead Teaching the Living” by dignitaries**



### Renovated Museum visit

3.08.2021	FLS, JSSAHER (30 students)
07-03-2020	DGM Ayurveda Medical College, Gadag (80 Students)
19-02-2020	Nataraja School of Nursing, Mysuru, (30 students)
19-02-2020	T S Chandrashekaraiiah Institute of Paramedical Science, Mysuru (40 Students)
10-02-2020	Food science & Nutrition, St Phelomina's college, Mysuru, (40 students)
08-02-2020	BPHE society's Ahmednagar College, Puna (Maharashtra)
31.1.2020	Ahmed nagar college, Gujrat (40 students)

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## **Smart campus initiatives**

- To develop 'Our Campus, Our Planet' best practices
- To assimilate health, transport, energy and environmental management within the campus and to the society.
- The motto of "SWACHH CAMPUS SWASTH SHIKSHA" is strongly implemented in every goal sets and activities of the institution.
- The focus areas of interest of our institution towards the environment and society are enumerated as below:
  - Learning Management System (Education and Research)
  - Drug Information Services to the society and scientific community
  - Social responsibility to the local community, activities and campaigns undertaken through the institution and NSS team.

The City of Mysore where JSS Academy of Higher Education & Research is situated is itself a great example of Sustainable Cities and Communities. The City has been continuously on the top 5 of the cleanest cities of India and sets an example for the other States to focus on cleanliness and sustainability. Faculty and students have actively contributed for Clean City initiative of Swachh Survekshan through My Clean App. The Institute has adapted to the concept of smart campus in the existing buildings and infrastructure. The founder organization JSS Mahavidyapeetha has set targets to attain the status of smart and sustainable campuses through key elements :

1. Buildings & Infrastructure
2. Education, Learning & Digitization
3. Sports & Recreation
4. Safety & Security
5. Waste, Water, Air management
6. Utilities – Water, Gas, Electricity
7. Services & Connectivity

## 8. Green environment resilience

## 9. Governance

## 10. Food & Health

As an initial step, the institute has surveyed the available facilities, which would enable to either enhance or add smart features. Further, discussions and feedback from stakeholders are in progress which would add significant values towards the goal. Students are the central part of the smart campus as they are the ambassadors of a sustainable future.

A Smart Campus actively learns from and adapts to the needs of its people and place, unlocking the potential of e-technology and enabling world-changing learning and research methodologies. Also to create an environment friendly atmosphere enabled with technology is the main goal of a smart campus.



It is a modern application in the standard of the internet of things. The idea of building a “smart campus” implies that the institution will adopt advanced ICTs to automatically monitor and control all the facilities on campus. The students and staff members will benefit from location-aware services for using campus equipments and collaboration services. This will add values for students and increases the attractiveness of the campus.

New emerging technologies have changed human lifestyles dramatically. The smart campus implements an IoT-based system to a selected part of campus like the Campus Environment, Campus Security, Campus Parking, Campus Building, Campus offices, and classroom to create smart environment, smart security, smart building, smart parking, smart offices, and smart classrooms. Apart from focusing on technology, smart campuses are inevitable to restore environment and resources and also help the student communities for a smart and sustainable future. There are more than 750 universities, 40,000 colleges and institutes, and 1.5 million schools in India where around 200 to 300 million students are engaged in learning. Apart from being a significant consumer of energy, water and other utility and material resources, the educational campuses provide captive young thinkers action-based education on sustainable development. They are the spaces bubbling with potential opportunities to create skilled and 'job-ready' professional force. A smart campus is achieved by integrating sustainability to every component of an institute including building structures, renewable resources, digitalization through internet of things (IoT), bringing together the institute, stake holders, faculty and external members to understand the necessity of a sustainable and environment friendly campus.

JSS AHER has established its State of Art Campus using cutting edge technology. In order to achieve the smart campus status the institute and the constituent colleges have initiated the process of implementing technologies like

- Smart Physical Security and Surveillance
- Smart Wi-Fi Enabled Campus
- Smart Metering
- Smart Recycling Process
- Smart Transportation System
- Smart Energy Conservation and Utilization practice
- Smart Hostel Management
- Smart Canteen/food court management





# INFRASTRUCTURE & MAINTENANCE POLICY

**JSS ACADEMY OF HIGHER EDUCATION & RESEARCH,  
MYSURU**

## **PREFACE**

JSS Academy of Higher Education & Research is focused on medical and health-related studies, and comprises JSS Medical College, JSS Dental College and JSS College of Pharmacy at the main campus in Mysore as well as in Ootacamund, Tamil Nadu. With a view to extend the horizons in the field of Health Sciences, the Department of Water and Health, Department of Health System Management were also started.

Over the years JSS Academy of Higher Education & Research has amassed several accolades. The institute is accredited with A+ Grade (CGPA of 3.47 out of 4) by National Assessment and Accreditation Council (NAAC) during 2018 re-accreditation. The Deemed to be University is continuously sustaining its position since three years in top 50 universities & top 10 pharmacy colleges in NIRF ranking. For the first time JSS AHER has been recognized globally by the Times Higher Education within top 500 universities and the institute has been listed in the band of 200-300 Universities across the world.

Continuing its efforts to impart quality education and infrastructure, JSS AHER has taken an initiative towards building up a Smart Campus by enhancing its teaching – learning resources, infrastructure, upgradation of technology, research & innovation, waste management and green environment resilience. The institute has planned to incorporate smart thinking which leads to sustainable living and working conditions especially among the students who are not only the main stake holders but also the future ambassadors of smart and sustainable life styles.

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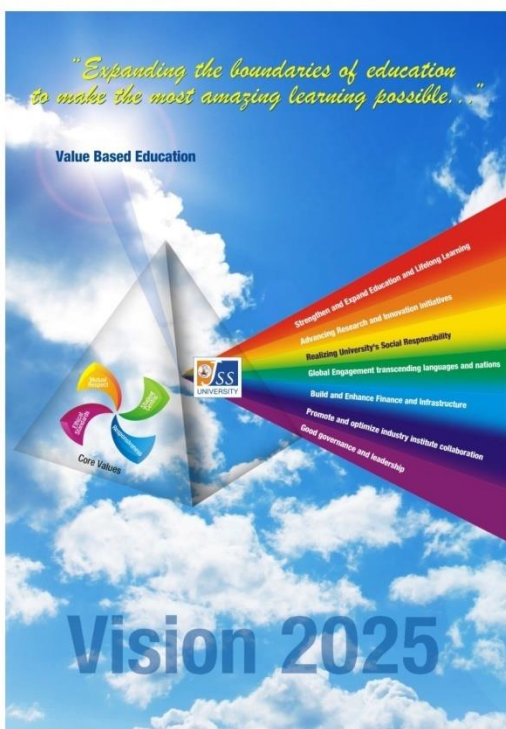
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## Executive Summary

JSS group of institutions has a number of educational units at different regions and the JSS Academy of Higher Education & Research or shortly JSS AHER is one of the important milestones in the societal contribution of the parent organization, JSS Mahavidyapeetha and it has grown tremendously in just over a decade which is because of the continuous striving to fulfill the Vision & Mission of the Deemed to be University. The institute has set up a Vision Plan for the next 15 years to reach a status of excellence.

## VISION PLAN

### Vision 2032 - Transformation from Good to Excellent



#### “ Vision

To provide education that helps transformation of individuals and society. ”

#### “ Mission

The mission of JSSU is to expand the boundaries of education and to make the most amazing learning possible by:

- Providing superior undergraduate, graduate and professional education to its students.
- Developing and advancing the talents of students to create applicable knowledge.
- Nurturing translational and transformational research that benefit the society.
- Inspiring to excel in health sciences delivery and care. ”

5 Year  
Action Agenda

10 Year  
transformative  
agenda

15 year  
Excellence  
Agenda

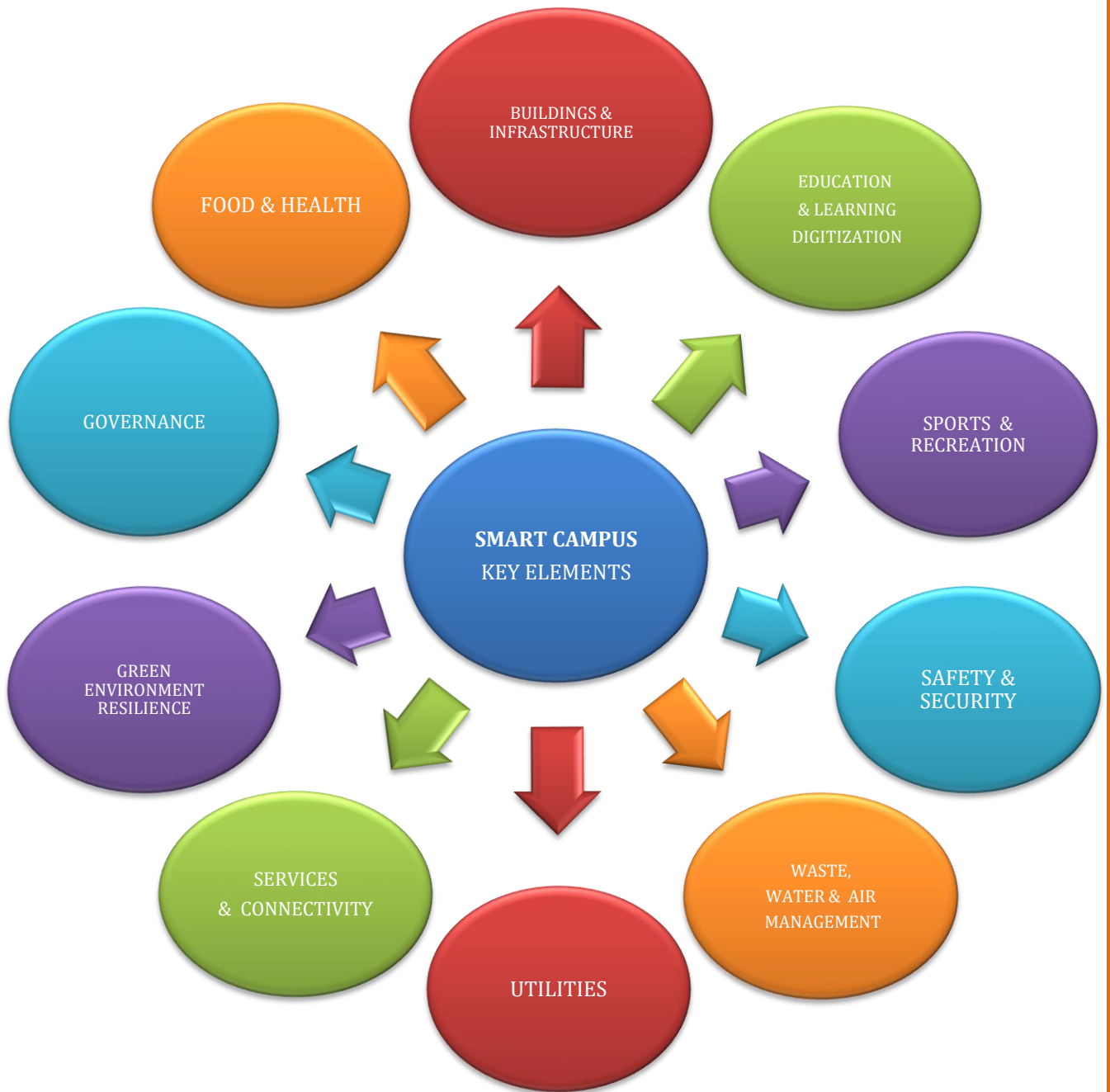
#### Focus Areas of Education and Research

- ❖ Health Sciences
- ❖ Science and Technology
- ❖ Energy, Environment and Water resources
- ❖ Skill Development and Entrepreneurship
- ❖ Policy, Leadership and Good Governance

