



# Training Manual for Youth on Climate Change



Ministry of Environment and Sustainable Development  
Mauritius

**February 2014**

## PREFACE

### CONGRATULATIONS!

You are on a journey to care for your planet.

This training manual has been developed for young people like you to become a Climate Ambassador for your school, at home and within your community.

In this training manual, you will read and understand more about climate change - What is it? Why is it happening? How can you help to combat climate change?

Enjoy your reading, learn about climate change, explain it to your friends, relatives and become a young climate champion.

# ACKNOWLEDGEMENT

The Ministry of Environment and Sustainable Development is thankful to all contributors who have directly and indirectly helped in conception and preparation of this Training Manual.

We acknowledge all sources from which information and materials have been drawn.

Special thanks go to the Association of Youth and Scouts club who have been consulted for validation of the Training Manual.

Ministry of Environment  
&  
Sustainable Development

# WHAT AND WHERE

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# THE CHILD PSYCHOLOGY TOWARDS CARING FOR THE ENVIRONMENT

Children have 3 capacities that evolve during their childhood<sup>1</sup> and youth phases until they reach the adult phase of life. They are as follows:-

1. Capacity in self-development;
2. Capacity of participating; and
3. Capacity of protecting and caring.

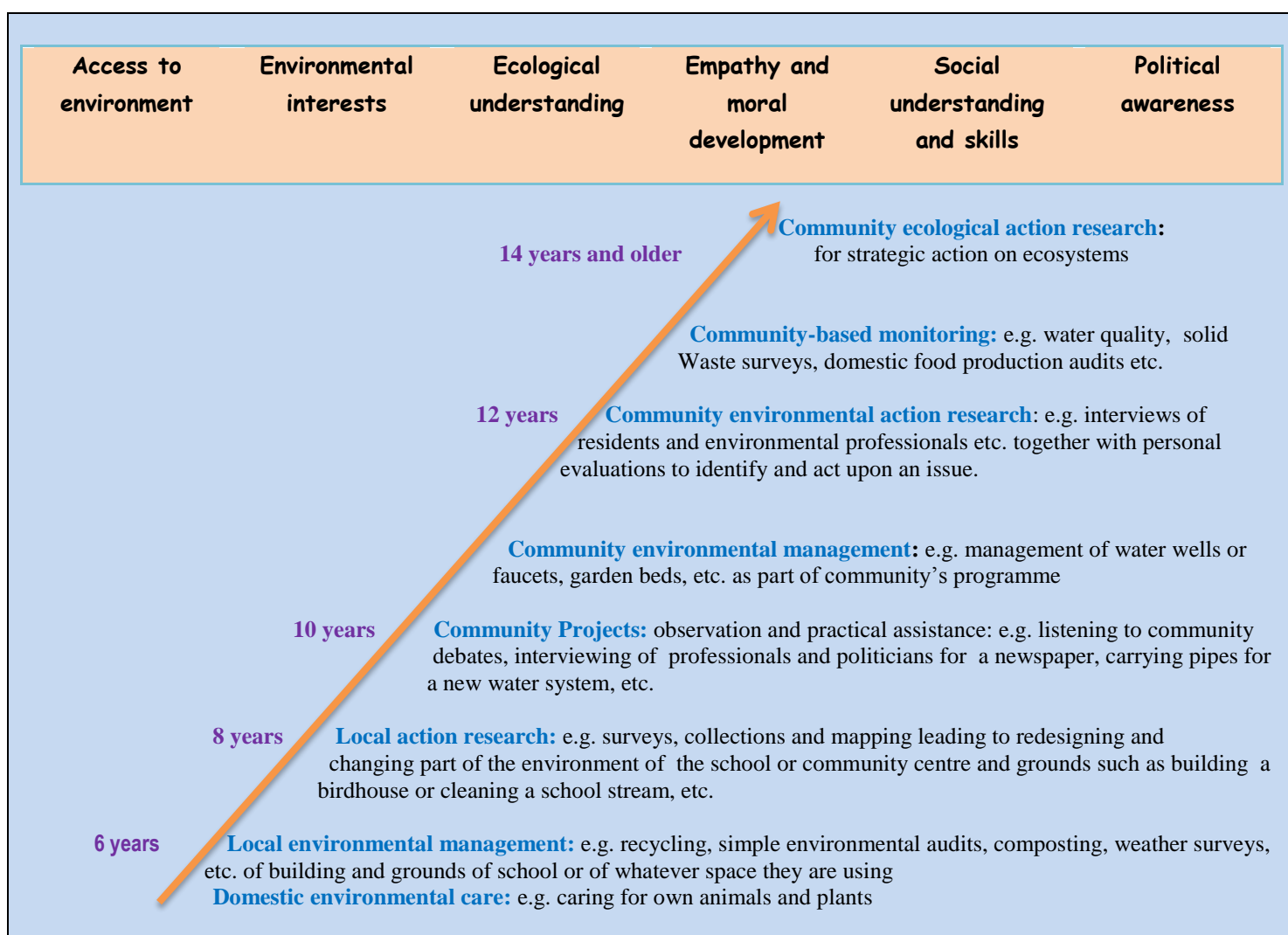


Chart showing the development of the psychological ability of a person

<sup>1</sup>UNICEF-Climate Change Adaptation and Disaster Risk Reduction in the Education sector. Resource Manual, November 2012

As children grow, they become more and more aware of their surroundings.

**Up to 3 years old:** They observe their surroundings and start becoming curious about their environment.

**From ages 3 to 11:** Children understand many things about the environment. They learn about good habits such as throwing litter in bin, engaging in collective activities namely segregation of wastes at school as well as caring for animals and plants.



**By the age 11:** They start taking certain decisions and make choices about their lifestyles.



**Youth (age 15-24):** They are able to reflect on what is good or bad for society.

Their understanding about environment, environmental changes, society and sustainable development increases over time. Their interest and engagement are highly beneficial to community-based initiatives and local environmental management.

