

# The worldwide Adventures of Droppy



## Imprint

Original [Las aventuras de Ytyky](#)

Produced by:

Secretary of the Environment of the Republic of Paraguay  
Directorate General of Water Protection and Conservation (DGPCRH)  
[www.seam.gov.py](http://www.seam.gov.py)

In cooperation with:

Federal Institute for Geosciences and Natural Resources

In the framework of the project PAS-PY (decentralised groundwater management)

Financed by Federal Ministry for Economic Cooperation and Development (BMZ)

Story:

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Editorial revision [The worldwide Adventures of Droppy](#)

Produced by:

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Graphic design and illustrations:

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Printing:

MHD Druck und Service GmbH  
Harmsstraße 6  
D-29320 Hermannsburg



März 2012

Published for free distribution – sale is prohibited

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# Characters



## Droppy

A drop of water that has a lot of adventures.



## Bernard, Ali, Budi , Makwetu

These boys sometimes cause problems without meaning to. They learn several lessons about water and the environment with their friend Droppy.



## Dr. Nature

He knows a great deal about health and nature. He helps the children to improve the protection of the environment.



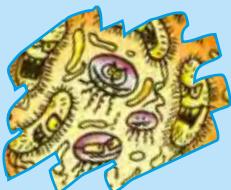
## Jaya, Asha, Rosa

These school girls want to know all about nature and how to protect it.



## The Farmers

They produce the food we eat. Droppy helps them to improve their production without compromising water quality .



## Faecal Coliforms

They are very nasty bacteria which make people ill, and which come from the wastewater.



## Heavy Metals (Copper, Cadmium and Lead)

The heavy metal band also makes people ill. They escape from corroded batteries.

# The Adventures

1

**The Long Trip**

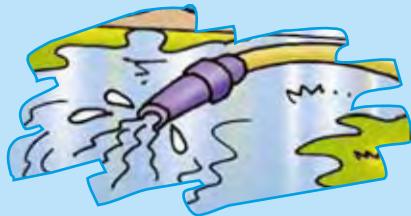


Droppy and his water drop friends go on a trip. They travel up to the clouds, fall as rain to help thirsty plants, enter and leave the soil and the aquifer, and experience many more adventures.

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2

**Water is Precious**



Ali lives in an Arab country. He learns that water is precious and must not be wasted.

[Page 12](#)

3

**The Heavy Metals Escape**



In South-East Asia Budi frees the heavy metals, which, together with some drops of oil, pollute the water and make Budi ill. He learns that waste collection and recycling can prevent pollution and illnesses.

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4

**Health Starts at Home**



Makwetu comes from the Sub-Saharan region. He gets ill by drinking polluted water from a well affected by a nearby cesspit. Dr. Nature explains the importance of a sewer system for health.

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5

**Less is More**



Droppy goes to the countryside in Eastern Asia to find out where food comes from. He meets some East Asian farmers and helps them to protect water in the rural areas.

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# 6

## A Difficult Word



Rosa from South America has to give a presentation in school on sustainability. Droppy helps her and explains using some examples.

[Page 32](#)

# 7

## The Protector of Life



Bernard lives in Europe and he does not believe that water is so important. Droppy gets angry and makes all the water disappear. Many people and animals suffer. Bernard learns his lesson, and Droppy makes the water reappear for everyone.

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# 8

## Without rules you cannot play



Asha and Jaya in South Asia want to fetch water but only find an empty well. How is this possible? They learn that the use of water has to be regulated so that there is water for everyone.

