



INTRODUCTION

This comic strip has been developed to provide both primary and secondary school students a better understanding of the climate change related concepts. It addresses the following concepts:

- **weather**
- **climate**
- **climate change**
- **causes and consequences of climate change**
- **taking mitigation measures to combat climate change and**
- **adaptation to changing climate**

This comic strip is divided into two parts. Part I is mainly targeted to the primary school pupils. We believe that teachers can help them to learn the various concepts and issues addressed in the second part. While secondary school students would easily follow both part I and Part II.

Our ancestors have unknowingly damaged our environment to a large extent. This bad practice is being continued till today by many of us. Now it is high time that we become more informed and responsible citizen of the Republic of Mauritius and take care of our environment. In this way, we will surely achieve our Prime Minister's vision in making our country a green and sustainable island or 'Maurice Ile Durable'

We hope that you enjoy reading the comic strip. At the same time try to learn about climate change, how to reduce the causes and also to adapt to the changing climate.

Happy reading

ACKNOWLEDGEMENTS

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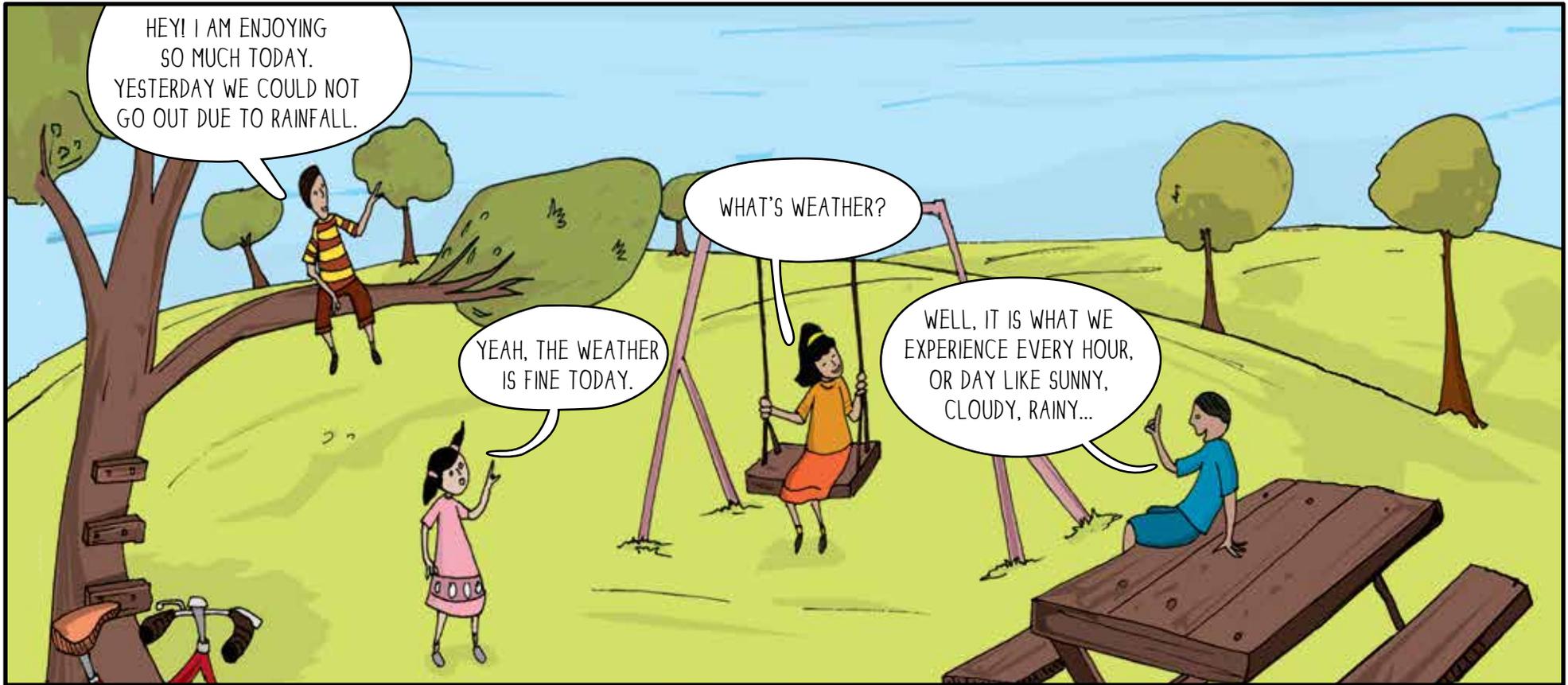
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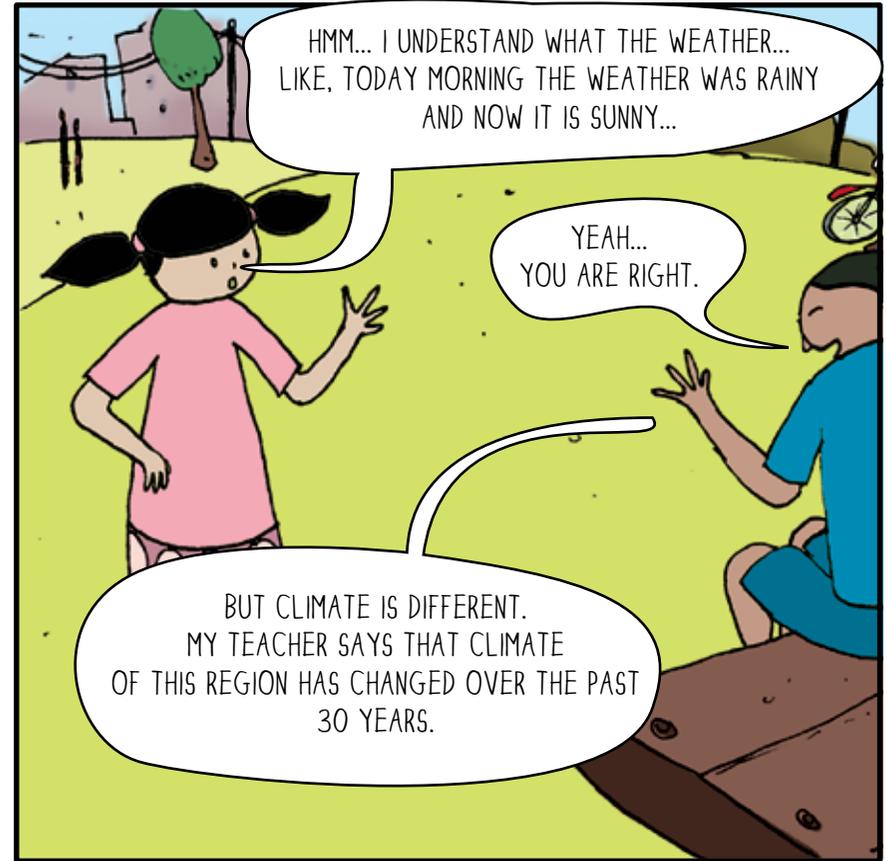
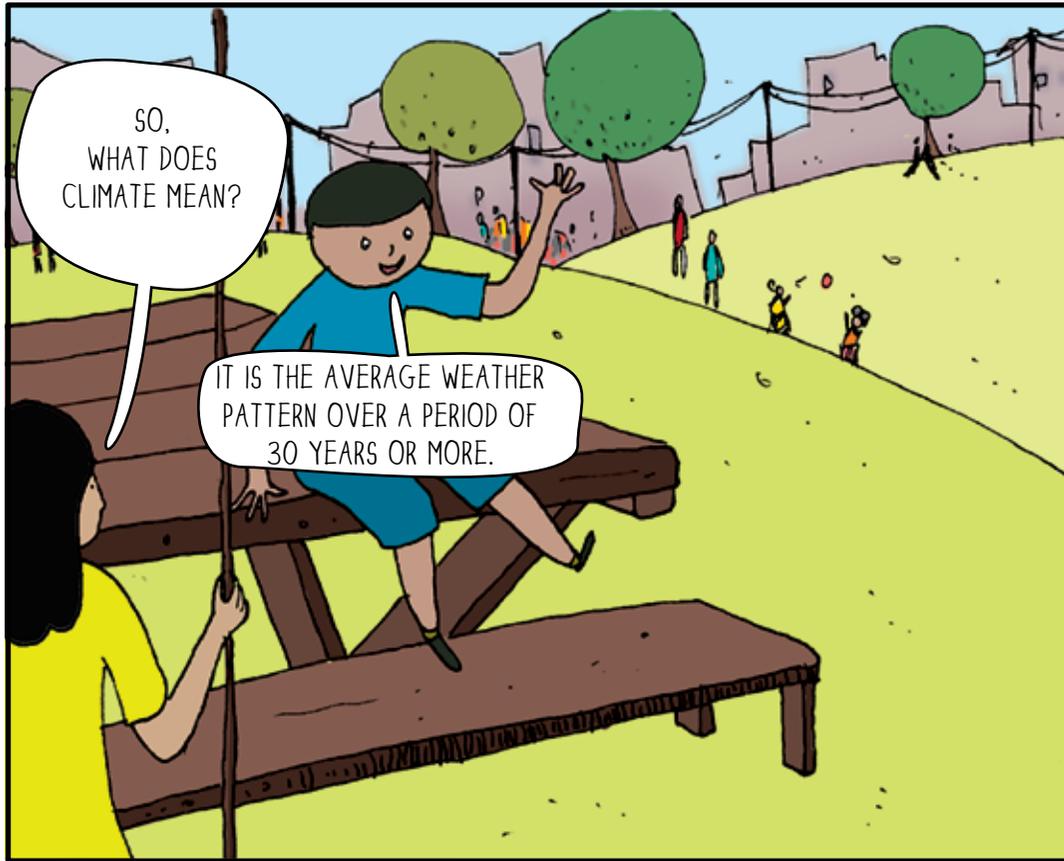
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PART 1