## **Main Purposes of the manual**

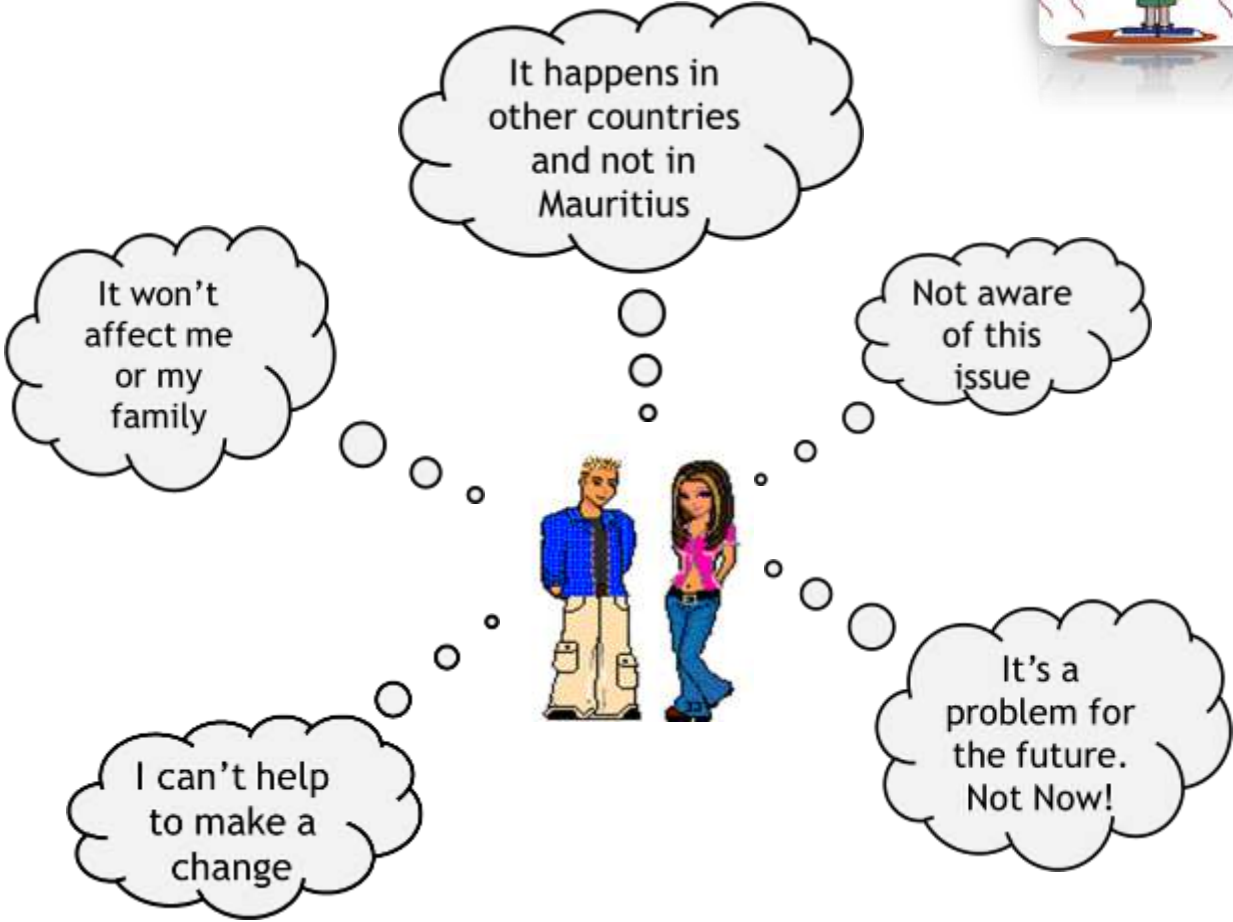
**The main purposes of this training manual are to:**

- (i) inspire, inform and engage the youth in taking action on climate change; and
- (ii) empower the youth in leading the way to mobilize their neighbours and communities to act together in the combat of climate change.

**Session 1**

**Basics on climate change**

What do youngsters think about climate change?

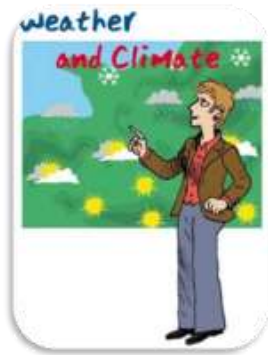
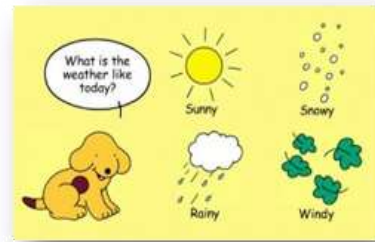




## Weather

It is the atmospheric condition prevailing in a specific area at a certain point in time.

For example: it is sunny, rainy, windy, cold or warm.



## Climate

It is the total of all weather occurring over a period of years in a given place.

For example: some countries in Africa have sunny, hot and wet climate all over the year.

## Climate Change

The Earth's climate is getting warmer. Rain patterns are changing, sea level is rising, and snow and ice are melting sooner in the spring. As global temperatures continue to rise, we'll see more changes in our climate and our environment. These changes will affect people at home and at work in many ways.

- The normal average temperature in Mauritius has risen (by 0.74°C) as compared to previous years. (1961-1990). This makes the climate hotter in summer and less cold in winter;
- Mauritius experienced its worst droughts in 1999 and 2011;
- The average annual rainfall has decreased by 8% since 1950;
- Nowadays, intense rainfall is observed for shorter period of time, resulting in flash floods;



- Between 1998 & 2007, the local mean sea level in Mauritius rose by 2.1 mm per year. Over the last 5 years, sea level has been rising by around 3.8 mm/year; and
- An increasing rate of mortality of coral reefs has been observed.

## **Green house**

Have you ever seen a greenhouse? A green house is a house made of glass to plant crops and very commonly used in cold countries. A greenhouse is also referred to as a glasshouse which traps the sun's heat inside the house and warms the plants air inside. So during daylight hours, it gets warmer up to 55°C to 65°C and remains warm enough at night too.



In a similar way, some gases in the earth's atmosphere act as a glasshouse. The atmosphere has accumulated some gases which are keeping the temperature warm. These gases are called *greenhouse gas (GHG)*.



The main GHG are carbon dioxide, water vapour, nitrous oxide and methane.

Have you ever got into your car that has been left in the sun with all windows closed? What did you noticed?

The trapped heat is a good example of the greenhouse effect.

## **Global warming**

The earth temperature has risen by an average of +1°C over the last century. In some regions of Africa, the temperature has increased by +3°C.

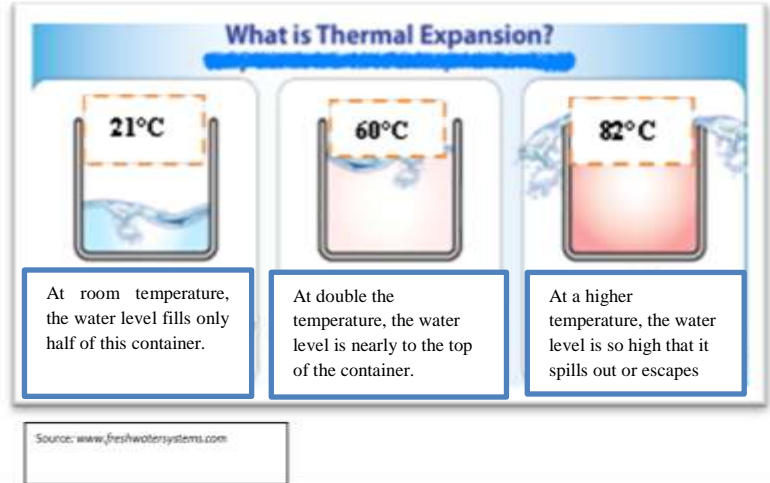




Scientists around the world agree that man's activities are making the natural greenhouse effect stronger. If we keep on polluting the atmosphere with greenhouse gases, dangerous effects will keep affecting on the Earth.

**Sea level rise:**

Sea level is the mean level of sea water. It has been observed that the level of sea has been rising rapidly over the last decade as a result of melting of glaciers and the thermal expansion of water.



**Activity: Open discussion**

Have you noticed any change in climate in your area? (Is it getting warmer or dryer?)

Have you noticed any change in rainfall patterns in your area?

Are there extreme weather events happening in your area and elsewhere?

Have you heard about the deadly flashflood in Port-Louis in March 2013?

