

National Disaster Response Force

Mr. Rana Sangram Singh, Deputy Commandant

Dear Prahari Reporters,

Thank you for the opportunity to write to Prahari and to share the NDRF disaster response and safety preparation work with students so we can become a team that will work to make Varanasi a safer place for everybody.

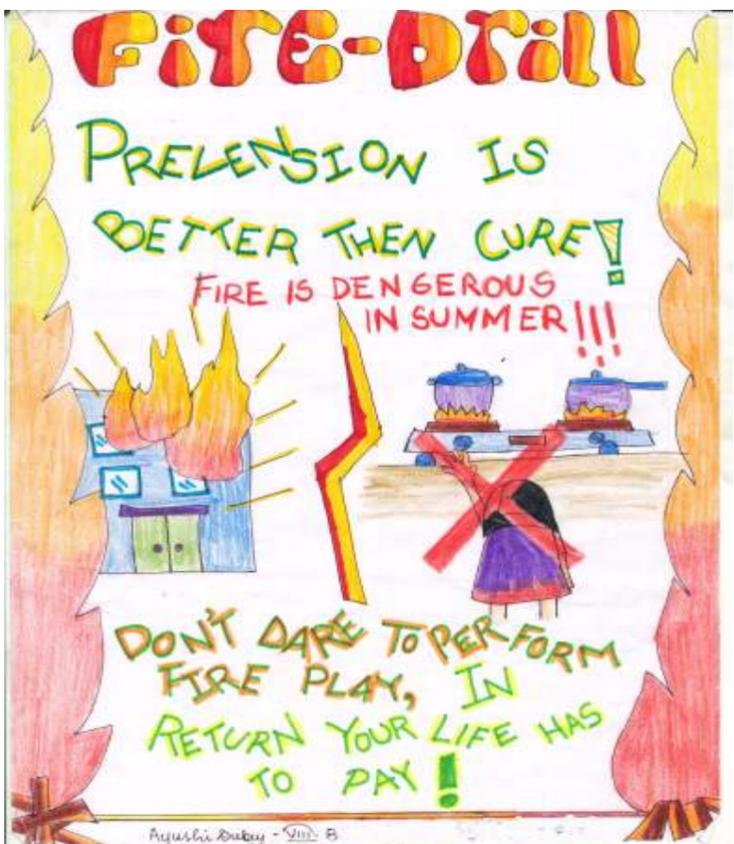
NDRF is the premier agency of Govt of India, which is tasked to respond in any disaster situation. As we all know that for such a vast country with over 1.2 billion countrymen, the number of specialized rescuers is too little. One important program is school safety that focuses on preparing teachers to face disasters by taking safety precautions and also to be ready for emergencies. Schools are an important part of the community and when a disaster strikes the teachers are accountable for the safety of hundreds of students. Training teachers are therefore crucial to save lives. Hazard areas in schools are the laboratories and libraries—the former because of the risks of chemical blasts and the latter contains heavy books that can injure people during a disaster such as an earthquake. Also the area outside the school has hazards such as electrical poles and wires.

The importance of teachers being able to conduct safety and rescue measures that includes first aid and sanitation makes the school better prepared to face disasters and reduce loss.

Good Luck with Prahari and contact me anytime.

Fire Drill Conducted

at Rajghat Besant School on April 15, 2017



Manani-VI, Divyansh-VI, Avni-VI, Manikya-VI, Pushkar-VI, Aarush-VI, Ayush-VII, Chandrashkhar-VII, Aditya Sakunia-VII, Aditya Gupta-VII, Anuj-VII, Dhruv-VII, Ayushi Dubey-VIII, Yash-VIII

by Prahari Reporters

Interview:

NDRF Office (Varanasi)

Mr. Rana Sangram Singh

Deputy Commandant

by Arshikam Jaiswal, Vishal Shah, Anil. Central Hindu Boys School

Q. Sir, your Department has 12 (Arshikam) Battalions each with 1049 member that is equal to 12, 588 members. Sir, do you think that is enough for such a vast country like India?

