

Responses for Green Schools Programme Audit 2016

School Name: BELPAHAR REFRACTORIES HIGH

SCHOOL

Address: GUMADERA, BELPAHAR, BELPAHAR,

JHARSUGUDA, Odisha, India

Coordinator Name: Sujata Pradhan



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

Name of the School / In	stitution
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BELPAHAR REFRACTORIES HIGH SCHOOL

2 Address

GUMADERA, BELPAHAR, BELPAHAR, JHARSUGUDA, Odisha, India

Telephone Number (Landline Number with STD code)

(ISD) 91 (STD) 6645 (NUMBER) 258783

Mobile Number (Mobile Number with STD code)

(ISD) 91 (Number) 9238912009

5 Principal Name

Ranjan Kumar Das

6 GSP Coordinator Name

Sujata Pradhan

GSP Coordinator Email

rdranjankumardas@gmail.com

GSP Coordinator Mobile Number

(ISD)91 (Number) 9238912009

Category Of The School

Day Scholar + Residential

10 School Shifts

Morning

GENERAL QUESTIONS

How many levels does your school have?

Lowest level of grade:1 Highest level of grade:10

ls your school single gender or mixed gender?

Mixed/Co-education

Which board of education does the school follow?

State Board of Education (please select name of your state from the list below if applicable)

State: Odisha

Total permanent population of the school

	Male	Female	Total
Students	574	446	1020
Teachers	18	14	32
Non-Teaching Staff	8	5	13
TOTAL	600	465	1065

4(b) How many visitors visit your school

12

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

220

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

Aug, Sep, Oct

Where is the school located?

Urban Area



Task 1: Air Audit Team

Teachers

Sno.	Name	Email
1.	Rabindra Kumar Pradhan	Rabindra Kumar Pradhan
2.	Agniprava Das	agnipravadas@gmail.com

Administrative staff

Sno.	Name	Email
1.	Geeta Nanda	brhs2020@gmail.com

Students

Sno.	Name	Email	Grade/Class
1.	Alampika Priyadarshini Sa	brhs2020@gmail.com	9
2.	Ashish Shukla		9
3.	Jagyasini Karta		9
4.	Jyotirmayee Dansana		9
5.	Mukesh naik		9
6.	Paurabi Behera		9
7.	Paresh Samal		9
8.	Priya Bag		9
9.	Chayan Pani		9
10.	Rasmita Seth		9

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

How many classrooms does your school have?

22

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 Percentage of the floor area being ventilated (Y/X x 100)

Class-I A,B	77.25	21.73	28.13
Class-II A,B	88.68	24.36	27.47
Class-IIIA,B	88.05	29.60	33.62
Class-IV A,B	90.72	27.88	30.73
Class-V A,B	92.16	21.81	23.67
Class-VI A,B	95.63	29.69	31.05
Class-VII A,B	97.85	29.51	30.16
Class-VIII A,B,C	144.26	51.32	35.57
Clas-IX A,B,C	195.34	57.82	29.60
Class-X A,B	90.72	27.88	30.73
TOTAL	1,060.66	321.60	

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?

School does not use or own 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	0	0	0	0
Public Bus	0	0	0	0
School Transport(Other than bus)	0	0	0	0
Public transport (other than bus, Metro, car pool)	0	0	0	0
Taxi four-wheeler	0	0	0	0
Taxi three-wheeler	0	0	0	0
Personal four-wheeler	0	0	0	0
Personal two-wheeler	212	15	4	231

Bicycle	235	1	3	239
On foot	573	16	6	595
Others (non-motorised)	0	0	0	0
SUB-TOTAL	1020	32	13	1065

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



0

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?

Yes



ENERGY

Task 1: Energy Audit Team

Teachers

Sno.	Name	Email
1.	Suresh Kumar Padhan	sureshpadhan00@gmail.com
2.	Swapnanjali Brahma	swapnanjalibrahma@gmail.com

Administrative staff

Sno.	Name	Email
1.	Birkishor Thakur	brhs2020@gmail.com

Students

Sno.	Name	Email	Grade/Class
1.	Bishnu Prasad Swain		9
2.	Soyeb Sidiki		9
3.	Pilkit Padhan		9
4.	Pratik Prasad Mahato		8
5.	Kumudini Behera		8
6.	Tarun Khedkar		8
7.	Dillip Sahani		7
8.	Sampat Sekhar Kumar		7
9.	Subham Panigrahi		6
10.	Abhishek Satapathy		5

Task 2: How much energy does your school consume?

1

Does your school have access to an electricity bill?

Yes

Supporting Documents

- 1. April 2016.jpg
- 2. Mar 2016.jpg
- 3. Feb 2016.jpg

4. Jan 2016.jpg

Does your school have its own vehicles?