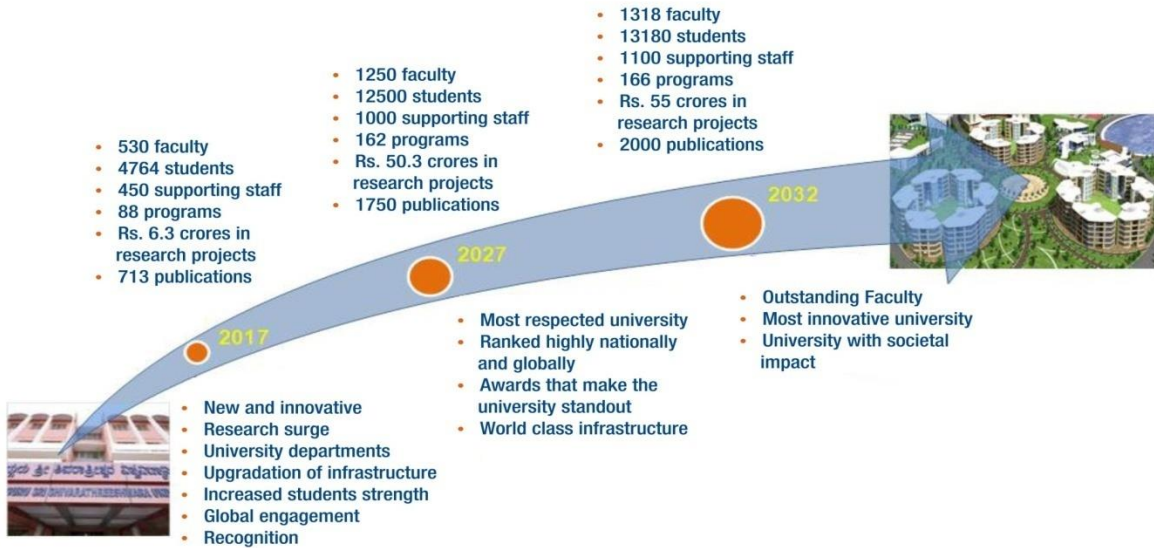
The institute is situated in a 43 acre land and comprises of Medical College, Dental College and University Departments (Faculty of Life Sciences and Health Systems Management Studies). JSS AHER has planned to adapt for a smart campus as per the need of the hour. The institute is focusing on 10 key elements that comprise smart campus viz. 1. Buildings & Infrastructure, 2. Education, Learning & Digitization, 3. Sports & Recreation, 4. Safety & Security, 5. Waste, Water, Air management, 6. Utilities – Water, Gas, Electricity, 7. Services & Connectivity, 8. Green environment resilience, 9. Governance & 10. Food & Health.

As an initial step, the institute has surveyed the available facilities which would enable either to enhance or add smart features. Further, discussions and feedback from stake holders are in progress which would add significant values towards the goal. Students are the central part of the smart campus as they are the ambassadors of a sustainable future.

To begin with, the institute has planned to focus on Swachhta Ranking, an initiative by the MHRD, Government of India which earmarks the potential of an institute to be smart.



## 15 Year Vision Plan for becoming an Institution of Eminence



JSS AHER has set a long term goal of establishing its new campus at Varuna with an estimated budget of Rs. 2000 Crores.



An over view of the architectural plan of the proposed Varuna campus  
 With the vision already set, the implementation of smart and best practices will be an important aspect to be followed for a smart and sustainable future of the employees and

the student communities at large. Executing the practices of energy conservation, reducing carbon footprints by sustainable food habits among the faculty and students, proper drinking water facilities, water re-usage, managing food, solid and other wastes, healthy living standards through habits of well being, pollution control within the campus achieved through pedestrian friendly atmosphere and reduction of vehicle commuting, increasing the green carpet and preserving open spaces and other institutional best practices are the key players of achieving a smart campus.

## **1. INTRODUCTION:**

A Smart Campus actively learns from and adapts to the needs of its people and place, unlocking the potential of e-technology and enabling world-changing learning and research methodologies. Also to create an environment friendly atmosphere enabled with technology is the main goal of a smart campus. It is a modern application in the standard of the internet of things. The idea of building a “smart campus” implies that the institution will adopt advanced ICTs to automatically monitor and control all the facilities on campus. The students and staff members will benefit from location-aware services for using campus equipments and collaboration services. This will add values for students and increases the attractiveness of the campus. New emerging technologies have changed human lifestyles dramatically. The smart campus implements an IoT-based system to a selected part of campus like the Campus Environment, Campus Security, Campus Parking, Campus Building, Campus offices, and classroom to create smart environment, smart security, smart building, smart parking, smart offices, and smart classrooms.

Apart from focusing on technology, smart campuses are inevitable to restore environment and resources and also help the student communities for a smart and sustainable future. There are more than 750 universities, 40,000 colleges and institutes, and 1.5 million schools in India where around 200 to 300 million students are engaged in learning. Apart from being a significant consumer of energy, water and other utility and material resources, the educational campuses provide captive young thinkers action-based education on sustainable development. They are the spaces bubbling with potential opportunities to create skilled and 'job-ready' professional force.

Government of India has initiated a project on smart campuses throughout the country. The project is flagship activity of Technology, Education, Research and Rehabilitation for the Environment (TERRE) Policy Centre, a think-tank and action platform for sustainable development. It is called Smart Campus Cloud Network (SCCN).

A smart campus is achieved by integrating sustainability to every component of an institute including building structures, renewable resources, digitalization through internet of things (IoT), bringing together the institute, stake holders, faculty and external members to understand the necessity of a sustainable and environment friendly campus.

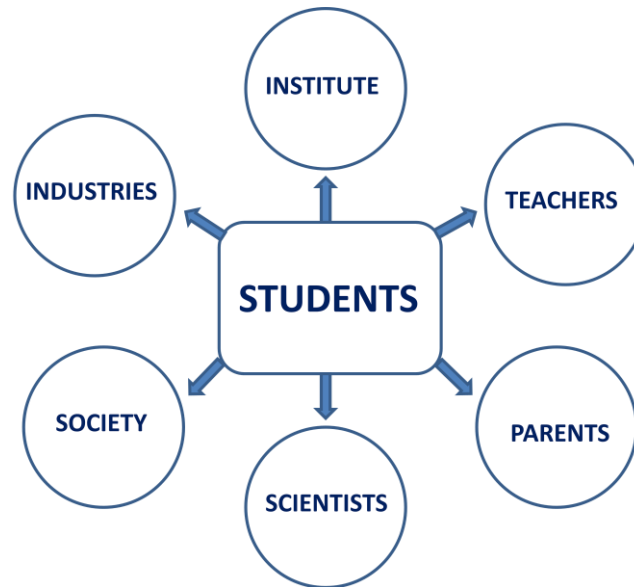
JSS AHER has established its State of Art Campus using cutting edge technology. In order to achieve the smart campus status the institute and the constituent colleges have initiated the process of implementing technologies like

1. Smart Physical Security and Surveillance
2. Smart Wi-Fi Enabled Campus
3. Smart Metering
4. Smart Recycling Process
5. Smart Transportation System
6. Smart Energy Conservation and Utilization practice
7. Smart Hostel Management
8. Smart Canteen/food court management



For meaningful and successful sustainability programs in campus we need to

- Set clear strategies and goals
- Have a comprehensive approach
- Integrate students, faculty, staff and external partners
- Initiate pilot projects in several areas involving students
- Plan policies, financial resources, facilities management, curriculum, sustainability literacy, ecosystems, land use, energy resources, etc.



Stake holders involved in the building of a smart campus with students occupying the central position

## **2. SMART CAMPUS POLICY**

### **I. OBJECTIVE:**

- To embed smart technology into daily life of the campus, providing an opportunity for the development and application of innovation and technology to support a smart campus.
- To integrate an enhanced process and programme focused on energy, materials, security, health, transport and environment management.
- To focus on maintaining “Eco friendly institution” through best practice.
- To educate students on the importance of sustainability for a smart future
- To provide world class facilities to enable nationally and internationally renowned industrial/institutional partners to co-locate on the campus.

### **II. SMART CAMPUS INITIATIVES:**

#### **a) Over all activities:**

- The Institute implemented CCTV cameras for the security of students day and night from the year 2010.
- The surveillance has built in analytic and intelligence for immediate remedial measures.
- Students are always connected to smart Wi-Fi.
- Healthy environment to support the mental, physical and social well being of the students and staff of the Institute.
- Daily power and water consumption data per student and room basis are captured and analyzed for reducing consumption cost.

#### **b) Students Centric Smart Campus:**

- Students are ensured a safe and secure homely atmosphere and are being monitored round the clock.
- Students have high speed internet both on campus and hostel rooms.
- Smart portal has a great impact on both students and stakeholders who are directly involved in daily hostel operations.
- Students are involved in the making of smart campus through several mini and major projects.

#### **c) ICT Based Smart Campus:**

- Physical security of students in the campus was a big challenge.
- 400 CCTV cameras are in operations for surveillance at all times.
- Internet plays a vital role in enabling students to pursue their academic goals. Internet with adequate band width was provided to make the campus Wi-Fi enabled.

- Optimization and improvement can only be brought about by identifying consumption patterns. The goal was to reduce the consumption of water and electricity to the lowest levels possible. Smart Metering was implemented for taking optimal decisions.
- A large number of students join every year. University needed a SMART portal where in all services are taken care centrally from student entry in hostel and to their exit. Smart Portal was made operational for connectivity with students at all times.

**d) Environment Friendly Smart Campus:**

- 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 AHER has adopted an energy / resources conservation and recycling policy.
- Conservation of energy and natural resources and recycling process is an integral part of JSS AHER facilities' design and usage.
- The University employs a variety of energy conservation, recycling, and other techniques to lessen the consumption of resources and achieve the lowest feasible life cycle costs.
- 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.
- All faculty, staff, students, design consultants, and construction contractors 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 are responsible for internal energy conservation and recycling efforts.
- The Transport Policy provides the Institute with a standard procedure for the acquisition, enhancement, use, control, maintenance, repair, checking fuel efficiency and disposal of the Institute's vehicles and for the management of related forms of transport engaged for Institute activities.

### **III. LONG TERM GOAL:**

The long-term strategy of the University focuses on the creation of a world-changing, connected, healthy and vibrant university campus. To achieve the goal, the Institute will concentrate on:

#### **a) Digital Environment**

- Open, flexible, integrated, interoperable, secure and scalable ICT architecture;
- Sense, capture, monitor and evaluate data to support and study the performance of the campus in real time.

#### **b) Integrated Urban Energy Systems**

- Low carbon, low impact energy in a complex urban environment, focusing on generation, storage, distribution and management.

#### **c) Data-driven Infrastructure Innovation**

- Resilient infrastructure systems
- Innovation in infrastructure design and delivery
- Building Information Modeling (BIM) for design and life-cycle performance.

#### **d) Health & Wellbeing**

- Evaluate, understand and improve the physical environment
- Develop new practices for workplace wellbeing
- Develop the technology, including wearable technology, to measure and influence health related behavior.

#### **e) Student Experience and Pedagogy**

- Data-driven services and spaces for an improved student experience
- Technology-enabled learning & teaching (including active learning, interactive teaching, flexible study).

### **IV. AUTHORITY:**

The Vice-Chancellor & Registrar of JSS AHER hold delegated authority and are responsible for all aspects of the Institute's "SMART CAMPUS POLICY".

#### **The Smart Campus Policy of JSS AHER follows:**

- 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.