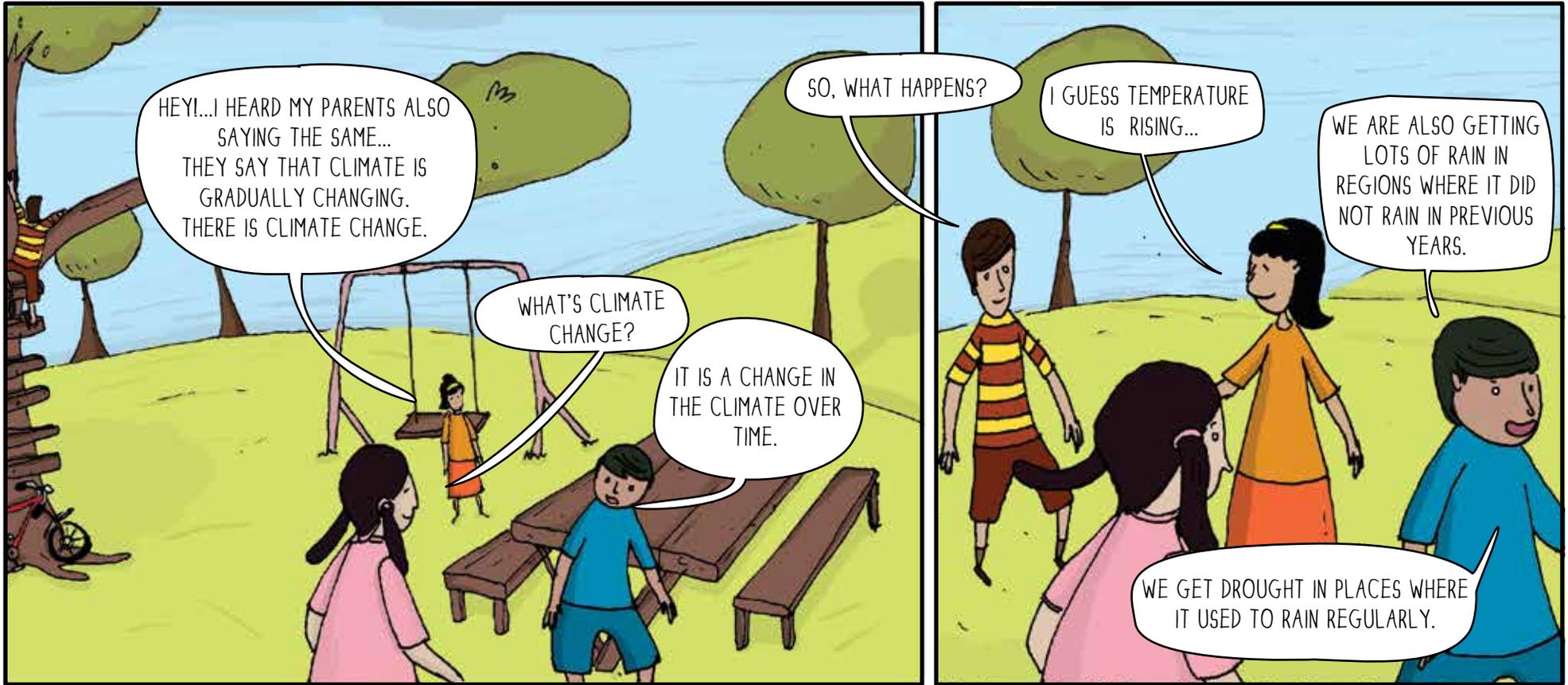
In this part, you will learn some important terms such as weather, climate and climate change and their causes and effects.

CHILDREN DISCUSSING ABOUT WEATHER...



