

## 2.2

# Campus Food Wastage

### 2.2.1 Campus Food waste Tracking

**MRIIRS Weblink to SDG 2:**

<https://mriirs.edu.in/sdg02-zero-hunger/>

## Campus Food Waste tracking

MRIIRS do follow a food wastage tracking program based on Sustainable Food policy.

**Food nutrition and wastage audit committee** has been constituted at the Institute level as per the '**Sustainable Food Policy of MRIIRS' laid down in 2018.**

The roles and responsibilities of this committee includes conduct of awareness sessions to minimize the food wastage, collate and analyze the food wastage records, draft the strategies to minimize the food waste, sustainable disposition of generated food waste, monitor waste food management, to ensure the availability of sustainable, healthy and affordable food choices on campus, conduct awareness on sustainable farming practices, training on sustainable technical agricultural aspects, etc.

This food waste tracking process provides better identification of areas for improvement and makes team members more aware about the food wastage. Food waste at all the outlets of the campus including Hostel Mess is recorded on the daily basis through MIS and kept in record for making future strategies. The analysis of food waste is evaluated and based on the statistics further measures including rigorous sensitization towards NO FOOD WASTE etc. are planned.

### **As evidence in support to 2.2.1, following details have been provided:**

- A. Process of food waste tracking
- B. Sample monthly records as obtained through MIS have been provided.
- C. Management of Food Waste
- D. Sustainable Food Policy of MRIIRS

All the data are available in public domain through web site of MRIIRS.

## A. Process of food waste tracking at MRIIRS

MRIIRS do follow a food wastage tracking program based on Sustainable Food policy. This food waste tracking process provides a better identification of areas for improvement and makes team members more aware about the food wastage.

- ✓ **Food nutrition and wastage audit committee** has been constituted at the Institute level as per the '**Sustainable Food Policy of MRIIRS**' laid down in **2018**.
- ✓ **Food waste at all the outlet of the campus is recorded on the daily basis through MIS** ( <https://forms.gle/ZCF165Rda1wPEQcu6> ) as per the Annexure B of Sustainable Food Policy and kept in record for making future strategies.
- ✓ The **access to MIS has been provided at the end of member secretary** (presently Dr. Mahak Sharma- Associate Professor, FAHS) of **Food nutrition and wastage audit committee of MRIIRS**.
- ✓ All the food waste records as obtained on daily basis through MIS are analyzed during the monthly meeting of **Food nutrition and wastage audit committee of MRIIRS**. This analysis majorly includes:
  - Analyzing the amount of dry and wet food waste
  - Amount of food waste during transportation
  - Management of food waste at the respective outlets which may include amount of food waste sent for Animal Feed, amount of food waste sent for Organic Compost, amount of food waste sent to shelter homes through Dr. O. P. Bhalla Foundation, amount of food waste sent to Food Unit of Manav Rachna Innovation and Incubation Centre.
- ✓ The **recommendation of this committee** as provided on the food wastage reports of are shared with the respective stakeholders for further interventions.

The analysis of food waste is thus evaluated as per the above process and based on the statistics further measures including rigorous sensitization towards NO FOOD WASTE etc. are planned.

**Further, following regular measures have been incorporated to ensure the minimized food wastage:**

We at Manav Rachna Education Institutions aim to minimizing the food wastage in order to overcome the global issue.

- Students and all peers are always sensitized about the food wastage. Multiple processes have been designed and being followed to ensure minimization of food wastage.
- Cyclic menu helps in planning the material supply and inventory.
- Raw food material and ingredients are always being procured from definite vendors which have already being identified on the basis of their quality service.
- Portion control dishes are being used in order to control the food portion to minimize the wastage.
- Regular audits are also done to understand the wastage of specific food type if any.
- We also use to recycle the amount of food waste to create compost and to feed stray animals as the motto of zero hunger exist to help out every species in any way possible.
- Sensor taps have been installed to control water wastage as well. Dish washers have been installed for second screening of food wastage.
- Deep and huge freezers have also been installed to store surplus raw and processed food to avoid food wastage.
- Regular audits and inspections from internal committee also ensure the follow up of the sustainable food policies in the most efficient manner.

