

Environment For Children

HARIT AND CHURNI SAVE PATANGPORE





Edited by
Ms Pritee Shah
CERC



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She has gained expertise in communication, public relations and liaising, administration, planning and organizing from the rich work experience she acquired over the years.

Writing has always been her passion. Various in-house bank magazines and bulletins published her articles. She has penned reviews on books, which have been featured in 'The Hindu'

She divides her time now among her interests, which are writing, sketching, teaching, music and photography.

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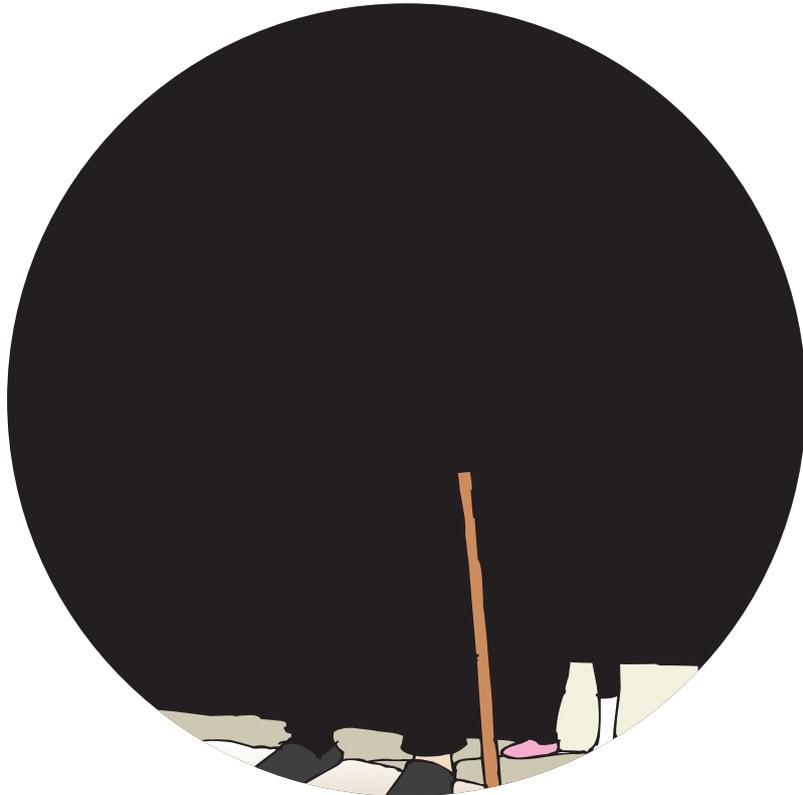
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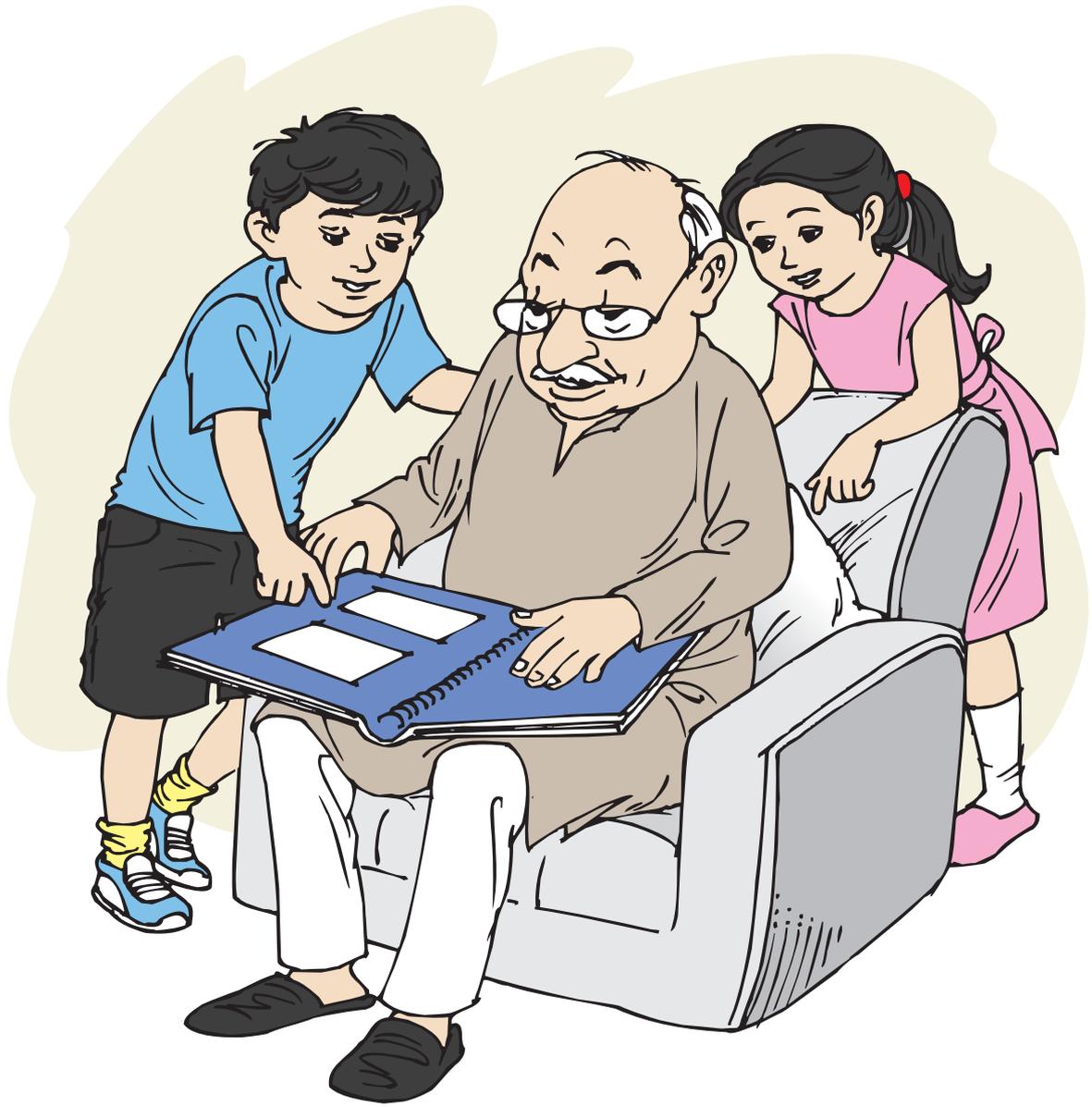
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Environment For Children