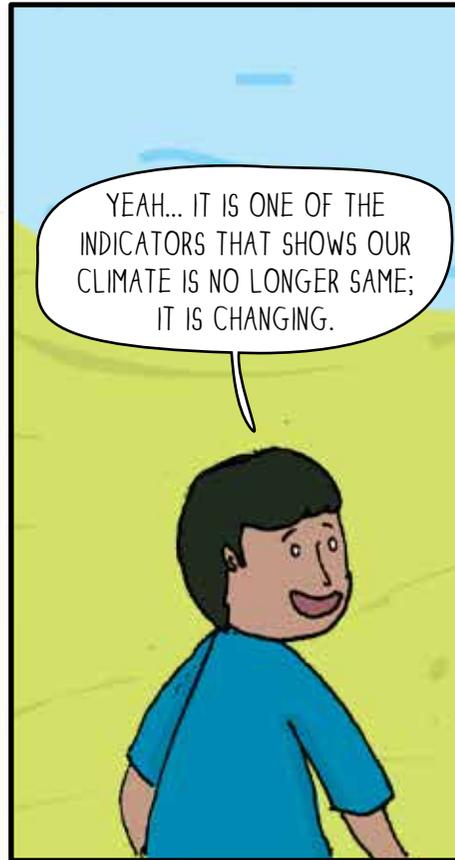


DISCUSSING ABOUT CLIMATE CHANGE

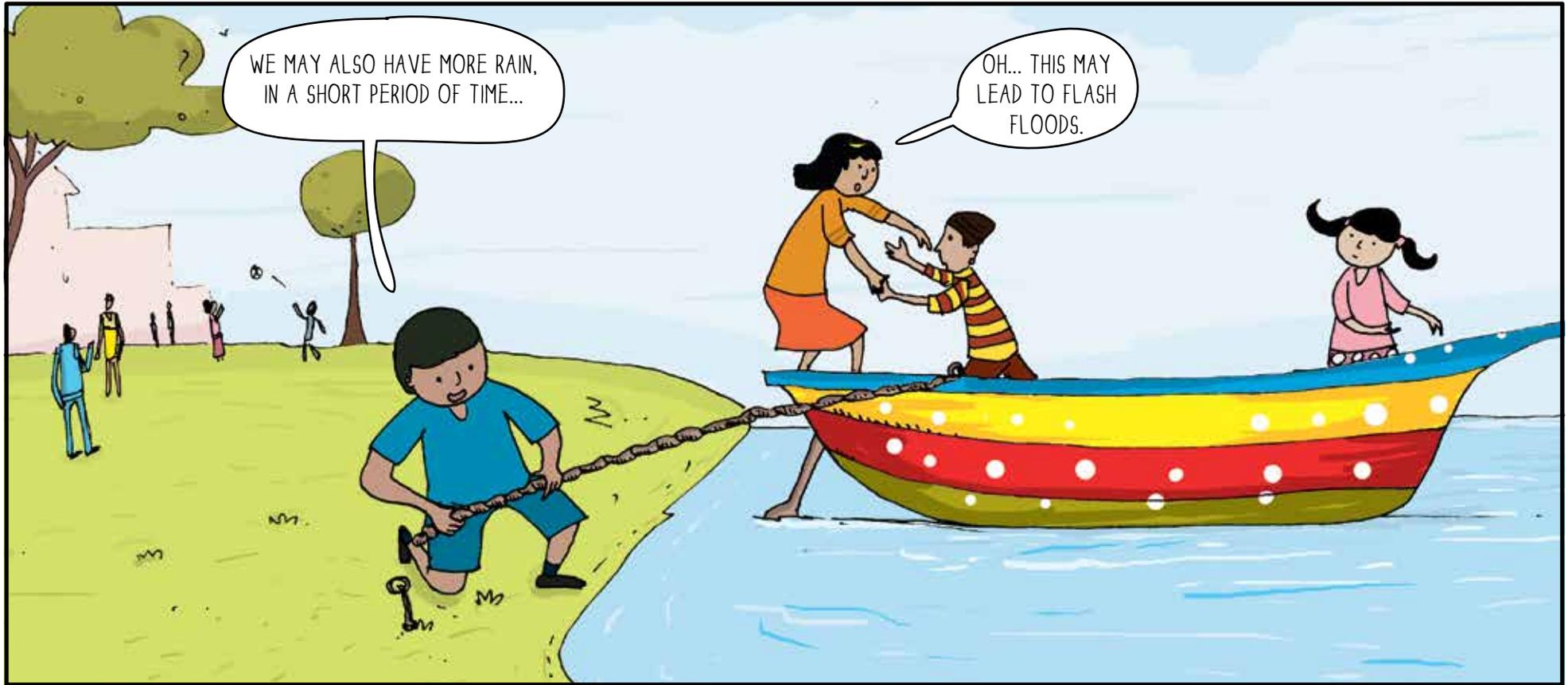


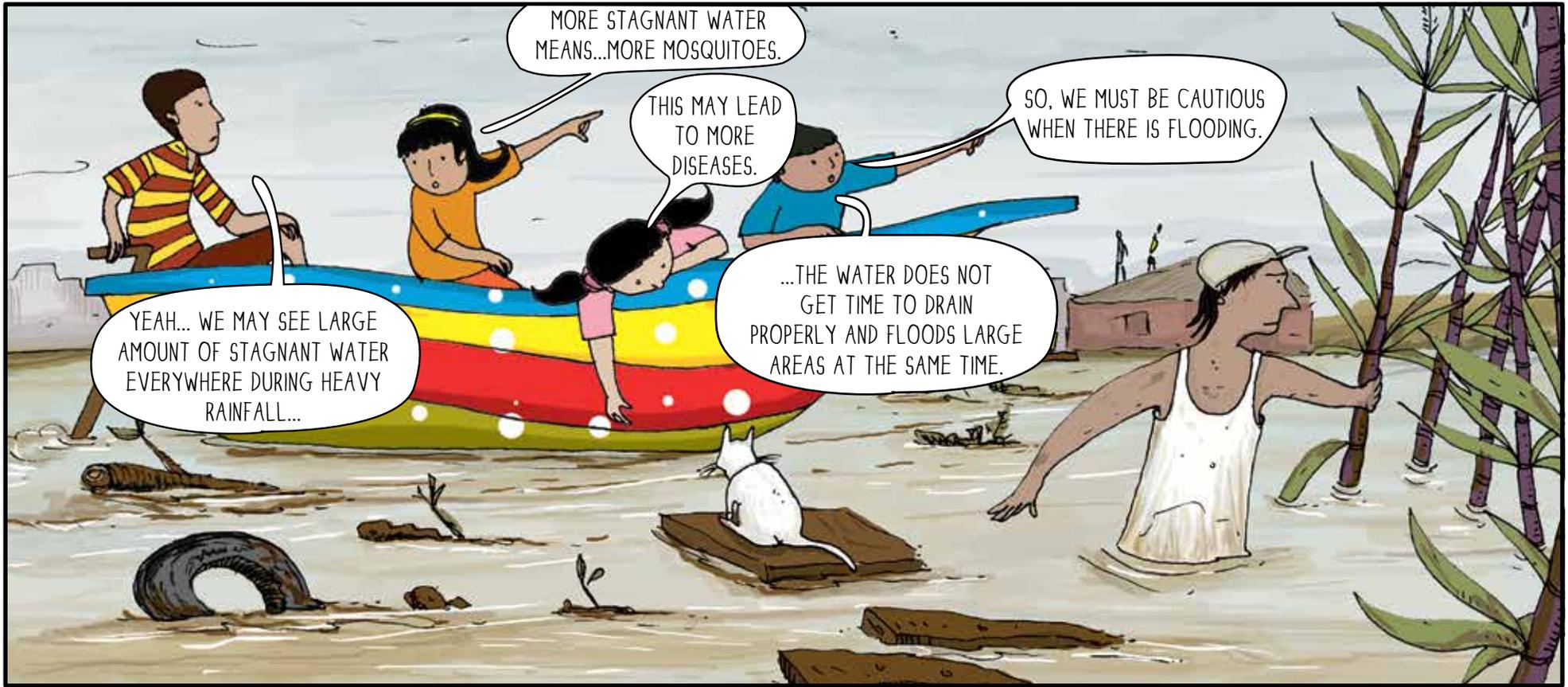
EFFECTS OF CLIMATE CHANGE





EFFECTS OF CLIMATE CHANGE





MORE STAGNANT WATER MEANS...MORE MOSQUITOES.

THIS MAY LEAD TO MORE DISEASES.

SO, WE MUST BE CAUTIOUS WHEN THERE IS FLOODING.

YEAH... WE MAY SEE LARGE AMOUNT OF STAGNANT WATER EVERYWHERE DURING HEAVY RAINFALL...

...THE WATER DOES NOT GET TIME TO DRAIN PROPERLY AND FLOODS LARGE AREAS AT THE SAME TIME.





THEY LIVE NEAR
THE BEACH.

OH! YES... THIS IS BECAUSE OF RISE IN
SEA LEVEL.