### 3. DEMOGRAPHICAL VIEW OF MEDICAL INSTITUTIONS



#### **4. KEY ELEMENTS AND SUB ELEMENTS OF A SMART CAMPUS**

##### **1. Smart Buildings & Infrastructure**

Accessibility  
Safety and Security  
Energy efficient  
Rain Water Harvesting (RWH)  
Walkable campus  
Bicycle  
Sustainable Transport  
Road network  
Signage

##### **2. Smart Education, Learning & Digitization**

Smart Classroom  
E-Resources  
Wi-Fi Connectivity  
ICT Enabled services  
Modular Laboratories  
Innovation Centre  
Virtual Class and Laboratories  
Outreach Programmes

##### **3. Smart Sports & Recreation**

Playgrounds  
Sport facilities-Indoor and Outdoor  
Recreational space  
Open Gym  
Yoga facilities  
Amusement park  
Open air theatre  
Swimming pool

##### **4. Smart Safety & Security**

CCTV surveillance  
Fire alarms  
Fire fighting  
Peripheral safety  
Visitor management system  
Biometric system  
Anti-ragging  
Women safety  
Student counselling system

## **5. Smart Waste, Water & Air Management**

Sanitation and cleanliness  
STP  
Solid waste management  
Plastic waste management  
E-waste management  
Automatic sensor taps  
Air monitoring system

## **6. Smart Utilities**

Solar Projects  
Smart lighting System  
Emergency power backup  
Smart micro grids  
Bio-gas plant  
Kiosks

## **7. Smart Services & Connectivity**

Online services  
Amenities- Bank, Food court, Stationery, pharmacy  
Wi-Fi Services  
LAN

## **8. Smart Green Environment Resilience**

Green Campus  
Landscaping  
Preserving open space  
Soil erosion control  
Ground water recharging

## **9. Smart Governance**

ERP  
Less paper Office  
Training and Development  
ART- Accountability, Responsibility, Transparency

## **10. Smart Food & Health**

Wellness Centre  
Health Centre  
Potable water facility  
Personal Hygiene

**ACTION TAKEN REPORT**



#### 4.1. **Smart Buildings & Infrastructure**

Buildings & Infrastructure are the main criteria of functionality. The JSS Medical Institutions comprise JSS Medical College, JSS Dental College, Faculty of Life Sciences (Heritage Building), Hostels and Playgrounds.

To realize the vision of providing education for transformation of individual and society, each faculty has been provided to have their own separate self contained buildings to meet the academic, administrative, research, training and extension activities associated with teaching learning process. The infrastructure is provided to meet the modern requirements by retaining the conventional methods wherever required to accommodate the following requirement:

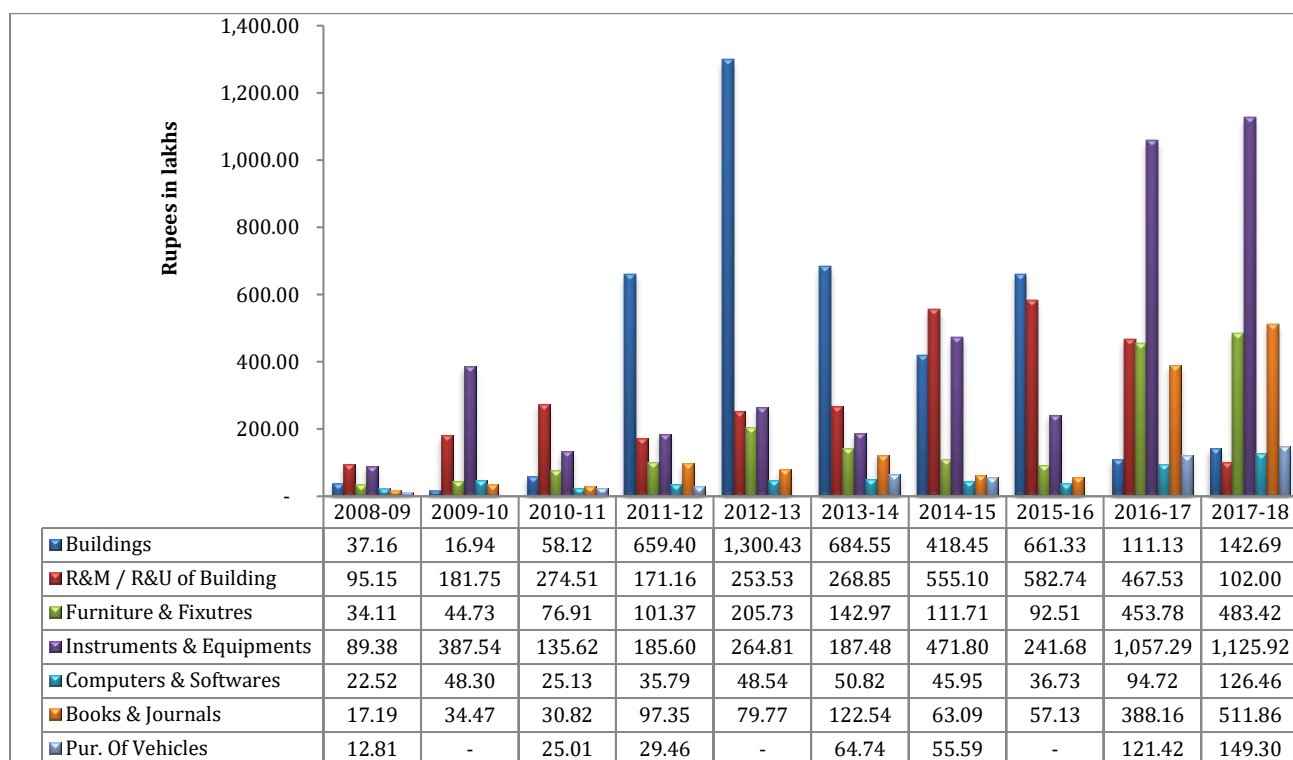
- ✓ To have national and international strategic tie – ups and to collaborate with reputed universities, industries and research organizations.
- ✓ To build global network through alumni and to have multidimensional partnerships with faculty and institutions around the world to foster flow of ideas.
- ✓ To establish centers of excellence.
- ✓ To ensure the quality education system nationally & internationally and necessary certification recognition are obtained.
- ✓ To attract the best researchers and research students by providing comprehensive support and motivation.
- ✓ To drive inter – disciplinary approach as desired by the global world.
- ✓ To work in partnership with policy makers and practitioners worldwide, to bring improvement in real time to people’s lives.

JSS AHER is a multi campus institution located with its campuses at Mysuru and Ooty. The campuses have a total extent of land area of 57.24 acres and house the four constituent colleges and two university departments. The campus is endowed with the state of the art buildings comprising of the physical infrastructural facilities that support and facilitate teaching – learning process.

Following are the details of land of JSSAHE&R Campuses and the expenditure incurred towards providing infrastructure to create an excellent ambiance and atmosphere for work

Sl. No.	JSSU Campuses	Total Area in acres	Total Built up Area	Plinth Area / in %	Infrastructure Provided
1	JSSMI Campus, Mysuru	43.60	79861.81 Sqm	15.06%	<ul style="list-style-type: none"> <li>• Academic Infrastructure</li> <li>• Library &amp; Information Services &amp; ICT</li> <li>• Amenities</li> <li>• Support Services</li> </ul>
2	JSSCP Campus, Mysuru	7.19	17,966.82 Sqm	27.90%	
3	JSSCP Campus, Ooty	6.40	37932.76 Sqm	22.96%	
4	NRI Studio Apartments - Off campus (B+G+3)	0.275	1747.60 Sqm	33.67%	
5	Staff Quarters - Off campus (G+2)	0.275	1982.00 Sqm	56.67%	

### Expenditure Incurred towards providing Infrastructure



## Academic infrastructure

### Auditorium

Auditoriums and multipurpose halls are fully equipped with AC, lighting and AV solutions for conducting various functions, meetings and cultural activities as below:

Sl. No.	Name of the Institutions	Seating Capacity
1	JSS Medical College, Mysuru JSS Hospital, Mysuru	600 500
2	JSS Dental College & Hospital, Mysuru	300
3	JSS College of Pharmacy, Mysuru	500
4	JSS College of Pharmacy, Ooty	500



## Gallery / Seminar halls

Sl. No.	Name of the Institution	Details	Seating Capacity	Number
1	<b>JSS Medical College, Mysuru</b>	Lecture Hall (Gallery Type)	275 x 1 250 x 4 200 x 2	07
2	<b>JSS Hospital</b>	Lecture Hall	250 x 1 150 x 1	02
		Seminar Room	60 x 100	14
3	<b>JSS Dental College &amp; Hospital, Mysuru</b>	Lecture Hall	100 x 4 60 x 2	06
		Seminar Hall	50 x 9	09
4	<b>Dept., of Water &amp; Health</b>	Lecture Hall	40 x 3 20 x 4 15 x 6	13
		Seminar Room	100 x 1	01
5	<b>Dept., of HSMS</b>	Lecture Hall	40 x 2	02
		Seminar Room	40 x 1	01



## PG guest hostel

JSS AHER has newly constructed the PG Guest Hostel at the North East Corner of JSSMI Campus comprising B+G+2 floors.

## Guest House



## Sub Elements of Smart Buildings & Infrastructure

### Accessibility

JSS Medical College campus is situated on the Mysore – Bangalore Highway and it is well accessed by all the stakeholders. College has bus facilities for students and it is also well connected through local bus routes.

Disabled access facilities provided for physically challenged

For the physically challenged personal the following facilities are made available in the college campus.

- ✓ Wheel Chairs
- ✓ Stretchers
- ✓ Ramps provided in all the floors of the college and hostel
- ✓ Suitable toilets provided in college and hostels
- ✓ Lift facilities available



Accessibility for disabled or students who require additional support during examinations

## Hostel Facilities



### Wash room – physically challenged access

All the institutions of JSSAHE&R have provided the Physically Challenged Friendly Washrooms for the convenience of them.



### Safety and Security

All the buildings are safe and do not pose any threat to students, employees and other stakeholders due to wide spaced rooms and corridors. Fire alarms and fire extinguishers are in place. Laboratories are equipped with first aid accessories.

### Energy efficient

Most of the buildings are equipped with enough natural lighting, avoiding the use of artificial lighting during majority of the time. Wherever lighting is required, all the energy consuming bulbs have been converted to LED lamps which conserve energy. There is enough ventilation allowing natural air passing through the buildings, thereby reducing the use of air conditioners.



Name of the Institution	Power generation (SRTP)	Date of Solar plant charging (of panels) / generation	Details of Feeders used for Solar power generation		Impact of the initiative
			No. of feeders	Capacity	
JSSDCH	172 kw	19 <sup>th</sup> May 2019	04	50kw*2no's 36kw*2no's	Total Power dependency on KEB is reduced by 50% in JSS Medical Institution campus of JSS AHER @ Mysuru
JSSMC	200 kw	3 <sup>rd</sup> June 2019	04	50kw*4no's	
JSSCPM	100 kw	19 <sup>th</sup> July 2019	02	50kw*2no's	Total Power dependency on KEB is reduced by 70% in JSS College of Pharmacy campus of JSS AHER @ Mysuru

### Rain Water Harvesting (RWH)

There are a couple of pits available within the campus which is connected by water pavements which collect rain water.

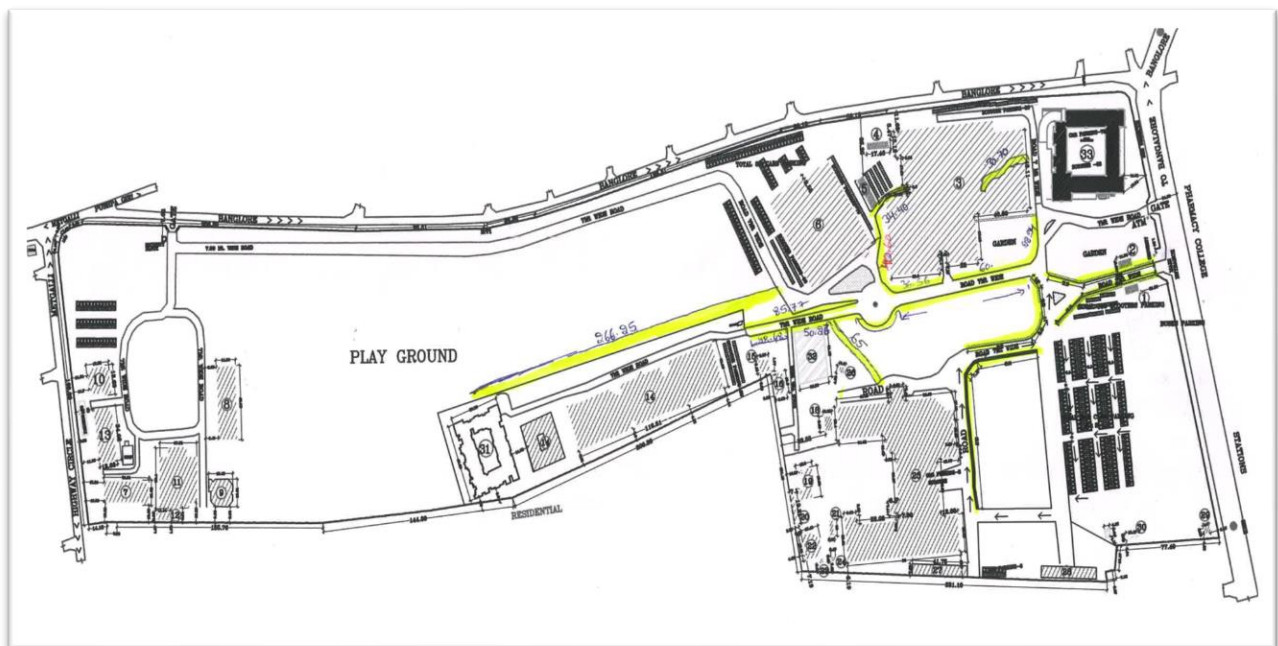


## Walkable campus

The Medical College campus is well accessed by walking between the different constituent colleges. Almost 1 km of walking pavements have been arranged making the accessibility better.