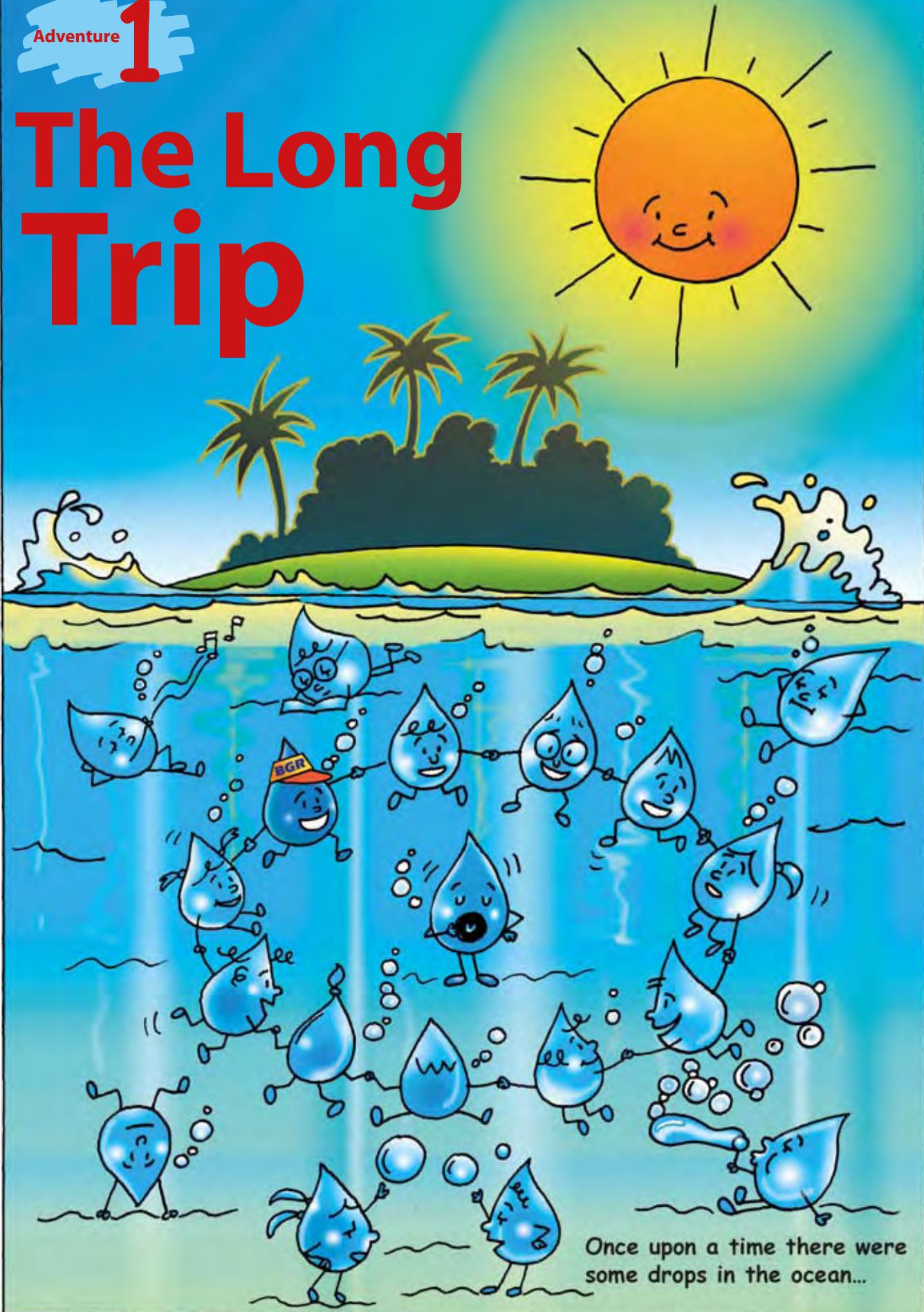
[Page 42](#)



Although these stories are happening in different cultural regions in this comic, these are problems which are happening daily in **many parts of our world**.