**1. Regular food inventory audit**

For instance, based on the statistics, it could be concluded that an excessive amount of expired produce is being disposed of. In order to ensure that products are used before they expire, the food nutrition and wastage audit committee decides to alter how frequently the team analyses inventory. This makes a significant contribution to achieving future goals and expectations about food waste.

## 2. Daily Student Wastage Awareness

Daily student wastage awareness notice boards are updated to sensitize the students on Food Wastage, the geotagged photograph of notice boards for daily student wastage awareness is as provided below:



**DAILY STUDENT WASTAGE AWARENESS**  
**(Notice Board to make student aware about wastage)**

### 3. Awareness through Banners/rallies/Awareness Sessions across the Campus:



Food waste management is sustainable and advantageous for both the economy and the environment. By identifying strategies to reduce waste, we are able to reduce the energy and labour expenses associated with tossing out good food and products. The amount of food that ends up in local landfills is decreased while also safeguarding the environment through the reduction of food waste through production methods and overproduction measures. By opting and following these measures we were able to not only minimize the food waste but also to identify the best sustainable ways possible to manage the wet food waste.

## **B. Sample monthly records as obtained through MIS at MRIIRS**

Food waste at all the outlets of the campus including Hostel Mess is recorded on the daily basis through MIS and kept in record for making future strategies. Sample monthly records of Food wastage in Kgs are provided for the following food outlets:

- Annexure 1: Boys Mess
- Annexure II: On-Campus Food Outlet of MRIIRS – SUBWAY
- Annexure III: On-Campus Food Outlet of MRIIRS- Chai Garam
- Annexure IV On-Campus Food Outlet of MRIIRS- Red Brick Bistro

Management of food waste at the respective outlets which includes whether

- food waste sent for **Animal Feed,**
- food waste sent for **Organic Compost,**
- food waste sent to **shelter homes through Dr. O. P. Bhalla Foundation,**
- food waste sent to **Food Unit of Manav Rachna Innovation and Incubation Centre** is also consolidated in the Remarks section of the report.

SDG- 2 ZERO HUNGER



**Annexure I: RECORDS OF BOY MESS (EVERY MONTH) with Action Taken**

Manav Rachna International Institute of Research and Studies								
BOYS MESS RECORD								
					Month: August 2022			
FOOD WASTAGE RECORD								
DATE	PAX	Dry wastage/kg	Wet wastage/kg	ACTION TAKEN	REMARKS			
Aug-01	200	10	19	Educated Students	50% used for Animal feeds. & 50% used fr compost			
Aug-02	190	12	19	Spoke to warden				
Aug-03	180	13	18	Educated Students				
Aug-04	188	14	21	Educated Students				
Aug-05	150	15	20	Need Smaller Plates				
Aug-06	160	15	21	Educated Students				
Aug-07	150	16	22	Educated Students				
Aug-08	200	14	20	Educated Students				
Aug-09	180	13	18	Faculty duty to check				
Aug-10	170	14	23	Educated Students				
Aug-11	200	15	25	Report to Operatinal Manage				
Aug-12	160	17	13	Educated Students				
Aug-13	188	18	14	Spoke to warden				
Aug-14	170	9	14	Educated Students				
Aug-15	160	12	15	Educated Students				
Aug-16	155	14	20	Educated Students				
Aug-17	145	12	21	Use ladle for portioning				
Aug-18	145	10	20	Educated Students				
Aug-19	150	12	23	Educated Students				
Aug-20	166	13	22	Report to Operational Manag				
Aug-21	190	14	25	Educated Students				
Aug-22	170	15	19	Report to Operational Manag				
Aug-23	188	15	20	Educated Students				
Aug-24	190	16	19	Report to Operational Manag				
Aug-25	190	12	18	Educated Students				
Aug-26	150	12	19	Report to Operational Manag				
Aug-27	190	15	19	Educated Students				
Aug-28	190	15	20	Report to O. Manager				
Aug-29	178	15	19	Educated Students				
Aug-30	180	14	21	Spoke to warden and student				
Aug-31	190	10	15	Educated Students				
<b>Total</b>	<b>5413</b>	<b>421</b>	<b>587</b>					
◀ ▶		Jan 2022	Feb	March	April	May	June	Ju