Walking pavements within the campus



## Bicycle

JSS AHER has introduced bicycles for the convenience of students and faculty at different points which has considerably reduced the usage of motor vehicles. This initiative goes in line with creating a green campus, reducing the carbon output.



Bicycle stand constructed within the campus

## Sustainable Transport

JSS AHER has provided a well connected transportation to large number of students. Bus facility is provided for easy transit between the different units of the Institute for students, teachers and other employees. The college buses are regularly checked for their efficiencies, such that no extra fuel is utilized. The institute provides regularly maintained vehicles for commutation and the concept of car pooling and use of bicycles within the campus have been initiated.

<b>Type of Vehicle</b>	<b>Total</b>
Buses	11
Mobile Van / Ambulance	02
Bolero / Jeeps	08
Cars	03
Two Wheeler	01



### Road network & Signage

The entire campus is well connected with roads and there are proper signage displayed wherever necessary.

#### 4.2. SMART EDUCATION, LEARNING & DIGITIZATION

Digitization of teaching and study materials is under process. Accessibility to study materials by students is rendered through Wi-Fi connectivity in the entire campus. Most of the rooms are IT enabled in order to enhance learning through powerpoints and videos.

Spacious and well furnished libraries cater the needs of students in learning.

##### Existing Facilities

- Smart class room – 2 no's (MC & DCH)
- Simulation lab (Pharmacology and Physiology)
- Digital Library – 4 no's (MC - 40 no's. DCH – 15 no's. HSMS – 5 no's. FLS – 28 no's)
- Outreach programme facility (ISRO open Learning)
- IT enabled classroom (with projectors)
- Upto 1 GBPS uninterrupted internet services through NKN connectivity for a period of 10 years is availed (*presently, 300 mbps*)
- All the buildings are connected with OFC cable.
- Wifi connectivity is enabled (*within the building*)
- MS Windows license version computers
- JSSU online services (*for all official communication*)

##### Smart Classroom

**Smart classrooms** are provided to extract the potential of best online resources in teaching and learning process and to go extra mile to grasp information other than the curricula, online resources can improve the curiosity and creativity among the students.

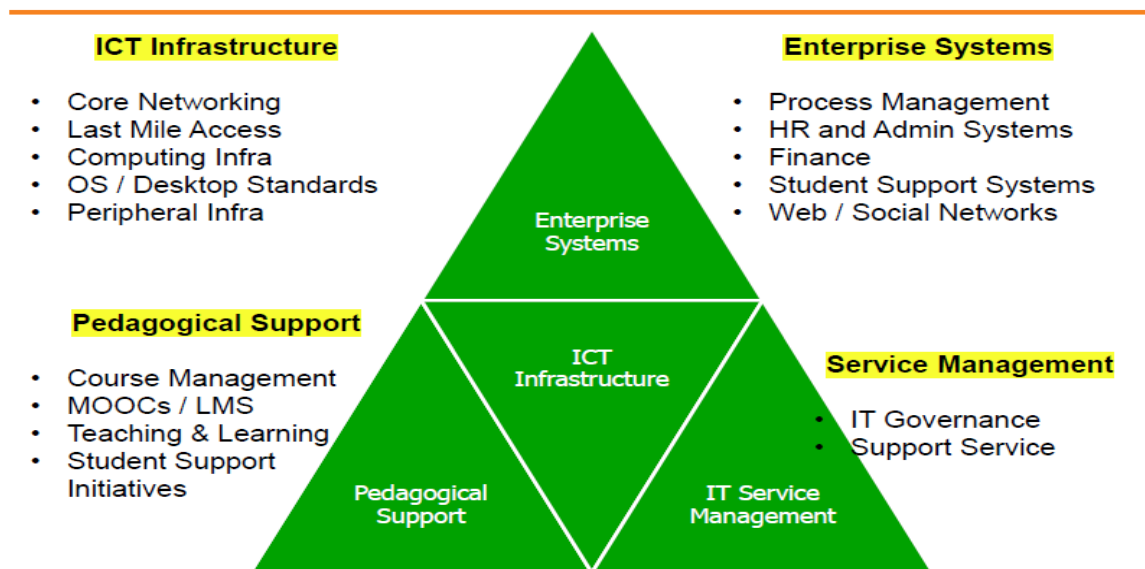


JSS AHER has provided smart class rooms with facilities up to date for benefit of the students.

## ICT Enabled services, Wi-Fi Connectivity & E-Resources

The entire campus is Wi-Fi enabled and students can access learning materials wherever they are. All the study materials have been available through the JSS AHER online portal so that students can access through their login credentials and the same has been demonstrated during the most difficult times. Further, the institute is well equipped with a digital library which hosts several thousands of books and journals readily accessible for students and teachers.

### Priorities and Program Plans *ICT – Focus Areas*



## Digital Journal of Clinical Medicine

In the era of Digital Technology and online learning, the concept of “Digital Journal of Clinical Medicine” is being introduced in order to help medical students learn in a better and more holistic manner. With smart phones and online learning gaining a significant role in every student’s life, it would only make sense to incorporate something that would be educative for them in a short span of time.

## SWAYAM portal and MOOCs

Swayam is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.

## Online Teaching

JSS AHER has stepped up to take its teaching online during the most difficult times making use of the ICT enabled services, Wi-Fi connectivity and E-Resources. The services provided were aptly rewarded.



## Modular Laboratories



## Innovation Centre

JSS AHER provides opportunities to incubate innovative ideas from both students and faculty. The innovation/incubation centre is called SPARKLE CINE. SPARKLE signifies Science Promotion through Advancement of Research & Knowledge for Life through Entrepreneurship, & CINE stands for Centre for INnovation & Entrepreneurship.

Sparkle CINE is a Section 8 company established under the aegis of JSS Academy of Higher Education & Research for the purpose of promoting translation of educational excellence to ideas and to catalyse the power of the idea towards innovation and entrepreneurship focused on advancement of Science.

## Virtual Class and Laboratories



In view of providing experimental training for the students in the Physiology and Pharmacology Depts of University, the students, researchers and faculty are given the facility of training **through simulation technology** via Elsevier Animal Simulation Software across the University. This is an attempt to comply with the CPCSEA guidelines.



## Outreach Programmes

The Motto of NSS "NOT ME BUT YOU" reflects the essence of democratic living and upholds the need for self-less service. NSS helps the students develop appreciation to other person`s point of view and also show consideration to other living beings. JSS AHER started NSS activities at its constituent colleges with important objectives of identify the needs & problems of the community & involve them in problem-solving and to develop among themselves a sense of social and civic responsibility. It helps the students to acquire leadership qualities and democratic attitudes, to develop capacity to meet emergencies and natural disasters and practice NATIONAL INTEGRATION and SOCIAL HARMONY. We have 5 NSS Units spread across the constituent college with a strength of 450 NSS volunteers and 5 NSS Program Officers.



JSSAHER'S Social Responsibility is an approach of ethical and intelligent management, which involves both its impact on its human, social and natural context, and its active role on the promotion of Sustainable Human Development of the country. Within this approach, "Sustainable Campus" is a strategy that strives to reduce the ecological footprint of the Institution via a rational use of resources and to educate the JSSAHER community on the ethics of sustainability.

### 4.3. SMART SPORTS & RECREATION

Health and well-being are an important aspect of academic success and retention; when a student is healthy in mind and body, they are better able to focus on and complete their studies. By taking measures to improve a student's health and well-being, an institution is actually helping its self by potentially increasing the student's GPA and graduation, and retention rates.

The goal is to have the campus community flourish and be fulfilled individually and within our communities where we live, learn, work, and play. As one of the vital stakeholders in Health & Well-Being, the Sports and Campus Recreation Complex should fulfill this vision by providing space and opportunities for students to discover and affirm their own well-being practices in five different dimensions (emotional, physical, social, professional and spiritual) that lead to a healthy lifestyle.

#### Playgrounds



Sport facilities-Indoor and Outdoor





## Open Gym



## Yoga facilities



Amusement park – Yet to create

Open air theatre – Yet to create

Swimming pool – Yet to build

#### 4.4. SMART SAFETY & SECURITY

##### CCTV surveillance

The entire campus is under CCTV surveillance to ensure the safety of students around the clock. Majority of the laboratories are also equipped with cameras to attend to any accidents. Hostels are also continuously monitored through the cameras.

##### Fire alarms & Fire fighting



##### Peripheral safety

Round the clock security guards (Male & Female for respective hostels) as well as CCTV cameras are placed for continuous monitoring and vigilance for the safety of students.



## **Safety parameters**

- High raised buildings are equipped with fire/smoke sensors.
- Regular workshops on safety management are being conducted for both faculty and students to help them handle emergency situations.
- Interaction with Laboratory managers and electricians should be facilitated for the safety of the campus. Their contacts should be displayed and readily available in case of emergency.

## **Visitor management system**

Visitors are monitored and entertained only after getting prior consent from the concerned Department. Security offices are advised to keep a record of visitors who enter the premises.

## **Biometric system**

Biometric system is already in practice for all the teaching and non-teaching faculty of the institution.

## **Anti-ragging & Women safety**

Committee comprising of faculty against ragging and sexual harassment is highly functional and therefore such circumstances are completely avoided in the campus.

Hostel premises are equipped with about 120+ CCTV cameras and continuous surveillance under security personnel.



### Student counselling system

An efficient committee for student counseling system has been constituted to further address issues of students both academically and personally. The system is integrating students, teachers and parents.

Hostel premises are equipped with cameras and continuous surveillance under security personnel. A regular check of food for nutrition and hygiene is carried out in order to provide safe health.



#### 4.5. SMART WASTE, WATER & AIR MANAGEMENT

##### Sanitation and cleanliness



Waste materials being cleared by the municipality

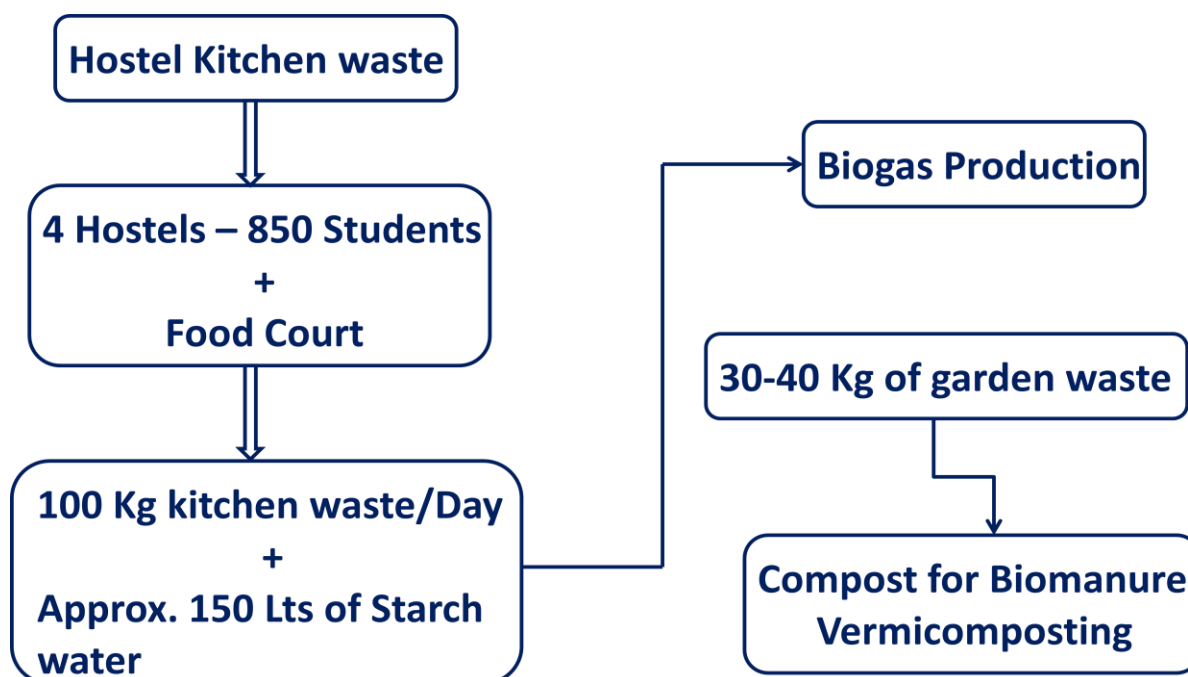


Colour coded bins for segregation of waste

### Solid waste management

- 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.