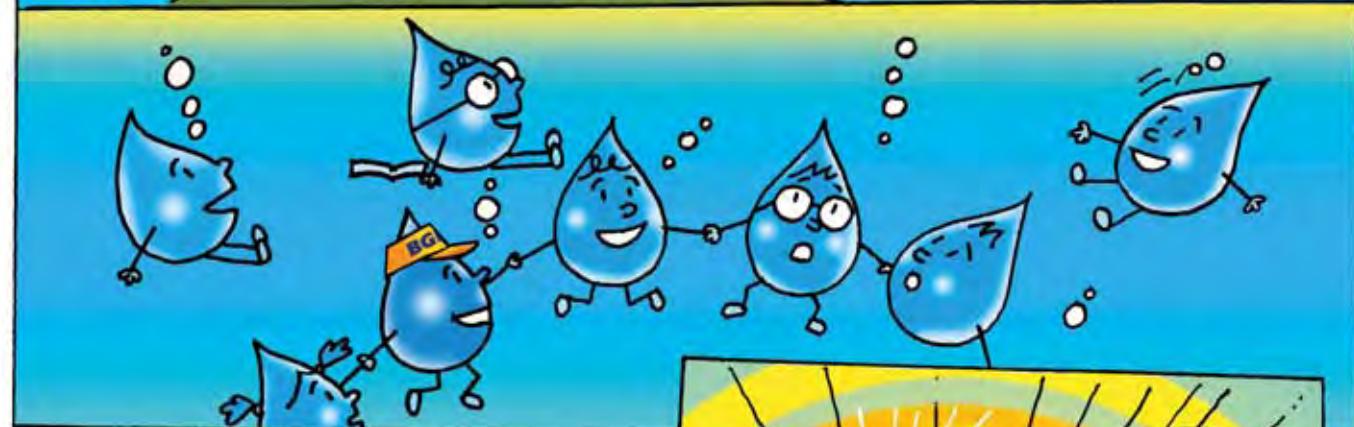
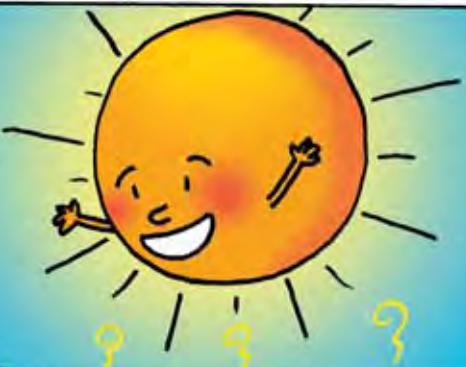
We only have one earth and we should **manage our water resources** sustainably, so that in the future we all will have enough.