No

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)	0.713	2.57	1,2,5
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)	0	0.00	0
Piped Natural Gas (kilogrammes)	0	0.00	0
TOTAL	0.71	2.57	

No documents uploaded by the school.

What appliances does your school have?

	Number	Size	BEE Star Rating
--	--------	------	-----------------

Air Conditioners	0	0	0
Refrigerator	0	0	0
Microwave	0	0	0
Tube Lights	60	2400	**
CFL Bulbs	18	216	0
LED Lights	49	441	0
Fans	132	7275	0

No documents uploaded by the school.

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



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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.	Raghunath Nayak	raghunathnayak900@gmail.com
2.	Supriti Roy	supriti.roy28@gmail.com

Administrative staff

Sno.	Name	Email
1.	Indrabati Singh	

Students

Sno.	Name	Email	Grade/Class
1.	Sameer Biswal		10
2.	Shankar Singh Mahanty		9
3.	Mukesh Sahoo		8
4.	Rituparna Sahu		9
5.	Nilima Jandulia		9
6.	Pallavi Satapathy		9
7.	Barhsa Panigrahi		9
8.	Priyanka Deep		9
9.	Biranchi Narayan Nayak		7
10.	Shaktiman Raut		6

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

2(a) Do students bring their own lunch from home?

No

No documents uploaded by the school.

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
Packaged/Bottled Energy Drinks	0	0	0

No documents uploaded by the school.

Does your school serve traditional Indian snacks?

No

Does your school serve traditional Indian beverages?

No

Task 4: What kind of food does your school promote?

Does the school distribute packaged food items as rewards during schools events?

No

Does the school distribute chocolates/similar products as refreshments during schools events?

Yes

Please provide the names?

chocolates candy only

Are your school events such as quiz shows, talent shows, debates sponsored by food companies/brands?

No

Supporting Documents

- 1. Children%27s Day 2016.JPG
- 2. Food Team1.JPG
- 3. Food Team2.JPG



Task 1: Land Audit Team

Teachers

Sno.	Name	Email
1.	Debendra Kumar Behera	debendra189@gmail.com
2.	Renuka Patel	patelrenuka1970@gmail.com

Administrative staff

Sno.	Name	Email
1.	Purna Chandra Sahu	

Students

Sno.	Name	Email	Grade/Class
1.	Omkar Nath		9
2.	Sheshdeb Mirig		9
3.	Omprakash Behera		9
4.	Biswajit Gartia		9
5.	Jyotsna Ksihan		8
6.	Artatrana Nayak		8
7.	Asutosh Pradhan		7
8.	Pratikshya P Mishra		7
9.	Ritika Sharma		6
10.	Basu Prasad		6

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

Complete the table:

	Your school's area
Site area in square meter (m2)	24,929
Ground coverage area	2,445
Green landscaped area on-ground	13,797
Surface parking area	0

Play area that is paved/ concrete on ground	0
Play area that has grass on ground	1,998
Service Area on ground	0
Roof and terrace area	970
Green cover on exposed roof & terrace	0
Total built up/constructed area	3,879
Total no. of floors	2
Others	6,139

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	34	2	36
Animals	6	2	8

Task 4: Find out if your school uses pesticides

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

No

Supporting Documents

- 1. Master Plan B.R.jpg
- 2. Green Cover1.pdf
- 3. Green Cover2.pdf
- 4. Landscape1.pdf
- 5. Landscape2.pdf



WATER

Task 1: Water Audit Team

Teachers

Sno.	Name	Email	
1.	Sujata Pradhan	sujatapradhan2020@gmail.com	
2.	Kailash Chandra Pattnaik	pkailash64@gmil.com	

Administrative staff

Sno.	Name	Email
1.	Satyendra Kumar Panda	
2.	Punam Mukhi	

Students

Sno.	Name	Email	Grade/Class
1.	Anshuraj Minz		10
2.	Harshbrdhan Mishra		10
3.	Narayan Baral		10
4.	Pratyush Ku Patel		10
5.	Sumanta Paule		10
6.	Siddhanta Mallick		10
7.	Binu Kumar Sahu		10
8.	Sandeep Ku Mllick		10
9.	Arslan Akhtar		10
10.	Aftab hmad Khan		10

Task 2: How much water does your school use?

Calculate your school's water consumption, per activity.

Activity	Total Quantity (litres per day)	
Drinking	1950	
Toilet flushing	4500	
Personal cleaning	500	

Washing clothes	0
Cooking	0
Cleaning Utensils	0
Washing Vegetables	0
Mopping floors	200
Gardening	4000
Total	11150

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

Where does the water your school uses, come from?

Surface water

Who supplies the water in your school?