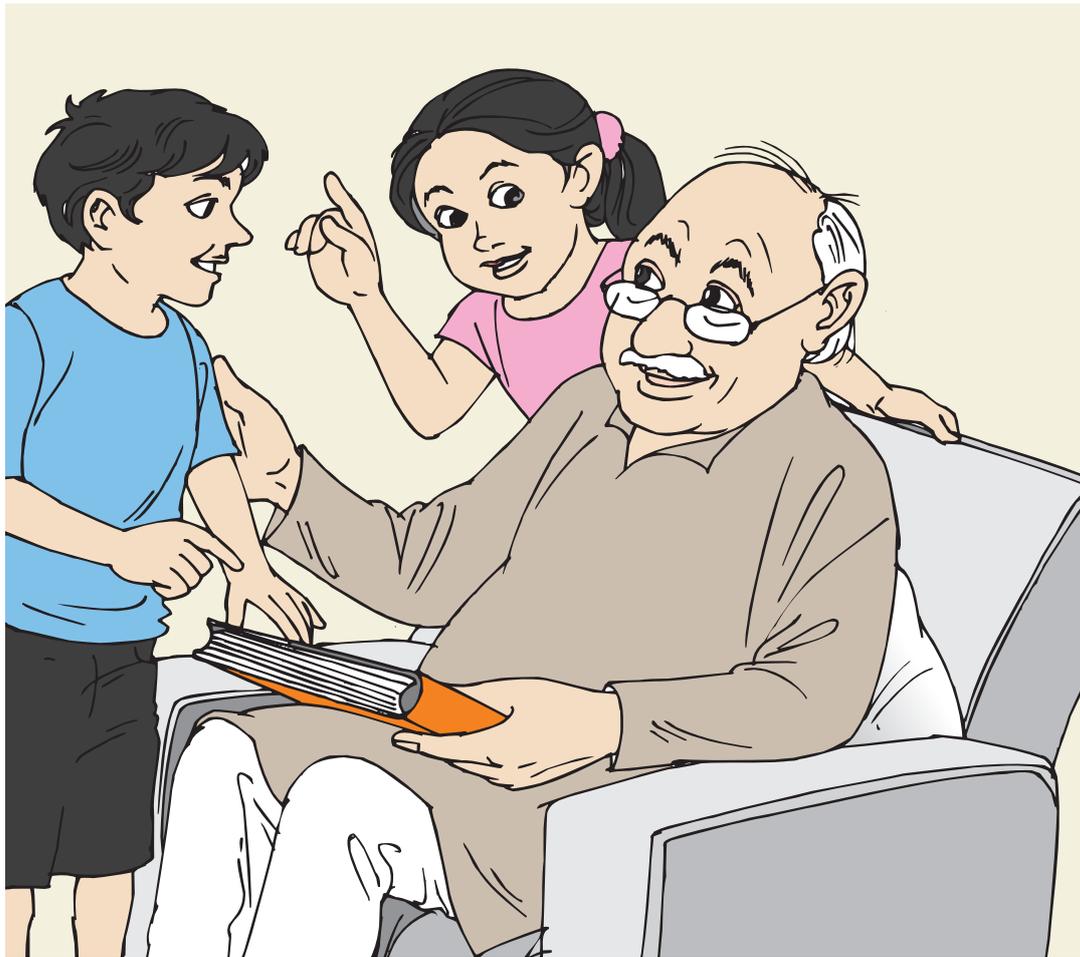
HARIT AND CHURNI SAVE PATANGPORE

By
Chhaya Ramachandran





The Roy household was preparing excitedly for a journey. Harit and Churni were jumping in joy. They were going to take a train, and a bus and then a boat down the river that joins the sea to see their Dadaji's old house and the casuarina groves where he had played in, as child! What's more, Dadaji, Dadiji, Ma and Pa-ji were all travelling along with them. To old Mr Roy, it was a trip down Memory Lane, and a wish that was coming true! Patangpore, a village on the Sunderbans Delta, where he had grown up, was now a page from the past, which he was eager to



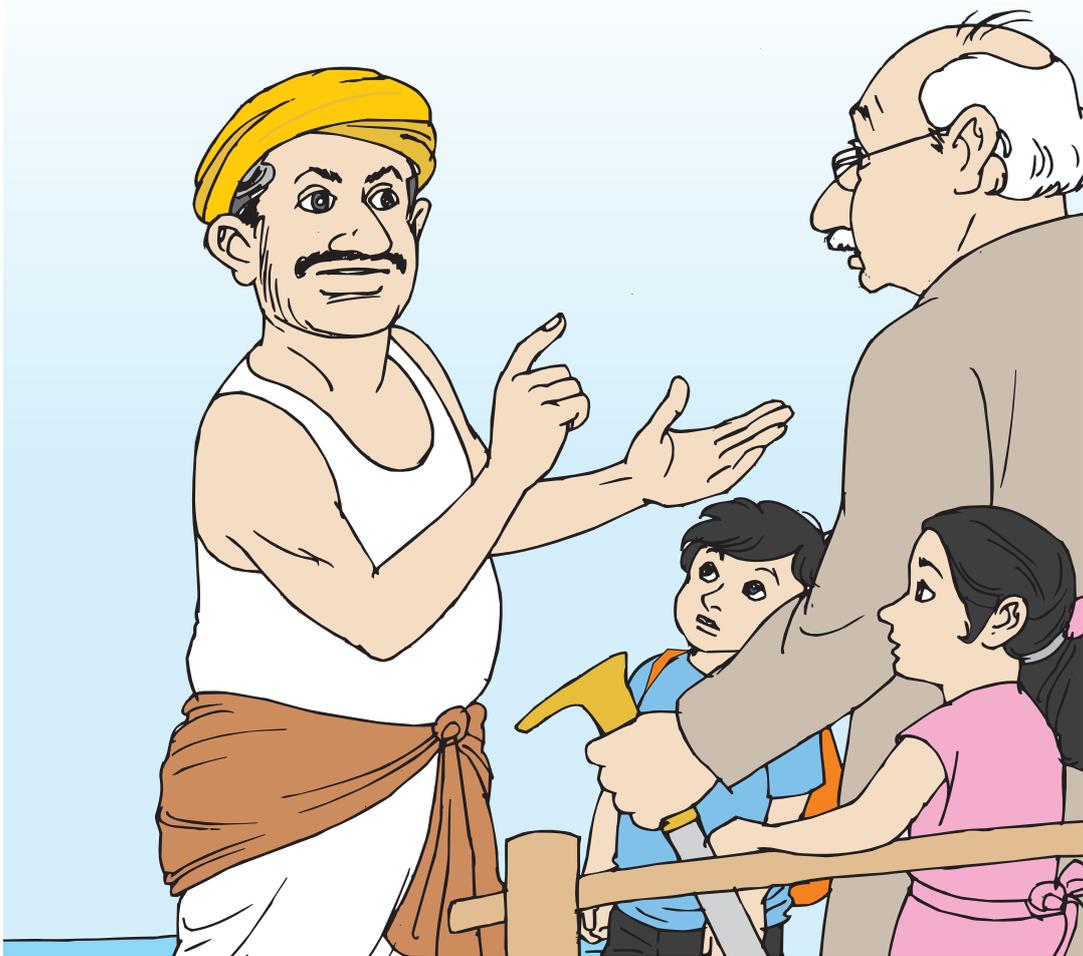
revisit after 55 years! His son, daughter-in-law and grandchildren had never been there. Mr Roy was nearing eighty, but had been keeping fit by doing Yoga, and eating frugal meals. The one ambition in his life was to set foot on the native village near the sea and relive the past days of happy childhood. His son understood his wish, but this trip was being postponed for ever, it seemed, for so many personal reasons. But Purno, his son, decided this summer they would visit Patangpore, and all things else may take a second place in priorities.



The children, dressed up in their casuals, were ready to rush into the groves and play in the waves, once they would reach the destination. It was a long journey, which took two days by different modes of transport.

As they were nearing the jetty on the last leg of their journey, after two tiresome days of train and bus, they sighted a lone motor boat idling.

