

# Responses for Green Schools Programme Audit 2016

School Name: KENDRIYA VIDYALAYA DRDO

Address: DRDO COMPLEX PHASE I, C V

RAMAN NAGAR, BANGALORE,

Bangalore, Karnataka, India

Coordinator Name: SMT. SUJATHA GUNESWARI



# Green Schools Programme

### Centre for Science and Environment

41, Tughlakabad Institutional Area, New Delhi. India - 110062

Tel: +91-11 29955124, 29956110, 40616000

http://www.greenschoolsprogramme.org/

## **SCHOOL PROFILE**

KENDRIYA VIDYALAYA DRDO

2 Address

DRDO COMPLEX PHASE I, C V RAMAN NAGAR, BANGALORE, Bangalore, Karnataka, India

Telephone Number (Landline Number with STD code)

(ISD) 91 (STD) 080 (NUMBER) 25243919

4 Mobile Number (Mobile Number with STD code)

(ISD) 91 (Number) 8147533609

5 Principal Name

DR.(SMT.) NUTAN PUNJ

6 GSP Coordinator Name

SMT. SUJATHA GUNESWARI

GSP Coordinator Email

sujathaguneswari@yahoo.com

GSP Coordinator Mobile Number

(ISD)91 (Number) 9482439571

Gategory Of The School

Day Scholar

School Shifts

Morning

# **GENERAL QUESTIONS**

How many levels does your school have?

Lowest level of grade:1 Highest level of grade:12

ls your school single gender or mixed gender?

Mixed/Co-education

Which board of education does the school follow?

Central Board of Secondary Education

Total permanent population of the school

	Male	Female	Total
Students	1094	1031	2125
Teachers	16	47	63
Non-Teaching Staff	5	3	8
TOTAL	1115	1081	2196

4(b) How many visitors visit your school

500

What is the total number of working days of your school in a year?

240

Month(s) in which the GSP audit was carried out?

Oct

Where is the school located?

Urban Area



# Task 1: Air Audit Team

### **Teachers**

Sno.	Name	Email
1.	Mrs.SUJATHAGUNESWARI	Mrs.SUJATHAGUNESWARI
2.	Mrs.Aruna.D.Eknath	arunaklkrm@yahoo.co.in
3.	Mrs. Chitra	chitravoc@yahoo.com

### **Administrative staff**

Sno.	Name	Email
1.	Mrs.sujathaguneswari	sujathaguneswari@yahoo.com
2.	Vijay Kumar	vijaykvdrdo@gmail.com
3.	Aruna D Eknath	arunaklkrn@yahoo.co.in
4.	Gautam	r.gautam.sm@gmail.com
5.	Hema Ramesh	hemarpai@gmail.com

### **Students**

Sno.	Name	Email	Grade/Class
1.	Lakshmi	lakshmianand22@gmail.com	11
2.	Priyanka	priyanka123@gmail.com	11
3.	Amrutha	ammugshekhar@gmail.com	11
4.	Saloni	salonisingh880@gmail.com	11
5.	Shalini	shalinipandey0610@gmail.com	11
6.	Devasurya	nanudevarajan@gmail.com	11
7.	Aditya Gautam	adi.anang19@gmail.com	11
8.	Uthara	utharasrinivasan@gmail.com	11
9.	R.Juveria Fathima	juvimissu2000@gmail.com	11
10.	Anirudh Varkhedi	anirudhvarkhedi@gmail.com	11

# Task 2: Are the rooms in your school well-ventilated?

1

How many classrooms does your school have?

### Window-floor ratio of classrooms in the school.

Details of the classroom (e.g. Class II section b)	X = Area of floor (LxB)	Y = Area of openings (LxH)	Percentage of the floor area being ventilated (Y/X x 100)
I-A	95.00	10.00	10.53
II-B	95.00	9.00	9.47
III-C	105.00	9.00	8.57
IV-D	105.00	9.00	8.57
V-A	105.00	9.00	8.57
VI-B	115.00	9.00	7.83
VII-C	120.00	12.00	10.00
VIII-D	130.00	12.00	9.23
IX-A	130.00	14.00	10.77
X-B	130.00	14.00	10.77
TOTAL	1,130.00	107.00	

## Task 3: How eco-friendly are the vehicles in your school?

What is the ownership used by the vehicles used in your school? Please choose what is applicable?