## SDG- 2 ZERO HUNGER



### Annexure II: RECORDS OF VARIOUS FOOD OUTLET OF MRIIRS (EVERY MONTH)

- Analysis Food Wastage at Subway**

Manav Rachna International Institute of Research and Studies					
Subway					
FOOD WASTAGE RECORD					
DATE	PAX	Dry wastage/kg	Wet wastage/kg	ACTION TAKEN	REMARKS
01.03.2022	102	4	0	Creating awareness among customers	Food wastage was used for Animal feed
02.03.2022	98	4	2	Creating awareness among customers	
03.03.2022	105	4.5	2.5	Creating awareness among customers	
04.03.2022	120	6	2	Creating awareness among customers	
05.03.2022	125	6	2	Creating awareness among customers	
06.03.2022	Sunday	0	0		
07.03.2022	97	3.5	1	Creating awareness among customers	
08.03.2022	109	5	2.5	Creating awareness among customers	
09.03.2022	115	6	4.5	Creating awareness among customers	
10.03.2022	165	7	3	Creating awareness among customers	
11.03.2022	156	6.5	3.5	Creating awareness among customers	
12.03.2022	Closed	0	0		
13.03.2022	Sunday	0	0		
14.03.2022	99	4	1.5	Creating awareness among customers	
15.03.2022	106	4.5	2	Creating awareness among customers	
16.03.2022	189	7	3.5	Creating awareness among customers	
17.03.2022	180	7	3	Creating awareness among customers	
18.03.2022	Closed	0	0		
19.03.2022	Closed	0	0		
20.03.2022	Sunday	0	0		
21.03.2022	106	4	2.5	Creating awareness among customers	
22.03.2022	110	5	2.5	Creating awareness among customers	
23.03.2022	115	5.5	3	Creating awareness among customers	
24.03.2022	78	3	1	Creating awareness among customers	
25.03.2022	97	4	4	Creating awareness among customers	
26.03.2022	Closed	0	0		
27.03.2022	Sunday	0	0		
28.03.2022	99	4	2	Creating awareness among customers	
29.03.2022	102	4	2.5	Creating awareness among customers	
30.03.2022	122	4.5	2.5	Creating awareness among customers	
31.03.2022	68	2	1	Creating awareness among customers	
<b>Total</b>	<b>2663</b>	<b>111</b>	<b>54</b>		