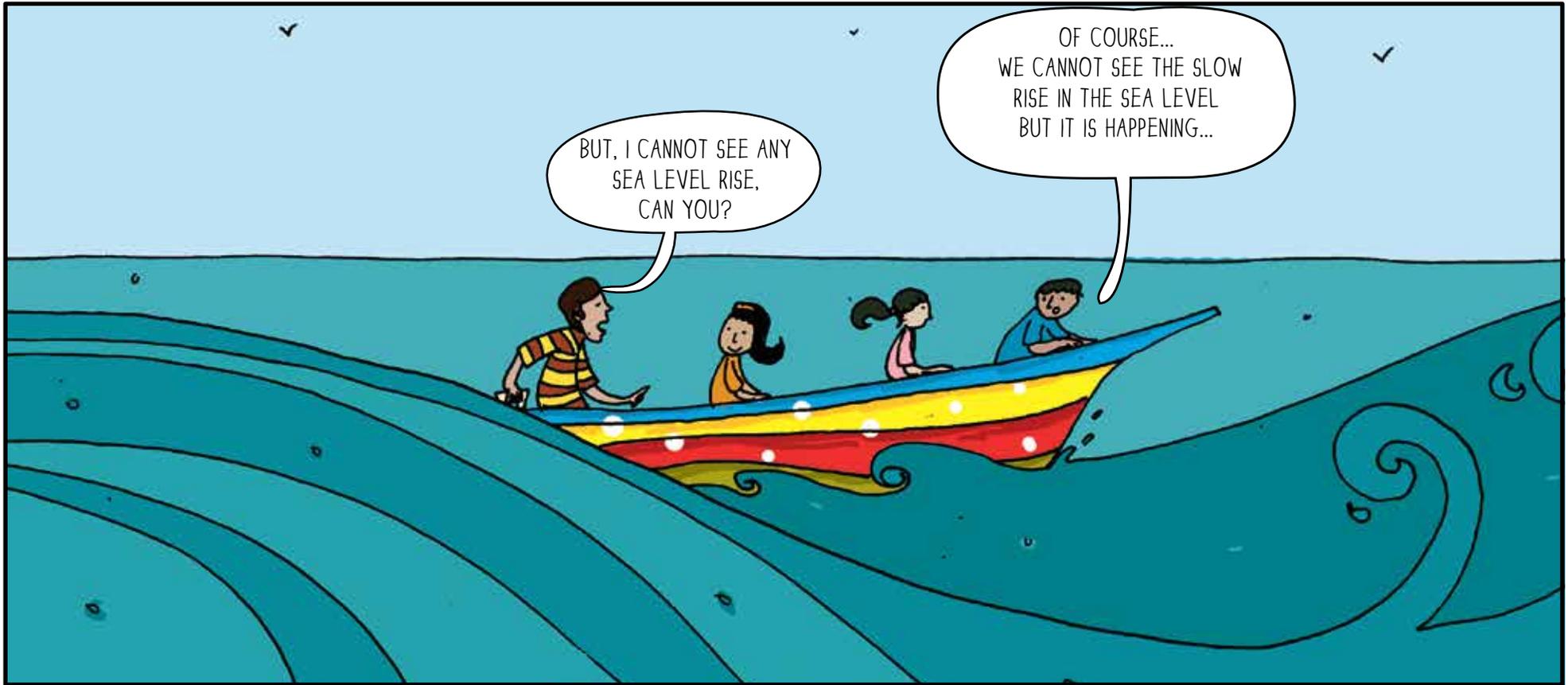
WE MAY HAVE WATER COMING INTO OUR COMPOUNDS AND ON OUR ROADS.

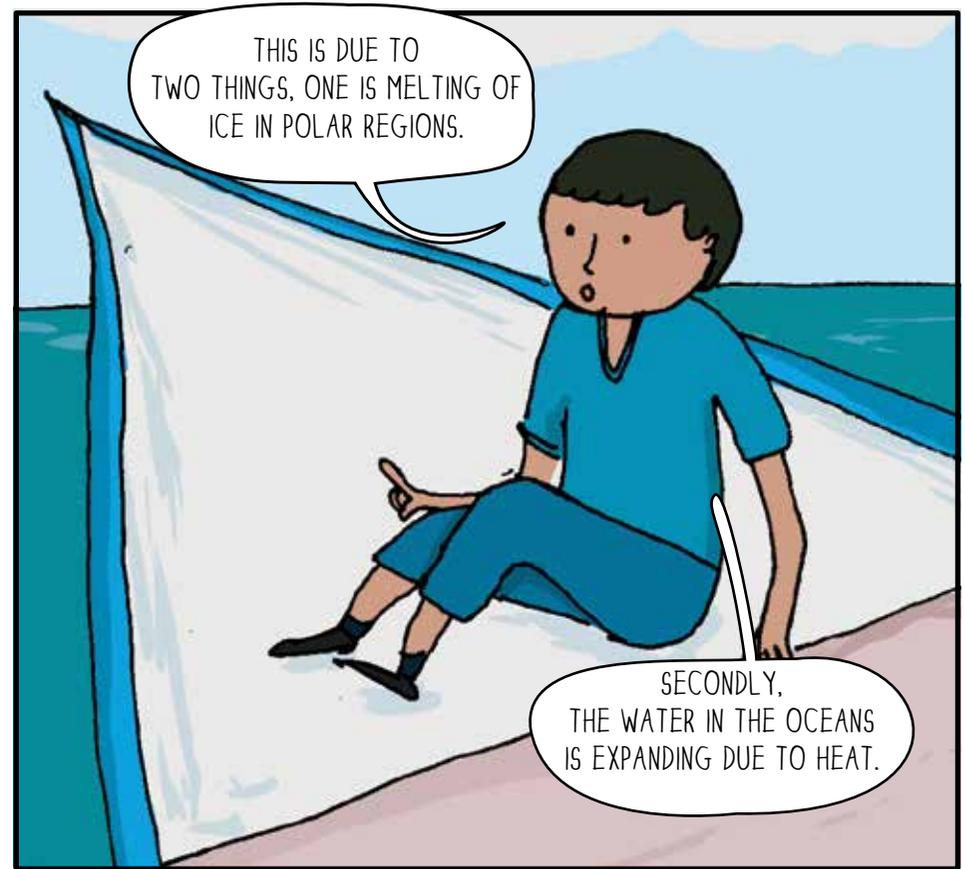
THE BEACHES ARE ALSO ERODING.