Grandpa Roy said, "Well, times have changed... we had only old rowing boats those days!... Boatman, will you take us to Patangpore? How much is the fare?"



"Well, I wouldn't go there.... There is nothing worth seeing there." said the boatman, "and we do not have a ferry going near there regularly."

"Why, won't you come?" asked an anxious Dadaji.

"Well, if you want! I can take you there for fifty rupees per head!"

"That's a lot for a short ride", said Dhadji.

But Pa-ji intervened and they all got into the boat. The river joined the Bay of Bengal a few kilometres further and the river itself was in spate, full of waves. The boat went along with the rapids and there was a strong breeze blowing into their faces.

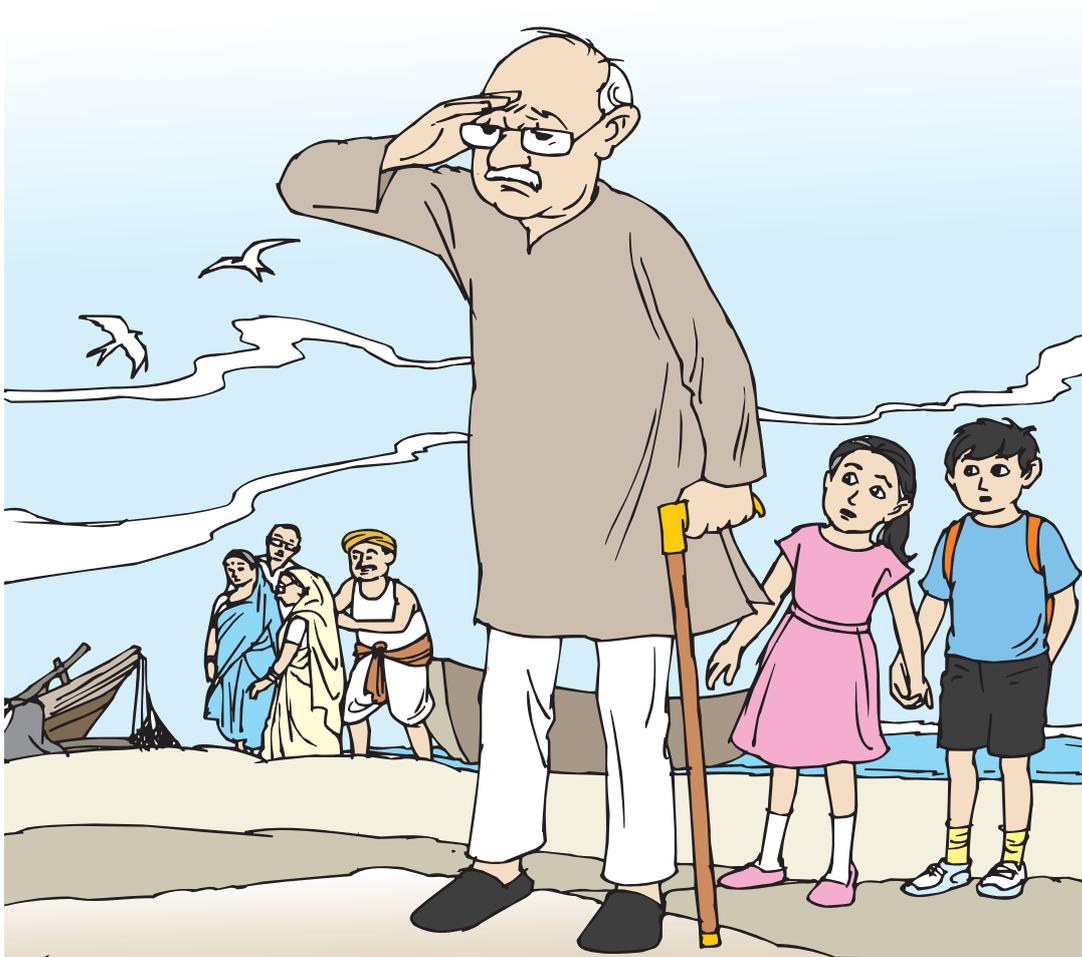


"Why won't boats go there often? Has the place changed?" asked Dadaji.

"Changed?" said the boatman. "See for yourself!"

Neither the elders nor the children were feeling comfortable or happy. It was as though their enthusiasm had gone down considerably. It was a good half hour's journey.

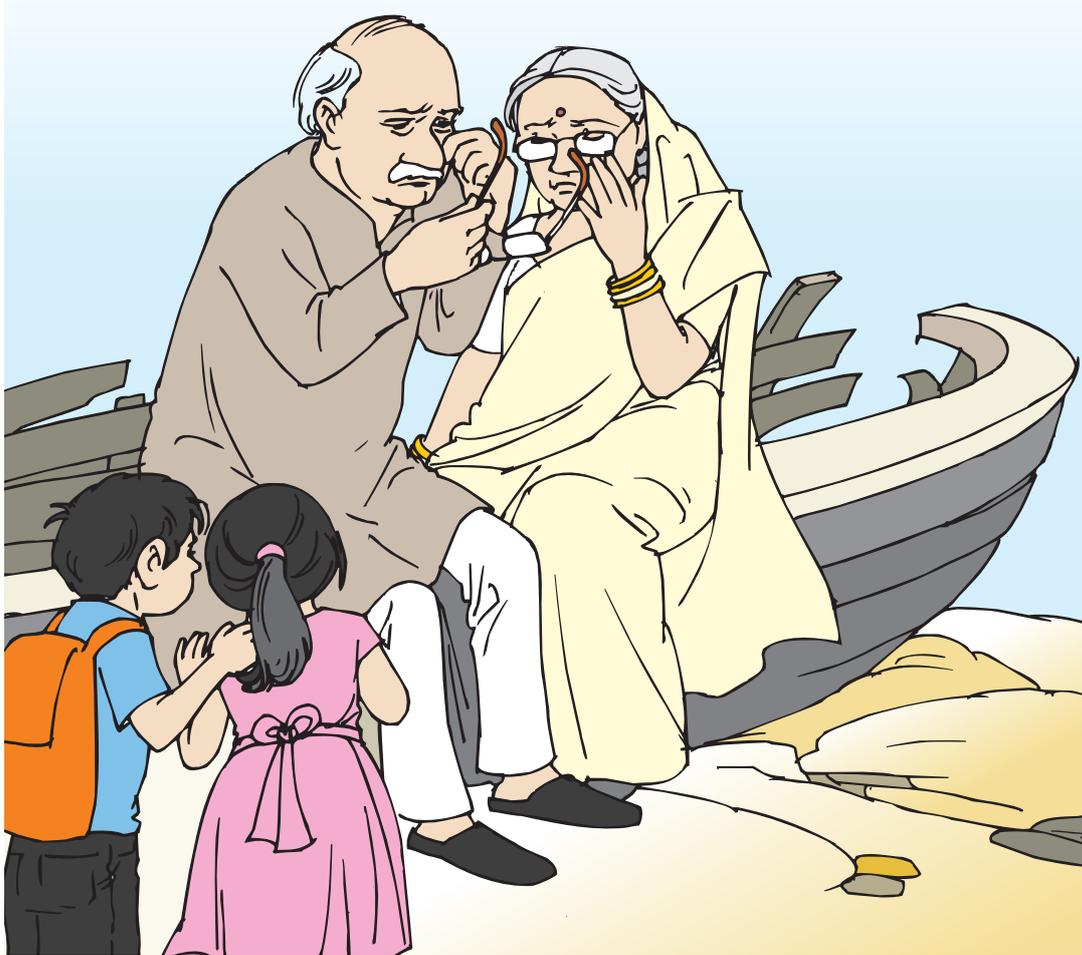
"Here, get off, I shall wait for you, but be back in twenty minutes. God knows why you are coming here. Get back soon!" said the boatman.



