

Academic Year 2022-23

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**'. 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**'.
- ✓ **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, School of Allied and Health Science, SAHS) 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. 'Pledge on Zero Food Wastage'

To spread awareness amongst the students and faculty members about Zero Hunger (Sustainable Development Goal SDG-02) and promote a sustainable habit of not wasting food, a pledge taking ceremony on 'Zero Food Wastage' was organized by the School of Culinary and Hotel Management, Manav Rachna International Institute of Research and Studies (MRIIRS) on August 23 and 24, 2023. The same was scheduled in two parts one for the hostlers of Girls Hostel of MRIIS to sensitize them about the need and importance of conserving food and to motivate them for minimizing food wastage during their meal timings in Girls' Hostel Mess area. A board mentioning the total food waste per day has also being kept in the Mess area is to make the hostlers understand that the total amount of food wasted by them the previous day was able to feed how many people. The second part was scheduled for the students of the School of Culinary and Hotel Management. Students have made posters and written slogans for addressing the issue of world hunger.

Students have taken pledge on minimizing the food wastage with the message of 'Food for Everyone All Year Long'. The students have visited many of the food joints located inside the campus and also sensitize their friends and fellow students about the message.

Total of 231 girls from the Girls Hostel and 385 students from the different departments of MRIIRS have participated.

During the session, following pledge was taken by the students:

"I wholeheartedly pledge to minimize the food wastage. I will diligently strive to reduce the food waste around me and contribute towards the sustainable future."

The session fulfilled its objectives by successfully raising awareness about Zero hunger.

SDG- 2 ZERO HUNGER



SDG- 2 ZERO HUNGER





4. Awareness through Banners/rallies/Awareness Sessions across the Campus:





Reduce Food Waste

Did you know?.....
 Getting food waste means methane gas, which is more harmful to the environment than carbon dioxide. Wasting food contributes to climate change.

Tips to Reduce Food Waste

Plan & Prep
 Plan your meals (beforehand) so that you know what ingredients are required for meal and how much you need to buy.
 Check your fridge before shopping to prevent wastage through buying food you do not need.

Use Up Leftovers
 Leftover or surplus food from dinner can be packaged up neatly the next day as a snack or for lunch.

Keep Track
 Keep an eye on your list of perishables as they sit on the counter to track your food usage, helping you remember when you have used what it needs to be used by.

Cook Smart
 Turn up kitchen appliances to smaller sizes, such as small cups or a smaller...

Faridabad, Haryana, India
 22° C
 Longitude: 77.2869° E, Latitude: 28.4509° N
 21° C
 Friday, 26, Aug, 2022
 01:17 PM

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: Girls Mess being run by Culinary Centre, MRIIRS
- Annexure II: On-Campus Food Outlet of MRIIRS- Sample added for Chai Garam

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 GIRLS MESS (EVERY MONTH) with Action Taken