A. Absolutely not. That is why every state is also running its own Resum force (JDRF) who are trained by NDRF members which stregthivs our force. Any community can never be successfull if it is not supported by society and society should be rewarded as a result.

Q. Do you have different strategies for different kind of disasters at different times.

A. Yes, we have different strategies. To tackle different disasters. We need to think in many ways. Like if it is flood then we need to first get portable water. If its a building collapse we need to sometime break down the walls or some time lift them. If its a fire then we have to even protect ourselves.

Q. As you know major parts of India face earthquakes. Are you better prepared this time?

A. We can't prepare much for earthquakes. What we can do is so reduce risks and loss of lives. We should build earthquake resistant houses, keep emergency bags of food, water and blankets. Keep evacuation maps.

Q. What problems do you face to educate the people.

A. Major problem is that they first think they know everything But they are not able at time of need.

Q. What was the most dangerous time of your life.

A. It was a building collapse in Nagpur as when the building collapsed many people were inside it and the public was also cooperating less. It took 8 hours to save a 2 year old child, which was the biggest reward.

Uttar Pradesh Fire Service, Varanasi

Mr Rakash.K. Rai, Chief Fire Officer

Dear Prahari Reporters,

I would like to share with you a little bit of my work so we can build the disaster risk resilience of our city together.

Varanasi is an old city and roads are very narrow and remain almost the same as it was many hundreds of years ago. Shops, business, and residents live in close proximity to each other and some places do not have proper road access. Fire is very common in the dry summer months.

This means the situation is very dangerous in the event of a fire. Our big trucks do not have access to some of the areas that need help because the streets are too narrow. And motorcycles can take only limited fire extinguisher equipment. Therefore the focus of my work is to stop fires and save people and the city.

It is very important to prevent fires from happening. Varanasi city and its surroundings that have many LPG gas plants, handloom factories on the streets and bottling plants. Last year we had 254 emergency calls an annual increase. We must be more aware of risks and Parhari is the right place to start doing this.

Lets learn and discuss more how we can protect our city.

Visit to Fire Office (An Interview with CFO)

April 17, 2017

Jahnvi Pandey, Shweta Mishra, Karuna Keshari

11th (Science) Agrasen Kanya Inter College

Q. What is fire?

A. Fire is a chemical reaction of heat, fuel and oxygen.

Q. How we can prevent fire?

A. During summer fire incidents are very high because of dry heat. Please do not use matches, do not smoke and take extra care in your house to stop gas leakage.

Q. Can you describe fire incident?

A. In village there was a big fire when a farmer threw his 'bidi' into the dry field. The fire destroyed three hundred acres of land. In Varanasi streets are very narrow and there unauthorized gas filling plants. There can be explosion and our engines can't enter the site because street is to narrow. People must be aware to take safety precaution.

Q. What kinds of fire extinguisher?

A. There are six kinds of extinguisher.

1. Amonium Carbonate Sulphate
2. Borex
3. Amonium Carbonate
4. Boric Acid
5. Allum Phitkari
6. Water

Q. Why do you like about this job?

A. To save lives is most important jobs in the World.



View from Fire Brigade Elevator - 'Thank you for taking us!'



Shweta Mishra 11th A

From Students of Takakura Elementary School,
Kyoto, Japan, 9, March, 2017



Fifth Grade Students participated
in a Town - Watching programme
on February 15th supported by
their Community. After the training

they made posters and shared their
knowledge with other grade students.

Their comments are below -----

By: **Asuka Yoshie**

Studying about disaster risk reduction (DRR) this time, I learned about the fear of earthquakes and the importance of helping one another. I focused my study and presentation on "DRR equipment", and what I heard from the local people became my reference. I also learned about the importance of "Self Help, Mutual Help", and learned that my judgment during a disaster might influence my own life, my family members' lives and other people's lives.