### Bio/food waste



### **Vermicomposting**

Vermicomposting is the use of earthworms and microorganisms to accelerate the composting process. Worms, through digestion, liberate plant nutrients from organic material converting it to rich humus. Worms consume up to their own weight daily, excreting castings which contain from five to eleven times the amount of plant available nutrients in the material consumed. Worms have been recognized to play a very important role in the enhancement and maintenance of soil penetrability, redistribution of nutrients, water flow and gas exchange. The pedogenic value of worms, in addition to the release of nutrients, has vast applications in agriculture and soil reclamation. The vigorous ability of worms to convert organic residue into a nutrient rich growth medium also has applications in waste management.



### **Need for a Vermicompost unit within the campus**

Our Institute maintains a very good green carpet area making the campus a 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.



Plastic waste management



The Institute has pledged to reduce the use of plastics throughout the premises. Constantly the students and faculty are being advised not to use plastics wherever possible. JSS AHER is continuously supporting the Swachh Survekashan, an initiative by the city Municipal Corporation.

## E-waste management

Certificate No.	MERA/1819/2015	Date: 2-MAY-2018
Date of Material Receipt	12-APRIL-2018	
Weight	610Kgs	
Customer Reference No.	MOU Dated 3-AUG-2017	



### CERTIFICATE OF E-WASTE RECYCLING

*This is to Certify that e-waste received for recycling  
from  
JSS Academy of Higher Education & Research,  
MYSURU-15  
has been safely disposed at our registered facility in an environment friendly manner.*



**For Mahalaxami e Recyclers**  
  
Authorized Signatory

MPCB Reg. No. : MPCB/RO(HQ)/REG/14/E-Waste/HWMD-182 | Date : 31st July 2014  
Renewed Reg. No. : MPCB/RO(HQ)/REG-15/EWASTE/HWMD-257/Dt. 9th Oct. 2015 Valid till 8th Oct. 2020  
Mahalaxami e-Recyclers Pvt. Ltd. Plot no: 1-5 (Part), Gokul Shirgoan MIDC, Tal : Karveer, Dist : Kolhapur | Website : recyclebin.com

## Waste water management

Hostels, for instance are the main source of sewage water, while waste water from canteens, restaurants and campus buildings add up to the sewage. An effective sewage water treatment in a biological aspect can replace conventional chemical water treatment, as a need for sustainable green management is vital for a smart campus.

Student Projects/Pilot Projects are a main source of ideas that can be implemented after successful completion of the projects.

## Sewage treatment plant



Existing small scale sewage treatment plant in the guest house

Usually a sewage treatment plant (STP) is considered as a liability and is only planned to comply mandatory regulations. But same can be made an asset that produces revenue at the same time addresses the mandatory environmental compliances.

An STP can be considered to be an industry where the raw material (sewage and food waste) is of reliable supply and available at no cost. The treated water which is the product of this unit can substitute fresh water required for gardening and thus reducing the current water bills and finally the biogas which can substitute/supplement LPG in the kitchens and reduce LPG bills. Below is brief overlook of a model:

- Raw material is reliable
- Raw material is free
- Treated water (end product) has demand
- By-product (biogas) out of treatment has a demand
- Sludge produced can be used as a valuable source of fertilizer for the landscape irrigation

### **The specific salient features of the ARBiT™ STP are listed below:**

1. ARBiT™ STP can be commissioned and operated even with low occupancy of the college unlike other technologies that requires at least 40% occupancy in the college project.
2. The ARBiT™ STP will be located between the B & C Blocks of girls hostel.
3. The ARBiT™ water reclamation plant will be located below and above the ground.
4. Wastewater unseen during the treatment process.
5. Zero noise and vibration during operation.
6. Power consumption is very low and approximately 70% lesser than conventional systems

7. The area required for the STP is also approximately 30% lesser than conventional systems. This will also reduce on the civil construction cost effectively reducing the capital required.
8. The odor produced from the STP will be collected, contained and discharged without causing inconvenience to the occupants or neighbors.
9. The quality of the treated water will meet the reuse standards specified by Karnataka State Pollution Control Board.
10. The disinfection of the treated effluent may be done using Hypochlorite.
11. The biogas generated during the treatment process can be used for beneficial purposes if required.
12. Optional treatment for the disposal of the organic solid waste from the canteens can be integrated with this ARBiT™ STP. High volumes of biogas can be generated and may be supplied to the canteens to reduce the LPG consumption or generate electricity.

### **Proposal of the STP to address the wastewater treatment for the girls hostel**

As seen during the site inspection, we propose the location to establish next to the compound wall between the B&C block

The capacity of the plant: 90 KLD (detailed calculations given in the proposal)

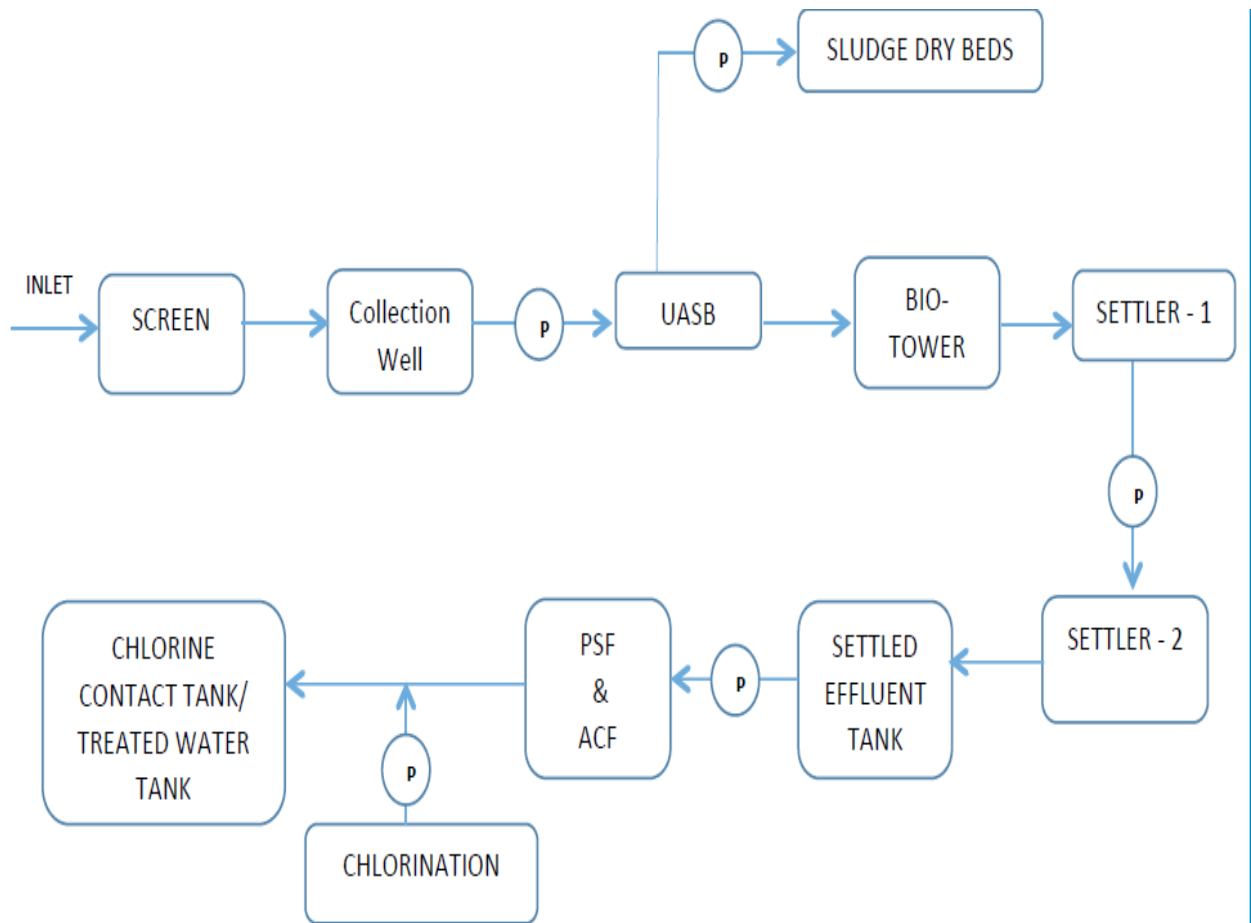
Implementing the biogas utilization unit along with the STP is possible since the leftover food from the canteen and the organic wet waste from the kitchen is very nearby and can be converted into biogas. The biogas is produced both from the sewage and left over food and vegetable waste.

The expected production of biogas per day equivalent of LPG is: 30 Kg which works out to Rs 47,400/- per month savings. The treated water can be used for the gardening and toilet flushing with small change in the plumbing. Recycling water will also reduce the fresh water consumption and in turn reduce the water bills.

The project thus meets the sustainability aspects, economical and entire campus become "Green".

### **ARBiT™ PROCESS**

The ARBiT™ process (Anaerobic Reactor with Bio-tower) is a combination of both anaerobic and aerobic treatment of wastewater. The wastewater is first introduced into an anaerobic reaction tank (UASB tank) with a designed retention time. A floating sludge blanket is formed inside the UASB reactor under anaerobic conditions. Anaerobic degradation of organic matter (BOD) is achieved up to 75-80%. The overflow of this reactor is fed into the bio-tower for further removal of BOD under aerobic conditions.



Flowchart of the processes of water reclamation plant

### Automatic sensor taps

The institute has fixed touch sensor water taps during the first phase to validate the use of such taps. Following the data of water saved, automatic sensor taps may be installed during the second phase of up gradation.

### Air monitoring system – Yet to be initiated



#### 4.6. SMART UTILITIES – WATER, GAS & ELECTRICITY

##### **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” & non-degradable 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 utilization 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 storm water 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.

JSS Academy of Higher Education & Research (JSSAHER) is conscious of its responsibility and role in materializing 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 AHER 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.