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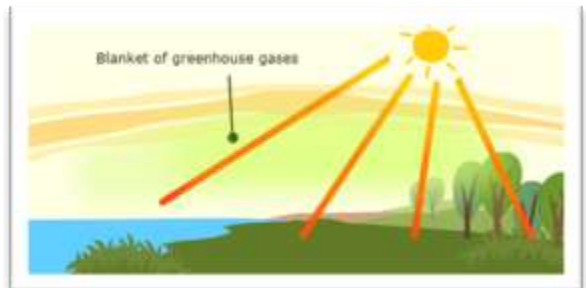
## Session 2

# Understanding the effect of greenhouse gas on earth?

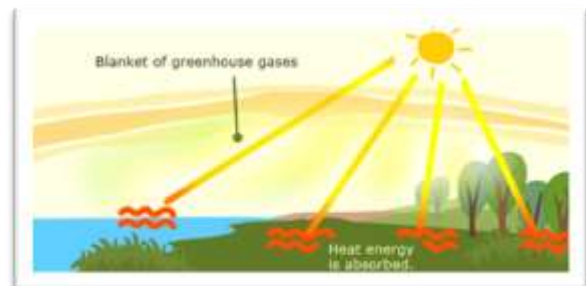
The earth's atmosphere is all around us. It contains gases such as oxygen, nitrogen, water vapour, carbon dioxide and rare gases.



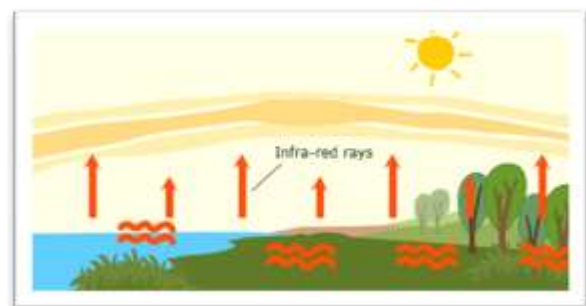
Sunlight enters the Earth's atmosphere.



As it reaches the earth's surface, the land and water absorb the sunlight's energy.



Once absorbed, the energy is sent back into the atmosphere in the form of infra-red rays.



Some of the energy passes into space, but much of it remains trapped in the atmosphere by the greenhouse gas (like a blanket), causing our globe (earth) to warm up.



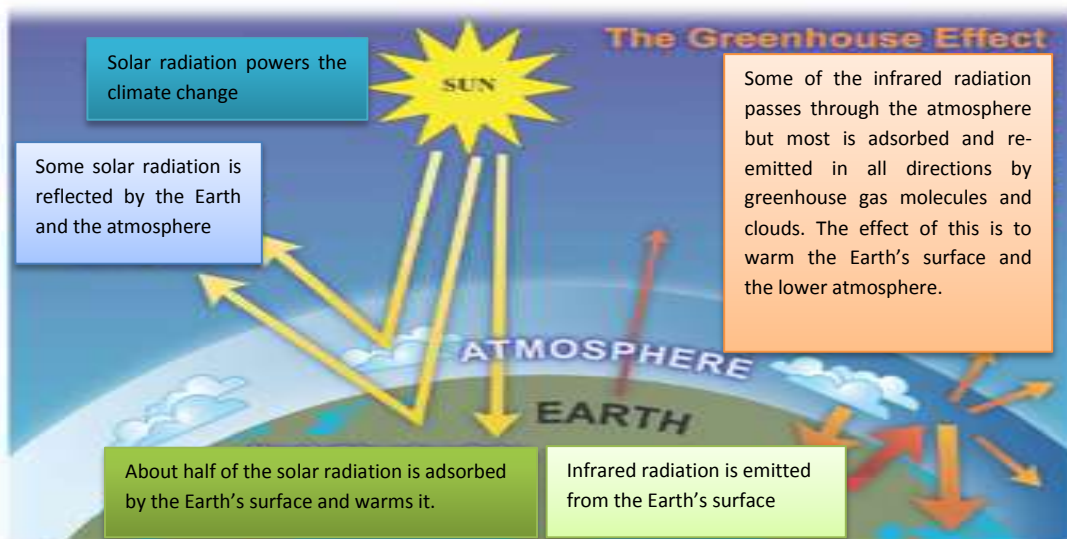
Source: [eschooltoday.com](http://eschooltoday.com)

This warming is what we call **Global Warming**, and it is caused by the greenhouse effect.

The greenhouse effect is important. Without the greenhouse effect, the earth would not be warm enough for humans to live. However, with an increase in amount of greenhouse gas in the atmosphere, the earth is getting warmer than usual.

### **In terms of figures**

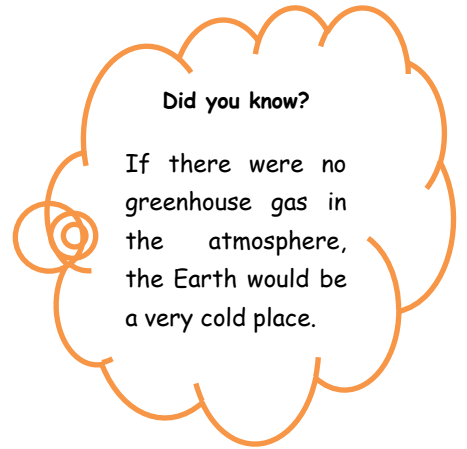
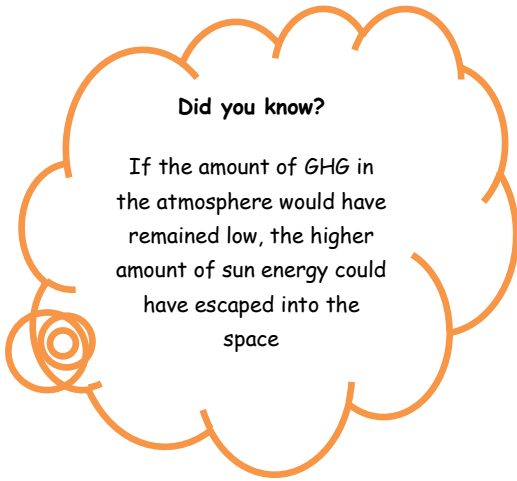
At present, sun heats the earth with energy of 340 watts per square metre. 100 watts reflected straight back into space and 240 watts stored as heat and other forms of energy.



Source: [green.nd.edu](http://green.nd.edu)

**Conclusion:**

Greenhouse gas is responsible for global warming and sea level rise.



**Activity: Open discussion**

Greenhouse gas keep the Earth warm through a process called the greenhouse effect. Explain how it causes climate change?

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## Session 3

# What are the causes of climate change and who are the culprits?

The rising GHG concentration in the atmosphere is the main cause of climate change.

Some alarming figures about **atmospheric CO<sub>2</sub> concentration globally**

- 280 ppm in pre-industrial era (year 1850-1900)
- Already reached 400 ppm on 9<sup>th</sup> May 2013
- It is projected to reach around 490-1,260 ppm by year 2100



Pre-industrial era



Industrial era

Which are these greenhouse gas and what are their main sources?

- 🔥 Carbon Dioxide (CO<sub>2</sub>) emissions due to transportation (vehicles, airplanes, ships), deforestation and industries.



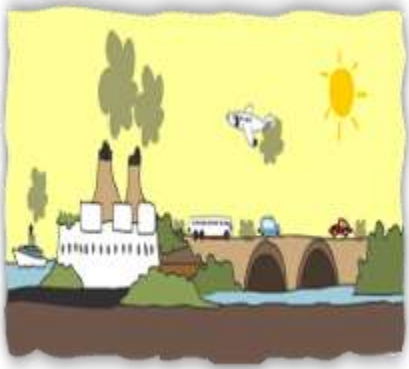
Burning of fossil fuels



Deforestation of tropical forests for wood, pulp & farmland



Burning of gasoline

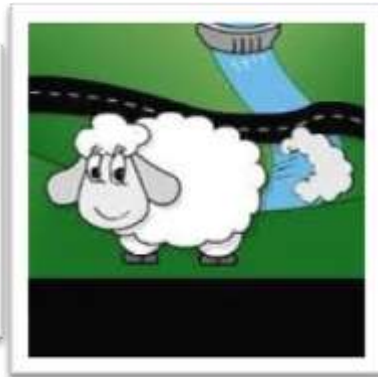


The production and consumption of goods contribute to the emission of greenhouse gas.