By: **Karen Yamada**

I understand a lot of things after the (town-watching) lesson "To protect the town of Takakura". For example, it is good that through the talks with the local people, I realised that I know very little about my neighborhood; I was allowed to try holding some equipment that the fire station's staff members usually use; and I also learned about the equipment, facilities and efforts in disaster risk reduction (DRR) that are hidden in my neighborhood. Besides, I made a poster to use during my presentation.

By: **Maasa Yoshida**

Through this lesson, I learned how fearsome disasters can be and also that many measures were being considered to protect us. I feel that we, children, have our own lives, so we must be better prepared. I think that in my life, what I fear the most are earthquakes. Since we do not know when earthquakes will occur, preparedness is definitely necessary. It was so good that through the talk by Mr. Ota and through field work, I learned about the DRR activities in my neighborhood and methods to protect my own self while protecting other people.

By: **Issa Takeyama**

I was taught a lot of things that I did not know by the guest teacher, Mr. Ota, and staff members from the fire station in the lesson "To protect Takakura..." Through the talk of Mr. Ota, I understand about the awareness of "Self Help", which means to try to protect ourselves, and "Mutual Help", which means to cooperate and help one another. This learning is important. I think it was really good for me.

I think that knowing how to use DRR equipment will help protect Takakura from disasters. I learned that DRR equipment was easy to use. I had been worried if I could speak well on presentation day, but I think I conveyed about disaster risk reduction firmly to fourth graders about knowledge and also translating into actions.

By: **Mirai Fujihara**

The point that I wanted to convey the most through posters was 'Self Help' and 'Mutual Help'. It's about becoming "the person who helps", not "the person who is helped". Although no big disasters have occurred in my neighborhood up to now, I learned that no one could forecast the occurrence of earthquakes, so it's necessary that we always keep our awareness of it. Like it was mentioned in Mr. Ota's talk, students of lower grades are in the position of "being protected", but the students of fifth grade, sixth grade and middle grades should be in the position of "being able to protect".

By: **Reiou Tada**

My father is in the fire brigade. Now I understand that fire brigade's members are those who have training from ordinary days to protect people and the town. They are amazing people who protect us from disasters. I want to stay grateful for members of fire brigade as well as my father. Although I am only a kid, I think that everyone has something that they are capable of, so I want to prepare emergency foods or emergency bags.

NDRF (National Disaster Response Force)

Lecture in our school

-Rajghat Besant School

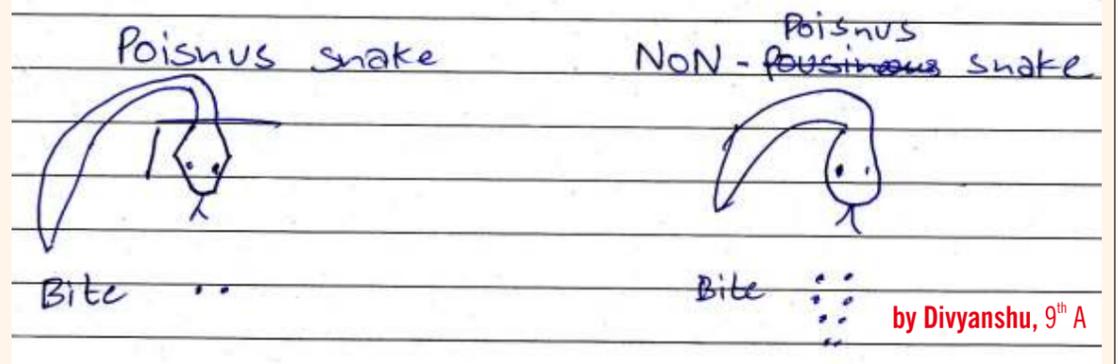
February 25-26, 2017

"against all odds" by Ansha Jain, 9th B

This Saturday we learned something different from our normal subjects. We learned how to respond to disasters when the NDRF came to our school and the inspector gave us lectures on life saving techniques and how to perform them. NDRF started in 2006, after the formation of NDRA in 2005. Today, there are 12 such battalions throughout India. And, they are helping to save lives of thousands of people not only in India but also in our neighbouring countries. I liked their simple language and the easy to do techniques they taught us. One of the best things was the different ways they made a stretcher. Some of my friends even made a stretcher out of a rope, a shirt and plastic bags. Another thing that caught my eye was how they taught us to differentiate between venomous and non-venomous bites. I want to study more.