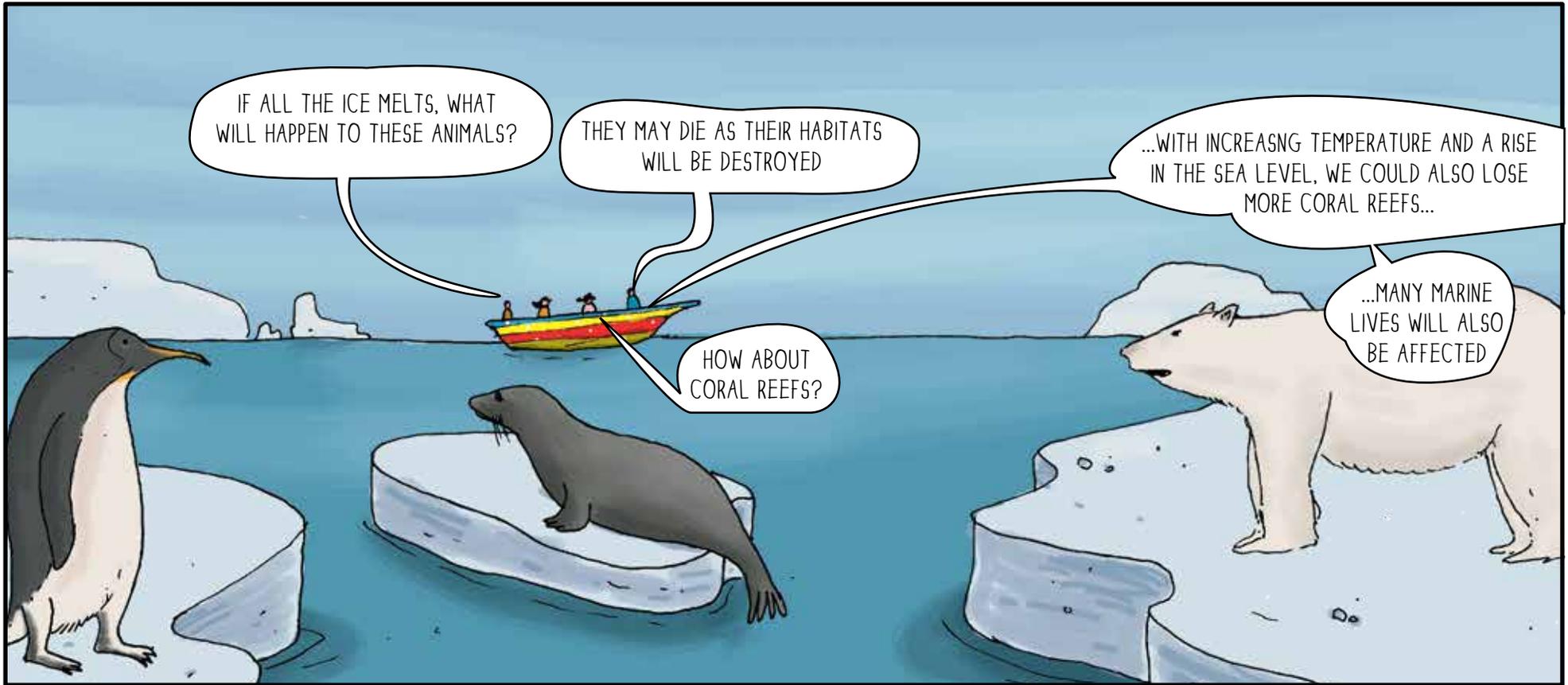
BEACH ACTIVITIES SUCH AS FISHING, SWIMMING, SPORTS, EVEN TOURIST ACTIVITIES MAY ALL BE AFFECTED.

WE OFTEN SEE HUGE WAVES STRIKING OUR BEACH BARRIERS.

THIS MEANS THERE IS SEA LEVEL RISE...







IF ALL THE ICE MELTS, WHAT WILL HAPPEN TO THESE ANIMALS?

THEY MAY DIE AS THEIR HABITATS WILL BE DESTROYED

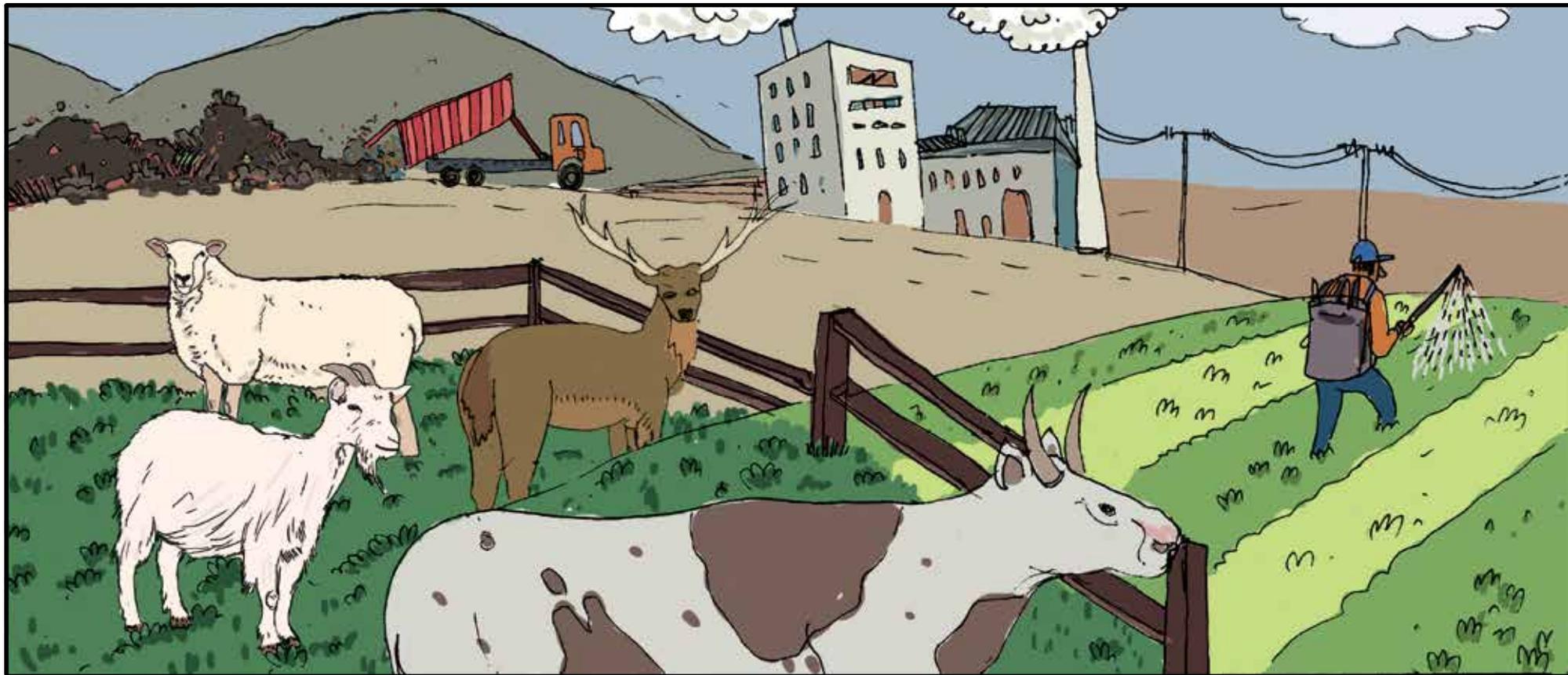
HOW ABOUT CORAL REEFS?

...WITH INCREASNG TEMPERATURE AND A RISE IN THE SEA LEVEL, WE COULD ALSO LOSE MORE CORAL REEFS...

...MANY MARINE LIVES WILL ALSO BE AFFECTED



..BY FACTORIES, FARMS, CATTLE, FERTILISERS, LANDFILLS, ETC.