🦋 Methane ( $\text{CH}_4$ ) emissions from agriculture such as rice paddies, animals, landfills & melting of Arctic glaciers



Rice paddies



Animal excrete



Arctic glaciers

🦋 Nitrous oxide ( $\text{N}_2\text{O}$ ) emission due to agriculture, transportation and industry



Increase use of synthetic fertilizer

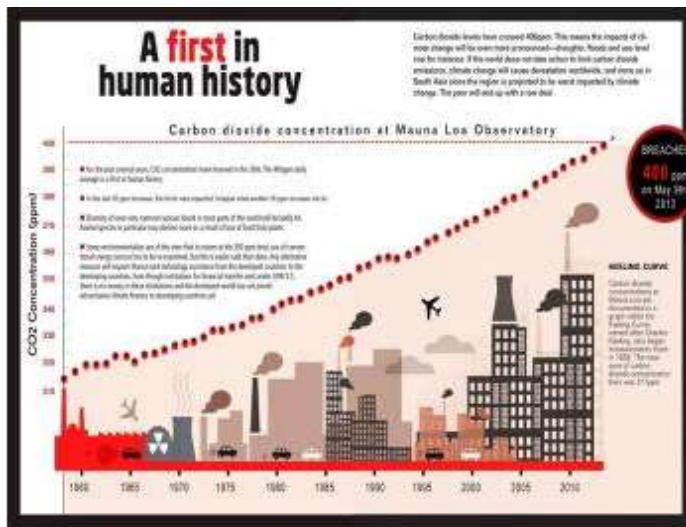


Increase use of catalytic convertors



Industrial activities





Graphs shows carbon dioxide concentration reaching 400 ppm

Source: [keelingcurve.ucsd.edu](http://keelingcurve.ucsd.edu)

On May 9, 2013 the daily mean concentration of carbon dioxide measured at Mauna Loa, Hawaii, U.S. exceeded 400 parts per million for the first time<sup>2</sup>. We are the one to breathe air of 400 ppm after 750,000 years as per NASA.

**Did you know?**

Mauna Loa is the oldest continuous carbon dioxide measurement station in the world & is also the primary global benchmark site.

Before Industrial Revolution in 19<sup>th</sup> century, global average carbon dioxide was about 280 ppm. The rate of increase in 1950s was 0.7 ppm per year and whereas during the last 10 years it was 2.1 ppm per year. The increase is more than 300%.

<sup>2</sup> Scripps Institution of Oceanography / University of California, San Diego, May 10, 2013

## Who are the main culprits?

In 1960, the U.S had been the biggest contributor (40%)<sup>3</sup> of carbon emitted globally from fossil fuels and cement production. The second largest contributor by 1960 was the U.K (15%) followed by Germany and France with 11% and 5% of the total cumulative world carbon emissions, respectively.

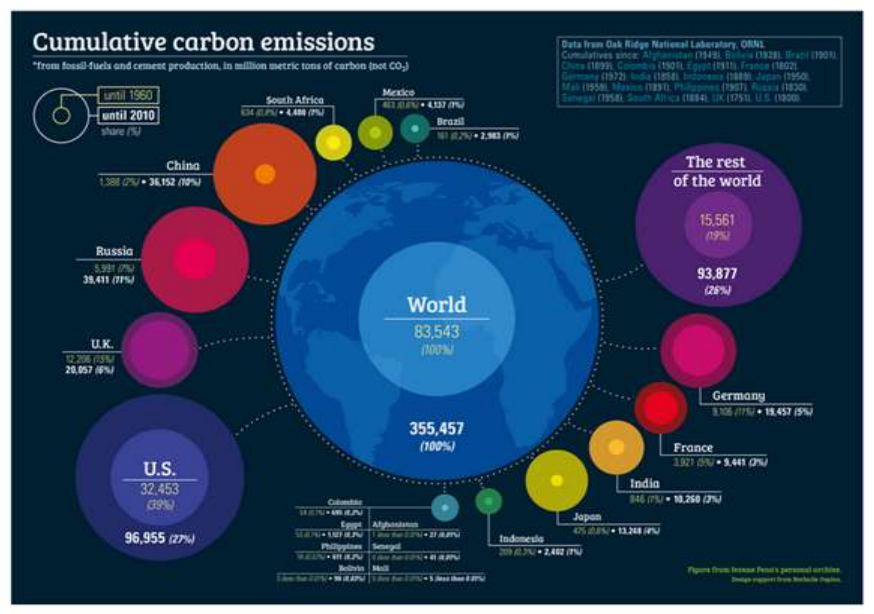


Chart showing carbon emissions by several countries

Source: [theenergycollective](http://theenergycollective.com) (September 30, 2013)

### Activity: Open discussion

Certain human activities are adding carbon dioxide to the atmosphere faster than it can be removed. Please discuss?

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<sup>3</sup>The Energy Collective, 30 September 2013

## Session 4

# Impacts of climate change in Mauritius

Sea level rise, erosion & inundation of coastal lands, huge cost for protecting & rehabilitating vulnerable areas



Increases pest and disease incidences and causes reduction in yield and quality



Changes in precipitation pattern, reduction in amount of utilizable water



Temperature variabilities



**Climate Change Impacts**

Intense Precipitation



Forest Impacts



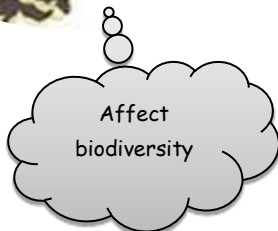
Degradation of environment



Wildlife



Affect biodiversity



More Intense Cyclones



Health impacts



Heat-related deaths, Infectious diseases, air quality-respiratory illnesses



## Coastal areas:

### Accelerated beach erosion:


Beach erosion is a natural process which is being accelerated by too intensive unsustainable use without allowing time for the beach eco-system to recover, degradation in the coral reef and frequent extreme weather events in Mauritius. Beach erosion is becoming a serious issue. Areas such as Grand Baie, Mon Choisy, Flic en Flac are being seriously impacted.