by Nishant Jain, 9th B

NDRF has five types of forces; BSF, CRPF, SSB, ITBP and ISB. They are scattered in different places in India. NDRF told us about one method known as CPR, which means that if we see a person on a road fallen on a road. Then, first we have to check the circulation. If circulation is not responding then we have to alert EMS, then we check the air to find out whether he is breathing. If not we have to give make him breath by continuing mouth-to-mouth and CPR resuscitation. Then we should contact EMS (Emergency Medical Services), and continue resuscitation until they come. Then, NDRF told us that there are 3,500 species of snakes in the world out of which 10% are poisons. In India there 216 species of snakes, and the poisonous ones are King Cobra, Cobra, Krate, and Russel Viper. The most dangerous snake is the common "krate" because it has the lethal dose of poison and the person can live only one to two hours of after the bite. **But, we can now identify the poisonous and non-poisonous heads. If the head is triangular in shape, then it is poisonous. If it is circular in shape then it is non-poisonous.** Finally, they told us that during a natural disaster like earthquake, flood, fire and Tsunami we have to stay cool and calm. If fire is in your room and smoke is there, you have to bend down and open the window and call the firemen for help. Be patient until the fireman reaches you.



by Divyanshu, 9th A

Introducing our 'Green' school - by Aman Kumar Ojha, 8th E, Vikas Tiwari, VII-C

Sant Atulanand Convent School is using solar power. There are 100 solar panels in our school. Each of them generate 350 watt of electricity. Our principal told us that we have solar power to generate green energy, save our averment from burning fuel and coal, because these material generate greenhouse gases. Also she said this system is installed to make student understand the importance of using alternate forms of energy and to prevent electric accidents in our school.

Solar energy is harnessed using range of evolving technologies such as Solar Heating, Photovoltaic technology, solar thermal energy, solar architecture, molten salt power plants and the artificial photosynthesis.



Collecting Scientific Data

Report

Kopal Kapoor, XI Humanities and Ganesh Sahai, Principal
Aryan International School

The growing impact of modern technology has raised the important question to what extent the actions of humans in the past century has been on the cycles of the earth's climate. Climate Change—the scientific fact that the earth is getting hotter and its negative impact on the environment and humans—has become a real issue that needs urgent attention by governments and ordinary people. Climate change and its influence on weather patterns, such as our experience of hotter summers, warmer oceans, changed rainfall patterns etc needs to be accepted and steps taken to confront the fall out on our lives,

An important example of the economic impact of climate change is the challenges faced by our farmers. The changing monsoon has now forced our farmers to grow crops differently according to the changing rainfall patterns. Farmers in Varanasi grow wheat and gram and mustard crops. These crops were grown in the traditional method – which means harvest four to five times a year based on the knowledge that the monsoon follows stable pattern. But with less rainfall now and unpredictable monsoons, farmers have to find new crops to survive.