A survey of water utility and storage in the Medical Institutions Campus is given below

<b>BUILDINGS</b>	<b>WATER CAPACITY</b>
<b>Main Over Head Tank</b>	<b>4,50,000 Ltr</b>
<b>Main Over Head Sump</b>	<b>2,00,000 Ltr</b>
<b>Over Head Tank Entrance</b>	<b>50,000 Ltr</b>
<b>Girls Hostel D Block Sump</b>	<b>85,000 Ltr</b>
<b>Girls Hostel D Block OHT</b>	<b>75,000 Ltr</b>
<b>Boys Hostel Sump</b>	<b>40,000 Ltr</b>
<b>MC Over Head Tank</b>	<b>30,000 Ltr</b>
<b>Guest House Sump</b>	<b>87,000 Ltr</b>
<b>Guest House OHT</b>	<b>25,000 Ltr</b>
<b>Canteen Sump</b>	<b>10,000 Ltr</b>
<b>Canteen OHT</b>	<b>10,000 Ltr</b>
<b>Total</b>	<b>10,62,000 Ltr</b>

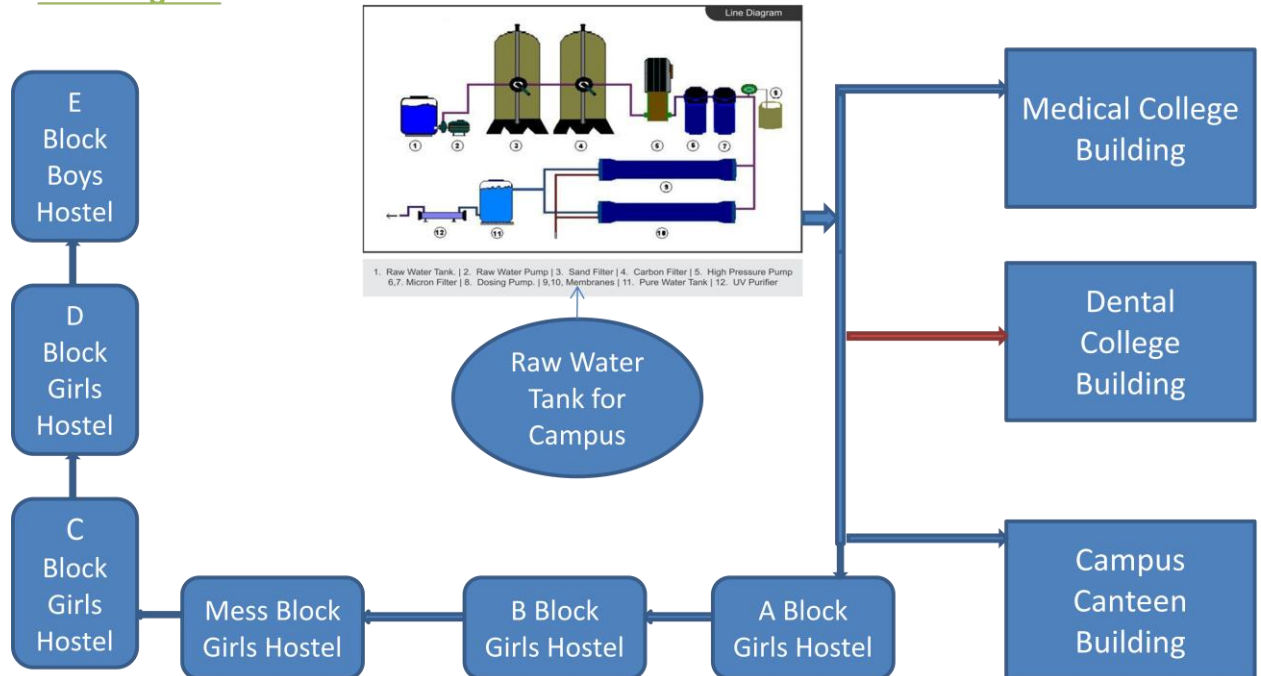
#### **RAIN WATER HARVESTING / RO PLANT / WATER MANAGEMENT**

- ✓ Rain water harvesting collection tank of 30,000 ltrs storage capacity.
- ✓ 10 no's of Ground water & bore well recharge pits and infiltration tank of about 15,000 ltrs capacity.
- ✓ STP of 25 KLD capacity by using SWR technology has been installed for treating of sewage & kitchen waste water of PG Guest Hostel & the treated water is using for the purpose gardening area developed surrounding the building.
- ✓ One tank of 10,000 ltrs capacity is made for re-use of RO rejected water for gardening purpose
- ✓ Water sprinklers are in place

## RO WATER SUPPLY - CURRENT SCENARIO

An overview of the drinking water facility and the current situation of the RO plant installed in the campus help us to think how we can upgrade the RO plant to fulfill the RO water requirement for the entire campus. The present RO plant installed is not sufficient to fulfill the RO water requirement for the entire campus.

### Line Diagram



### Inspection Report

- 1) The entire campus has a one Commercial RO plant of capacity 3000 LPH.
- 2) Plant needs to be upgraded to fulfill the present requirement of the drinking water.
- 3) The product output of the plant is having only 40% of permeate water Only
- 4) The RO water is been distributed in 2 different lines for the entire campus.
  - a) Line 1: Dental Block, Campus Canteen Block & Medical Block.
  - b) Line 2: Girls Hostel A , B , C , Mess Block , D Block Canteen and Continued to Boys Hostel E Block.
- 5) The pump which is been used for the distribution of the RO water is a Cast Iron mould pump and impeller gets rusted inside the pump & discharge rust particles which gets mixed in the drinking water.
- 6) The Pipe line laid to distribute the RO water should be in CPVC. But in Dental Block GI line has been laid which discharges high rust which is getting settled in the drinking water.

- 7) All the Water which is been treated through RO plant is been Stored in a Syntex tank on the roof top of each and every building without the storage tank Lid and Instead they are using a wooden plank or a black stone slab to cover the same.
- 8) Since it is Purified water it has to be kept in a closed environment to avoid dust and microbes OR ELSE THERE IS NO POINT IN PURIFYING THE WATER.
- 9) Rest of the Blocks distribution pipe line in Boys and Girls hostel is CPVC can be retained.
- 10) The Storage water tank of the RO water should be in SS (Stainless Steel)but all the storage tanks which is been installed is Syntex tank.
- 11) Using Syntex tank for drinking water storage is not suggested, because it reacts when sunlight falls on tank. Since all the tanks are kept in open terrace.
- 12) All the storage tanks should be sheltered to avoid bio aerosol and dust



Current status of the RO Water Plant at the MCI

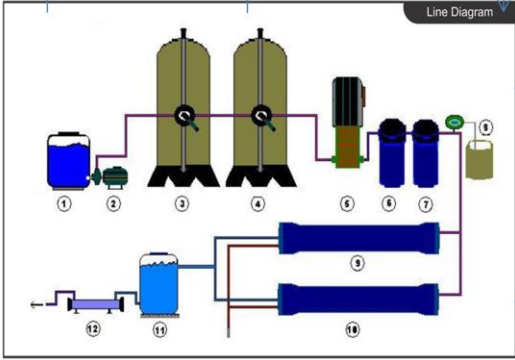
**D BLOCK**  
 Floors : 4 Floors  
 Students : 72  
 Drinking Water  
 Usage : 250

**A BLOCK**  
 Floors : 4 Floors  
 Students : 78  
 Drinking Water  
 Usage : 250

**Mess Block**  
 Floor : 2 Floors  
 Number of  
 Students : 750  
 Floating  
 ( 3 Times Food )

**E BLOCK ( RO Plant )**  
 Floors : 4 Floors  
 Students : 150  
 Drinking Water  
 Usage : 450

**B BLOCK**  
 Floors : 4 Floors  
 Students : 65  
 Drinking Water  
 Usage : 200



1. Raw Water Tank | 2. Raw Water Pump | 3. Sand Filter | 4. Carbon Filter | 5. High Pressure Pump  
 6,7. Micron Filter | 8. Dosing Pump | 9,10. Membranes | 11. Pure Water Tank | 12. UV Purifier

**C BLOCK**  
 Floors : 4 Floors  
 Students : 54  
 Drinking Water  
 Usage : 150

**D Block**  
 Floors : 7 Floors  
 Number of Students :  
 600  
 Water Consumption per  
 day 2000 Liters

## Proposed upgradation of RO Water Plant at MCI

Schema A:

- 1) Upgrading the commercial RO Plant in the campus to 6000 LPH to Centralized RO plant and decentralizing the distribution of drinking water to the entire campus with Storage tank in each block with automatic filling.
- 2) RO Plant room has to be expanded by another 300 Sqft.
- 3) CPVC Pipe Line has to be laid to the distribution units.

Time Period: To complete the above process setup it would require one month time.

Tentative Budget:

- a) RO Plant Only : 15 Lakhs Rupees + 18% GST
- b) RO Room Building : 6 Lakhs
- c) Pipe Laying including Material Cost: 95 Rupees per feet
- d) Storage Tanks, Pressure Boosting Pumps and Fittings can be designed only after exact requirement which will be an additional cost.



Overview of the RO water distribution in the MCI campus hostels

## **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.

### **ELECTRICITY - UNDERGROUND CABLE WORKS COMPLETED**









### Underground Cable works and power backup

#### POWER / ELECTRICITY (Power back up: 24 x 7 )

JSSAHE&R provides has created the facility of providing 24 x 7 power / electric supply either in the form of power connection through CHESCOM / TNEB and in case of failure in power supply, generators are installed in all the campuses for providing uninterrupted electric / power supply.

Campus	RR No.	Contracted Demand in KVA	Motor Constant	Date of Connection / Service	Generator
JSSMI Campus	HT - 166	450 KVA	2500	May 1995	2 dedicated generators of 450 KVA & 500 KVA capacity is provided with auto switch over facility
JSSCPM Campus	HT - 384	150 KVA	750	May 1995	82.5 KVA & 160 KVA
JSSCPO Campus	HT - 107	150 KVA	200	May 1995	100 KVA, 125 KVA & 150 KVA capacity is provided

## Solar Projects



At the Institution level, solar panels have been installed which has considerably brought down the power consumption by at least 50% compared to earlier years. In order to set an example, the institution shares some of the electricity generated by solar energy to the local electricity board. Proper signages have been installed advising the users to always switch off the electricity when not in use.

Most of the lights have been replaced by energy saving bulbs and LEDs to save power. Continuous monitoring and maintenance of Air Conditioning, generators and other power appliances are being carried out to ensure that no power is being wasted under any circumstances.



Emergency power backup & smart micro grids



## Proper lighting

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.



## Summary of power generation with the aid of solar panels

1	2				3		4		5	6
Month	KEB				Solar Units Generated		Total		KEB Rate	Saving
	A	B	C	D	A	B	A	B		
	Import Units KEB	Export Units from Solar	Actual Consumption of Units (2A-2B)	Amounts	Total Units	Amounts	Units	Amounts (2D+3B)		
Apr-19	144450	0	144450	1314716	0	0	144450	1314716	1314716	0
May-19	153225	0	153225	1419601	11909	73835.8	165134	1493436.8	1535134	41697.2
Jun-19	118150	75	118075	1096122	24708	153189.6	142783	1249311.6	1332678	83366.4
Jul-19	109425	450	108975	1023980	22879	141849.8	131854	1165829.8	1231164	65334.2
Aug-19	101250	1025	100225	944791	35607	220763.4	135832	1165554.4	1267196	101641.6
Sep-19	93125	4325	88800	850504	46215	286533	135015	1137037	1266547	129510
Oct-19	96375	7275	89100	852928	53755	333281	142855	1186209	1337953	151744
Nov-19	89025	10125	78900	764651	60973	378032.6	139873	1142683.6	1310793	168109.4
Dec-19	83575	9025	74550	720964	54812	339834.4	129362	1060798.4	1204710	143911.6
Jan-20	85600	3975	81625	781752	72663	450510.6	154288	1232262.6	1429742	197479.4
Feb-20	81425	17675	63750	628170	69004	427824.8	132754	1055994.8	1235333	179338.2

Mar-20	76300	19800	56500	560793	66086	409733.2	122586	970526.2	1132504	<b>161977.8</b>
<b>Total</b>	<b>1231925</b>	<b>73750</b>	<b>1158175</b>	<b>10958972</b>	<b>518611</b>	<b>3215388</b>	<b>1676786</b>	<b>14174360</b>	<b>15598470</b>	<b>1424110</b>

#### 4.7. SMART SERVICES & CONNECTIVITY

##### **Available Facilities**

- Dental Hospital (366 dental chairs)
- Dental Mobile Van (*1 no. for community services*)
- Bank
- Post Office
- Pharmacy
- Co-operative Society
- Laundry / Cobbler
- Telecommunication
- Incinerators
- Photo copiers and bindings
- Health Insurance services(TATA AIG)
- JSS University NSS Unit
- Free Wi-Fi
- Common communication social platform like a link that connects faculty, students and the institute.
- An in house pharmacy is functioning within the campus to cater the needs of students as well as public.

##### Amenities- Bank, Food court, Stationery, pharmacy

##### **BANK**

A branch of State Bank of India at S. S. Nagara, Mysuru shares its banking services with the JSSAHE&R in the JSSMI Campus. The 24 x 7 ATM counter is also attached to the JSSMI Campus Building for easy access to the students.





## Post office

Both the Post Office (Sub Branch) and the Telegraph Offices are in the campus for easy access of students and staff.