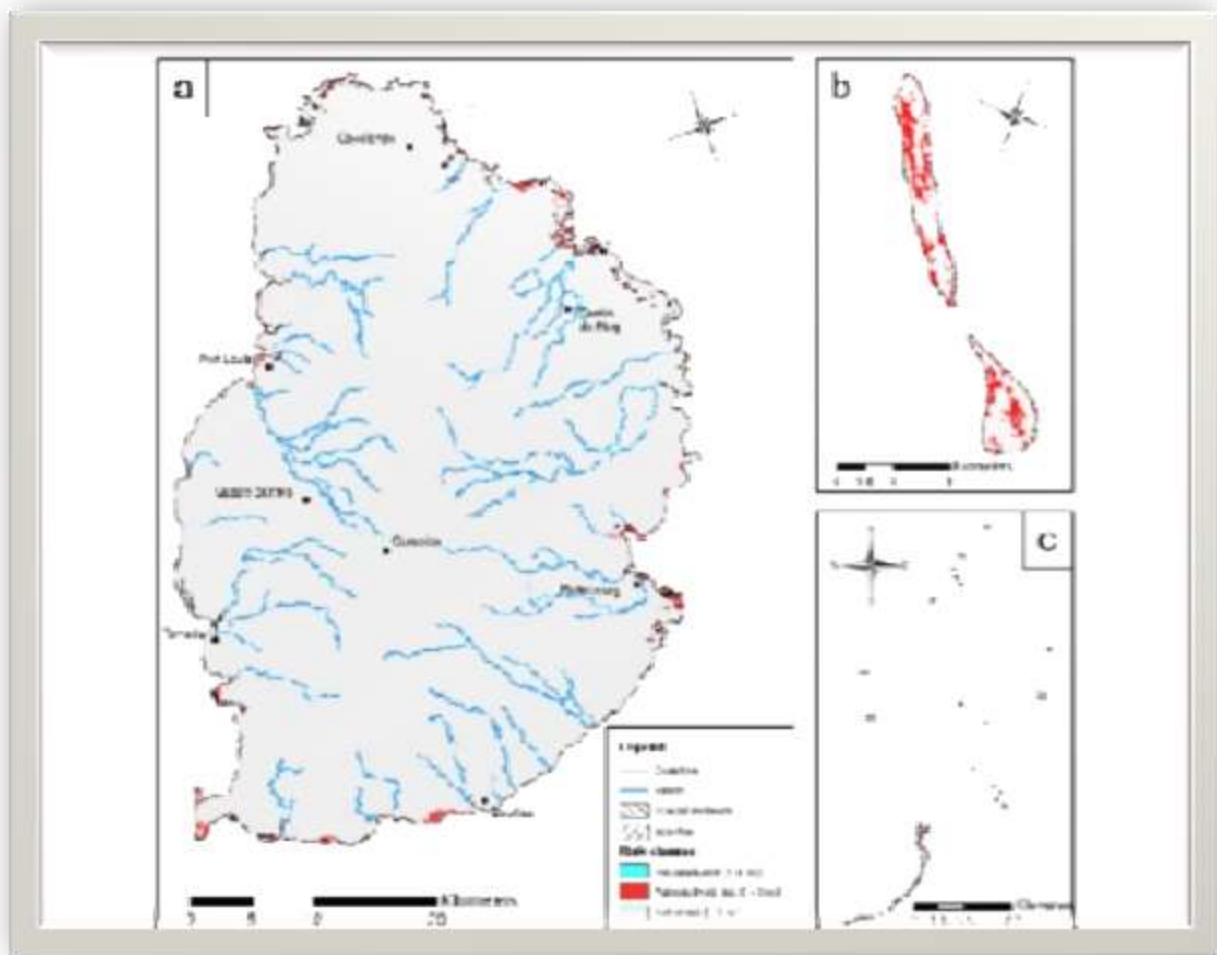


### Threats due to rising sea level:

- 🌊 Serious impacts on ecosystems such as mangrove forests and wetlands;
- 🌊 Damage to houses and other socio-economically important infrastructures such as airports, hotels, power plants lying near the coast;
- 🌊 Disappearance of low-lying islets/ islands such as Tuvalu (Pacific) and Agalega (Mauritius);
- 🌊 Saline water intrusion and contamination of borehole water on the coast; and
- 🌊 Degradation of good agricultural land situated on the coast.

#### Did you know?

Between 1998 and 2007, mean sea level rose by  mm/year. Over the last 5 years sea level has been rising by around 3.8 mm/year

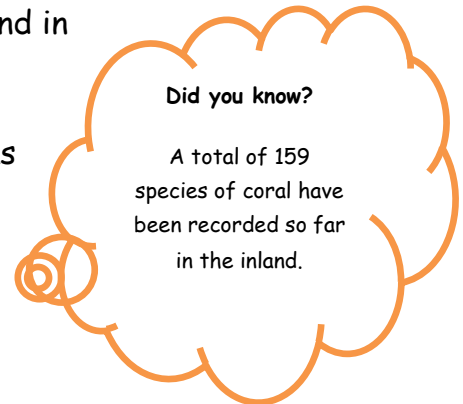
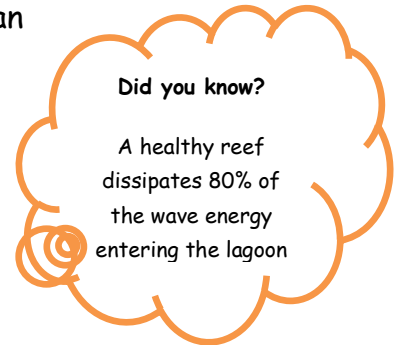


Red spots showing areas expected to be affected by sea level rise<sup>4</sup> around the islands based on elevation for (a) Mauritius (b) Agalega and (c) St Brandon Coral reefs.

<sup>4</sup>Mauritius Adaptation Funds Board Project/ Programme Proposal

One of the natural features that protect our coastline and beach areas is coral reef. Mauritius has a diverse marine environment with 5 reef types: fringing, patch, atolls, flats and barrier reefs. These corals play an important such as:

- produce approx. 10% of world marine fish production;
- support about 25% of marine life;
- help control carbon dioxide level in the ocean and in recycling nutrients;
- act as feeding, breeding grounds and as shelters for a number of marine organisms; and
- are responsible for formation of sandy beaches and lagoons.



**Group discussion:**

Can you imagine what will happen to our beaches if all corals die in the lagoon?

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*Hint: Serious effects on the livelihoods and socio-economic sectors will be faced on our country.*

**Threats to coral reefs**

Coral reefs are very fragile and sensitive. Their eco-systems can easily be disturbed naturally and by human activities.



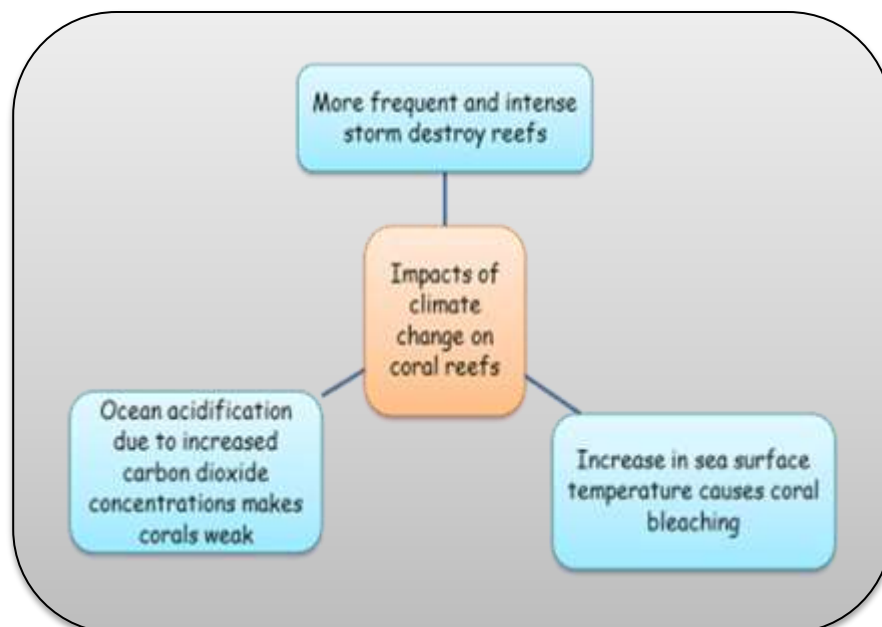
Scientists have observed that an increase in the ocean's temperature may lead to a condition known as 'coral bleaching' i.e the corals become white in color and die. This is due to loss of live microorganism ("symbiotic unicellular algae"). Coral bleaching occurs mainly due to elevated sea-surface temperature.