Harit and Churni looked at each other, an eerie feeling rising within them. They held hands after jumping on to the shore. Dadaji got down slowly, with Pa-ji and the boatman Rano helping him and the two ladies get off the boat carefully. Dadaji cupped his palms above his eyes and looked at the shore, at the plain stretch of steep wet sand where they had alighted. They walked up to find a few mud walls where once houses must have stood, and saw forsaken catamarans and torn fishing nets.



Dadaji did not expect this, obviously. He was shaking all over. He walked forward , too fast for his age, and his voice shook when he said " Laxmo, do you think we have come to a wrong place? Where are all those birds and trees? My father was the Village Munsif! This was a trading and fishing village. Our house was a two storeyed house..." They had heard him say this proudly before, but now it was pathetic that they stood in a ruined place and he could not even utter the words fully. There was no sign of inhabitation, no trees, nothing.



Dadaji sat down slowly on a catamaran, and they all felt tears in their eyes, to see the old man and his wife weeping over a lost home, the village of their childhood.

There was no choice but to return. Pa-ji took his parents back slowly to the boat and they were silent for a while.

The boatman Rano asked, "Dadaji, did you live here?"

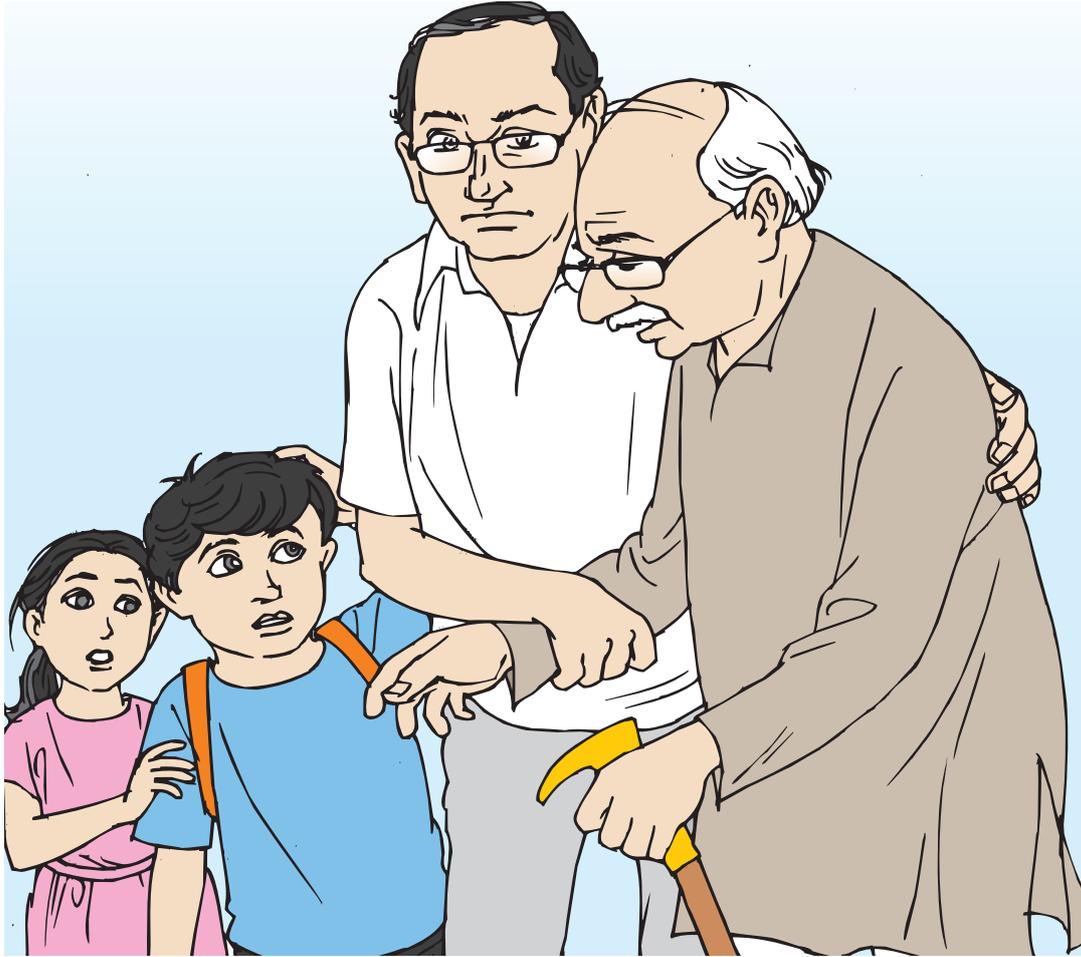
Dadaji stared at the shore, and said "Yes, this was my home. But where is everything?"



“Oh, Dadaji, Samudra-raj has been making this place his playground all these years. Even when I was a child, there was nothing much here, except for a few fishermen. The sea was closing in every year, and is still doing that! All have left, and Government has done nothing, there is no population there to ask questions....”

“But why?” asked Dadiji, in a trembling voice.

“It is against Nature, Dadiji, we lost all the casuarina trees, with poachers and thieves cutting them off for timber and no one to replant them or bring new plants. The remaining saplings