Private supplier, School's own supply (bore well, rainwater harvesting facility, etc)

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?	Yes
If your school has an eco-club, do they have water component?	Yes
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?	No

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)	No

Supporting Documents

- 1. Water Component 1.JPG
- 2. Float Valve1.JPG
- 3. Water Conservation short Play in Hindi %27Anmol%27.JPG
- 4. Spill Proof Tap.jpg
- 5. Storage tank1.JPG

Task 5: Does your school harvest rainwater?

Do you have Rainwater harvesting (RWH) system in your school? Yes Does your school harvest different catchments?. No How does your school harvest rainwater?

By recharging groundwater

Does your school have groundwater recharge structure? 6(b)(1)

Yes

Please share the total number of groundwater recharge structures 6(b)(1)(i) 8.00

Please tick the type of groundwater recharge structure used in your school: 6(b)(1)(ii)

Recharge pits

How much area in your school is harvested?

21 to 30 per cent

Please select (from the list given below) the rainwater harvesting structures present in your school

Conduits, Gutters, Recharge structure

Rate your catchment on cleanliness:

Average

Supporting Documents

- 1. Recharge Pit1.JPG
- 2. Catchment Area.JPG
- 3. Water Conservation short Play in Hindi %27Anmol%27.JPG
- 4. Conduits.JPG
- 5. Boys %26 Girls Toilet.JPG

Does your school clean your catchment and system (structure?)?

Yes

6(f)(1) Please specify when does your school clean the catchment and RWH system?

Post-monsoon

Does your school monitor the rainwater harvesting structure for its efficiency?

No

6(h) What is the trend of groundwater level in your school across the year?

If there was a decrease, please specify

6(h)(1) Please specify how much was the decrease?

Less than a metre annually

If your school's RWH structure is more than a year old, is there any improvement in the groundwater quality after the implementation of the RWH structure?

No

6(i)

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

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

19 of 31

	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?

9

How many hand pumps do you have?

1

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

15

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

	Girls	Boys	Common	Total
Number of toilets	10	12	4	26

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

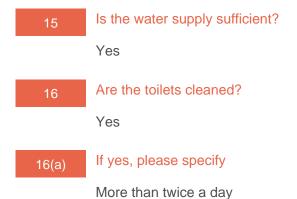
22

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

1

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

Yes



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

Does your school treat wastewater?

No

Does your school reuse the treated wastewater?

No

18(a) Please specify the fate of wastewater

Used for groundwater recharge

Supporting Documents

1. Wash Basin1.JPG



Task 1: Waste Audit Team

Teachers

Sno.	Name	Email	
1.	Ramesh Chandra Behera	ipruramesh@gmail.com	
2.	Jayanti Pradhan	jayantineha2015@gmail.com	

Administrative staff

Sno.	Name	Email
1.	Chandana Suna	

Students

Sno.	Name	Email	Grade/Class
1.	Ayush Pradhan		8
2.	Ashish Majhi		8
3.	Adarsh Jaiswal		8
4.	Amit Kumar Senapati		8
5.	Chandan Keshar		8
6.	Harekrushna Sahu		8
7.	Krishna Rohidas		8
8.	Nibash Naik		8
9.	Kailash Ch. Bhoi		8
10.	Lingaraj Meher		8

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. Housekeeping (Sweeper)
- 2. Gardener

	Total No. of collection points	No bin	One bin	Two bins (wet & dry)	Three bins or more
Classrooms	16	0	16	0	0
Playgrounds	1	0	0	1	0
Common area (e.g. reception, corridors)	13	0	2	11	0
Staffroom	2	0	2	0	0
Laboratory	2	0	2	0	0
Canteen	0	0	0	0	0
Clinic/ Sick room	0	0	0	0	0
Library	1	0	1	0	0
Toilets	8	0	8	0	0
Others	5	0	5	0	0
Total	48	0	36	12	0

Supporting Documents

- 1. Classroom1.JPG
- 2. Classroom2 c.jpg
- 3. DSCN7221.JPG
- 4. Dustbin at Playground.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	5.5
Kitchen waste	0
Paper	10.1
Plastic	2.2
Wood, glass, metal, classroom furniture	1
E-waste	0
Biomedical waste	0
Sanitary waste	1.5
Construction and Demolition (C & D) waste	0
Hazardous waste	0
Total Generated Solid Waste (in kilogram)	20.3

Supporting Documents

- 1. Weighing waste1.JPG
- 2. Weighing waste2.JPG
- 3. Housekeepng staff2.JPG

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

Does your school recycle any generated waste?

Yes

Please provide quantity of which is applicable. (in kilogram)

	Quantity
Garden/ horticulture waste	11.5
Kitchen waste	0
Paper	9
Plastic	0

Wood, glass, metal, classroom furniture	0
E-waste	0
Biomedical waste	0
Sanitary waste	0
Construction and Demolition (C & D) waste	0
Hazardous waste	0
Total (in kilogram)	20.5

Does your school have a composting facility?