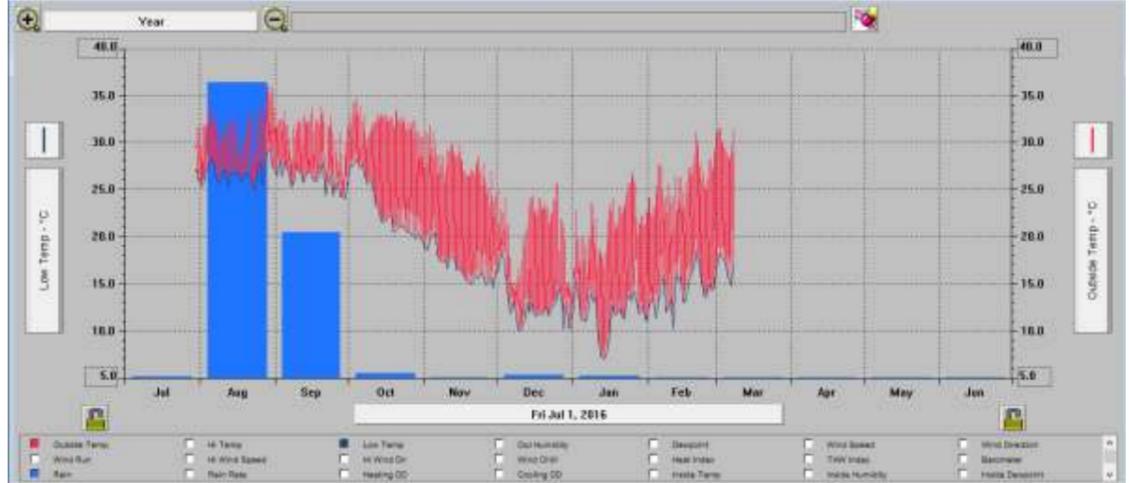
At Aryan School we are now taking preparedness steps to face the hot season in Varanasi. Temperatures have risen to over 40° C. According to the weather station in our school, the humidity has also rise to over 60 percent starting as early as March.

In preparation for the next five months of hot and humid summer and also the sudden storms that occur from the low air pressure, we start school at 6 am and end classes at 11.30 am. Water from our water coolers are also distributed regularly to students in the classes. This is to protect students from heat wave. Also by leaving early, the students can avoid the extreme heat in the school buses. Temperatures rise over 6 degrees higher inside the buses when windows are closed due to the greenhouse effect.

Lets get prepared for minimizing bad health effects in the ever heating summer.!

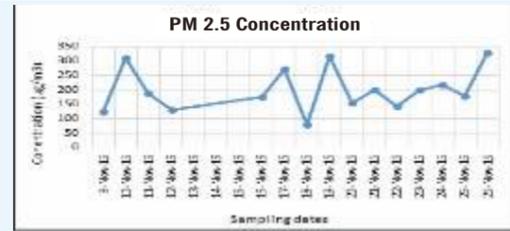
From Our Automatic Weather Station-Aryan International School

Rainfall and Temperature:September — February. Aryan International School



Air Sampler Data

Local air quality affects how you live and breathe. Like the weather, it can change from day to day or even hour to hour. A particle is a solid suspended mixture of liquid and solid particles. Air Sampling is capturing the contaminants in a known (specific) volume of air and measuring those contaminants as a concentration. AS per the Central Pollution Control Board (CPCB) air quality standards for particle pollutant should not be above than 60 $\mu\text{g}/\text{m}^3$ for 24 hours. Above that is unhealthy to inhale. Air sampling has been done in Varansi and the



maximum concentration observed is 329 $\mu\text{g}/\text{m}^3$ and minimum concentration is 80 $\mu\text{g}/\text{m}^3$. The above graph is showing the concentration of the particulate matter in BHU, Varanasi.

More than 90% days in November are above then the prescribed CPCb guidelines. Exposure to particle pollution may cause people with heart disease to

from,
Institute of Environment and Sustainable Development,
Banaras Hindu University.
November, 2016

experience chest pain, palpitations, shortness of breath, and fatigue. Particle pollution has also been associated with causing cardiac arrhythmia and heart attacks in people. Dust allergies are most common during March to June when the particles are being transported from Middle East (desert regions) to indo gangetic plains (Varanasi).

Dust Menace - by Vishal and CHBS Students



Quiz

- Which hazard can produce the faster wind?
[Knowing the speed power of tornado]
Ans: A) Tornado
- If you see the Tornado signs, you should [Guiding people where can be safe place for them to evacuate]
Ans: B) Go in to a basement or cellar
- Fire depends on the three elements that are....
Ans: B) Heat, Fuel and Oxygen

Who are Prahari Reporters

VARANASI CLIMATE SCHOOLS

- Agrasen Kanya Inter College (AKIC)
- Aryan International School (AIS)
- Central Hindu Boys School (CHBS)
- Rajghat Besant School (RBS)
- Sant Atulanand Convent School (SACS)

Prahari Reporters belong to the above five Climate Schools. They are students who are investigating and writing about natural and man-made disasters that affect them, their families and neighborhood. Their findings are published in the Climate School Newspaper with the objective of sharing the lessons learned with their colleagues, community and local officials to build a safer society and world.