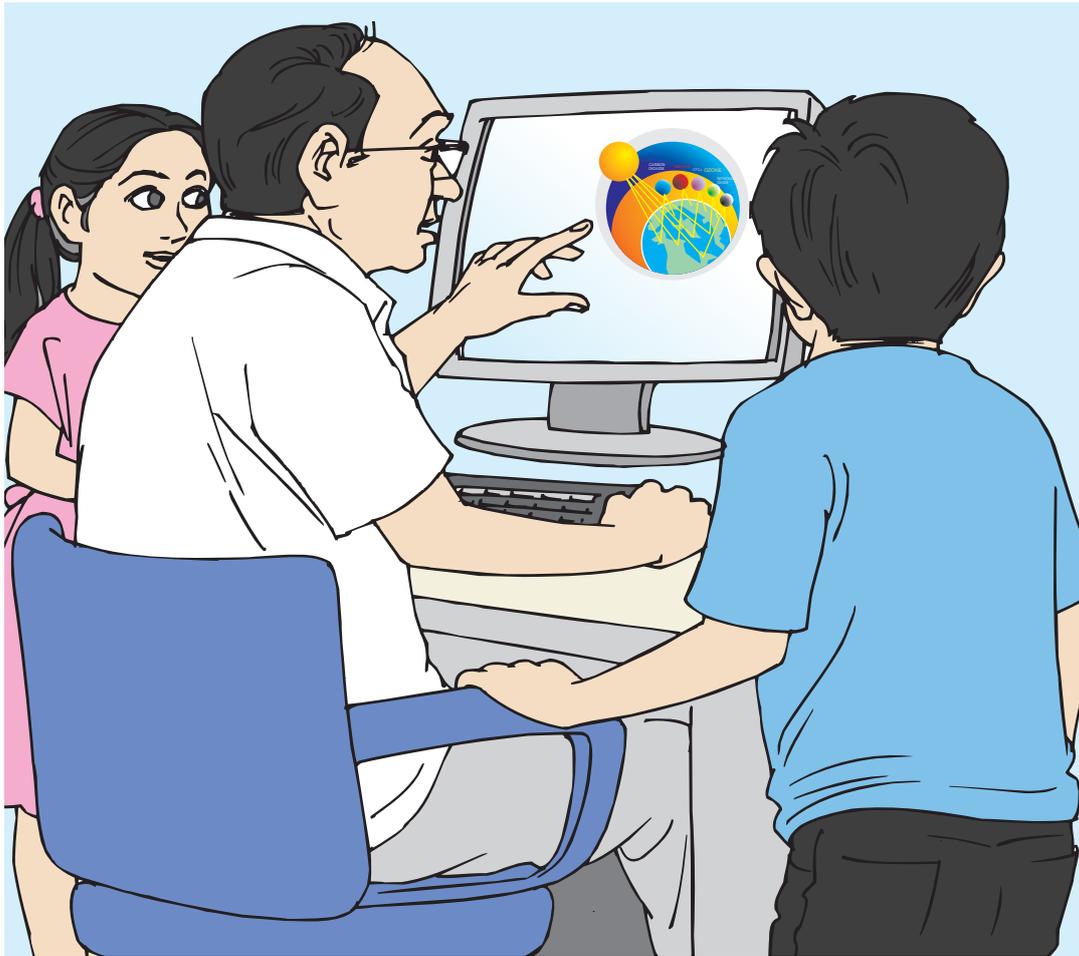


were dragged into the high tide...The land has gone under the ocean...."

Pa-ji said, "Yes, the trees would have definitely curtailed the erosion. See how the sea has eaten up the shore? You can see the difference from where we started off."

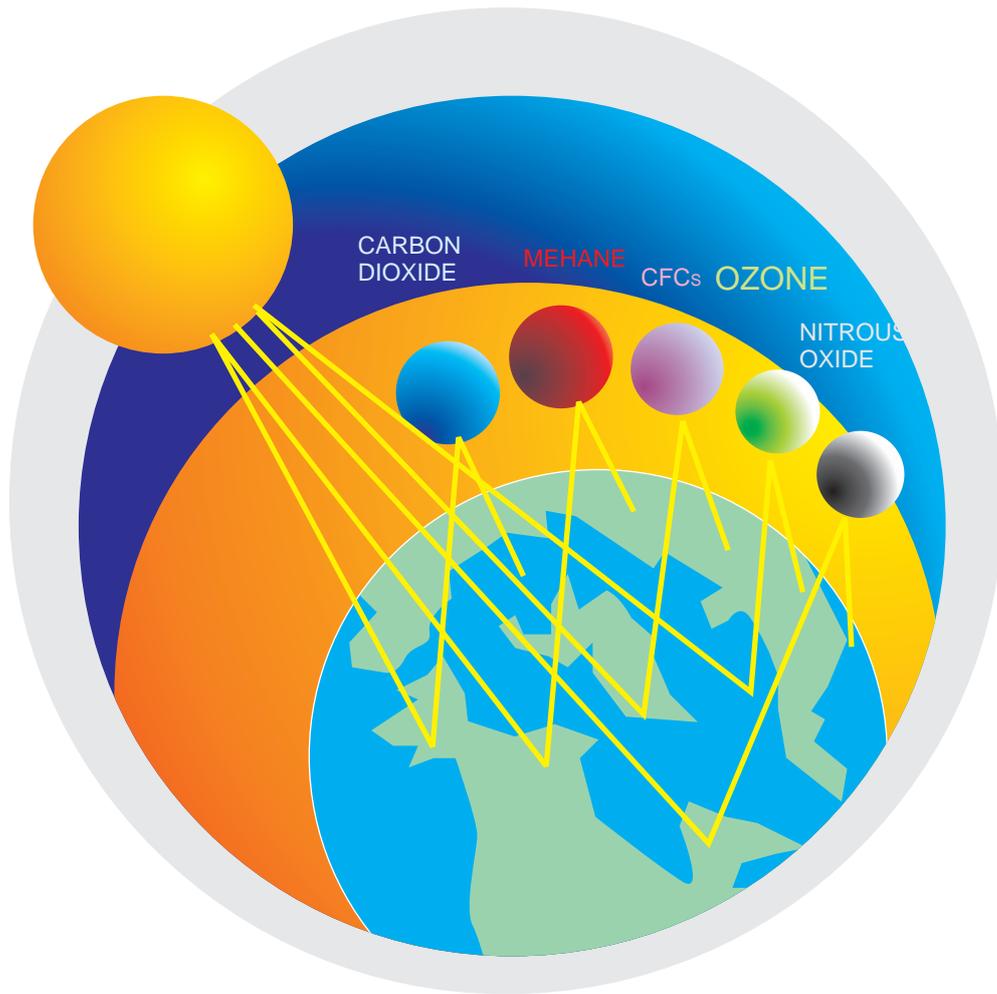
"Why did the sea come up this way, Pa-ji?"

But Pa-ji was busy tending to the utterly shaken Dadaji. Harit and Churni kept quiet.



The return home had been almost mournful. All joy had been stolen from them by the sea, it seemed. What will it be like to lose our home where we now play and laugh! But was the sea the real culprit?

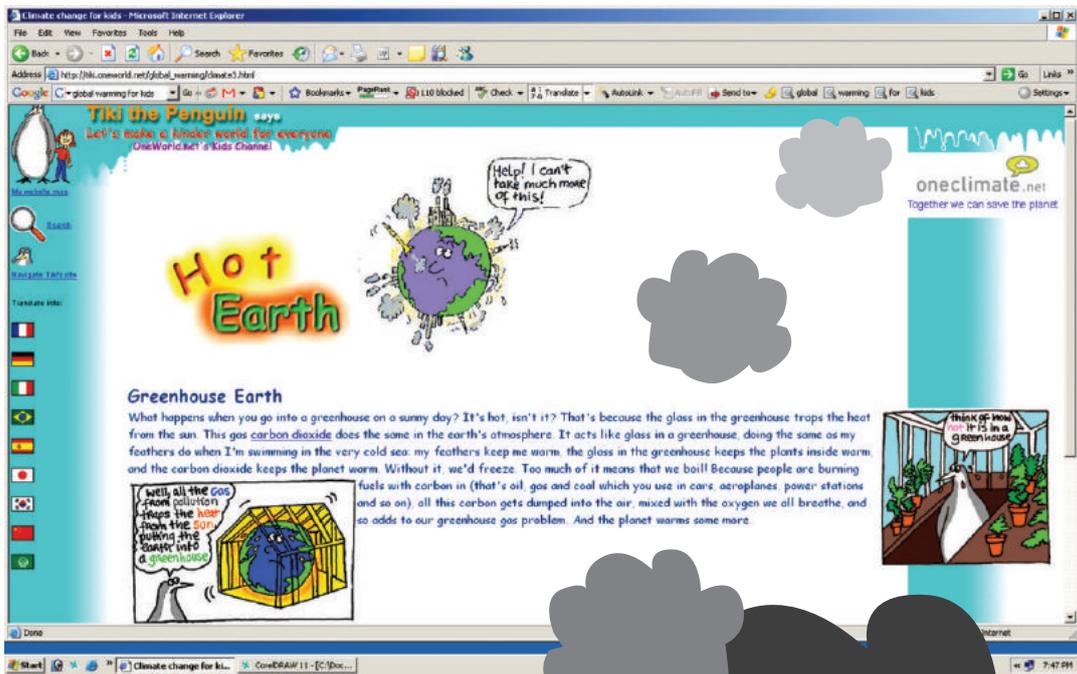
When they were back in the city three days later, Harit asked the same question of Pa-ji. He said, "There is only one answer: this is not the work done overnight. Do you remember, Dadaji has not gone there all of 55 years? There was no contact with the village! This is the slow erosion of soil by rising sea level which is caused by global warming."