Coral bleaching has caused mortality of corals in many places around the world and as well as in Mauritius in locations such as Blue Bay, Ile aux Benitiers, Belle Mare, Poudre d'Or and Albion.



**Did you know?**  
The financial loss of that may occur due to degradation of our coral reefs is about **USD 50 billion**

Some impacts affecting coral reefs are listed below



## How to protect corals?

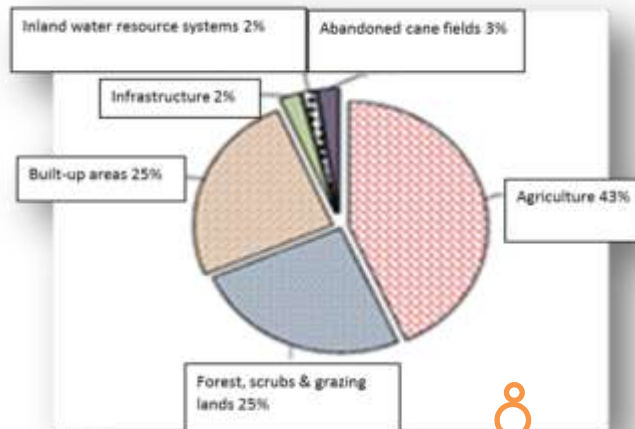
- Divers and snorkelers should avoid walking and standing on corals;
- Do not throw waste along the coast;
- Avoid collection of living or dead corals; and
- Boat operators should take care not to drop the anchors directly on the reefs.



## Agriculture:

### Importance of agriculture:

Agriculture plays a crucial role in the life of human beings. It is important for the economy, in the production of food crops and in the provision of greater employment opportunities.












Climate is the most important factor in determining plant growth and productivity e.g. temperature, precipitation, solar radiation, climate extremes, nutrient supply and carbon dioxide ( $CO_2$ ) concentration.



#### Did you know?

43% of the land is used for agriculture



-  A rise in temperature has enabled the cultivation of certain fruit and vegetable species in the uplands, such as litchis and mangoes.
-  Higher temperatures shortened crop cycle, resulting in lower yields.
-  During drought periods plant growth, development and yield are affected due to shortage of water.
-  Cropping calendars, flowering and productivity of vegetables and fruits are being affected by higher temperatures.
-  Production is affected by more frequent and severe droughts as well as cyclones and heavy rains.
-  Coastal lands are affected by more frequent storm surge destroying crops and affecting soil quality and productivity.
-  Warmer temperatures and milder winters are favoring higher incidence of pests and diseases in plants.
-  Soil erosion on cultivated sloping lands is increasing during torrential rains, leading to a decrease in soil fertility and an increase in off-site impacts (e.g. sedimentation of rivers and lakes).
-  Higher temperatures lead to heat stress in farm animals. Measures to minimize stress have to be taken, such as modification of their environment and provision of shading, cooling etc.

### Group discussion:

Have you noticed such phenomena in Mauritius?

Did you notice of any change in flowering or fruiting incidence?

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#### **Collapse of \$30 billion honey bee economy in the U.S**

Colony Collapse Disorder (CCD) has wiped out some 10 million bee hives worth \$ 2 billion over past 6 years. There are now about 2.5 million left down from 6 million in 1947. California harvests more than 80% world's almonds but they cannot grow the crop anymore without enough bees left. Other crops being affected are avocados, pears, blueberries & plums.

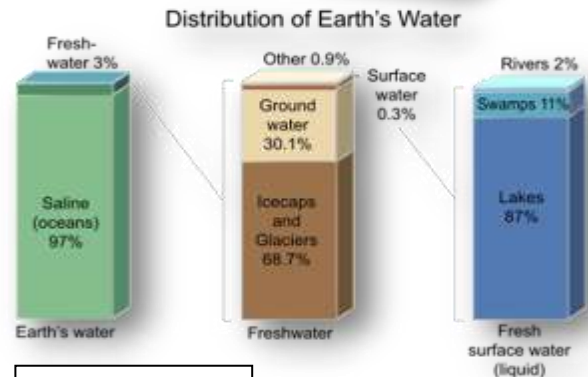
## How to promote agriculture?

- By planting crops during different times of the year, or by planting crops that can survive better in hot and dry conditions.
- Avoid excessive use of any agro-chemicals



## Water resources:

Only 3% of earth's surface water is fresh water. Due to climate change, the percentage is steadily decreasing. Rainfall is often observed outside the catchment areas of our reservoirs leaving them partially filled. Some of the impacts of climate change<sup>5</sup> on water resources are:



Source: *nature.com*

- There is an increase in the number of consecutive dry days and a decrease in the number of rainy days.
- There is a general tendency for intense rainfall happening over a short time lapse. This is causing increased erosion of agricultural lands.
- There is a reduction in the groundwater recharge<sup>6</sup>

### Did you know?

Water consumption by Mauritian is 162 litres and that by African is 20 litres per person per day<sup>6</sup>



Midlands Dam showing only 50.7% of its capacity in September 2013. The reservoir was at 97.2% some four months earlier

<sup>5</sup> Digest of Environment Statistics 2011

<sup>6</sup> Institute of water for Africa: <http://www.water-for-africa.org/en/water-consumption.html>

## Tips to conserve and preserve water

Do's	Don't
<p>Collect and use rainwater for all washing purposes and for watering (rainwater harvesting)</p> 	<p>Do not leave taps open</p> 
<p>Use bucket when washing cars</p>	<p>Do not throw or dump wastes into watercourses or along their banks</p>
<p>Use a water can instead of a hose when watering plants</p> 	<p>Do not wash containers contaminated with pesticides, herbicides and such other substances in rivers and canals</p> 
<p>Repair leaks in water pipes. This can reduce<sup>7</sup> water bills by 20%</p>	<p>Do not pollute the groundwater</p>
<p>Inform the authorities if you detect any water leakage</p>	<p>Do not throw dead animals into rivers, canals and reservoirs</p>
<p>Use a mug when brushing your teeth or when shaving instead of running tap. This can save 0.5 litre of water<sup>7</sup></p> 	<p>Do not allow waste water from bathrooms, toilets, poultry or cow sheds etc. to flow into rivers and canals</p> 
<p>Use grey water from clothes washing for paves surfaces/ floors</p>	
<p>Use waste kitchen water for watering plants/ gardens</p>	
<p>Use low capacity flushing cisterns by modifying the float or dipping a sponge<sup>7</sup> in water flushing tank. 3-6 litres of water can be saved</p> 	

<sup>7</sup> ECO TV, <http://www.gov.mu/portal/sites/mid/InFocusEcoTV.htm>

Can you imagine life without water?



**Group discussion:**

Discuss the ways and means to save water?

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**Health:**



There is no doubt that adequate food, clean air and water and the absence of diseases are important factors for the good health of human beings.

There are several impacts of climate change on public health that have serious consequences such as:

- 🌍 heat stroke and dehydration due to heat waves
- 🌍 injuries or even death due to extreme weather events; e.g. Haiyan typhoon in Philippines
- 🌍 abnormal climatic conditions can favor spread of food-borne, water-borne and vector borne diseases e.g. dengue, chikungunya and malaria.