# SDG- 2 ZERO HUNGER



## Annexure III: Analysis of Food Wastage at Food Outlet Chai Garam

	A	B	C	D	E	F	G	H	I	
1										
2	<b>Manav Rachna International Institute of Research and Studies</b>									
3	<b>Chai Garam</b>									
4										
5	<b>FOOD WASTAGE RECORD</b>									
6										
7	DATE	PAX	Dry wastage/kg	Wet wastage/kg	ACTION TAKEN	REMARKS				
8	01.05.2022	Sunday	0	0	0	Food wastage was used for Animal feed				
9	02.05.2022	60	3	0	Portion Control and sensitizing customer					
10	03.05.2022	95	2	1	Portion Control and sensitizing customer					
11	04.05.2022	89	3.5	1	Portion Control and sensitizing customer					
12	05.05.2022	50	2.5	0	Portion Control and sensitizing customer					
13	06.05.2022	54	2.5	0	Portion Control and sensitizing customer					
14	07.05.2022	Closed	0	0						
15	08.05.2022	Sunday	0	0						
16	09.05.2022	97	4	2	Portion Control and sensitizing customer					
17	10.05.2022	78	3.5	1	Portion Control and sensitizing customer					
18	11.05.2022	86	3.5	1.5	Portion Control and sensitizing customer					
19	12.05.2022	60	3	2	Portion Control and sensitizing customer					
20	13.05.2022	55	2.5	1	Portion Control and sensitizing customer					
21	14.05.2022	54	2.5	1.5	Portion Control and sensitizing customer					
22	15.05.2022	Sunday	0	0						
23	16.05.2022	42	2	0	Portion Control and sensitizing customer					
24	17.05.2022	56	2.5	0	Portion Control and sensitizing customer					
25	18.05.2022	46	2	0	Portion Control and sensitizing customer					
26	19.05.2022	56	1.5	0	Portion Control and sensitizing customer					
27	20.05.2022	78	3	2.5	Portion Control and sensitizing customer					
28	21.05.2022	Closed	0	0						
29	22.05.2022	Sunday	0	0						
30	23.05.2022	95	4	2.5	Portion Control and sensitizing customer					
31	24.05.2022	94	4	1	Portion Control and sensitizing customer					
32	25.05.2022	56	2	0	Portion Control and sensitizing customer					
33	26.05.2022	79	3	1.5	Portion Control and sensitizing customer					
34	27.05.2022	64	0.5	3	Portion Control and sensitizing customer					
35	28.05.2022	34	1.5	0.5	Portion Control and sensitizing customer					
36	29.05.2022	Sunday	0	0						
37	30.05.2022	59	1	2	Portion Control and sensitizing customer					
38	31.05.2022	67	1.5	1	Portion Control and sensitizing customer					
39	Total	1604	61	25						
40										