“Global warming?” asked Harit and Churni in one voice.

In reply Pa-ji took them on a tour of the Internet. Sitting at his computer, they came to know of global warming and climate change.

They learnt that global warming is the increase in the average measured temperature of the Earth's near-surface air and oceans since the mid-twentieth century, and it is expected to continue. It is the trapping of harmful “greenhouse gases” emitted into the atmosphere that causes global warming. They

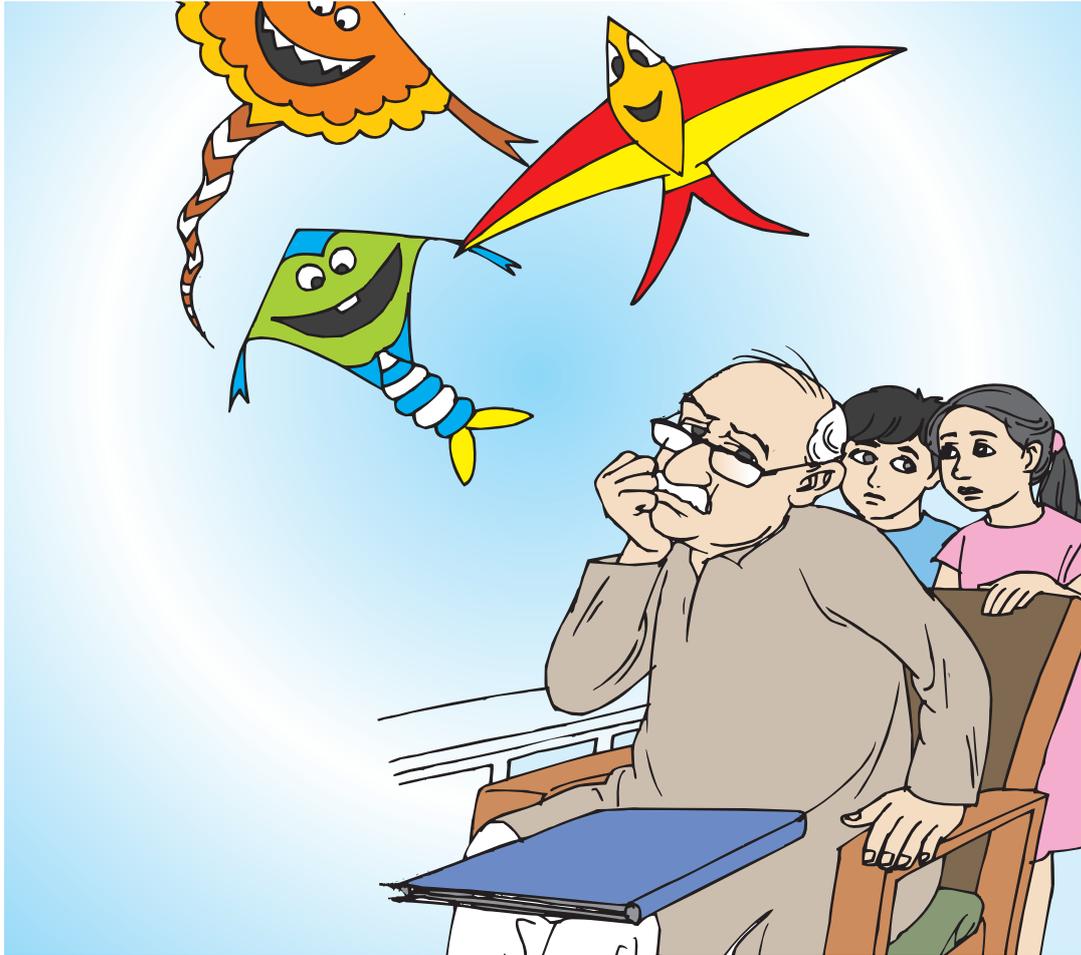


CARBON FOOTPRINT

are emitted by human beings in their daily activities, burning fossil fuels like coal, oil and gas.

They read of the little island Tuvalu, near the Bahamas, that was disappearing under the Pacific Ocean. So also are Sundarbans Delta in India and Bangladesh affected by global warming resulting in sea level rise.

Pa-ji then told them their generation should not suffer what Dadaji suffered now.



Dadaji did not go on his usual walk, always sullen these days. He was often going into memories of his childhood days: "You know, we had a kite festival every year in Patangpore! We had such fun with those huge kites shaped like birds and animals...."

Harit and Churni knew what they had to do as responsible young citizens.

They told the news about the erosion of Patangpore coastline to all their friends, who were horrified. They at once restarted the non-functional "Eco Club" in their colony, and every member



promised he/she would never fail to attend meetings and take part in activities. 'Steps Against Global Warming' became their Project for the next two years. All of them researched a lot on the subject. They went ahead to enlist two neighbouring colonies as members of their Eco Club.

The youngsters prepared leaflets and placards on the dangers of Global Warming such as sea level rise due to glacier retreat, Arctic shrinkage, erosion of entire islands, destruction of coral reefs, floods, hurricanes, droughts, air pollution, severe



weather conditions, increase in disease-causing viruses, deforestation, disappearance of certain species, crop failure, economic recession and so on. These were exhibited in School first. Then Mr Kundu, their friend Moni's father, printed these free for them in his press and distributed them to the public.

They learnt of carbon footprints: at one of the meetings, Harit read out from a book :- "Your daily activities use energy and release greenhouse gases into the air.

"From morning to night as your house keeps you comfortable, you are using energy and leaving a 'climate footprint' or 'carbon footprint' .



“When you switch on a light, a power plant somewhere burns fossil fuels.

“Petrol measuring 3.78 litres gives off nearly 9.08 kg of anthropogenic or human generated carbon dioxide in fumes.”

Harit and Churni were encouraged by Pa-ji to talk to Schools on carbon emissions from School buses, especially when they were idling - which caused breathing problems and aggravated asthmatic conditions in children who were already asthmatic. But, idling one bus 10 minutes less a day actually saves 250 kg of Co₂ emission per year! They decided to approach School authorities on this, and also address them on other related issues.

So, Eco-Club members went on processions every week on all main roads to local and nearby Schools, carrying placards reading thus:

"Walk or ride a bicycle to School."