Source: [techcrunch.com](http://techcrunch.com) (11 November 2013)



**Did you know?**

In 2006 Tourism sector suffered tremendously because of chikungunya

## Preventing mosquito borne diseases after heavy rainfall and during an outbreak:



### 1. Elimination of mosquito breeding places

- Dispose of tin cans, plastic containers, ceramic pots, or similar water-holding containers in a covered bin pending disposal.
- Used tyres are usually one of the common mosquito breeding places. You can put them in a sheltered place.
- For containers that must remain on your premises, such as small pools, change the water regularly and at least once per week.
- Make sure roof gutters drain properly. Clean clogged gutters.
- Clear flat roofs of standing water.
- Avoid water collection in plates under flower pots
- Drums and containers used for water collection for domestic or other use should be covered or screened.
- Remove all leaf debris from the yard



### 2. Eliminating mosquito harboring sites

One can reduce the number of areas where adult mosquitoes can find shelter by cutting down weeds, mowing the lawn regularly and trimming bushes.

### 3. Preventing mosquito bites




1. Wear long -sleeved shirts and long trousers.
2. Apply mosquito repellent to exposed skin areas in accordance with label instructions.



3. Use mosquito coils or plug-in insecticide devices to kill mosquitoes in-door.  
Follow the instructions on the packaging.
4. If possible, sleep under bed nets
5. Electric fans and air conditioning system may help prevent mosquito bites









### During extreme heat conditions:



-  Avoid long exposure to sun rays;
-  Try to rest often in shady areas
-  Drink lots of water.



### Water and food safety after heavy rainfall:

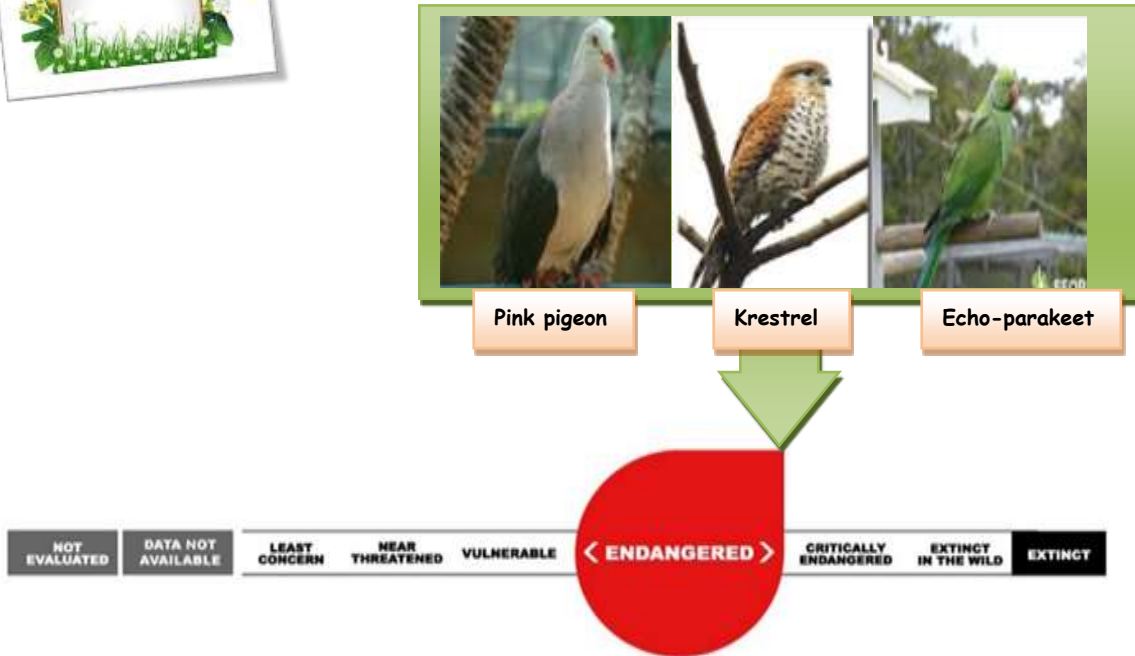
-  Drink boiled water;
-  Wash hands properly with soap and water;
-  Wash fruits and vegetables under running water;
-  Eat freshly prepared food;
-  Keep raw and cooked food separately;
-  Use separate chopping boards for meat and vegetables;
-  Cooked food should be kept away from dust, rodents, mosquitoes and other insects; and
-  Do not leave cooked food for more than 2 hours at room temperature.



## Wild life & Forest:



Habitat loss and degradation of our ecosystems are major threats to our biodiversity species. With climate change, the natural habitat continues to degrade<sup>8</sup>.



Scale indicating these birds are endangered species in Mauritius

### Did you know?

In Mauritius, around 2% of native forest is left. There are 691 species of indigenous flowering plants recorded in Mauritius, of which 273 are endemic and 61 are classified as extinct. From the existing flowering species, about 89% are already classified as threatened<sup>8</sup>.

### Did you know?

The freshwater biodiversity in Mauritius is contained within some 90 rivers and streams, several man-made reservoirs, natural lakes and marshy areas

<sup>8</sup> National Parks and Conservation Service (NPCS), Annual Report 2013, Ministry of Agro-Industry and Food Security.

For example: **Orangutans and other species lose habitat to palm oil plantations**

Palm oil plantations in the tropical regions of Africa, Latin America, and Asia have led the large scale destruction of important habitat for many species.



**Did you know?**

24 of 52 native species of forest vertebrate in Mauritius & adjacent islets are now extinct e.g: dodo, giant parrot & giant tortoise

Similarly, tigers, elephants, rhinos, and many other species are decreasing due to forest degradation which causes a reduction in their habitat area<sup>9</sup>.



**Did you know?**

According to the World Conservation Union (IUCN), Mauritius is considered as the third island to have the most threatened plant species<sup>9</sup>.

<sup>9</sup> National Biodiversity Strategy and Action Plan (NBSAP) 2006-2015, Ministry of Agro-Industry and Food Security.



## Engage yourself to protect trees by:

- 🌳 Planting trees in your gardens and schools, especially endemic and threatened species;
- 🌳 As far as possible, not cutting trees;
- 🌳 Not harming or killing threatened animals including birds and marine creatures;
- 🌳 Participating and forming voluntary groups to help in conservation programmes;
- 🌳 Informing people around you to respect the nature and not to destroy our natural resources; and
- 🌳 Not snapping twigs or branches off trees along the road.



## Protect your forest

### How to protect wildlife and forest?

- 🌳 Do not remove or damage plants, flowers and ferns from the ground cover while visiting natural habitats;
- 🌳 Do not light fire or smoking during visits;
- 🌳 Always stay on marked trails;
- 🌳 Use bins or take your litter back home;
- 🌳 Avoid loud music and shouting, which disturbs wildlife; and
- 🌳 Do not carry your pets (cats & dogs) while visiting natural habitats.



## Session 5

# What are the measures taken in Mauritius to combat climate change?

### ○ Maurice Ile Durable (MID)

In 2008, the Prime Minister of the Republic of Mauritius, Dr The Honourable Navinchandra Ramgoolam, announced a long-term vision to make Mauritius a world model of sustainable development. The MID seeks to promote sustainable practices and technologies, towards making Mauritius a low-carbon economy and a climate resilient island. Furthermore, a National Disaster Risk Reduction and Management Centre has been established since November 2013.



