

## Teacher's Innovative Idea

During the academic year 2024–25, Department of environment Science, Rajkiya Kanya Mahavidyalaya (RKMV), Shimla introduced innovative, action-oriented environmental practices aimed at sustainable waste management and experiential learning. One major faculty-led initiative was the Milk Bag Recycling Project, under which used plastic milk packets generated on the college campus and in nearby households were systematically collected, cleaned, dried, and segregated by students under teacher guidance along with involvement of staff as well in collection. These low-density polyethylene (LDPE) milk packets, which are otherwise difficult to manage through conventional waste systems, were aggregated and sent to authorized recycling units. Approximately 100 kg of used milk packets were sent to Mumbai based NGO for recycling during 2024–25, ensuring their safe diversion from landfills and the fragile hill ecosystem.<sup>9</sup>

Another significant teacher-driven initiative of department was the Single-Use Plastic (SUP) Collection and Handover Programme, implemented in collaboration with the Municipal Corporation (MC) Shimla. Through regular awareness campaigns, cleanliness drives, and active student participation, single-use plastic waste was collected from the college campus, surrounding schools, and nearby residential areas. Under faculty supervision, the waste was properly segregated and formally handed over to MC Shimla for scientific processing. Nearly 400 kg of single-use plastic was transferred to MC Shimla for meaningful management during 2024–25, including recycling and utilization in sustainable applications such as road construction.

In addition, department conceptualized and guided the Composting of Canteen Waste Initiative, promoting the principle of “waste to wealth.” Biodegradable waste generated from the college canteen was collected daily and processed through composting techniques on campus. As a result, approximately 350 kg of nutrient-rich green manure, popularly termed “black gold,” was produced during 2024–25. The compost was utilized in the college gardens and green spaces, reducing dependence on chemical fertilizers while enriching soil health. Collectively, these teacher-led innovations strengthened environmental stewardship, enhanced hands-on learning among students, and established RKMV Shimla as a model institution for sustainable campus practices.

  
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# RAJKIYA KANYA MAHAVIDYALAYA (RKMV), SHIMLA-1 Himachal Pradesh



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**Rajkiya Kanya Mahavidyalaya**



## Project: "KATRAN"

### PREAMBLE:

India being among the top 10 textile manufacturing hubs, the growing demand and foray of fast fashion contributes to textile waste. The country grapples with managing a staggering 7800 kilo tones of textile waste annually, accounting for 8.5 per cent of the total global waste. About 51 per cent of this waste originates from post-consumer sources, like discarded clothing, while 42 per cent comes from pre-consumer waste generated during production such as fabric off-cuts and yarn scraps and remaining 7 per cent as imported clothes.

In order to deal with this massive pile of discarded fabric waste, the students of RKMV plan to make a small effort to reduce, recycle, reuse and even up-cycle of the same through the project named *KATRAN*.

**Date of Initiation:** 26<sup>th</sup> February, 2024

**Aims:** This project is working for two aims:

1. An environment-friendly stride through fabric waste management
2. Making *potlis* using jute burlap- woven canvas woven from natural fibre

### Objectives:

1. To inculcate environmental values in students through emphasis on the concept of:
  - up-cycling of pre-consumer fabric waste.
  - three R's- Reduce, Recycle, Reuse for a cleaner and healthier environment.
  - using natural fibre textile for making articles to minimize the use of synthetic fibre, as an eco-friendly approach.

  
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2. To equip the students with the concept of designing home furnishings, apparels and accessories with best usage of fabric waste.
3. To make students capable of earning from skillful learning.

**Plan of Action:**

1. A group of dedicated *KATRAN* volunteers has been formed.
2. Discarded textiles left from fabric off-cuts are being collected by these volunteers from the tailors in surrounding areas to protect it to reach to municipal dumps.
3. Students are being educated about how to transform/ up-cycle the collected fabric waste into new useful products viz. bags, pouches, runners, wall panels, table mats, file folders, etc. with a higher value or function with less investment.
4. Each article is being labelled with the price tag which includes the cost of raw material (minimum), labour and profit margin.
5. Selling the above upcycled products make it a viable option for students to earn while they learn.