"Do your shopping near home "

"Buy locally grown food, which takes less fuel to transport."

"Parents, School Buses, turn off car/bus engines while waiting!"

"Re-use, recycle!"

"Say No to plastic!"

"Change to compact fluorescents bulbs"

"Turn switches off, use appliances sparingly!"

"Drink filtered tap water , no plastic bottles."

"Eat less meat. (Cows and sheep produce methane, a greenhouse gas)"

"Parents, use car pools with neighbours!"

"Use wood products they retain, and do not emit, carbon."

"Reduce your Carbon Footprints!"

"Do not invite Enemies of Clean Living: Greenhouse gases- Water Vapor, Carbon dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulfur hexafluoride (Sf₆)"

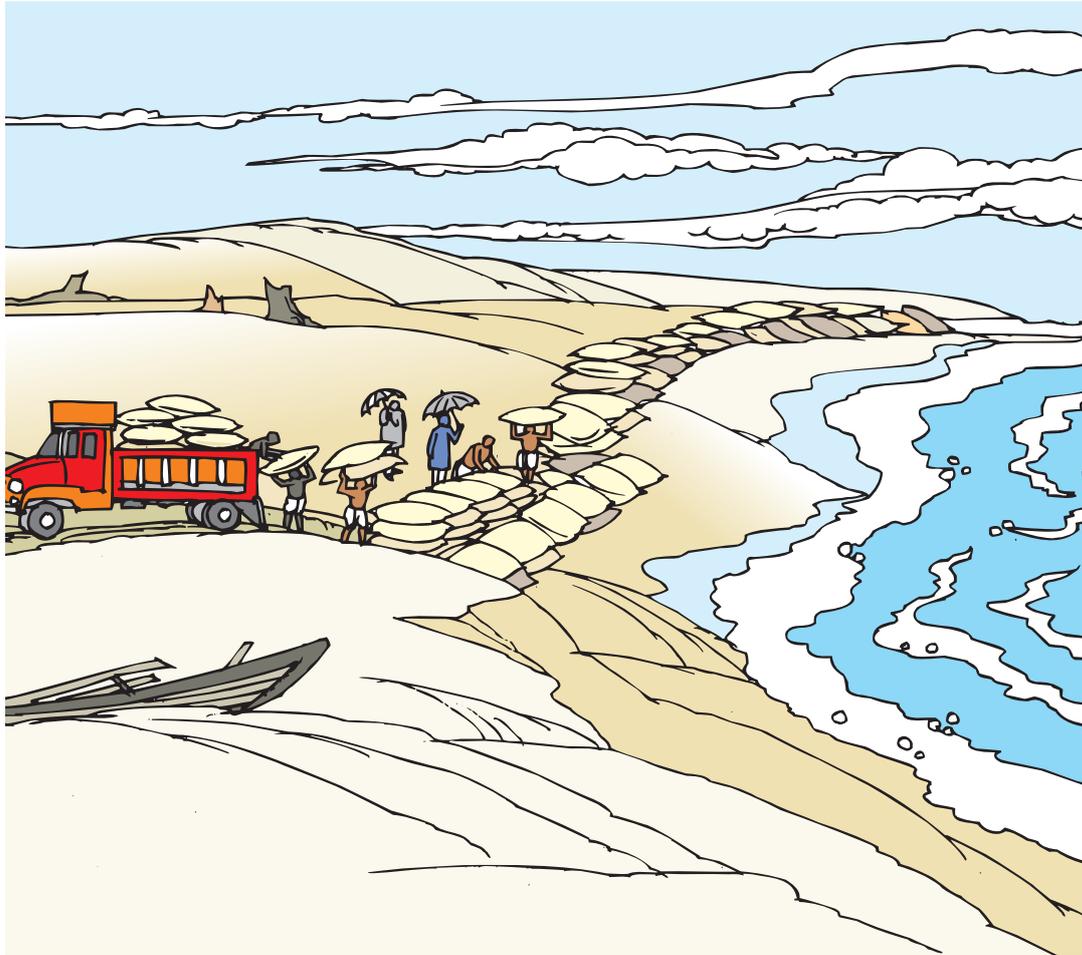
"Councillors, help us fight global warming!"

They spoke to the authorities and in School assemblies or Civic classes, which the Schools were ready to listen to. Schools also started their own eco-clubs . School bus drivers were advised against idling buses.



Meanwhile, a few parents and children went on an expedition to Patangpore with Pa-ji, though it was far away. This could happen anywhere! Coming back, they met Dadaji directly, and told him of the actions which they would take in the next few weeks.

Accordingly, Mr Bannerjee and Mr Kundu, whose children studied with Harit and Churni, met the Member of Parliament representing the constituency covering Patangpore and its neighbourhood. They insisted on protection of the coastline, and revival of fishing activity and other businesses in the Patangpore area. They hoped the village would be populated in due course if all facilities were revived for the villagers.



The MP readily allotted money from his Constituency Development Funds, as he knew he had been totally neglecting the village and the entire issue of coastal erosion. Soon hundreds of casuarina and mangrove saplings and trees were planted as also transplanted along the coastline to immediately check further erosion. Huge boulders and heavy sandbags were placed all along that coastline. Diversion of the river was also discussed. All this attracted media attention. Pa-ji said it was for the good!

Dadaji was becoming more and more cheerful .Several months later they all took him and Dadiji to Patangpore to show them



the fortified coastline. Dadaji was delighted to meet the awed boatman Rano again, and located some of his old playmates who were visiting Patangpore on hearing of its revival.

Mr Purnendu Roy was happy to see his children doing things which made their Dadaji a happy man, indeed. But there were miles to go

Yet, Pa-ji was sure children and their Earth would succeed fully one day.

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GLOBAL WARMING

Facts:

What is "Global Warming"?

1. Global warming is the increase in the average measured temperature of the Earth's near-surface air and oceans since the mid-twentieth century, and its projected continuation (i.e. of likely temperatures in the future). The large heat capacity of the oceans contributes no less to the retention of such heat. Overall, it is a cause for concern and immediate action.
2. The term 'global warming' implies human-induced or human-influenced change, which means it is the activities of people which cause the drastic threat to the world climate. These activities include the burning of fossil fuels (coal, oil, gas), resulting in 'greenhouse gas emissions' which have increased by 70 per cent in the last 35 years. They also include deforestation on a large scale everywhere for construction of buildings. The trapping of these harmful gases in the atmosphere causes the Earth to warm up and is called the Greenhouse Effect.
3. Climate model projections indicate that average global surface temperatures are likely to rise a further 1.1 to 6.4 °C (2.0 to 11.5 °F) during the twenty-first century. This will depend on differing levels of greenhouse gas emissions and climate sensitivity.