Yes

Supporting Documents

- 1. Compost 1.pdf
- 2. Compost Pit.jpg
- 3. DSCN7155.JPG
- 4. Green8.JPG

5a What is the methodology used?

Natural composting without added microbes

What is the quantity of compost that is generated per month(in kilogram)?

3.50

What is the purpose of the compost that is generated per month?

For school garden

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
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Paper (e.g., used notebooks, used examination paper, subscription newspaper and magazines)	✓	×	×	×
Plastic (e.g. plastic bottles)	⋞	×	×	×
Horticultural waste	×	×	×	⊻
E-waste (e.g. broken, unusable computers)	×	€	×	×
Hazardous waste (e.g. diesel fuel, battery)	×	×	×	4
Wood,glass, metal scrap, other scrap	✓	×	×	×
Biomedical waste (e.g. waste from Nurse's room in school, e.g. band-aids, syringe)	×	×	×	4

Supporting Documents

- 1. Kawadibala.JPG
- 2. Kawadibala1.JPG
- 3. DSCN7299.JPG
- 4. DSCN7321.JPG

Task 5: How does your school dispose waste?

8

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

Designated dumping site (Dhalao)

Supporting Documents

- 1. Housekeeping staff1.JPG
- 2. Housekeeping staff3.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	0	0	0
VCR or DVD players	2	2	0
Refrigerators and freezers	0	0	0
Washing machines	0	0	0
Air conditioners	0	0	0
Heaters	0	0	0
Microwaves	0	0	0
Ovens	0	0	0
Toasters	0	0	0
Electric Kettles	0	0	0
Personal computers (CPU, mouse, screen and keyboard included)	30	30	0
Laptop computer (CPU, mouse, screen and keyboard included)	0	0	0
Notebook computers	2	2	0
Notepad computers	0	0	0
Printers	2	2	0
Copying equipment (Photocopiers)	1	1	0
Projectors	10	10	0
Whiteboards	3	3	0
Electrical & electronic typewriters	0	0	0
Pocket & desk calculators	1	1	0
Fax machines	0	0	0
Telex	0	0	0
Telephones	2	2	0
Pay telephones	0	0	0

Mobiles	0	0	0
Answering systems	0	0	0

Supporting Documents

- 1. Computers.JPG
- 2. Computer1.JPG
- 3. Laptop.JPG
- 4. Printer %26 Copier.JPG
- 5. Smart Board.JPG

11

Do you know that your E-waste can be collected by an authorised dealer or dismantler?

No

Task 6: School's initiatives

12

Does the school have a policy on waste?

Yes

Policy document

Master Plan B.R.jpg

13

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

Yes

Supporting Documents

- 1. Paper Bag.JPG
- 2. Rally.JPG
- 3. Plastic Bottle.JPG
- 4. Plastic.JPG
- 5. Art C.JPG

13a

What form do these awareness drives take?

As part of the curriculum

1/

Is the study of the environment integrated into the curriculum?

Yes

Supporting Documents

- 1. Audit team survey1.JPG
- 2. Audit team survey2.JPG
- 3. Audit Team3.JPG
- 4. Terrace1.JPG



FEEDBACK

1	Has your school participated in the Green Schools Programme (GSP) Audit before?
	Yes

1(a) If yes, then in which year did your school first participate in the GSP Audit?

1(b) If yes, how many times have you done the audit?

1

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?

More workshop and manuals.

How would you rate the overall design of the audit?

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

Orientation for conducting tasks	
----------------------------------	--

Average

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

Yes

9(a) If yes, please share your suggestions.

1. In land, plantation and afforestation programme may be the part of the audit. 2. New Initiative may be included in all areas.

Could you finish all the tasks in given period of time online?

Yes

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

Once

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?

80.00

Checklist of uploaded documents

- 1. Electricity Bill
- 2. Picture of Renewable sources of Energy
- 3. Photographs of lunch boxes
- 4. Pictures of Green Cover
- 5. Pictures of landscaped area
- 6. Building construction plan
- 7. Pictures of bio-pesticides
- 8. Pictures of dustbins in classroom showing segregation at source
- 9. Pictures of playground with more than two dustbins
- 10. Picture of audit team weighing solid waste
- 11. Picture of types of solid waste generated
- 12. Pictures of recycling units composting pit, paper recycling machine, selling paper to kabadiwala, recyclers,etc
- 13. Pictures of housekeeping staff disposing different types of solid waste
- 14. Pictures of Electronic items used by school and storage of non-working electronic items
- 15. Waste Policy

- 16. Pictures of various school initiatives e.g. rally, debate, street play, art competition, etc
- 17. Pictures of respective audit teams doing survey