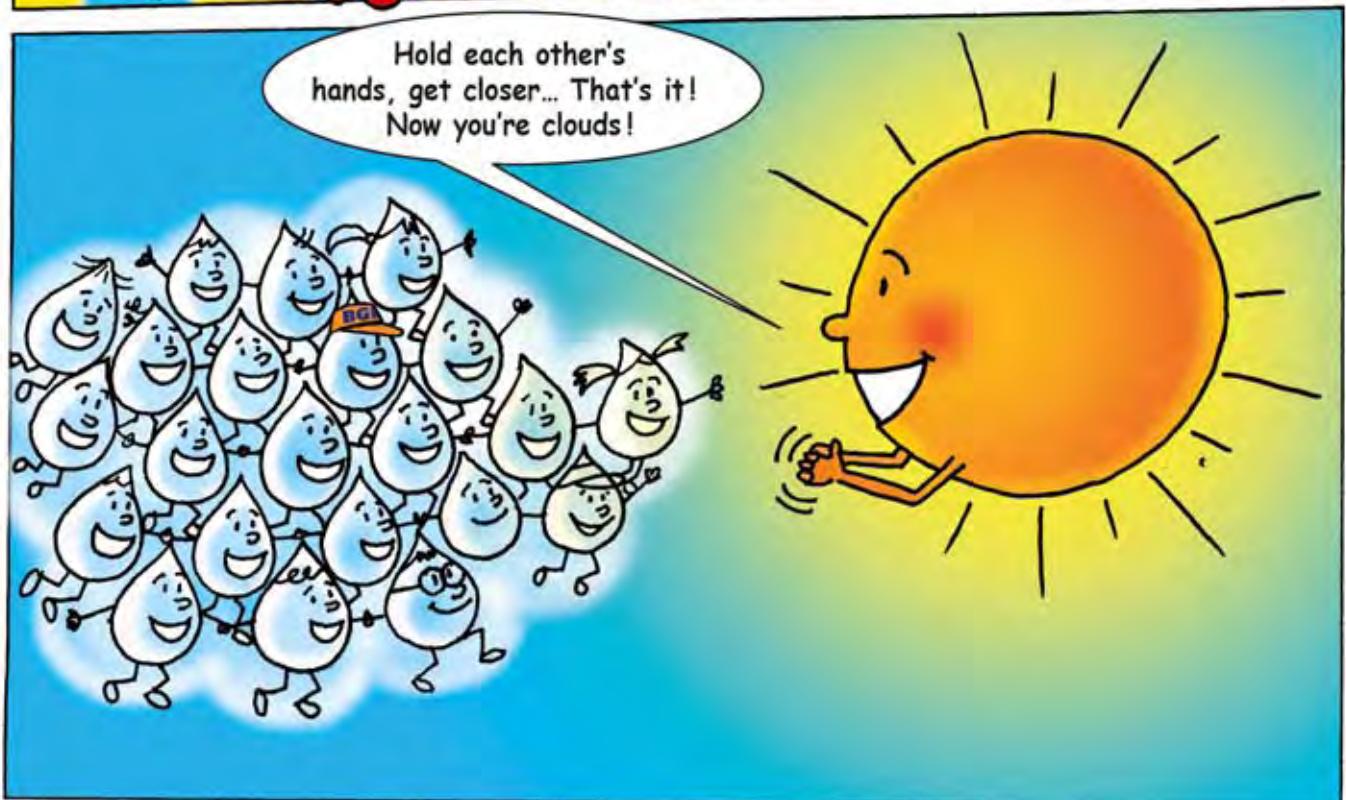
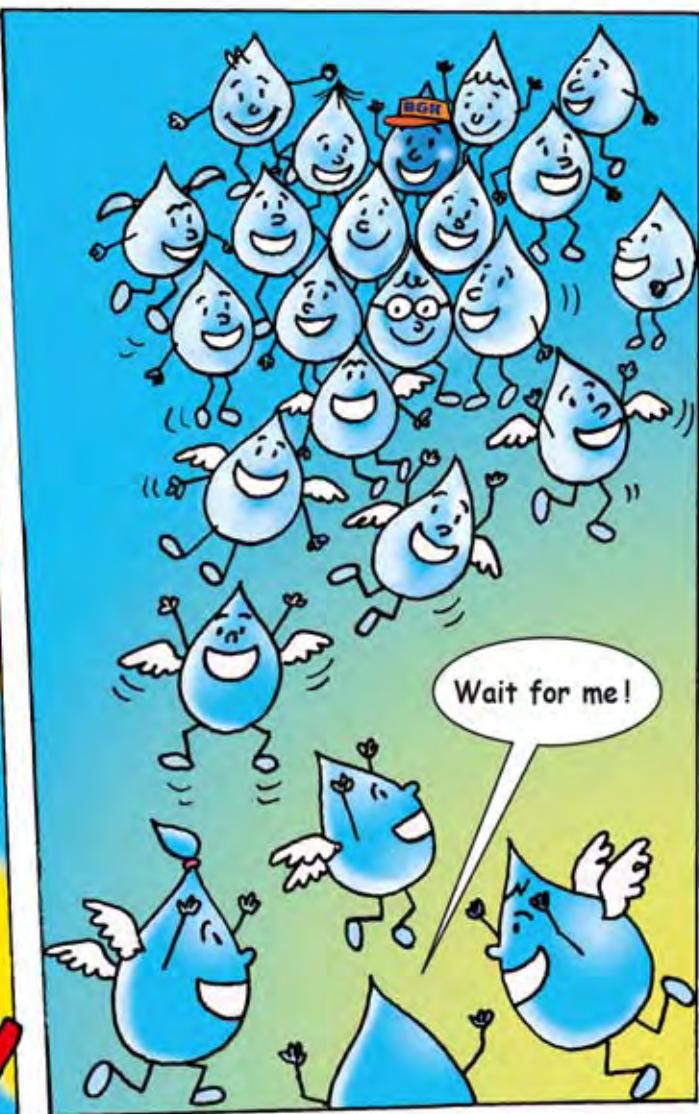
# The Long Trip