**Annexure IV: Analysis Food Wastage at Food Outlet Red Brick Bistro**

Manav Rachna International Institute of Research and Studies  
Red Brick Bistro

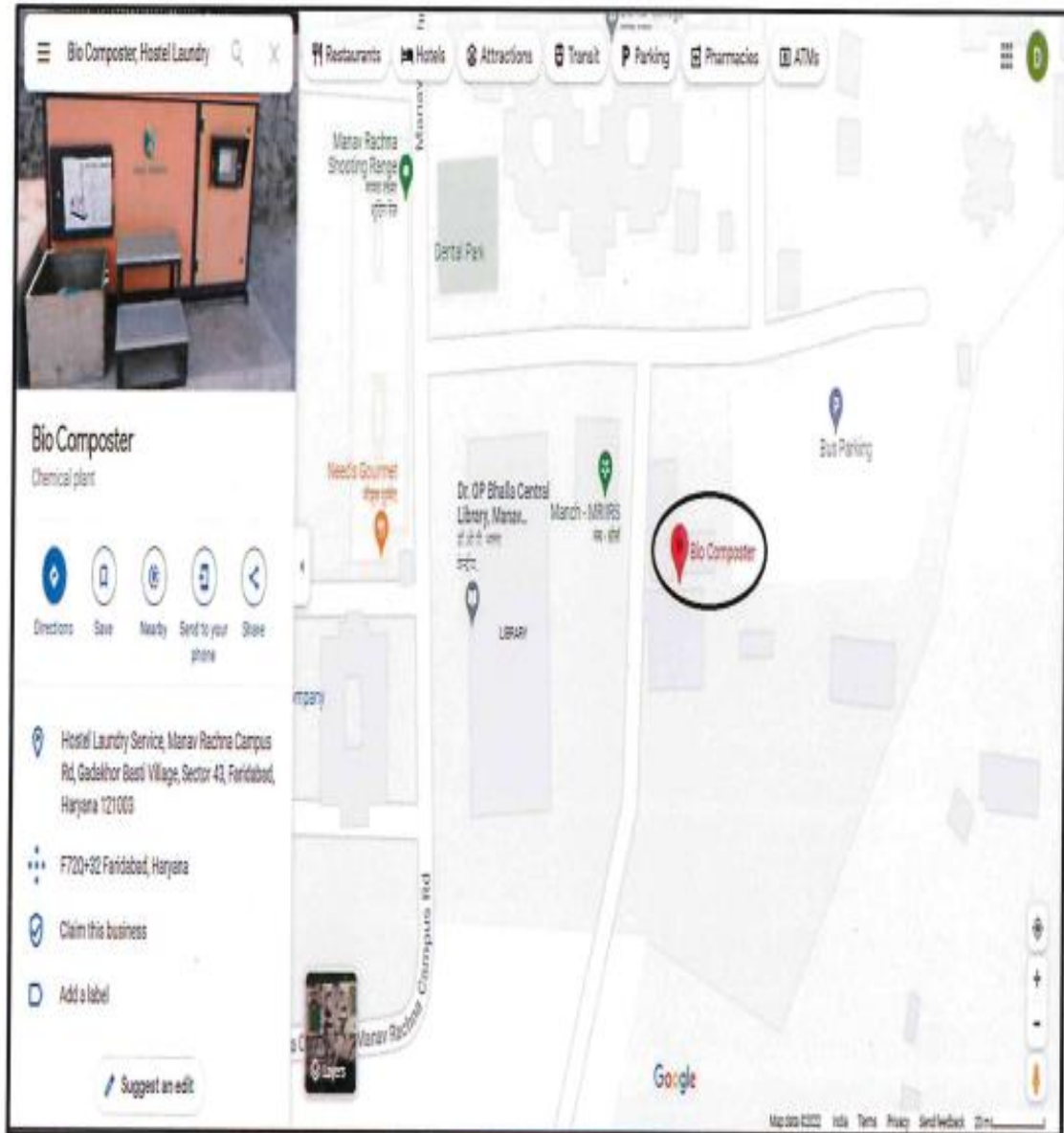
**FOOD WASTAGE RECORD**

DATE	PAX	Dry wastage/kg	Wet wastage/kg	ACTION TAKEN	REMARKS
01.06.2022	70	3	1	Animal Feed, Composting the waste & Sensitizing Customers	Food wastage was used for Animal feed and Composting
02.06.2022	68	3	0	Animal Feed, Composting the waste & Sensitizing Customers	
03.06.2022	75	2	0	Animal Feed, Composting the waste & Sensitizing Customers	
04.06.2022	46	1	0		
05.06.2022	Sunday	0	0	Animal Feed, Composting the waste & Sensitizing Customers	
06.06.2022	75	3	0.5	Animal Feed, Composting the waste & Sensitizing Customers	
07.06.2022	78	2.5	0	Animal Feed, Composting the waste & Sensitizing Customers	
08.06.2022	95	2.5	1.5	Animal Feed, Composting the waste & Sensitizing Customers	
09.06.2022	58	0.5	0	Animal Feed, Composting the waste & Sensitizing Customers	
10.06.2022	86	2.5	0		
11.06.2022	Closed	0	0		
12.06.2022	Sunday	0	2	& Sensitizing Customers	
13.06.2022	86	1	1	& Sensitizing Customers	
14.06.2022	84	2	0	& Sensitizing Customers	
15.06.2022	56	2	2	Animal Feed, Composting the waste & Sensitizing Customers	
16.06.2022	75	3	2	Animal Feed, Composting the waste & Sensitizing Customers	
17.06.2022	78	1.5	0.5	Animal Feed, Composting the waste & Sensitizing Customers	
18.06.2022	48	2	1	Animal Feed, Composting the waste & Sensitizing Customers	
19.06.2022	Sunday	0	0		
20.06.2022	96	1.5	0.5	Animal Feed, Composting the waste & Sensitizing Customers	
21.06.2022	97	3	2	Animal Feed, Composting the waste & Sensitizing Customers	
22.06.2022	94	3	1	Animal Feed, Composting the waste & Sensitizing Customers	
23.06.2022	56	3	2	Animal Feed, Composting the waste & Sensitizing Customers	
24.06.2022	64	2.5	0	Animal Feed, Composting the waste & Sensitizing Customers	
25.06.2022	Closed	0	0		
26.06.2022	Sunday	0	0		
27.06.2022	84	2	1.5	Animal Feed, Composting the waste & Sensitizing Customers	
28.06.2022	59	2.5	0.5	Animal Feed, Composting the waste & Sensitizing Customers	
29.06.2022	56	2.5	0.5	Animal Feed, Composting the waste & Sensitizing Customers	
30.06.2022	54	0.5	1.5	Animal Feed, Composting the waste & Sensitizing Customers	
Total	1738	52	21		