Operator-owned vehicles

## Task 4: How do you travel to school every day?

How many members of the school community use each type of transport:

	Students	Teaching Staff	Non Teaching Staff	Total
Schoool Bus	214	0	0	214
Public Bus	175	2	1	178
School Transport(Other than bus)	0	0	0	0
Public transport (other than bus, Metro, car pool)	297	2	0	299
Taxi four-wheeler	50	0	0	50

Taxi three-wheeler	56	0	0	56
Personal four-wheeler	78	14	0	92
Personal two-wheeler	289	34	2	325
Bicycle	414	0	0	414
On foot	552	11	5	568
Others (non-motorised)	0	0	0	0
SUB-TOTAL	2125	63	8	2196

## Task 5: How good is the air you breathe in your school?



15

Does the school laboratory have air quality monitoring equipment?

No

No documents uploaded by the school.

If No, is there an air quality monitoring station (private or government) close to your school?

No



## **ENERGY**

## **Task 1: Energy Audit Team**

### **Teachers**

Sno.	Name	Email
1.	Mrs.sujathaguneswari	sujathaguneswari@yahoo.com
2.	R.Gautham	r.gautam.sm@gamil.com
3.	E.N.Kannan	kannaen2007@yahoo.com

### **Administrative staff**

Sno.	Name	Email
1.	Mrs.sujathaguneswari	sujathaguneswari@yahoo.com
2.	Aruna D Eknath	arunaklkrn@yahoo.co.in
3.	Hema Ramesh	hemarpai@gmail.com
4.	Vijay Kumar	vijaykvdrdo@gmail.com
5.	Chandrasekhar	resekhar59@gmail.com

### **Students**

Sno.	Name	Email	Grade/Class
1.	lakshmianand	lakshmianand22@gmail.com	11
2.	Hamritha	mhamritha09@gmail.com	11
3.	Hinta Rose	rosehinta@gmail.com	11
4.	R.Juveria Fathima	juvimissu2000@gmail.com	11
5.	D.Devasurya	nanudevarajan@gmail.com	11
6.	Aditya Gautam	adi.anang19@gmail.com	11
7.	Amrutha	ammugshekhar@gmail.com	11
8.	Uthara Srinivasan	utharasrinivasan@gmail.com	11
9.	Anirudh Varkhedi	anirudhvarkhedi@gmail.com	11

# Task 2: How much energy does your school consume?

1

Does your school have access to an electricity bill?

No

No documents uploaded by the school.

Does your school have its own vehicles?

No

3

### Provide the details of total energy consumed by the school

	Quantity consumed/monthly average	Energy consumed in Megajoules (MJ)	Type of use
Electricity from the board (kwh)	11237	40453.20	3
Electricity from generator (diesel) (litres)	0	0.00	0
Petrol (litres)	0	0.00	0
Diesel (litres)	0	0.00	0
CNG (kilogrammes)	0	0.00	0
Kerosene (litres)	0	0.00	0
Coal (kilogrammes)	0	0.00	0
Wood (kilogrammes)	0	0.00	0
Animal waste (kilogrammes)	0	0.00	0
Solar (kwh)	0	0.00	0
Wind (kwh)	0	0.00	0
LPG (kilogrammes)	3.55	183.18	1
Piped Natural Gas (kilogrammes)	0	0.00	0
TOTAL	11240.55	40636.38	

No documents uploaded by the school.

What appliances does your school have?

	Number	Size	BEE Star Rating
Air Conditioners	10	1.5	5
Refrigerator	3	90	3

Microwave	1	17.7	5
Tube Lights	440	18	4
CFL Bulbs	0	0	0
LED Lights	0	0	0
Fans	227	72	3

- 1. 5 star.JPG
- 2. tv.jpg
- 3. fridge.jpg
- 4. biometric.jpg

## Task 3: Is your school using any renewable sources of energy?

What is the average number of sunny days in your area?

135

Are there any alternate sources of energy employed/ installed in your school?

No

No documents uploaded by the school for energy chapter.