  
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Rajendra Prasad  
SIRKMV Shrija-1

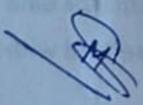
Sr.No. 202

# MUNICIPAL CORPORATION SHIMLA

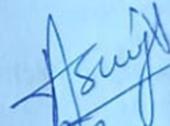
## Receipt

Received non-recyclable/single use plastic waste as per indicative list of the Buyback Plastic Waste Policy of the Department of Environment, Science & Technology, Government of Himachal Pradesh as per the details given below:

1. Name of the Rag Picker/Individual R.K.M.V collage
2. Aadhar No. of Rag picker/Individual \_\_\_\_\_
- Registration No. of Rag picker R.K.M.V
3. Particulars such as Address, Contact no. 077-2807959 (9489009108)
4. Registration Number of Rag Picker \_\_\_\_\_
5. Quantity of Waste 54.6 Kg @ 75 Rs/- Kg kg.  
Type of Waste Single Use plastic
6. Amount Rs. 4095 /Rs (Four thousand and Nine five rupees only)

Received 4095/- rupees  


Signature:

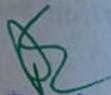
 04/10/2024

Dr. D.P. Singh Project coordinator  
Name of Officer/Official/Staff. M.C. Shimla

Contact No:- 9816878989

Date: 04/10/2024

Time: 01:05 PM

  
Principal  
R.K.M.V. Shimla

  
PRINCIPAL  
Rajendra Khandela  
R.K.M.V. Shimla

November

classmate  
Date 2024

Sr. No. 411

# MUNICIPAL CORPORATION SHIMLA

## Receipt

Received non-recyclable/single use plastic waste as per indicative list of the Buyback Plastic Waste Policy of the Department of Environment, Science & Technology Government of Himachal Pradesh as per the details given below:

1. Name of the Rag Picker/Individual R.K.M.V. College
2. Aadhar No. of Rag picker/Individual \_\_\_\_\_
- Registration No. of Rag picker \_\_\_\_\_
3. Particulars such as Address, Contact no. haw wood Shimla 9459009108
4. Registration Number of Rag Picker \_\_\_\_\_
5. Quantity of Waste 47 Kg. kg.
- Type of Waste Single use plastic
6. Amount Rs. 3525 Thirty five hundred twenty five Rupees

Received Rs. 3525/-

Signature: \_\_\_\_\_

Name of Officer/Official/Staff

Principal  
R.K.M.V. Shimla

Contact No:

Date: 28/11/2024

Time: \_\_\_\_\_

Principal  
R.K.M.V. Shimla

classmate  
Date \_\_\_\_\_  
Page \_\_\_\_\_

December 2024

Sr. No. 207

# MUNICIPAL CORPORATION SHIMLA

## Receipt

Received non-recyclable/single use plastic waste as per indicative list of the Buyback Plastic Waste Policy of the Department of Environment, Science & Technology, Government of Himachal Pradesh as per the details given below:

1. Name of the Rag Picker/Individual RKMV College
2. Aadhar No. of Rag picker/Individual \_\_\_\_\_
- Registration No. of Rag picker RKMV
3. Particulars such as Address, Contact no. 01772807959
4. Registration Number of Rag Picker \_\_\_\_\_
5. Quantity of Waste 81 kg. at the 75 Per kg. kg.
6. Amount Rs. 6075/ Six thousand seventy five Rupees only

Paid ₹ 2500/- Two thousand only  
Balance ₹ 6075 - 2500 = 3575/-  
Three thousand five hundred & seventy five only  
Received Rs 2500/-  
Two thousand five hundred only  
Shankar  
21/01/2025

Signature:   
Name of Officer/Official/Staff: Anur Kumar Sanjay Jester

Contact No: 9418800599

Date: 18-12-2024  
1:20 PM

Sr. No. 110

# MUNICIPAL CORPORATION SHIMLA

## Receipt

Received non-recyclable/single use plastic waste as per indicative list of the Buyback Plastic Waste Policy of the Department of Environment, Science & Technology, Government of Himachal Pradesh as per the details given below:

1. Name of the Rag Picker/Individual R.K.M.V college
2. Aadhar No. of Rag picker/Individual \_\_\_\_\_  
Registration No. of Rag picker \_\_\_\_\_
3. Particulars such as Address, Contact no. Langwood, Shimla, 9459009108
4. Registration Number of Rag Picker \_\_\_\_\_
5. Quantity of Waste 32.700 kg. kg.  
Type of Waste Single Use plastic
6. Amount Rs. Rs 75/kg. (Rs 2452.50/-)

September

  
Principal  
R.K.M.V. Shimla

Signature:

D.P. Singh 14/09/24  
Name of Officer/Official/Staff: Dr. D.P. Singh Project Coordinator

Contact No: - 8219421719  
9816878989

Date: 12.09.24

Time: 12:40 PM

  
PRINCIPAL  
Rajendra Khatwal  
S: R.K.M.V. Shimla-1