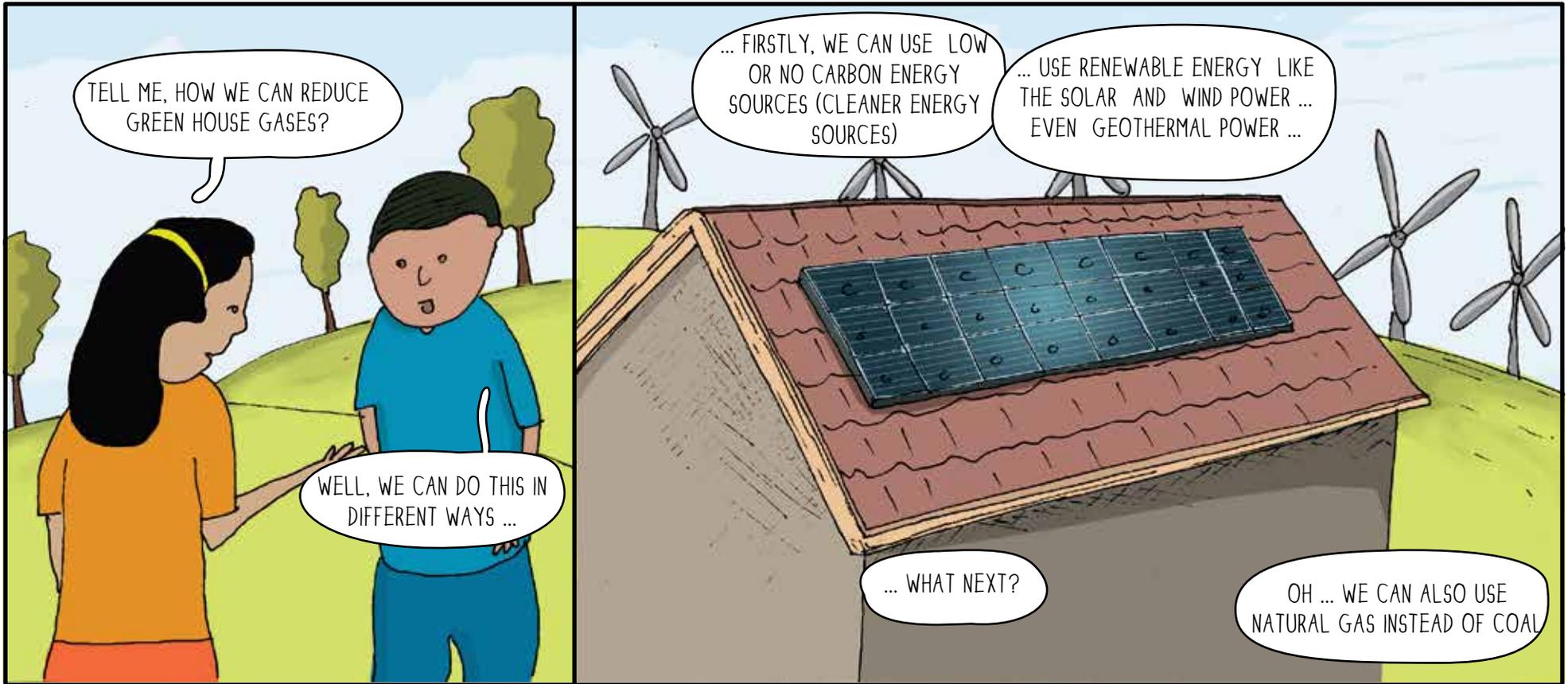
HOW SHOULD WE COMBAT CLIMATE CHANGE?

WE MUST REDUCE EMISSION OF GREEN HOUSE GASES

WE MUST TAKE STEPS TO BETTER ADJUST TO THE CLIMATE CHANGING ENVIRONMENT.

PART 2

You have already seen some of the causes and effects of climate change . In this part, you will learn how we can reduce emission of GHGs especially carbon dioxide and also to adapt to the changing climate.



TELL ME, HOW WE CAN REDUCE GREEN HOUSE GASES?

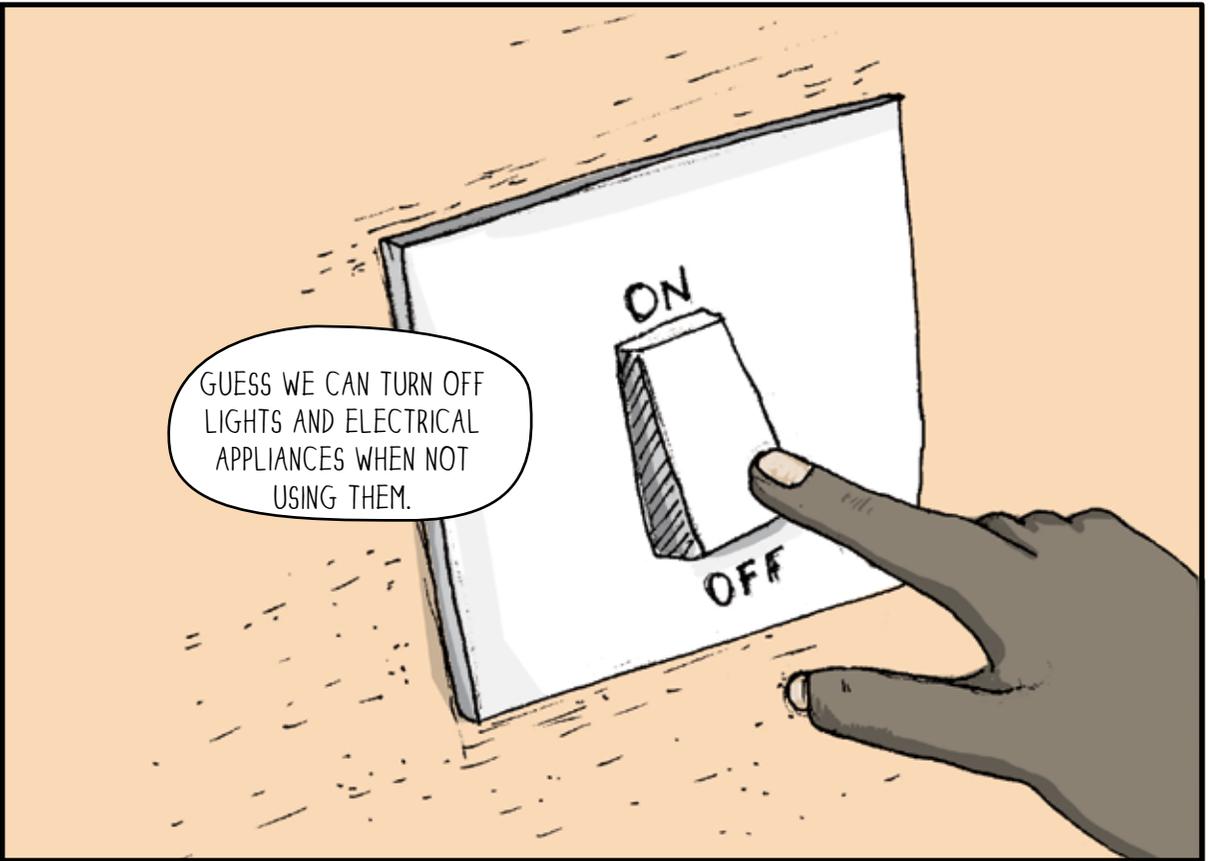
WELL, WE CAN DO THIS IN DIFFERENT WAYS ...