## Co-operative society

The co-operative society is also a part of the institution, which cater to the needs of the students with their essential daily requirements and other requirements such as text books, note books, papers, surgical items, etc. The society works on '**no profit - no loss**' basis.



Food Court



Health centre with pharmacy



#### 4.8. SMART GREEN ENVIRONMENT RESILIENCE

The beauty of nature is a gift of God, and as responsible citizens it is our duty to protect this gift by all means. Hence, following actions are initiated by JSSAHE&R towards Green Initiative:

- a) Greenery / Plantation
- b) Prohibition on use of Plastic bags and bottles
- c) E – scrape
- d) Use of Incinerators
- e) Solar – Power, Water Heater, Cooking System





**GREEN CAMPUS  
CLEAN CAMPUS  
PLASTIC FREE CAMPUS**

<b>SPEED LIMIT</b> <b>20</b> km./h.		<b>WEAR HELMET</b> 
<b>NO SMOKING</b> 	<b>NO ALCOHOL</b> 	<b>NO DRUGS</b> 
<b>I WILL SALUTE IF YOU DON'T POLLUTE</b> 	<b>YOU ARE UNDER CCTV SURVEILLANCE</b> 	

The Medical Institutions campus maintains a very well developed green carpet throughout the campus.



Recently more arrangements have been made for better parking.



Reduction of carbon foot prints in the atmosphere is a challenging task

A complete tree survey has been completed with the help of eminent botanists and students in the whole of Medical Institutions campus. The survey is vital in order to understand the distribution of plants and their level of carbon uptake.

#### 4.9. **SMART GOVERNANCE**

##### Existing Facilities:

- Periodical seminars & conferences,
- Faculty development programme
- Hands on training
- Skill development programs (*computer, Tally, Simulation, Software, Access to data bases*)
- JSSU Online Platform
- Computers / Laptops / Printers / Scanners / Photocopier's / Projectors etc., are provided based on requirement to the administrative & supportive staff and for the Depts., as required.

## Strengths of the Institution – A Health Sciences focussed Institution

**Dynamic and visionary leadership** provided by the authorities and officers of the University

**Good governance driven by the expertise and wisdom** of eminent personalities serving on the Board of Management, Academic Council, Finance committee, Planning, and Monitoring Board and other authorities

**Providing leadership** regionally, nationally and internationally

**Academic excellence** as exemplified by excellent human resource, infrastructure, and contemporary curriculum

**Faculty who are distinguished**, committed and from across the country National and International student diversity that serves as the melting pot of cultures

**Distinguished leaders in academics, research, and policy** as Adjunct and Visiting faculty National and International Collaborations with eminent universities, institutions, and organizations

**Research excellence** that is exemplified by the PI-driven nationally and internationally funded research, publications, patents and research programs leading to the award of Ph.D.

**Infrastructure excellence** that meets the academic, research, residential, extension, and student support needs

**Financial sustainability and administrative autonomy** that supports the continued growth of the University

**Students & Alumni** have always been instrumental in supporting the academic and research activities. The alumni are well placed as entrepreneurs, academicians & researchers and they bring laurel to institution through awards and achievements.

**Global Engagement** through strategic MoU's, staff / student exchange programs, International accreditations and outreach

**Outreach** through the State of the art Hospital with facilities catering to the diverse health needs and supporting the teaching, training and research programs of the University

#### 4.10. **SMART FOOD & HEALTH**

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 in to 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.
- To serve sustainable food and to reduce plate waste.

#### **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>.
- The Deputy Registrar has overall responsibility for the implementation and delivery of the policy within The University’s catering department. However, different colleges and departments shall have particular responsibility for managing aspects relevant to the department.
- Responsibility for application of the principles and practical delivery of this policy within the college in general lies with the Administrative Officers.
- Responsibility for application of the principles and practical delivery of this policy within catering services lies with the hostel wardens, catering managers and teams.
- JSSAHER shall promote sustainable food to customers to increase awareness and sales through meetings and workshops.
- Any changes to our 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 to customers.
- 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
- 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 wild species, and avoid damaging natural resources.
- Support a culture of healthy eating
- Provide social benefits, such as good quality food, safe and healthy products, and educational opportunities
- Sustainable procurement is partly about buying and sourcing green products but it's also about ensuring energy and resource efficiency as well as long term cost effectiveness.
- Fair-trade on better prices, decent working conditions and local sustainability.
- Saving costs measured across the whole lifecycle of a product
- Decisions on procurement and accreditation should 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.

JSS Institute hostels are well known for its aesthetic food and hygiene. The Institute follows strict vegetarian food both in hostels and food court. A regular check on food and hygiene is carried out to ensure safe health of the students.

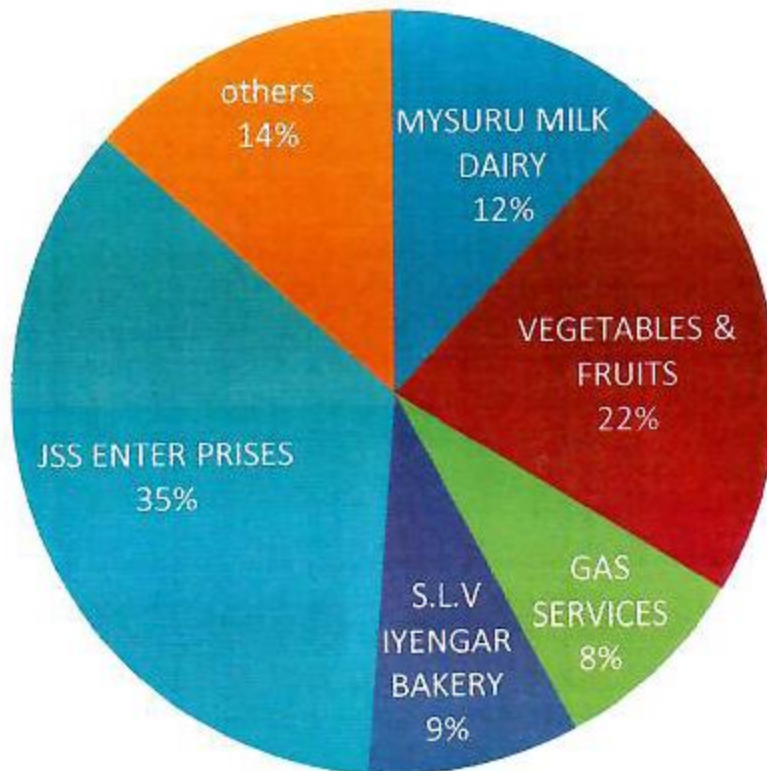
### Existing Facilities:

- Food Court (*80 seating capacity*)
- Coffee vending machine
- JSS Health Center
- Mess / Kitchen ( 3+1 +1 Nos)
- Staff Dining Hall – 2 no's. (JSSU)
- Dining Halls @ Hostels, Guest House, Food Court (5 no's.)

JSS Institutions are already contributing to the reduction of carbon foot print by following strict vegetarian food habits throughout the entire campus.

Further, it is necessary to give orientation to the students regarding the practice of low carbon food and diet.

Hostel officials, care takers and cooks are being trained on the importance of cleanliness and hygiene in the kitchen premises. JSS Institutions ensure that quality food commodities and raw materials are procured from approved vendors and local clean markets.



The pie chart depicts the procurement strategies of JSS AHER

## Summary

### **BUILDING & INFRASTRUCTURE**

- Accessibility
- Safety and Security
- Energy efficient
- Rain Water Harvesting
- Walkable campus
- Bicycle
- Sustainable Transport
- Road network

### **SAFETY & SECURITY**

- CCTV surveillance
- Fire alarms
- Fire fighting
- Peripheral safety
- Visitor management system
- Biometric system
- Anti-ragging

### **SERVICES & CONNECTIVITY**

- Online services
- Amenities- Bank, Food court, Stationery, pharmacy
- Wi-Fi Services

### **EDUCATION, LEARNING & DIGITIZATION**

- Smart Classroom
- E-Resources
- Wi-Fi Connectivity
- ICT Enabled services
- Modular Laboratories
- Innovation Centre
- Virtual Class and Laboratories
- Outreach Programmes

### **WASTE, WATER & AIR MANAGEMENT**

- Sanitation and cleanliness
- STP
- Solid waste management
- Plastic waste management
- E-waste management
- Automatic sensor taps
- Air monitoring system

### **GREEN ENVIRONMENT RESILIENCE**

- Green Campus
- Landscaping
- Preserving open space
- Soil erosion control
- Ground water recharging

### **SPORTS & RECREATION**

- Playgrounds
- Sport facilities- Indoor and Outdoor
- Recreational space
- Open Gym
- Yoga facilities
- Amusement park
- Open air theatre
- Swimming pool

### **UTILITIES**

- Solar Projects
- Smart lighting System
- Emergency power backup
- Smart micro grids
- Bio-gas plant
- Kiosks

### **GOVERNANCE**

- ERP
- Less paper Office
- Training and Development
- ART- Accountability, Responsibility, Transparency

### **FOOD & HEALTH**

- Wellness Centre
- Health Centre
- Potable water facility
- Personal Hygiene
- Nutritional Values
- Dietary

### **Short Term Goal**

Most of the elements related to Smart Campus have been achieved. However, it can be claimed thus only after a valid certification that needs to be carried out by an authorized third party.

Godrej Services has been identified as one of such client to carry out the validation process in line with Institutional Green Building Council (IGBC).

### **IGBC Green Campus Rating System**

- ❖ It is applicable for buildings which are in design stage as well as operational
- ❖ Is applicable for campus with multi-functionality buildings
- ❖ Is majorly done for addressing the infrastructure design of the campus
- ❖ Influences the individual buildings to opt for green building rating program
- ❖ Addresses the complete water, energy and waste management on a holistic approach

### **IGBC GREEN CAMPUS – CREDIT CATEGORIES**

S.No.	Category	Points
1	Site Planning & Management	22
2	Sustainable Transportation	11
3	Water Conservation	18
4	Energy Efficiency	21
5	Material & Resources	03
6	Health & Well being	06
7	Green Education (GE)	03
8	Innovative Practices	06
	<b>Total</b>	<b>90</b>

## **IGBC GREEN CAMPUS – SITE PLANNING & MANAGEMENT**

<b>Credits</b>	<b>Category</b>
<b>SPM MR 1</b>	<b>Green Buildings within the campus</b>
<b>SPM MR 2</b>	<b>Soil Erosion control</b>
<b>SPM Credit 1</b>	<b>Green Buildings within the campus</b>
<b>SPM Credit 2</b>	<b>Site Preservation</b>
<b>SPM Credit 3</b>	<b>Green Cover &amp; Vegetation</b>
<b>SPM Credit 4</b>	<b>Heat Island Reduction, Non-roof</b>
<b>SPM Credit 5</b>	<b>Outdoor Light Pollution Reduction</b>

## **IGBC GREEN CAMPUS – SUSTAINABLE TRANSPORTATION & WATER CONSERVATION**

<b>Credits</b>	<b>Category</b>
<b>Sustainable Transportation</b>	
<b>ST 1</b>	<b>Pedestrian Network</b>
<b>ST 2</b>	<b>Bicycle Lane Network</b>
<b>ST 3</b>	<b>Access to sustainable transport</b>
<b>Water Conservation</b>	
<b>WC MR 1</b>	<b>Rain water harvesting</b>
<b>WC Credit 1</b>	<b>Rain water harvesting</b>
<b>WC Credit 2</b>	<b>Landscape Design</b>
<b>WC Credit 3</b>	<b>Management of irrigation system</b>
<b>WC Credit 4</b>	<b>Waste water treatment &amp; Reuse</b>
<b>WC Credit 5</b>	<b>Optimise water use for construction</b>
<b>WC Credit 6</b>	<b>Water metering</b>

### **IGBC GREEN CAMPUS – ENERGY EFFICIENCY**

<b>Credits</b>	<b>Category</b>
<b>Energy Efficiency</b>	
<b>EE Credit 1</b>	<b>Energy Efficiency in Infrastructural Equipment</b>
<b>EE Credit 2</b>	<b>On-Site Renewable Energy</b>
<b>EE Credit 3</b>	<b>Off-Site Renewable Energy</b>
<b>EE Credit 4</b>	<b>Energy Metering</b>