### **Task 1: Food Audit Team**

#### **Teachers**

Sno.	Name	Email
1.	sujathaguneswari	sujathaguneswari@yahoo.com
2.	E.N.Kannan	kannaen2007@yahoo.com
3.	vijay kumar	vijaykvdrdo@gmail.com

### **Administrative staff**

Sno.	Name	Email
1.	sujathaguneswari	sujathaguneswari@yahoo.com
2.	gautam	r.gautam.sm@gmail.com
3.	hema ramesh	hemarpai@gmail.com
4.	chandrasekhar	resekhar59@gmail.com

#### **Students**

Sno.	Name	Email	Grade/Class
1.	lakshmianand	lakshmianand22@gmail.com	11
2.	Uthara	utharasrinivasan@gmail.com	11
3.	R Juveria Fathima	juvimissu2000@gmail.com	11
4.	D Devasurya	nanudevarajan@gmail.com	11
5.	Aditya Gautam	adi.anang19@gmail.com	11

## Task 2: Find out about the food service in your school.

Does your school have a provision/space to sell packaged food items within the campus

No

Does your school serve midday meals?

No

Do students bring their own lunch from home?

Yes

1. 1bcd2c791709e71c5df2633c00d289f3.jpg

2(a)(1) How many students out of total student population bring home-made lunch? 2125.00

2(a)(2) Of the students who bring lunch from home, how many bring packaged food?

0.00

2(a)(3) Do teachers have the responsibility to ensure that students are carrying lunch from home?

Yes

## Task 3: What kind of food is served/sold in your school

What kind of food is being served / sold in your school

	Please count all flavours/variants available in the school canteen separately	Total number of items sold in a month in the canteen	Month the food items were sold in
Savoury snacks and similar packaged food like chips, Kurkure, Cheetos, potato crisps, corn snacks, nuts and seeds, etc	0	0	0
Instant Noodles like Knorr, Cup-a- noodles, Top Ramen, Wai-wai, Yippee, Foodles, Maggi, etc	0	0	0
Potato fries and Burgers	0	0	0
Confectionery items (chocolate, candies, gums)	0	0	0
Ice-cream	0	0	0
Carbonated beverages	0	0	0
Sugar sweetened noncarbonated beverages	0	0	0
Packaged/Bottled Nimboo Paani/ Lassi/ Flavoured milk	0	0	0

		12 01 21		
Package	d/Bottled Energy Drinks	0	0	0
No docum	nents uploaded by the school.			
5	Does your school serve tradition  No  Does your school serve tradition  No			
Task 4: \	What kind of food does	your school promote?		
6	Does the school distribute pack	kaged food items as rewards du	uring schools events	?
	No			
7	Does the school distribute chool	colates/similar products as refre	eshments during sch	ools events?
	Yes			
7(a)	Please provide the names?			
	perk,good day,cream bun			
8	Are your school events such as companies/brands?	s quiz shows, talent shows, deb	pates sponsored by t	food

No

1. 20161118\_132640.jpg



# **Task 1: Land Audit Team**

### **Teachers**

Sno.	Name	Email
1.	Sujatha Guneswari	sujathaguneswari@yahoo.com
2.	E.N.Kannan	kannaen2007@yahoo.com
3.	Aruna.D.Eknath	arunaklkrn@yahoo.co.in

### **Administrative staff**

Sno.	Name	Email
1.	Sujatha Guneswari	sujathaguneswari@yahoo.com
2.	E.N.Kannan	kannaen2007@yahoo.com
3.	Aruna.D.Eknath	arunaklkrn@yahoo.co.in

### **Students**

Sno.	Name	Email	Grade/Class
1.	Lakshmi Anand	lakshmianand22@gmail.com	11
2.	D.Devasurya	nanudevarajan@gmail.com	11
3.	Aditya Gautham	adi.anang19@gmail.com	11
4.	R.Juveria Fathima	juuvimissu@gmail.com	11
5.	Anirudh Varkhedi	anirudhvarkhedi@gmail.com	11
6.	Bindsi Sarangi	saranginiranjan@gmail.com	11
7.	pooja raju ganvir	poojarajuganvir@gmail.com	11
8.	Tanya James	jamestanya2000@gmail.com	11

# Task 2: Measure the four critical areas of your school campus

Complete the table:

	Your school's area
Site area in square meter (m2)	19,911
Ground coverage area	5,921
Green landscaped area on-ground	8,111

Surface parking area	0
Play area that is paved/ concrete on ground	1,911
Play area that has grass on ground	0
Service Area on ground	52
Roof and terrace area	1,753
Green cover on exposed roof & terrace	0
Total built up/constructed area	7,472
Total no. of floors	5
Others	475

## Task 3: Explore the number of species of plants and animals in your school

How many species of plants and animals exist in your school?