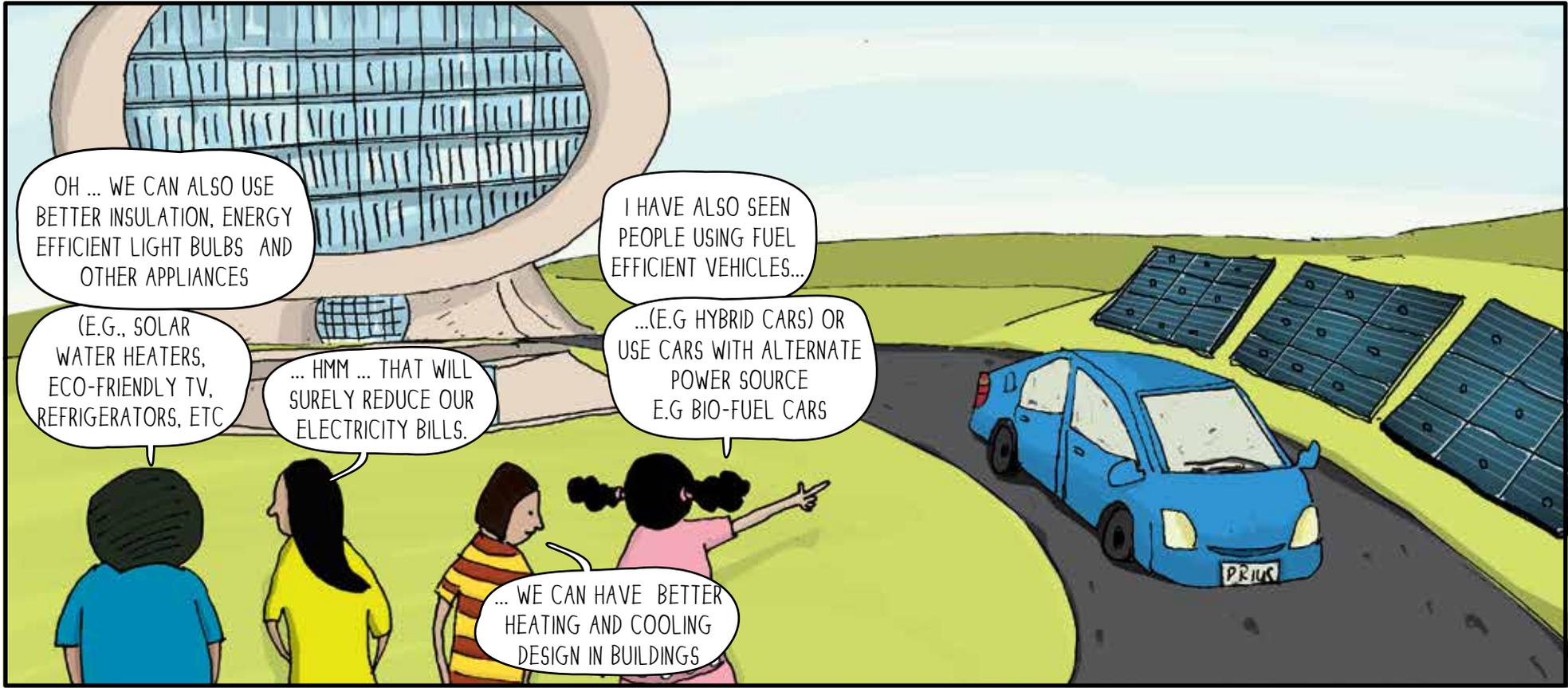
... FIRSTLY, WE CAN USE LOW OR NO CARBON ENERGY SOURCES (CLEANER ENERGY SOURCES)

... USE RENEWABLE ENERGY LIKE THE SOLAR AND WIND POWER ... EVEN GEOTHERMAL POWER ...

... WHAT NEXT?

OH ... WE CAN ALSO USE NATURAL GAS INSTEAD OF COAL





OH ... WE CAN ALSO USE BETTER INSULATION, ENERGY EFFICIENT LIGHT BULBS AND OTHER APPLIANCES

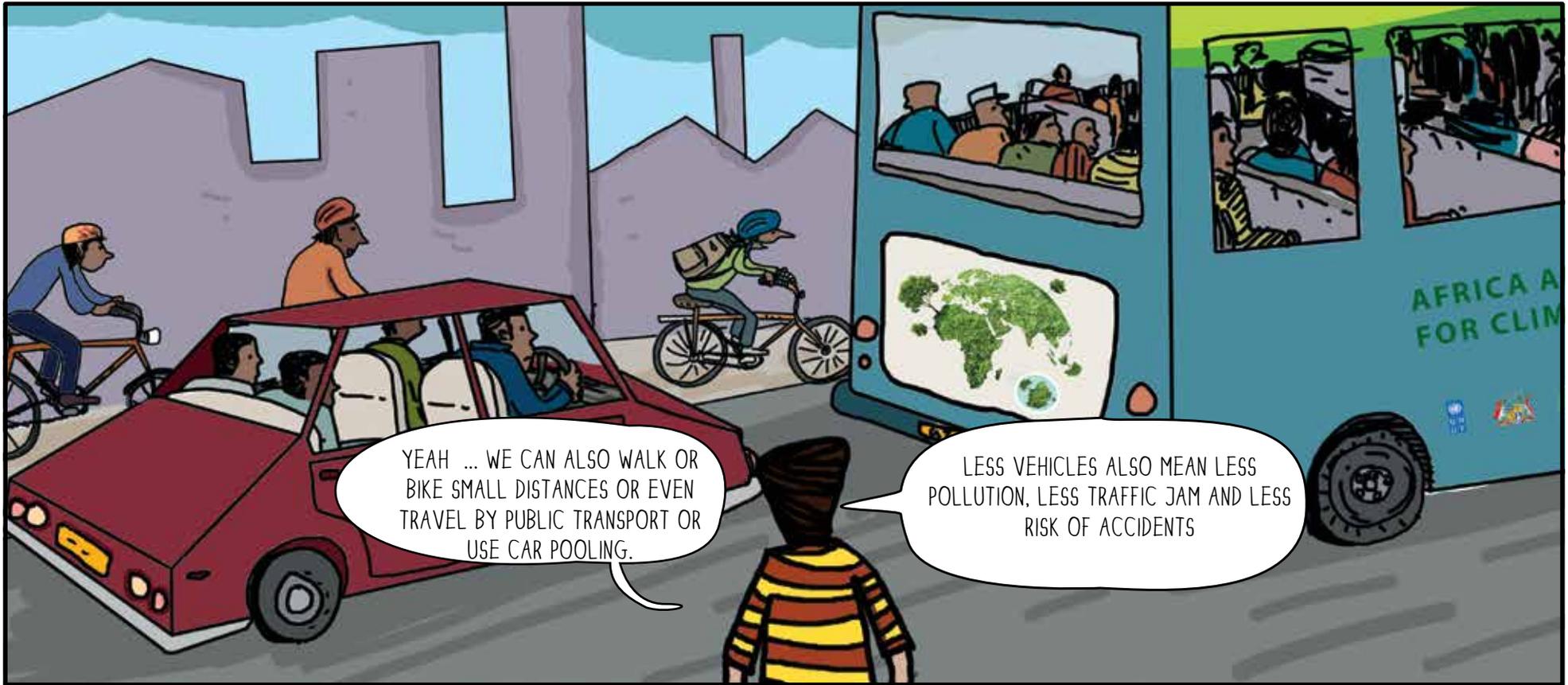
(E.G., SOLAR WATER HEATERS, ECO-FRIENDLY TV, REFRIGERATORS, ETC

... HMM ... THAT WILL SURELY REDUCE OUR ELECTRICITY BILLS.

I HAVE ALSO SEEN PEOPLE USING FUEL EFFICIENT VEHICLES...