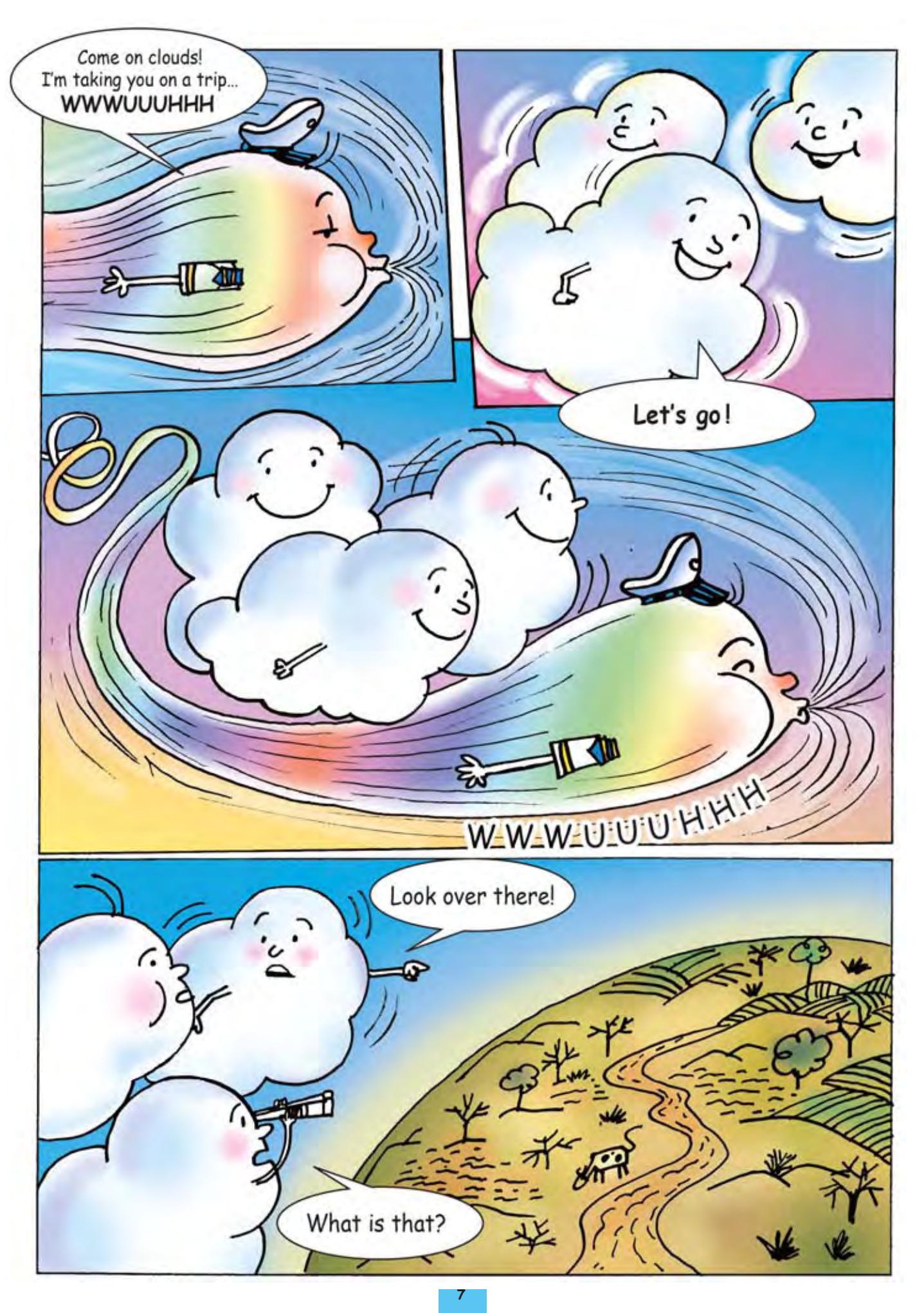


Once upon a time there were  
some drops in the ocean...