	Native	Exotic	Total
Plants	1493	15	1508
Animals	3	0	3

## Task 4: Find out if your school uses pesticides

4

Do you use chemical based pesticides in your school green cover?

No

### **Supporting Documents**

- 1. green cover %282%29.JPG
- 2. lotus.jpg
- 3. landscape.JPG
- 4. g cover 1.JPG
- 5. child.JPG



# WATER

# **Task 1: Water Audit Team**

#### **Teachers**

Sno.	Name	Email
1.	sujathaguneswari	sujathaguneswari@yahoo.com
2.	Gautham	r.gautam.sm@gmail.com
3.	Hema Ramesh	hemarpai@gmail.com

### **Administrative staff**

Sno.	Name	Email
1.	sujathaguneswari	sujathaguneswari@yahoo.com
2.	Chandrasekhar	resekhar59@gmail.com
3.	Vijay Kumar	vijaykvdrdo@gmail.com

### **Students**

Sno.	Name	Email	Grade/Class
1.	lakshmianand	lakshmianand22@gmail.com	11
2.	Manasa.S.H	manasa.sh00@gmail.com	11
3.	R.Juveria Fathima	juvimissu2000@gmail.com	11
4.	L.A.Prathiksha	lkbabu27@gmail.com	11
5.	D.Neha	nehadevendra6760@gmail.com	11
6.	U.S.Aarthi	srini_aarthi.2001@yahoo.com	11
7.	D.Devasurya	nanudevarajan@gmail.com	11
8.	Anirudh Varkhedi	anirudhvarkhedi@gmail.com	11

# Task 2: How much water does your school use?

Calculate your school's water consumption, per activity.

Activity	Total Quantity (litres per day)
Drinking	12
Toilet flushing	68
Personal cleaning	2

Washing clothes	0
Cooking	0
Cleaning Utensils	0
Washing Vegetables	0
Mopping floors	16
Gardening	45
Total	143

### Task 3: What are the sources, supply and storage of water in your school

Where does the water your school uses, come from?

Ground water

Who supplies the water in your school?

Municipality

Does your school get daily water supply?

Yes

4(a) If supply of water is daily, please tick the correct option

2-6 hours

## Task 4: What are the water conservation practices followed in your school?

What are the water conservation practices your school follows.

	Yes / No
Does your school have any water and sanitation policy?	No
If your school has an eco-club, do they have water component?	No
Do all tanks in the school have float valves installed to stop overflow?	Yes
Do the drinking water points have spill proof taps to check overflow?	Yes
Does your school use appliances with a quick-wash setting?	No
Are dual flush systems installed in the toilets?	Yes

Does your school encourage bottled water for drinking water?	No
Does your school grow local plant species which require limited amount of water to grow?	Yes
Has your school initiated any water conservation steps in the school or outside, in the past one year?	Yes
Does your school use a drip or irrigation system?	No
Any other step taken for water conservation? (if Yes, please specify)	Yes

- 1. puri.jpg
- 2. pond %282%29.jpg
- 3. water2.jpg
- 4. sustainable-agriculture06%5B1%5D.jpg

## Task 5: Does your school harvest rainwater?

Do you have Rainwater harvesting (RWH) system in your school?

No

6(a) Calculate your school's rainwater harvesting potential (in litres).

15

## Task 6: Are the plumbing and sanitation facilities in your school adequate?

Please share details about sanitation and hygiene practices in your school.