...(E.G HYBRID CARS) OR USE CARS WITH ALTERNATE POWER SOURCE E.G BIO-FUEL CARS

... WE CAN HAVE BETTER HEATING AND COOLING DESIGN IN BUILDINGS

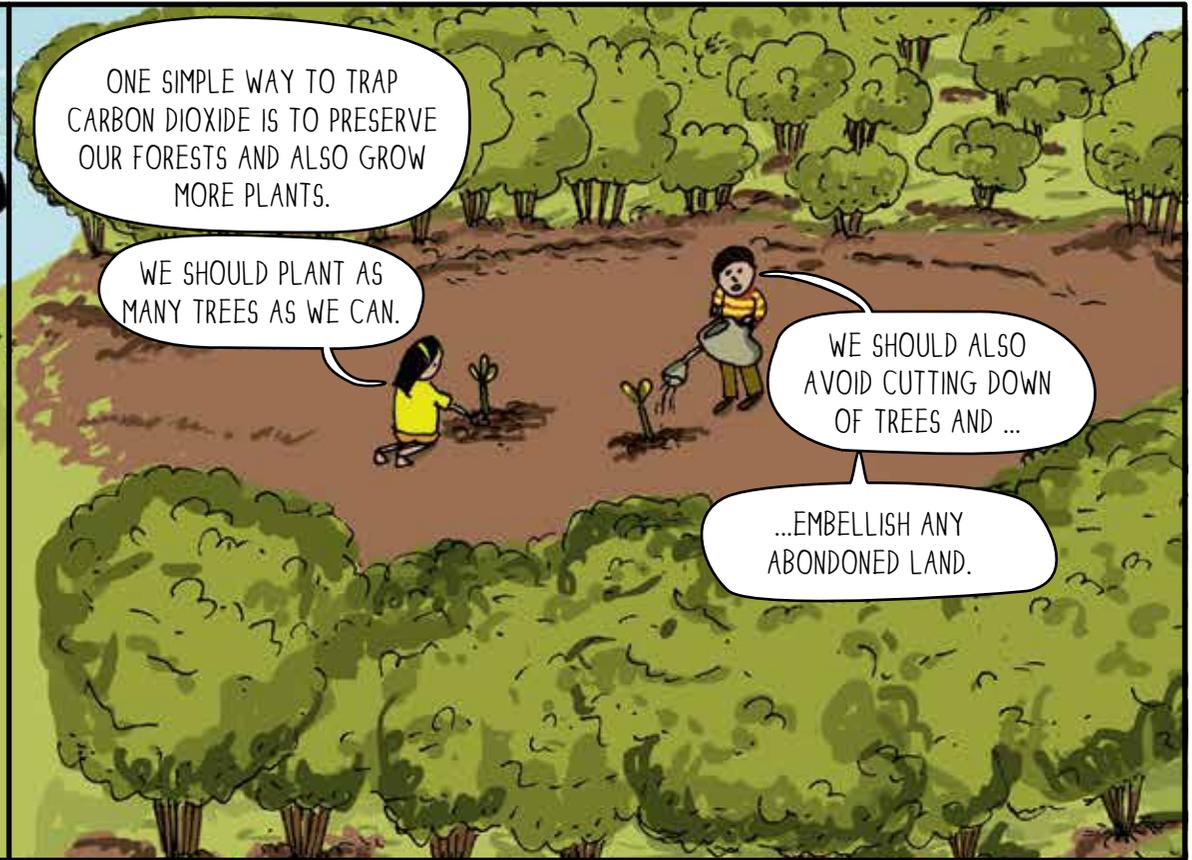


YEAH ... WE CAN ALSO WALK OR BIKE SMALL DISTANCES OR EVEN TRAVEL BY PUBLIC TRANSPORT OR USE CAR POOLING.

LESS VEHICLES ALSO MEAN LESS POLLUTION, LESS TRAFFIC JAM AND LESS RISK OF ACCIDENTS



WE CAN ALSO CAPTURE
METHANE FROM LANDFILLS
AND PRODUCE ELECTRICITY.



WE SHOULD ALSO PROTECT FRESH WATER BODIES, WETLANDS, COASTAL
AREAS AND OCEANS ... AS THESE BODIES ABSORB LOTS OF CARBON
DIOXIDE ...

WE NEED TO PROTECT OUR CORAL REEFS, ...AND MANGROVE FORESTS.
THEY PROTECT US FROM STORM SURGES, AND THEY PROVIDE FOOD AND
SHELTER TO MANY ANIMALS.





WE MUST ALSO CHANGE OUR LIFESTYLE AND CONSUME THINGS THAT HAVE LOW CARBON CONTENT...

... WHAT DO YOU MEAN BY THIS?

... WE CAN BUY LOCALLY GROWN AND MADE GOODS (E.G FOODS)... WHICH MEANS THAT THERE WILL BE NO CARBON DIOXIDE EMISSION DUE TO AIRPLANES AND TRUCKS CARRYING THEM

... WE CAN CARRY GREEN BAGS TO THE SHOPS ... IT REDUCES THE USE OF PLASTICS... WHICH POLLUTE OUR ENVIRONMENT

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WE MUST EAT LESS MEAT ...

IT IS GOOD FOR HEALTH AND WILL ALSO LEAD TO LESS GRAZING AND LESS METHANE PRODUCTION.

WE MUST CHOOSE SIMPLER LIFESTYLE ... OPT FOR THINGS THAT EMIT LESS CARBON DIOXIDE (E.G. FRESH VEGETABLES AGAINST FROZEN VEGETABLES; USE REGULAR TOOTHBRUSH NOT ELECTRIC ONE.

AM I USING ELECTRICITY JUDICIOUSLY?

TELL ME, WHAT WE CAN DO TO ADAPT TO THE CHANGING CLIMATE.

SO FAR YOU HAVE SAID HOW WE CAN REDUCE EFFECTS OF CLIMATE CHANGE

REGARDLESS OF WHERE WE LIVE, WE HAVE TO ADAPT OUR ACTIVITIES - INCLUDING EATING FOOD, WEARING CLOTHES AND APPROPRIATE SHELTER - OUR ECONOMIES AND OUR COMMUNITIES TO DIFFERENT SEASONAL CYCLES.



WE CAN HARVEST RAINWATER AND GROW DROUGHT RESISTANT TREES

WHAT ELSE ... WE CAN DO..

WE MUST ALSO HAVE ALSO APPROPRIATE PLANS TO PROTECT US FROM ANY CLIMATE RELATED DISASTERS (E.G FLOOD, DROUGHT, MOSQUITOES AND CYCLONE)

.. WE ALL NEED TO KEEP LEARNING ABOUT CLIMATE CHANGE AND BE READY TO TAKE ANY APPROPRIATE ACTION TO PROTECT ONESELF AND OTHERS.

WITH THESE MOSTLY SIMPLE STEPS, WE CAN BOTH REDUCE THE EFFECTS OF CLIMATE CHANGE ... AND ALSO ADAPT TO THIS CHANGING CLIMATE... SLOWLY BUT SURELY!!!

GLOSSARY OF TERMS FOR COMIC STRIP

1. Adaptation: changing our habits and adjusting our plans according to the demands of the changing climate
2. Alternative energy: energy source that has less fossil fuel or not at all
3. Bio-fuel: fuel derived from plants, like alcohol, bagasse and firewood
4. Car pooling: many persons travelling by same car rather than each person driving own vehicle
5. Clean energy: source of energy that does not cause pollution, like falling water
6. Coral bleaching: coral losing its natural colour, becoming white and dying due to pollution or heat
7. Eco-friendly: causing no pollution and leading to a healthy life
8. Energy efficient bulb: bulb that converts electricity mostly into light rather than heat
9. Expansion: increase in volume due to heating
10. Flash flood: a large amount of rain in a short time, leading to flooding
11. Fossil fuel: fuel like coal, gas and petrol that was formed deep under the ground
12. Geothermal: heat energy from the earth, like volcano
13. Global warming: rise in average temperature of land and water on the earth
14. Greenhouse effect: heat enters the greenhouse but is not able to go out, so the greenhouse gets warmer; in the same way heat enters the atmosphere but is not able to go out, this causes global warming
15. Greenhouse gas (GHG): gas like carbon dioxide which absorbs and retains heat
16. Hybrid car: car that runs with petrol as well as another source like an electric motor
17. Landfill: a place where garbage is thrown and then covered by soil
18. Low carbon energy source: a source of energy that has low carbon content so it causes less pollution
19. Mitigation: any action that we take either to reduce emission of greenhouse gases or to absorb carbon dioxide already present in the atmosphere
20. Renewable source of energy: a source of energy that is available even after continuous use, like energy from the sun and wind
21. Sea level rise: the level of water in the sea increasing due to melting of ice and due to expansion of sea water on heating
22. Stagnant water: water that is not absorbed by the soil, does not get drained away and remains on the surface for long time
23. Storm surge: abnormal rise in sea level due to strong wind and it can cause flooding of coastal areas
24. Wetland: big area of land that acts as filters for polluted water flowing from the mainland and thus prevents dangerous substances from leaving into the sea.

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