Come on everyone,  
let's go on a trip







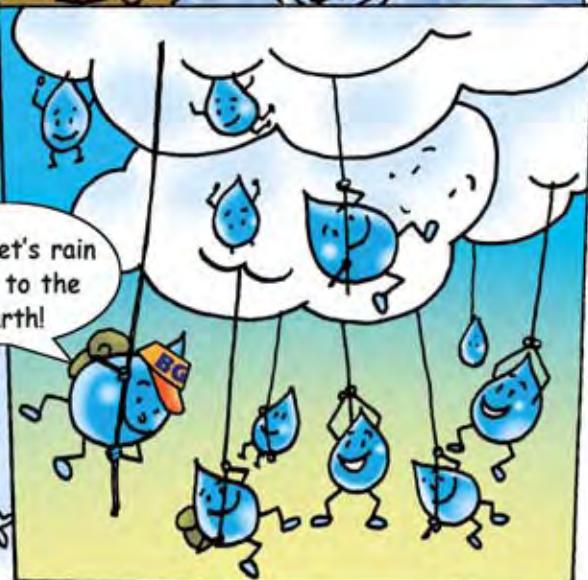
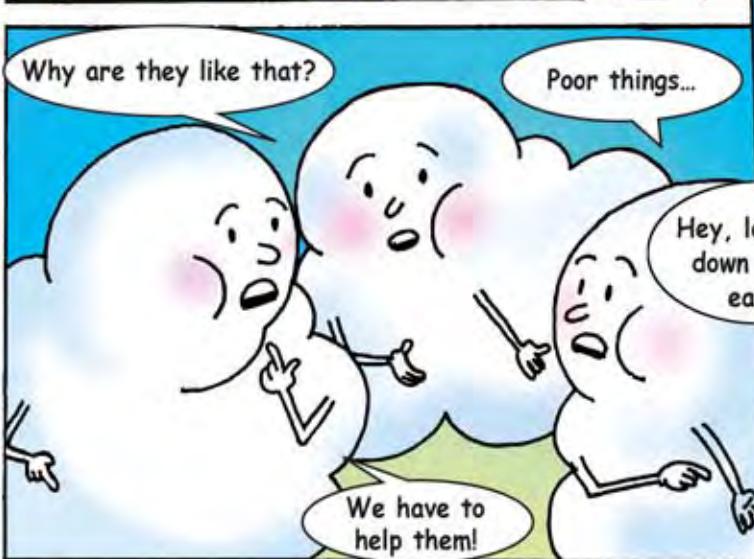