## **C. Management of Food Waste**

**Manav Rachna International Institute of Research and Studies,  
(Deemed to be University)**

**Geotagged Photographs of Biocomposter**



**Biocomposter -Geotag Link to Google Maps**

**On-Campus Bio-composter installed to manage Food Waste**



Latitude: 28.450194048796135  
Longitude: 77.28759945499488

**Biocomposter**

Latitude: 28.450194048796135, Longitude: 77.28759945499488  
28°27'00.7"N 77°17'15.4"E



Biocomposter Alternate View

Latitude: 28.45010438083879, Longitude: 77.28757804141851  
28°27'00.4"N 77°17'15.3"E



**COLD STORAGE ROOM 27 FOR FOOD WASTAGE**

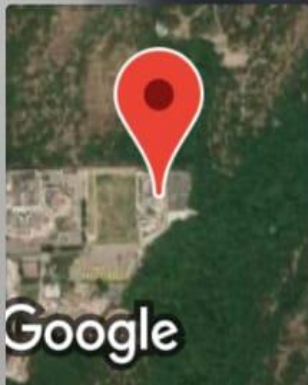
**(Walk-in to keep all food wastage at correct temp for future Process)**



## Washing Area to dispose Dry and Wet wastage Separately



GPS Map Camera



**Faridabad, Haryana, India**

F72Q+9GG, Gadakhor Basti Village, Sector 43,

Faridabad, Haryana 121003, India

Lat 28.451025°

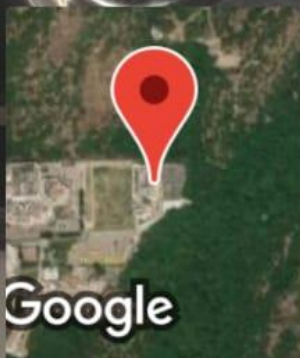
Long 77.288903°

07/11/22 04:49 PM GMT +05:30

**TOOLS FOR PORTION CONTROL- Different small Ladles are used to control excess serving**



GPS Map Camera



Google

**Faridabad, Haryana, India**

F72Q+9GG, Gadakhor Basti Village, Sector 43,  
Faridabad, Haryana 121003, India

Lat 28.451065°

Long 77.288902°

07/11/22 04:50 PM GMT +05:30

**Dish Washing Machine for secondary wastage, Food needs to be removed from plates before entering the Machine**



## **Sustainable Food Policy of MRIIRS**



**MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH  
AND STUDIES**

**(FORMERLY MANAV RACHNA INTERNATIONAL UNIVERSITY )**  
Deemed to be University under section 3 of the UGC Act,1956

**Sustainable Food Policy  
(Policy and standard Operating Procedures)**

**Year 2018**



## MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES

Deemed to be University under section 3 of the UGC Act,1956

**Background:** A sustainable food system focus on food availability that protect the environment, humanity and the economy. Food systems incorporate all the phases essential to feed the global population from production of raw material to actual food on plate. The Manav Rachna International Institute of Research & Studies (MRIIRS) promotes sustainable food system keeping in mind the health of its students, employees, guests and visitors. The objective of Sustainable Food Policy is to create a framework for Manav Rachna family to ensure that the raw material sourced and food produced, consumed and disposed by the university keeping in view to protect the environment, provides balanced meal to benefit the society and to promote Zero hunger.