### ○ Mitigation

Mitigation refers to the efforts to reduce or prevent emission of GHG by using appropriate technologies, renewable energies and changing management practices or consumer behaviour. Several measures are being taken:-

- the use of renewable energies such as solar photovoltaic cells, wind turbines and micro-hydro power for production of electricity
- introduction of "Green Loan schemes" to encourage companies to introduce cleaner technologies to reduce production costs and carbon dioxide emissions
- introduction of "carbon tax" to promote use of more energy-efficient vehicles. This would help in decreasing greenhouse gas emissions.
- adoption of renewable bags to reduce consumption of disposable plastic bags



Many institutions and companies now calculate their carbon footprint so as to reduce its impacts on their activities.

### Carbon footprint

Carbon footprint is the amount of carbon produced by all of our activities. It is a measure of the impact by our activities on the environment. Having a small carbon footprint is better than having a large one, and a good goal is becoming what is known as "carbon neutral." That's when the combination of all our activities releases the same amount of CO<sub>2</sub> as they absorb. When we are "carbon neutral," your carbon footprint is zero.

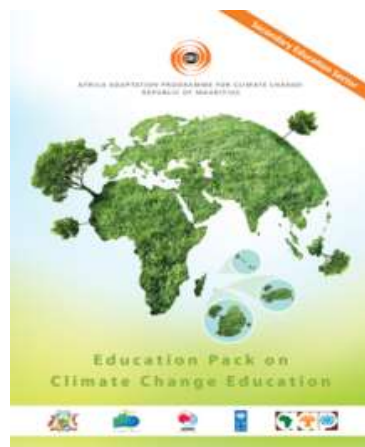


#### ○ Adaptation

It is important to reduce the adverse effects of climate change and to increase resilience to future impacts. The Ministry of Environment and Sustainable Development and other partners have initiated several laudable projects to combat climate change for example:-



- Household rain water harvesting scheme
- Household Compost Bins scheme
- Coral transplant
- Education
- Zero-plastic



- School guides

## Session 6

# Your Actions Count Too



## Walking, Biking



- Avoid car for short distances; walking is always good for health.
- Biking is better preferred for distances of few kilometers.
- To save on fuel bill, buy a small & fuel-efficient model car.



## Recycling



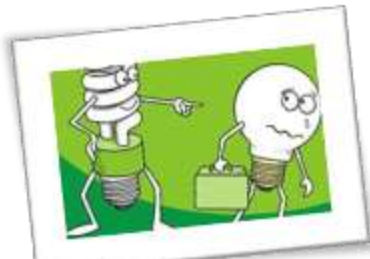
- Use a reusable bag instead of disposable plastic one for shopping.
- Sort out glass, paper, cardboard and cans from your waste. Recycling aluminium cans consumes 10 times less energy than producing new ones.
- Compost your biodegradable waste in your yard or on the roof.
- Take your lunch in a reusable lunch box instead of aluminium foil/paper bags.



## Turnoff



- Boil only the amount of water you need for your hot drink.
- 5 cm of ice uses 30% of the electricity, defrost your fridge regularly
- Do not put hot/ warm food in fridge. Cool it first.
- Set the fridge less than 5°C, this will keep food fresh longer.



## Switch off



- Switch off lights when not needed.
- Do not leave TV/ computer on standby mode. On average, a TV set uses 45% of its energy in this mode.
- Do not leave your mobile phone charging when battery is full. 95% of electricity is wasted & only 5% is used to actually charge your phone.
- Choose energy saving light bulbs. They last longer & use 5 times less electricity than conventional bulbs.
- Choose household appliances for example; washing machine (front loading)/ fridge (defrost) which use less energy & which have energy colour codes stuck on them.
- You can save several litres of water by keeping closed tap while brushing teeth.

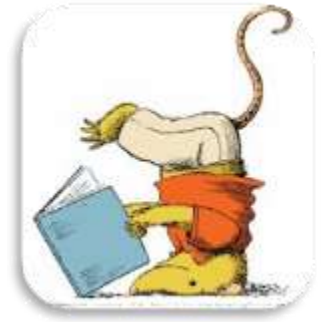


## Additional Activities



- Plant a tree in your yard. 5 trees soak up around one ton of carbon dioxide throughout their lifetime.
- Use as little paper as possible: photocopy on both sides & use email.
- Consume locally produced seasonal food. It is better for the environment.

## Where to read more about climate change?



- ✿ Sustainable consumption and production- Best practices in Mauritius; Ministry of Environment and Sustainable Development in joint collaboration with the United Nations Environment Programme, Republic of Mauritius.  
<http://environment.gov.mu/>
  
- ✿ Africa Adaptation Programme for climate change: Primary Education Sector; Ministry of Environment and Sustainable Development, Republic of Mauritius.  
<http://environment.gov.mu/>
  
- ✿ Africa Adaptation Programme for climate change: Secondary Education Sector; Ministry of Environment and Sustainable Development, Republic of Mauritius.  
<http://environment.gov.mu/>
  
- ✿ Mainstreaming climate change adaptation in the agriculture, tourism and fisheries sectors in the Republic of Mauritius and in the water sector in Rodrigues. Synthesis report. Ministry of Agro Industry & Food Security, Ministry of Environment & Sustainable Development, Ministry of Fisheries, Ministry of Tourism and Leisure, Rodrigues Regional Assembly. December 2012.  
<http://environment.gov.mu/>
  
- ✿ Scripps Institution of Oceanography/ University of California. San Diego, May 10, 2013. <https://scripps.ucsd.edu/news/7992>

- ★ Climate Change Take Action Now! Unicef; Available from:  
[http://www.ifrc.org/Global/Publications/youth/AYCEOs\\_climate-change\\_take-action-now\\_EN.pdf](http://www.ifrc.org/Global/Publications/youth/AYCEOs_climate-change_take-action-now_EN.pdf)
- ★ CLIMATE CHANGE [online]. Available from:  
<http://www.eschooltoday.com/climate-change/Introduction-to-climate-change-for-children.html>
- ★ ECO TV  
<http://www.gov.mu/portal/sites/mid/InFocusEcoTV.htm>
- ★ National Parks and Conservation Service (NPCS), Annual Report 2013, Ministry of Agro-Industry and Food Security.  
<http://agriculture.gov.mu>
- ★ National Biodiversity Strategy and Action Plan (NBSAP) 2006-2015, Ministry of Agro-Industry and Food Security.  
<http://agriculture.gov.mu>
- ★ CLIMATE CHANGE [online]. Available from:  
<http://climatekids.nasa.gov/menu/weather-and-climate/>
- ★ CLIMATE CHANGE [online]. Available from:  
<http://www.pacinst.org/issues/climate-change-vulnerability-and-resilience/>
- ★ UNICEF Zimbabwe.2010. National Nutrition Survey.  
[http://www.unicef.org/zimbabwe/media\\_5965.html](http://www.unicef.org/zimbabwe/media_5965.html).

- ★ Zimbabwe National Strategic Plan for the Education of Girls, Orphans and other Vulnerable Children 2005-2010. Retrieved from [http://planipolis.iiep.unesco.org/upload/Zimbabwe/Zimbabwe\\_National\\_Strategic\\_Plan\\_Girls\\_OVC.pdf](http://planipolis.iiep.unesco.org/upload/Zimbabwe/Zimbabwe_National_Strategic_Plan_Girls_OVC.pdf).
  
- ★ UNESCO Associated Schools Good Practices in Education for Sustainable Development retrieved from [www.sandwatch.org](http://www.sandwatch.org)



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