	Yes / No
Does the school have separate toilets for males and females?	Yes
Are there sufficient toilets for women in your school?	Yes
Are there sufficient toilets for men in your school?	Yes
Are the toilets accessible and safe to use for children?	Yes
Are the toilets accessible and safe to use for differently abled children?	Yes
Are the toilets accessible and safe to use for differently abled staff (teaching and non-teaching)?	Yes

Are the toilets situated in the right location in terms of privacy and safety?	Yes
Is there sufficient light during day time?	Yes

How many drinking water taps do you have?

30

How many hand pumps do you have?

0

How many ablution taps (taps used for washing hands only) do you have?

40

How many water closets (used for defecation and urination) do you have?.

	Girls	Boys	Common	Total
Number of toilets	36	37	0	73

How many urinals (strictly used for urination only) do you have?

12

How many other water outlets (example: taps in play fields, sprinklers, swimming pool) do you have?

7

ls there a water storage system in place to supply water in the toilets?

Yes

ls the water supply sufficient?

Yes

Are the toilets cleaned?

Yes

16(a) If yes, please specify

Once a day

Task 7: Does your school reuse/recycle waste water?

Does your school treat wastewater?

No

Does your school reuse the treated wastewater?

No

Please specify the fate of wastewater

Wastewater flows directly to the drains

No documents uploaded by the school.



### **Task 1: Waste Audit Team**

#### **Teachers**

Sno.	Name	Email
1.	E.N.Kannan	kannaen2007@yahoo.com
2.	Vijay Kumar	vijaykvdrdo@gmail.com

#### **Administrative staff**

Sno.	Sno. Name Email	
1.	Sujatha Guneswari	sujathaguneswari@yahoo.com
2.	Hema Ramesh	hemarpai@gmail.com

#### **Students**

Sno.	Name	Email	Grade/Class
1.	L.A.Prathiksha	lkbabu27@gmail.com	11
2.	U.S.Aarthi	srini_aarthi.2001@yahoo.com	11
3.	D.Neha	nehadevendra6760@gmail.com	11
4.	Lakshmi Anand	lakshmianand22@gmail.com	11
5.	R.Juveria Fathima	juvimissu2000@gmail.com	11
6.	D Devasurya	nanudevarajan@gmail.com	11
7.	Aditya Gautam	adi.anang19@gmail.com	11
8.	Anirudh Varkhedi	anirudhvarkhedi@gmail.com	11

## Task 2: What is the waste segregation system in your school?

Does your school segregate solid waste?

Yes

Who segregates the waste at source?

1. Students and teachers

Waste collection points in your school.

	Total No. of collection points	No bin	One bin	Two bins (wet & dry)	Three bins or more
Classrooms	48	0	48	0	0
Playgrounds	32	0	32	0	0
Common area (e.g. reception, corridors)	12	0	12	0	0
Staffroom	4	0	4	0	0
Laboratory	16	0	16	0	0
Canteen	0	0	0	0	0
Clinic/ Sick room	2	0	2	0	0
Library	2	0	2	0	0
Toilets	98	0	98	0	0
Others	0	0	0	0	0
Total	214	0	214	0	0

- 1. dustbin.JPG
- 2. 20161118\_131040.jpg

# Task 3: How much waste does your school generate?

Determine the quantity of waste generated in your school. (in kilogram)

	Collection per month (Frequency may differ)
Garden/ horticulture waste	2000
Kitchen waste	0
Paper	23
Plastic	0
Wood, glass, metal, classroom furniture	37.6
E-waste	0

Biomedical waste	0
Sanitary waste	5
Construction and Demolition (C & D) waste	0
Hazardous waste	0
Total Generated Solid Waste (in kilogram)	2065.6

- 1. survey2.JPG
- 2. 20161118\_143847.jpg

## Task 4: How much waste does your school recycle/treat?

Does your school recycle any generated waste?

No

Does your school have a composting facility?

No

Does your school encourage students & teachers to reuse textbooks?

Yes

Table to understand whether internal or external waste recycling procedures are applied to waste.

