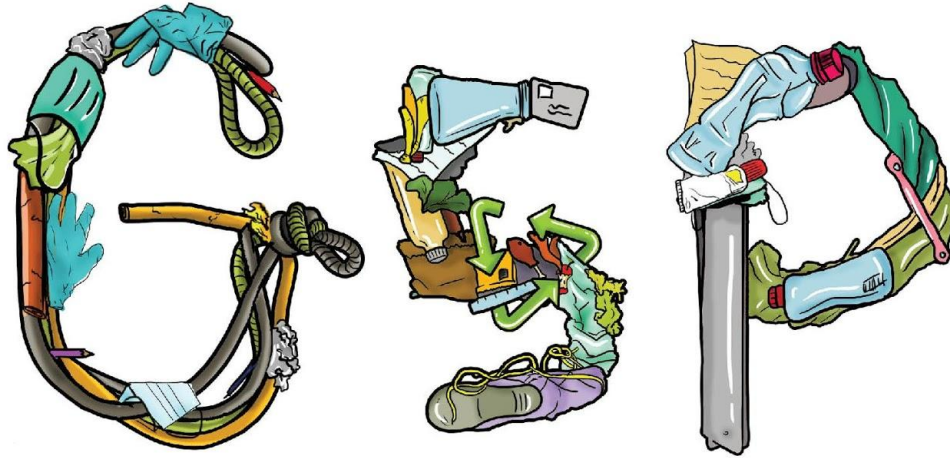Green Schools Programme
cordially invites you to

G5P

WASTE TRANSFORMERS 2020-21

Forum of schools that segregate

Dr. Rajendra Prasad Kendriya Vidyalaya President's Estate, New Delhi

ARTIFICIAL INTELLIGENCE BASED PROGRAMMING FOR WASTE SEGREGATION & PROMOTION OF CIRCULAR ECONOMY

Year of joining GSP: 2019

SCHOOL PROFILE

School category: **DAY SCHOLAR**

School type:

MIXED/CO-EDUCATION

Lowest level - highest level:
1 – 12

Population:
1032
(including students, teaching and non-teaching staff)

Why was the action plan needed?

1. Wet/ biodegradable waste **(270 kg/month)** is sent to the President's Estate, but we would like students to understand the resource recovery process

2. Waste was not being used as a resource

3. Waste need to be reduced

4. Paper waste **(66 kg/month)** is significant

School ground covered with leaves and plastic waste

Action Plan

1. Development of **image processing programming** through AI for students to understand types of waste

2. **Using AI to calculate** the most common fraction of **waste generated** in school, e.g., leaves, paper and organic matter

3. **Pilot resource recovery**: Flowers will be treated and converted into new items, such as soaps, candles, etc.

4. Use of **touchless dustbins** (for COVID generated waste) to avoid contact

5. Progress from two dustbins to **three for waste segregation**:
   - Wet / biodegradable waste bin
   - Paper waste/ used pens, pencils and other waste bin
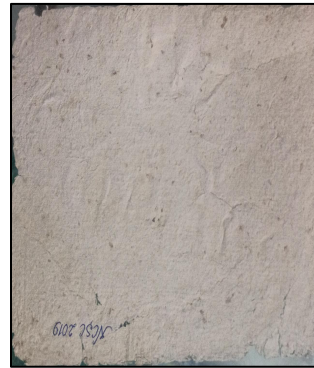   - Sanitary waste bin in girls' washrooms

Using AI to calculate waste fractions

Indicators to assess action plan

1. Improvement in segregation of waste

2. **100 percent resource recovery** for flowers and paper

3. Sensitising students with the help of AI

Basket, paper and candle made from fallen flowers