Manav Rachna International Institute of Research and Studies SCHOOL OF CULINARY AND HOTEL MANAGEMENT					
FOOD WASTAGE RECORD					
DATE	PAX	Dry wastage/kg	Wet wastage/kg	ACTION TAKEN	REMARKS
01-Aug	49	3	3.5	Educated Students through Boards	50% used for Animal Feeds & 50% used for compost
02-Aug	51	3.5	4	Educated Students through Boards	
03-Aug	45	3	3.5	Educated Students through Boards	
04-Aug	45	3	3	Educated Students through Boards	
05-Aug	45	3	3	Educated Students through Boards	
06-Aug	45	3	4	Educated Students through Boards	
07-Aug	45	3	4	Educated Students through Boards	
08-Aug	45	3.5	5	Educated Students through Boards	
09-Aug	45	3	4	Educated Students through Boards	
10-Aug	45	3	4	Educated Students through Boards	
11-Aug	45	3	4	Educated Students through Boards	
12-Aug	38	2.5	3	Educated Students through Boards	
13-Aug	38	2.5	3	Educated Students through Boards	
14-Aug	38	2.5	3.5	Educated Students through Boards	
15-Aug	38	2.5	3.5	Educated Students through Boards	
16-Aug	38	2.5	3.5	Educated Students through Boards	
17-Aug	38	2.5	3.5	Educated Students through Boards	
18-Aug	38	2.5	4	Educated Students through Boards	
19-Aug	38	3	3	Educated Students through Boards	
20-Aug	38	3	4	Educated Students through Boards	
21-Aug	38	3	4	Educated Students through Boards	
22-Aug	38	2.5	3	Educated Students through Boards	
23-Aug	58	3.5	3	Educated Students through Boards	
24-Aug	41	3	3	Educated Students through Boards	
25-Aug	41	3	4.5	Informed the Warden	
26-Aug	41	3	3	Educated Students through Boards	
27-Aug	41	3	3	Educated Students through Boards	
28-Aug	41	3	3	Educated Students through Boards	
29-Aug	27	2	3.5	Educated Students through Boards	
30-Aug	27	2	3	Educated Students through Boards	
31-Aug	27	2	3	Educated Students through Boards	
Total		87.5	109		

SDG- 2 ZERO HUNGER



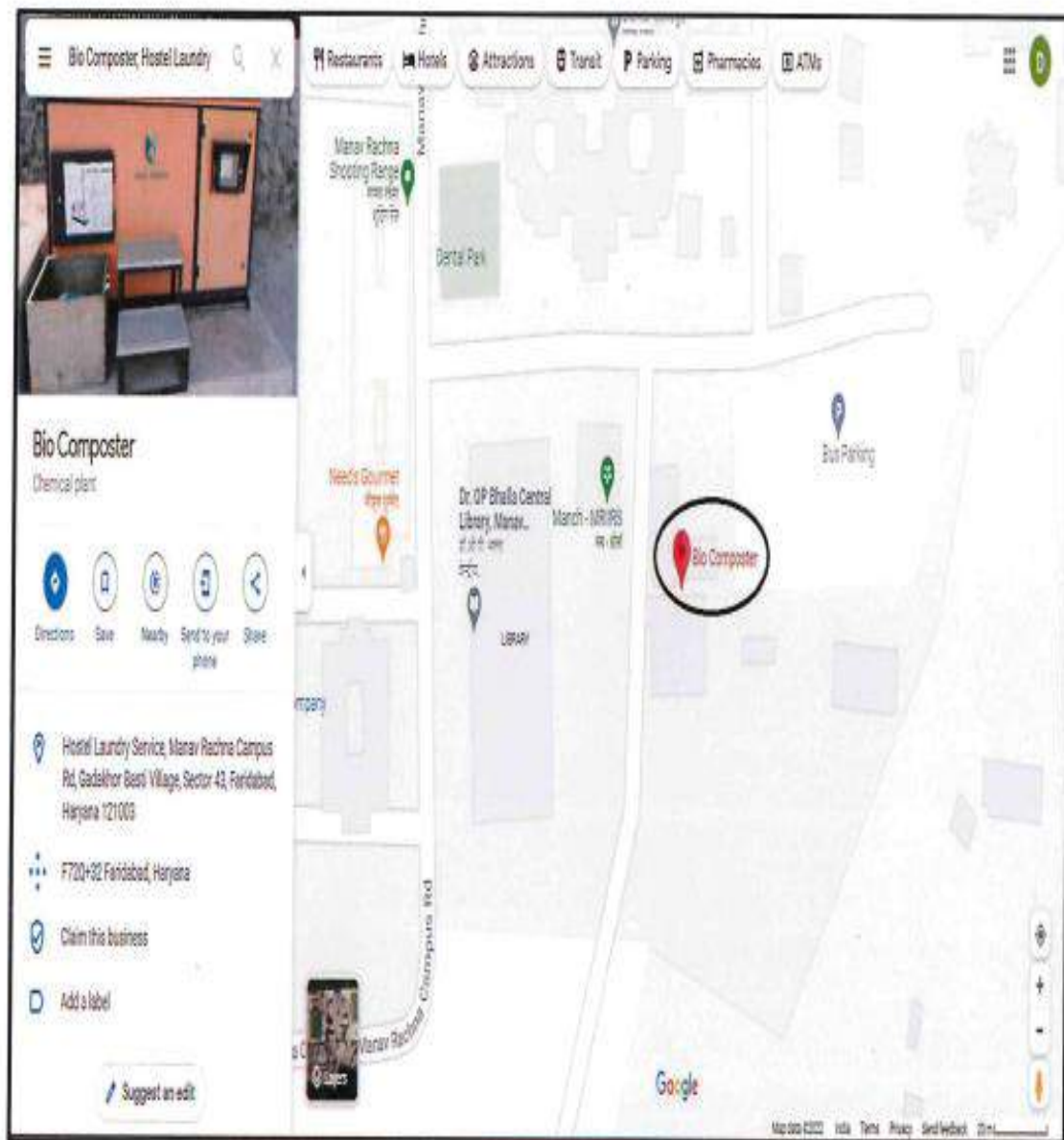
Annexure II: ANALYSIS OF FOOD WASTAGE AT FOOD OUTLET CHAI GARAM (EVERY MONTH)