	Local kabadiwala (the scrap collector)	Authorised dealer	Dumped at a designated community site	Internal procedure
Paper (e.g., used notebooks, used examination paper, subscription newspaper and magazines)	×	✓	×	×
Plastic (e.g. plastic bottles)	×	<b>⋞</b>	×	×
Horticultural waste	×	×	<b>∠</b>	<b>⊻</b>
E-waste (e.g. broken, unusable computers)	×	<b>✓</b>	×	×

Hazardous waste (e.g. diesel fuel, battery)	×	✓	×	×
Wood,glass, metal scrap, other scrap	×	<b>✓</b>	×	×
Biomedical waste (e.g. waste from Nurse's room in school, e.g. band-aids, syringe)	×	~	×	×

No documents uploaded by the school.

## Task 5: How does your school dispose waste?

What is the final destination for waste that is disposed of externally?

Designated dumping site (Dhalao)

### **Supporting Documents**

1. disposing.JPG

9 Does your school burn waste?

No

Does your school have the following? If yes, please give the numbers.

	Total	Working conditions	Non-working condition
TVs	2	2	0
VCR or DVD players	7	7	0
Refrigerators and freezers	3	3	0
Washing machines	0	0	0
Air conditioners	10	10	0
Heaters	0	0	0
Microwaves	1	1	0
Ovens	0	0	0

Toasters	0	0	0
Electric Kettles	2	2	0
Personal computers (CPU, mouse, screen and keyboard included)	85	85	0
Laptop computer (CPU, mouse, screen and keyboard included)	0	0	0
Notebook computers	0	0	0
Notepad computers	0	0	0
Printers	10	10	0
Copying equipment (Photocopiers)	2	2	0
Projectors	21	21	0
Whiteboards	6	6	0
Electrical & electronic typewriters	0	0	0
Pocket & desk calculators	4	4	0
Fax machines	2	2	0
Telex	0	0	0
Telephones	25	25	0
Pay telephones	0	0	0
Mobiles	0	0	0
Answering systems	0	0	0

- 1. indu.jpg
- 2. micro.jpg
- 3. x1.jpg
- 4. fridge.jpg
- 5. comp b.jpg

### Task 6: School's initiatives

Does the school have a policy on waste?

No

Yes

Are there awareness drives with regard to Reduce, Recycle and Reuse?

### **Supporting Documents**

- 1. child.JPG
- 2. children.JPG
- 3. water activities.JPG

What form do these awareness drives take?

As part of extracurricular activities such as guest lectures, By the showcasing of posters and stickers

Is the study of the environment integrated into the curriculum?

Yes

### **Supporting Documents**

- 1. survey.JPG
- 2. park.jpg



### **FEEDBACK**

1	Has your school participated in the Green Schools Programme (GSP) Audit before?
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No

Have teachers from your school participated in teacher interactive workshops organized by the GSP team?

No

Did you find the online information relevant to your environmental education activities?

Yes

Was the audit easy-to-understand and self-explanatory?

Yes

Did you understand the present format of the GSP?

Yes

Do you think your school will be a Green School (resource efficient) by 2019?

Yes

What would be the help required to make your school a Green School?

Encourage more activities related to conservation of environment and create awareness among students about the importance of environment and its uses.

How would you rate the overall design of the audit?

Aspect	Good / Average /Bad
Content	Good
Distribution of time among tasks	Good
Sequencing of tasks	Good
Orientation for conducting tasks	Good

Would your school like to recommend any topic/s that you strongly feel should be added or deleted in the audit?

No

Yes

How many times did you contact the Green Schools Programme Team for guidance and counseling?

Never

Water being the focus this year, did you find the questionnaire in Water section helpful to make your school understand how to become water efficient?

Yes

Did your students enjoy doing the Water activities?

Yes

How many students were involved in the activities?

8.00

#### **Checklist of uploaded documents**

- 1. Picture of 5 star appliances used by school
- 2. Photographs of lunch boxes
- 3. Pictures of Green Cover
- Pictures of landscaped area
- 5. Pictures of bio-pesticides
- 6. Pictures of dustbins in classroom showing segregation at source
- 7. Pictures of playground with more than two dustbins
- 8. Picture of audit team weighing solid waste
- 9. Picture of types of solid waste generated
- 10. Pictures of housekeeping staff disposing different types of solid waste
- 11. Pictures of Electronic items used by school and storage of non-working electronic items
- 12. Pictures of various school initiatives e.g. rally, debate, street play, art competition, etc
- 13. Pictures of respective audit teams doing survey