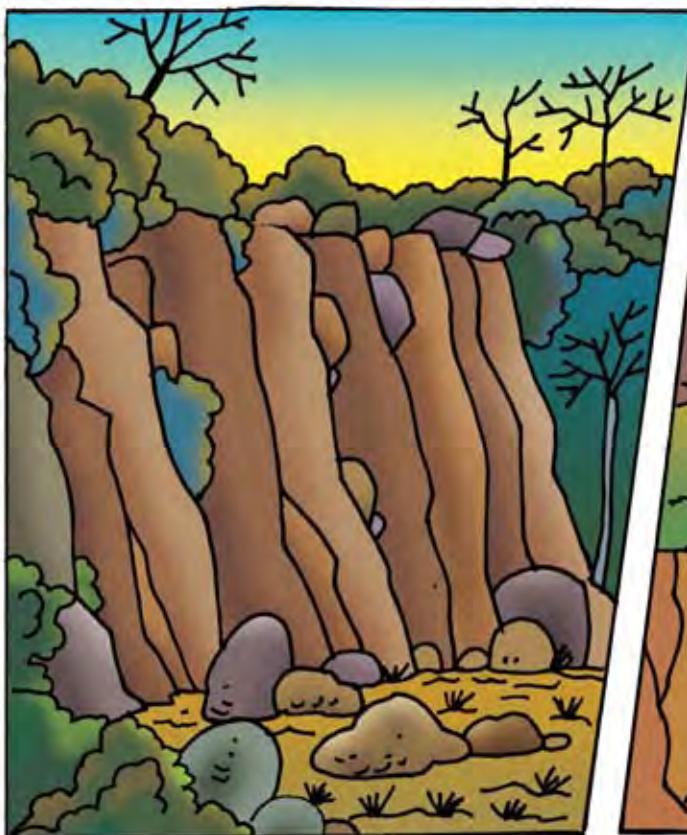
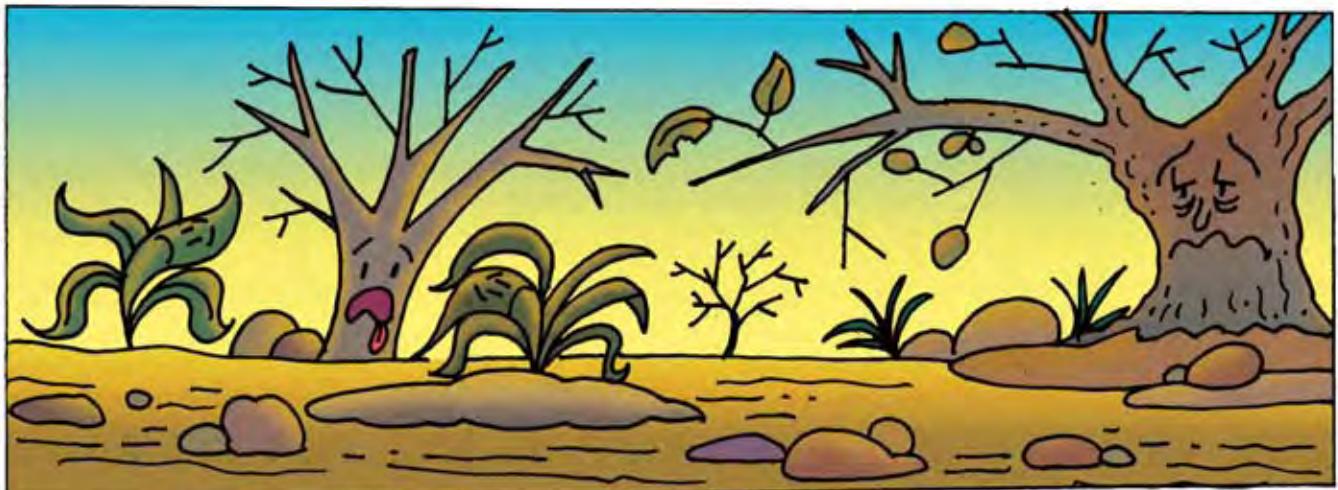
Come on clouds!  
I'm taking you on a trip...  
**WWUUUHHH**