Our Disaster Diary

Cold Wave
by Arshikam Jaiswal.CHBS

Interview with Rickshaw Puller
Name : Mr. Ramu Rajan
Venue: Assi Ghat **Date :** 5th Jan, 2017
Time: 11 A.M. **Temperature:** 10* C

It was a cold day when I went for a walk to Assi Ghat to complete my interview for Prahari. The sun came out late that day almost around 10 AM. After sometime we met a person who was waiting for a customer for his rickshaw. When we got close to him he first asked us whether we wanted a ride. But, we asked him to sit with us. Because, I wanted to interview him. Since it was very cold we decided to have tea together. At table I began to interview with him.

Q: Please tell me about yourself and your work?

A: My name is Ramu Rajan, and I live in small hut near Bhelupur. I am a poor man with a family of 5 children. I work very hard.

Q: Are you experiencing the cold wave this time?

A: Yes, I am suffering from fever and cold. And, this is because it is very cold outside. My condition would have been more adverse if I had not been pulling auto rickshaw as cycling the rickshaw keep me warm.

Q: When do feel the cold wave the most?

A: I am strongly affected in the months of December and January.

Q: How do you manage to keep yourself warm?

A: I wear three sets of clothes, and cover my head and face. I cycle

more and faster to generate heat. I sit near the fire and warm my body. I rub my hands and palms. And, also sometimes I go into a packed room which is warm.

Q: Do you have enough warm clothes?

A: Yes, I have three warm clothes which I wear in rotation. I am poor. So, I get clothes from a charity group.

Q: Do others help you?

A: Yes, some rich and nice people help people like us. They give us more money for rides, make us drink tea and donate us warm clothes. Even government helps us by lighting fires at few fire stalls, and provide us shelter in the night in "rain-baseara" where there is a blanket and cot during the winter.

Then, temples also help us. As they do "langar or bhandara" in which the food is free of cost. They even distribute the blankets and warm water and clothes.

Q: How is your work affected by cold waves?

A: Usually, we work from 6 AM to 8 PM, but when it is very cold I can only start from 11 AM to 5 PM. During winter I also fall sick more often. So my family is badly effected economically. My wife even lost her job as a maid. Because she went late due to frost.

Fog Fear - January & February

Fog is a essentially a cloud. That occurs at ground level instead of in the sky. When water vapours condenses the dust particles are formed.

Fog occurs in October to February. When fog occurs in the winter, a thick layer of cloud is formed which causes difficulty to see beyond few meters. Many air flights can cancelled, trains are delayed, and there are many car accidents because of lack of visibility.

Every year many people lose their lives due to fog and their carelessness. Many farmers are affected too because their fruit plants and wheat plants are

destroyed.

The main reason for the longer formation of fog is the increasing air pollution. Air Pollutant like Suphor-die-oxide (So₂), Carbon Mono Oxide (C), Ozone (O₃) mix with fog to form a dense layer in the atmosphere called smog. It causes a number of respiratory disorders like coughing, asthma, bronchitis.

Interview with my father

Daughter: What kind of problem do you face during Fog?

Father: In winters during fog when I drive my car, I can't see beyond the windshields. I worry about the chance of accident.

Daughter: What do you do to prevent accident?

Father: I always check my car's front and back lights. The lights should be working properly and bright. So, that I can see clearly. I also drive carefully to prevent accident.

Daughter: Any other problem do you face during flood?

Father: Yes, in Varanasi we also face smoky fog which is called "smog". It is formed because of air pollution. Smog is very harmful, so I wear mask to protect myself.

Daughter: Thank you!!