Manav Rachna International Institute of Research and Studies Chai Garam						
FOOD WASTAGE RECORD						
DATE	PAX	Dry wastage/kg	Wet wastage/kg	ACTION TAKEN	REMARKS	
1-May	56	1.5	1	Animal feed, composting the waste, Portion Control and sensitizing customer	Food wastage was used for Animal feed and composting	
2-May	60	3	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
3-May	95	2	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
4-May	89	3.5	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
5-May	50	2.5	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
6-May	54	2.5	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
7-May	Sunday	0	0			
8-May	115	6	3	Animal feed, composting the waste, Portion Control and sensitizing customer		
9-May	97	4	2	Animal feed, composting the waste, Portion Control and sensitizing customer		
10-May	78	3.5	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
11-May	86	3.5	1.5	Animal feed, composting the waste, Portion Control and sensitizing customer		
12-May	60	3	2	Animal feed, composting the waste, Portion Control and sensitizing customer		
13-May	Closed					
14-May	Sunday	0	0			
15-May	55	2.5	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
16-May	42	2	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
17-May	58	3	2.5	Animal feed, composting the waste, Portion Control and sensitizing customer		
18-May	46	2	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
19-May	56	1.5	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
20-May	78	3	2.5	Animal feed, composting the waste, Portion Control and sensitizing customer		
21-May	Sunday	0	0			
22-May	54	2.5	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
23-May	95	4	2.5	Animal feed, composting the waste, Portion Control and sensitizing customer		
24-May	94	4	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
25-May	56	2	0	Animal feed, composting the waste, Portion Control and sensitizing customer		
26-May	79	3	1.5	Animal feed, composting the waste, Portion Control and sensitizing customer		
27-May	Closed					
28-May	Sunday	0	0			
29-May	64	0.5	3	Animal feed, composting the waste, Portion Control and sensitizing customer		
30-May	59	1	2	Animal feed, composting the waste, Portion Control and sensitizing customer		
31-May	67	1.5	1	Animal feed, composting the waste, Portion Control and sensitizing customer		
Total	1743	67.5	29.5			

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



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



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 venders 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"> • Animal Feed • Organic Compost • Food sent to shelter homes through Dr O. P. Bhalla Foundation • Sent to Food Unit of Manav Rachna Innovation and Incubation Centre

MRIIRS MIS link to record Food Wastage and Management:

<https://forms.gle/ZCF165Rda1wPEQcu6>