### **IGBC GREEN CAMPUS – MATERIALS & RESOURCE MANAGEMENT**

<b>Credits</b>	<b>Category</b>
<b>Material &amp; Resource Management</b>	
<b>MRM Credit 1</b>	<b>Segregation of Waste</b>
<b>MRM Credit 2</b>	<b>Organic Waste Management</b>
<b>MRM Credit 3</b>	<b>Handling of Construction Waste</b>
<b>MRM Credit 4</b>	<b>Local Materials</b>

### **IGBC GREEN CAMPUS – HEALTH & WELL BEING**

<b>Credits</b>	<b>Category</b>
<b>Health &amp; Well Being</b>	
<b>HWB MR 1</b>	<b>Tobacco Smoke Control</b>
<b>HWB Credit 1</b>	<b>Basic Amenities</b>
<b>HWB Credit 2</b>	<b>Health &amp; Well Being Facilities</b>
<b>HWB Credit 3</b>	<b>Universal Design</b>
<b>HWB Credit 4</b>	<b>Basic Facilities for Construction</b>

## IGBC GREEN CAMPUS – GREEN EDUCATION

Credits	Category
Green Education	
GE Credit 1	Green Education
GE Credit 2	Green Campus Guidelines

## IGBC GREEN CAMPUS – CERTIFICATION LEVELS

Certification Level	New Campus	Existing Campus	Recognition
Certified	40 - 49	36 - 44	Best Practices
Silver	50 - 59	45 - 53	Outstanding Performance
Gold	60 - 74	54 - 66	National Excellence
Platinum	75 - 100	67 - 90	Global Leadership

### Budget

Accordingly, financial implications are as below:

1. Feasibility study, Facilitation, Energy modeling and Fundamental & Enhanced commissioning fee is proposed for **Rs. 6,40,000/-**.
2. **IGBC Fee details:**
  - Registration fee ---> Rs. 30,000
  - Certification fee ---> Rs. 3,68,000
  - **TOTAL ---> Rs. 3,98,000**

Thus, the total financial implication would be around **Rs. 10,38,000/-**

### Time Line

Gold certification could be attained in a period of 6 months.

## Long Term Goals

### **Aligning the Key Elements of Smart Campus in line with the Sustainable Development Goals (SDGs) of the UNO**

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. Today, the Division for Sustainable Development Goals (DSDG) in the United Nations Department of Economic and Social Affairs (UNDESA) provides substantive support and capacity-building for the SDGs and their related thematic issues, including water, energy, climate, oceans, urbanization, transport, science and technology, the Global Sustainable Development Report (GSDR), partnerships and Small Island Developing States. DSDG plays a key role in the evaluation of UN system wide implementation of the 2030 Agenda and on advocacy and outreach activities relating to the SDGs. In order to make the 2030 Agenda a reality, broad ownership of the SDGs must translate into a strong commitment by all stakeholders to implement the global goals.

## **SUSTAINABLE DEVELOPMENT GOALS**







<b>S. No</b>	<b>SMART CAMPUS KEY ELEMENTS</b>	<b>SUSTAINABLE DEVELOPMENT GOALS (SDGs)</b>
1	<b>BUILDINGS &amp; INFRASTRUCTURE</b>	<b>SDG 9 (Industry, Innovation &amp; Infrastructure), SDG 11 (Sustainable Cities &amp; Communities)</b>
2	<b>EDUCATION, LEARNING &amp; DIGITISATION</b>	<b>SDG 4 (Quality Education), SDG 15 (Life on Land)</b>
3	<b>SPORTS &amp; RECREATION</b>	<b>SDG 3 (Good Health &amp; Well- Being)</b>
4	<b>SAFETY &amp; SECURITY</b>	<b>SDG 16 ( Peace, Justice &amp; Strong Institutions)</b>
5	<b>WASTE, WATER, AIR MANAGEMENT</b>	<b>SDG 6 (Clean Water &amp; Sanitation)</b>
6	<b>UTILITIES - WATER, GAS, ELECTRICITY</b>	<b>SDG 7 (Affordable &amp; Clean Energy), SDG 12 (Responsible Consumption &amp; Production)</b>
7	<b>SERVICES, CONNECTIVITY &amp; RETAIL</b>	<b>SDG 12 (Responsible Consumption &amp; Production)</b>
8	<b>GREEN ENVIRONMENT RESILIENCE</b>	<b>SDG 13 (Climate Action), SDG 14 (Life Below Water)</b>
9	<b>GOVERNANCE</b>	<b>SDG 1 (No Poverty), SDG 5 (Gender Equality), SDG 8 (Decent Work &amp; Economic Growth), SDG 10 (Reduced Inequalities), SDG 17 (Partnerships for the Goals)</b>
10	<b>FOOD &amp; HEALTH</b>	<b>SDG 2 (Zero Hunger), SDG 3 (Good Health &amp; Well-Being)</b>

### SUSTAINABLE DEVELOPMENT GOAL RANKS OF JSSAHER

SDG No.	GOAL	2019	2020 (India)	2020 (Global)
	<b>Overall Ranking</b>	<b>101 - 200</b>	<b>3</b>	<b>201 - 300</b>
<b>1</b>	<b>No Poverty</b>	-	<b>2</b>	<b>60</b>
<b>2</b>	<b>Zero Hunger</b>	-	<b>2</b>	<b>101 - 200</b>
<b>3</b>	<b>Good Health and Well Being</b>	<b>46</b>	<b>1</b>	<b>20</b>
<b>4</b>	<b>Quality Education</b>	<b>201 - 300</b>	<b>13</b>	<b>401 - 600</b>
<b>5</b>	<b>Gender Equality</b>	<b>201+</b>	<b>2</b>	<b>101 - 200</b>
<b>6</b>	<b>Clean Water &amp; Sanitation</b>	-	<b>12</b>	<b>101 - 200</b>
<b>7</b>	<b>Affordable &amp; Clean Energy</b>	-	<b>7</b>	<b>101 - 200</b>
<b>8</b>	<b>Decent Work and Economic Growth</b>	-	<b>6</b>	<b>400+</b>
<b>9</b>	<b>Industry, Innovation and Infrastructure</b>	<b>201 - 300</b>	<b>12</b>	<b>400+</b>
<b>10</b>	<b>Reduced Inequalities</b>	<b>101 - 200</b>	<b>7</b>	<b>301 - 400</b>
<b>11</b>	<b>Sustainable Cities and Communities</b>	<b>101 - 200</b>	<b>5</b>	<b>301 - 400</b>
<b>12</b>	<b>Responsible Consumption &amp; Production</b>	<b>16</b>	<b>6</b>	<b>201 - 300</b>
<b>13</b>	<b>Climate Action</b>	-	<b>2</b>	<b>101 - 200</b>
<b>14</b>	<b>Life Below Water</b>	-	-	-
<b>15</b>	<b>Life on Land</b>	-	<b>3</b>	<b>73</b>
<b>16</b>	<b>Peace, Justice and Strong Institutions</b>	<b>91</b>	<b>8</b>	<b>400+</b>
<b>17</b>	<b>Partnership for the Goals</b>	<b>201 - 300</b>	<b>5</b>	<b>201 - 300</b>

## Roadmap for attaining the Sustainable Development Goals through Smart Campus initiatives

1. Awareness
2. Advocacy at institution level
3. Implementation at institution level and association with local bodies
4. Monitoring
5. Where do we go from here?

The above listed strategies have already been suggested by Global Taskforce for Regional and local Governments to support and attain the 2030 agenda.



JSS Academy of Higher Education & Research (JSSAHER)  
Mysuru, Karnataka, India

## **Social Responsibility Statement**

*‘Touching the lives of Millions’*



Proud moment

**His Holiness Swamiji-Chancellor with  
Excellency Late Dr. APJ Abdul Kalam,  
Former President of India**

JSSAHER’S Social Responsibility is an approach of ethical and intelligent management, which involves both its impact on its human, social and natural context, and its active role on the promotion of Sustainable Human Development of the country. Within this approach, “Sustainable Campus” is a strategy that strives to reduce the ecological footprint of the Institution via a rational use of resources and to educate the JSSAHER community on the ethics of sustainability.

JSSAHER with the legacy of more than 1000 years of its Founding organization Sri Suttur Math and the sponsoring society–JSS Mahavidyapeetha is acutely aware of its social responsibilities and is confident in stating that it already goes well beyond what is expected of an organization.

## *JSSAHER and its Social Responsibility*

Although Corporate Social Responsibility (CSR) is a relatively new concept, JSSAHER has embraced CSR principles based on the contributions made for several decades, particularly at a local and regional level. An organisation's internal and external practices can influence their employees, customers, partners and environment in a positive manner.

This document highlights our commitment to CSR locally, regionally, nationally and internationally. The JSSAHER's vision is nurture and develops the talents of students and to create applicable knowledge in order to support social and economic advancement.

Social Responsibility is part of the JSSAHER'S Strategic plan and is important to our Institution, Faculty and students and aims at making Organizational, Cognitive, social and educational impact.

*JSSAHER is committed –*

1. To promote ethical standards to be adopted by students, staff and other members of JSSAHER community.
2. To raise the educational aspirations of people in the community, as well as across the country and encourage their greater participation in higher education.
3. To encourage an inclusive environment without barriers to achievement, where students and staff are highly valued, based on mutual respect.
4. To provide a Higher Education Institute campus environment and range of facilities, both educational and recreational, which are attractive, accessible and stimulating.
5. To integrate with and support the needs of our community and our region.
6. To embrace environmental responsibility and sustainable development principles, to make a positive contribution to urban regeneration and to ensure that any adverse environmental impact of our activities is minimized.

## Touching the lives....

### *To the students*

1. As a most respected Higher Education Institute in the health sciences attract students from a range of backgrounds nationally and internationally.
2. Listening and responding to the student voice, with a shared understanding of our mutual responsibilities.
3. Providing a range of student support that covers all issues including support too low-income group students.
4. Student preparation towards a responsible citizenship for a Sustainable Development.

### *To the staff*

1. Adopt best practices in its Human Resources Management policies and Practices.
2. Assist staff to develop their full potential as members of the JSSAHER's workforce and provide opportunities for professional development.
3. Observe the fundamental tenets of human rights, safety and non-discrimination.
4. Provide fair compensation and implement minimum wages policy.
5. Involve employees in the decision-making processes, where appropriate.
6. Providing opportunities for staff to undertake projects with local communities.

### ***To our environment***

1. Ensure that the developments in JSS AHER are sustainable and do not have a negative impact on the environment.
2. Promote the concepts of the 3Rs of Reduction, Reuse and Recycling and eliminate, where possible, the use of non-degradable materials.
3. Aim for a continuous reduction of the carbon footprint of the Institution.
4. Provide equipment, training and other resources to ensure a healthy and safe environment for the students and staff.
5. Continuously work and evolve environmental improvements in the way we manage our transport, waste and energy.

### ***To our City and our community***

1. To work with the City of Mysore and regional partners to raise the health profile of the City and the Mysore and neighboring districts ; and in partnership help secure the economic, health, social and cultural regeneration of the City and region.
2. Enriching the Institution and City socially, culturally and economically, with our diverse and vibrant student population.
3. Make significant and major contributions through our Faculty to the Social Responsibility agenda including:
  - the training of the future health professional workforce
  - the ongoing support for health professionals
  - support JSS Hospital to provide access to quality healthcare at affordable costs
  - Nurture and contribute to research that impacts healthcare and health policies and makes significant contribution to national and global health.
4. Working with young people in local schools:
  - to discuss health and science and its relevance to their everyday lives
  - to inspire them to consider careers in science and health and apply to Institution in the future
  - to devise creative and fun activities to help engage them
5. By involving the public/patients in our work to improve the quality of our teaching and healthcare delivery.



## **Proud to be touching the lives of millions!**

Being socially responsible, be it as an individual, a group, or an organization is something we believe in very strongly and it makes us proud, as a Higher Education Institution, to highlight our commitment in this area. JSSAHER is acutely aware of its responsibilities to its community, its city and its wider environment and the way it touches the 'Lives of Millions'.

### ***JSS Academy of Higher Education & Research***

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