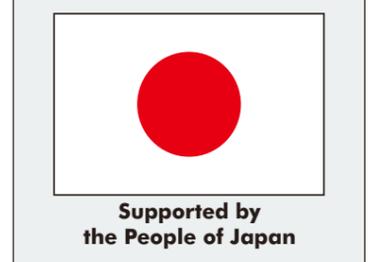
Pragya Singh, 8 F
Vaishnavi Singh, 7 D
Pari Singh, 8 A
Sant Atulanand Convent School

Prahari News Bulletin

'NGOs are torch bearers and students are the future in society. If both come together for disaster management we can prevent loss of life and property to a great extent. I appreciate this initiative of the Japanese Ministry of Foreign Affairs,' said **Dr. Rachna Agrawal** member Managing Committee, Agrasen Inter College.

'NDRF Informative lecture at Atulanand School on April 22, 2017 taught me how to make neck collar with my note book and scarf. Now i am better prepared for First Aid,' said- **Niraja Shadi**, Swastik Gardenia Society

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Our Project with guideline by our teacher Kirti Singh - Shri Agrasen Kanya Inter College Flood : August 2016

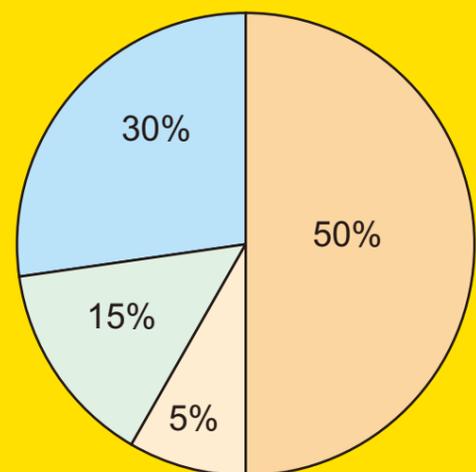
सीड्स एशिया की चल रही परियोजना के कारण हमने आपदा के बारे में हमारा रुझान बढ़ा है। हमारी शिक्षिका कीर्ति जी ने हमें आपदा से जुड़े शीर्षक बनारस के बाढ़ पीड़ित क्षेत्रों में आर्थिक हानि एवं इसको न्यून करने के तरीके के अन्तर्गत छात्रों के समूह ने बनारस में बाढ़ (अगस्त 2016) जैसी अत्यन्त भयावह समस्या के अध्ययन करने का प्रयास किया है। इसके तहत हम छात्रों ने बाढ़ पीड़ित क्षेत्रों में (कोनिया, सूजाबाद, पड़ाव आदि) के अन्दर बाढ़ की भयावहता के अध्ययन और इसके सम्भावित कारणों को खोजने का सामूहिक प्रयास किया है।

कार्य विधि :

1. छात्रों को दो गुटों में विभाजित किया गया।
2. बनाये गये क्रिया कलाप के अनुसार एक गुट ने पीड़ित क्षेत्रों में आर्थिक हानि और दूसरे गुट ने स्वास्थ्य केन्द्रों में सर्वेक्षण किया।
3. इसके बाद छात्रों ने तीन लोगों का इंटरव्यू लिया :
I. जिसने बाढ़ पीड़ित क्षेत्रों में काम किया हो।
II. NDRF की वाराणसी शाखा में जाकर आपदा प्रबंधन के बारे में।
III. CWC (central water commission) के कार्यालय में जाकर आंकड़ों के बारे में।
4. प्राप्त आंकड़ों का विश्लेषण करके अध्ययन करना।

आँकड़ों का विश्लेषण :

- 30% लोगों को NDRF एवं अन्य आपदा प्रबंधन समस्याओं की जानकारी नहीं है।
- 15% लोग आपदा के लिए स्थानीय सरकार को दोषी मानते हैं।
- 50% लोगों को बाढ़ जैसी आपदा के पश्चात दवा एवं सफाई इत्यादि की सुविधा नहीं प्राप्त हुई?
- 5% लोगों की समस्या बाढ़ के बाद चोरी।



Jahnavi Shweta Pratiksha Roli 11th

Note : Visual representations shown in this Newspaper are purely conceptual.