### Policy Statement

- Promotion of Plant based food in catering outlets, hostel mess and hospitality services.
- No consumption of red meat and less availability of lean meat (Chicken and egg), thrice a week in hostel mess and catering outlets. Meat free alternatives has to be provided as replacement.
- Raw materials like vegetables and fruits have to be sourced by local vendors and should be free from pesticides and insecticides.
- All dry products and packed products have to be FSSAI certified.
- Seasonal menu should be encouraged in catering outlets, hostel mess and hospitality services to promote the seasonal nutrient availability.
- Food waste need to be monitored, tracked and recorded as per the approved Standard Operating Procedures as listed in Annexure A.
- Composite plant and animal feed are allowed as Food waste management strategies.
- Waste management instruments need to be installed to promote healthy environment in kitchen.
- Well balance nutritious meal is a mandatory component. The food menu should be focused on providing appropriate proportion of macro and micronutrients in every meal provided by hostel mess.
- Use of trans fat and saturated fat are restricted.
- Provision of minimum two fruits in a day is promoted in hostel mess menu.

- Use of less salt, sugar and unsaturated fat content in freshly prepared menu is recommended.
- Nutrition education should be provided to consumers – students, employees, guest and visitors regarding balanced diet, food waste management strategies on personal level and benefits of nutrients in promotion of healthy human behavior and fitness.

### **Applicability**

Faculty, employees, students, volunteers, trainees, supplemental staff employed through contract agencies or outside trade unions, vendors, guests, and visitors are all included in the scope of this policy's applicability.

### **Responsibility**

To ensure this policy is followed consistently across the MRIIRS campus, everyone involved must treat each other with dignity and respect and work together.

## **Annexure A**

For effective implementation of this Sustainable Food Policy, the Standard Operating Procedures as outlined in **Annexure A** shall be observed.

1. Food nutrition and wastage audit committee shall be constituted at the Institute level.
2. The roles and responsibilities of the food nutrition and wastage audit committee shall include conduct of awareness sessions to minimize the food wastage, collate and analyze the food wastage records, draft the strategies to minimize the food waste, sustainable disposition of generated food waste, monitor waste food management, to ensure the availability of sustainable, healthy and affordable food choices on campus, conduct awareness on sustainable farming practices, training on sustainable technical agricultural aspects, etc.
3. Cyclic food menus shall be followed by all the hostel mess committees, sustainable-healthy and affordable food choices shall be offered by all food outlets including hostel mess.
4. The nutritive value of offered food menus and hostel mess shall be monitored by the committee.
5. Committee shall collate the records of campus food wastage on every day basis through MIS as per proforma approved as **Annexure B**.
6. The records shall be discussed on the monthly basis in the meeting of food nutrition and wastage audit committee meeting. The recommendations of the committee shall be shared with the respective representatives of the campus food outlets and hostel mess committee for the subsequent actions.
7. The Action Taken/Initiated Reports as submitted by the representatives of the campus food outlets and hostel mess committees shall be discussed during the subsequent meeting of food nutrition and wastage audit committee to monitor the progress and further interventions.



# MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES

(FORMERLY MANAV RACHNA INTERNATIONAL UNIVERSITY)

Deemed to be University under section 3 of the UGC Act,1956

## MONTHLY CAMPUS FOOD WASTAGE AND MANAGEMENT TRACKING SYSTEM

Name of the Unit (Food Outlet Details/Hostel Mess Details)	
Name of the contact person	
Email ID	
Contact Number	
Location of the Unit	
Amount of Food waste during transportation (perishable items)(kgs.)	
Amount of Food waste during production of excess food (kgs.) A. Dry Waste B. Wet Waste	
Amount of Food waste from large portion size of food served (kgs.)	
How do you manage the food waste produced at your outlet?	<ul style="list-style-type: none"> <li>• Animal Feed</li> <li>• Organic Compost</li> <li>• Food sent to shelter homes through Dr O. P. Bhalla Foundation</li> <li>• Sent to Food Unit of Manav Rachna Innovation and Incubation Centre</li> </ul>

**MRIIRS MIS link to record Food Wastage and Management:**

<https://forms.gle/ZCF165Rda1wPEQcu6>