Major Effects of Global Warming:

1. In the period up to 2100, warming and sea level rise (up to 2' in some places) may continue for over a thousand years even if greenhouse gas emission levels stabilise. Extreme climate conditions will prevail.
2. The way we expect the seasons to be -- our expectations for what Christmas would be like and our expectations for what summer would be like -- is going to change, but not for the better.
3. Floods may affect millions of people every year due to sea-level rise by the 2080's.
4. Dry areas may experience more frequent droughts.
5. Population without the resources to adapt will face increased malnutrition and deaths from severe weather events like storms, fires and heat waves.
6. Changes in agricultural yields (less quantity, poor quality, harmful side-effects).
7. Modifications of trade routes (eg: sea routes can change if sea levels rise).
8. Glacier retreat -- warming melts ice and may reduce the sizes of glaciers on one hand and cause erratic floods in rivers on the other
9. Species extinctions (due to deforestation, shortage of water, increase in desert spaces, increase in diseases).
10. There will be increased air pollution resulting in asthma rates in children.
11. Increase in the ranges of disease-causing micro-organisms such as mosquitoes and ticks (on animals): Consequently, health care costs associated with climate change-related illnesses will increase. It will be an economical and social problem all over the world.

12. The number of days of very hot temperature will increase sharply.
13. Severe weather conditions may cause infrastructure damage to bridges, tunnels, subway entrances located close to the sea level.
14. According to United Nations Environment Programme (UNEP), economic sectors likely to face difficulties related to climate change include banks, agriculture, transport and others. Developing countries dependent on agriculture will be particularly harmed by global warming.

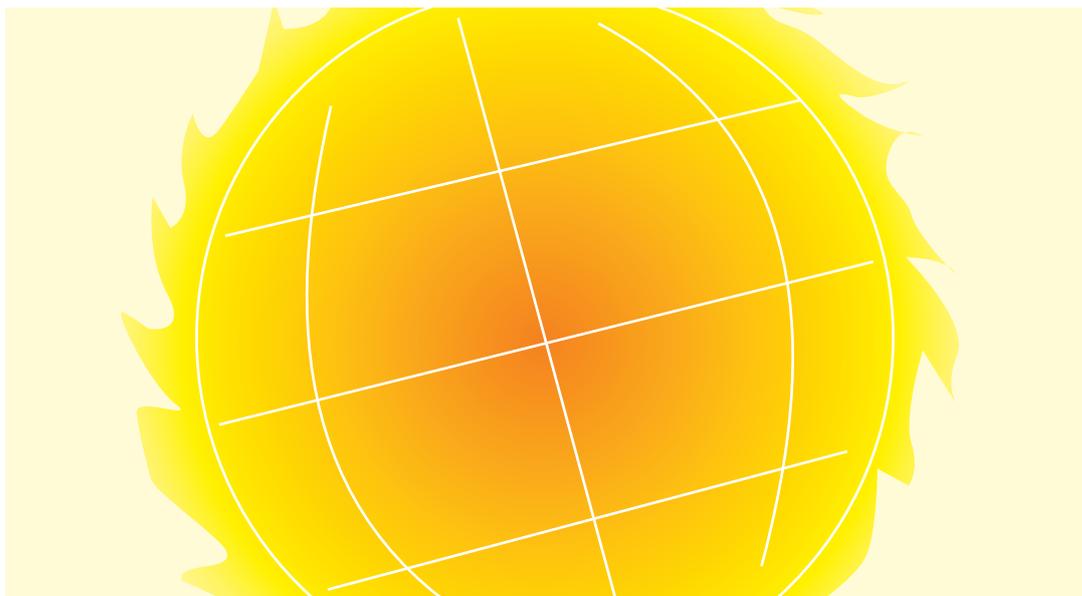
What is being done at global level to fight and reduce the threat?

1. As global temperatures are expected to continue increasing, it has led some nations, states, corporations and individuals to implement action to try to curtail global warming or adjust to it.
2. Many environmental groups encourage individual action against global warming, often not only by the consumer, but also by community and regional organisations.
3. Others have suggested a quota on worldwide fossil fuel production, citing a direct link between fossil fuel production and CO₂ emissions.
4. There has also been business action on climate change, including efforts by business houses and industries at increased energy efficiency and limited moves towards use of alternative fuels. One recently developed concept is that of companies, in conjunction with governments, agreeing to cap or limit their emissions or to purchase credits from those below their allowances. This way the balance in the use of fuel sources can be maintained.
5. The world's primary international agreement on combating global warming is the Kyoto Protocol, an amendment to the UNFCCC negotiated in 1997. The Protocol now covers more than 160 countries globally and over 55 per cent of global greenhouse gas emissions. Countries which signed the agreement promised to decrease the amount of greenhouse gases they emitted each year. Only the United States and Kazakhstan have not signed the treaty, though the United States is historically being the world's largest emitter of greenhouse gas. Instead, the US is trying to promote improved energy technology as a means to combat climate change.
6. The Intergovernmental Panel on Climate Change (IPCC) concludes "most of the observed increase in globally averaged temperatures since the mid-twentieth century is very likely due to the observed increase in anthropogenic (man-made) greenhouse gas concentrations, via an enhanced greenhouse effect ." According to IPCC's Working Group III, to limit temperature rise to 2 degrees centigrade, "developed countries as a group would need to reduce their emissions to below 1990 levels in 2020 and to still lower levels by 2050, even if developing countries make substantial reductions".
7. Mr Al Gore, former Vice President of the USA, has, along with the IPCC, won the Nobel Prize for Peace for spreading the message of Global Warming and focusing world attention in a big way by a series of lectures on the subject and continues to do the job. He has authored several papers and books on the subjects, the most important being 'An Inconvenient Truth', which was picturised and also won an Oscar Award.

GLOBAL WARMING :

Activities:

1. Prove to yourself and your class the effect of global warming on the sea levels : Higher seas are one of the most certain consequences of global warming. This is mainly because melting glaciers and polar ice sheets add water to our oceans. Glaciers store water on land. When these huge ice masses melt into the oceans, it adds volume and water levels rise. The concept is simple to demonstrate. Add a bunch of ice cubes to a glass of water that is already full to the brim and it will overflow. That extra water is like the extra ocean water from melting glaciers. On top of that, water expands as it gets warmer. Heat water on a stove and watch the level in the vessel. As the temperature rises, the same amount of water takes up more space. This again proves how global heat raises sea levels higher.
2. Plant trees and saplings to generate greenery and increase the flow of oxygen around us. Thus you will lend your voices against deforestation.
3. Reduce waste and help recycling whatever items can be recycled. Say 'No' to plastic.
4. Reduce garbage : you can reduce the amount of carbon dioxide released into the atmosphere and help stop global warming.
5. Try to watch the Nobel Prize winning motion picture "An Inconvenient Truth" featuring Mr Al Gore, former Vice President of USA, and at present an activist in the cause of alerting the world against the dangers of global warming. It is available in DVD form and can be bought by Schools, for their libraries. Also interesting are Mr Al Gore's subsequent speeches, and you may visit the website http://www.ted.com/index.php/speakers/al_gore.html. to access his fifteen suggestions to fight global warming.



Unscramble the following Global Warming terms:

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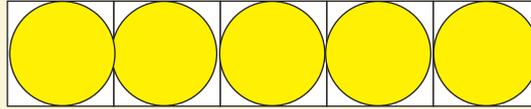
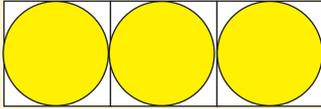
TENPAL

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Now use the letters in the circles to solve the final puzzle:

GLOBAL WARMING IS A

"



Answers:

1. Carbon
2. Flood
3. Heat Stress
4. Arctic
5. Planet

Answer to Puzzle:

Global Warming is a "Hot" Topic!

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