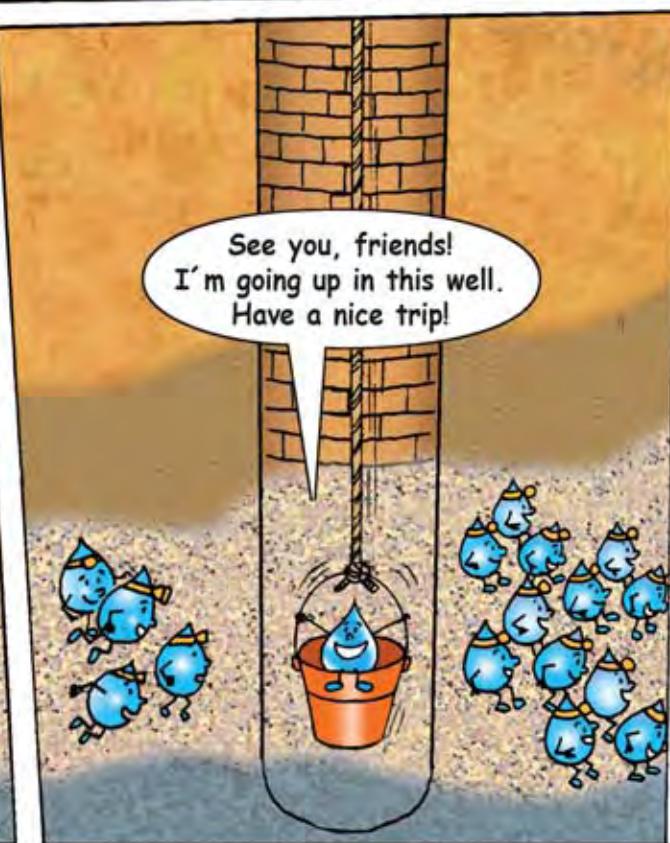
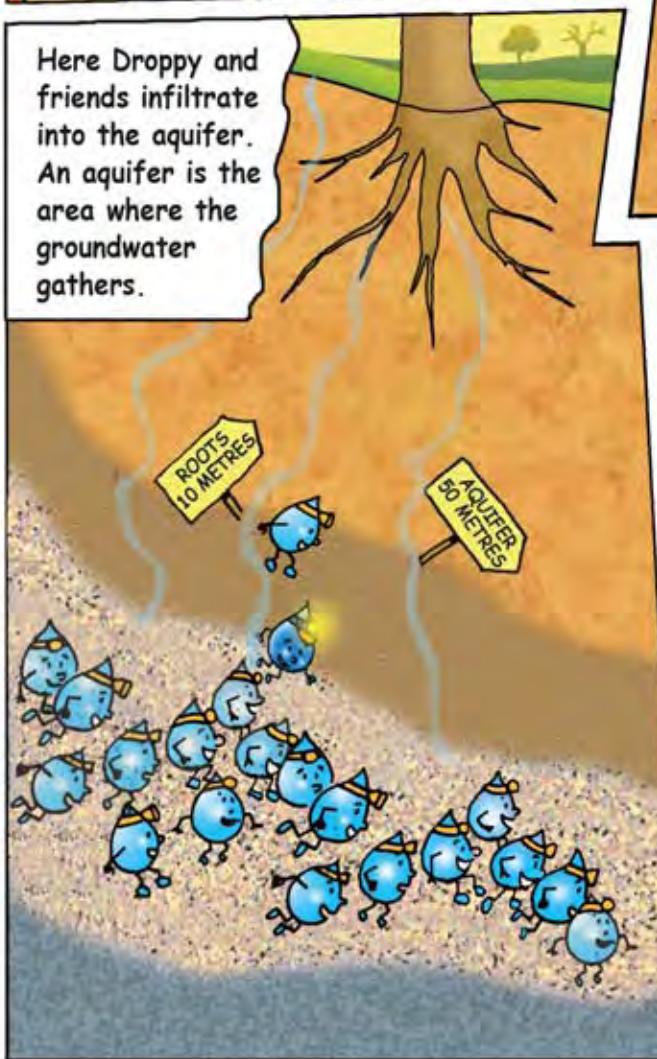
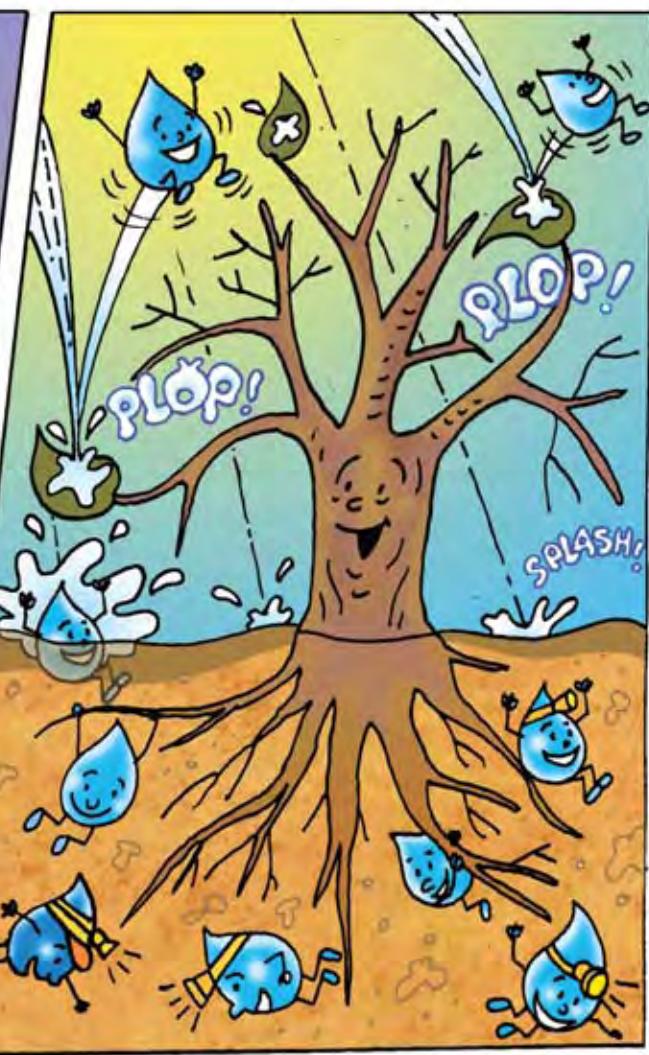
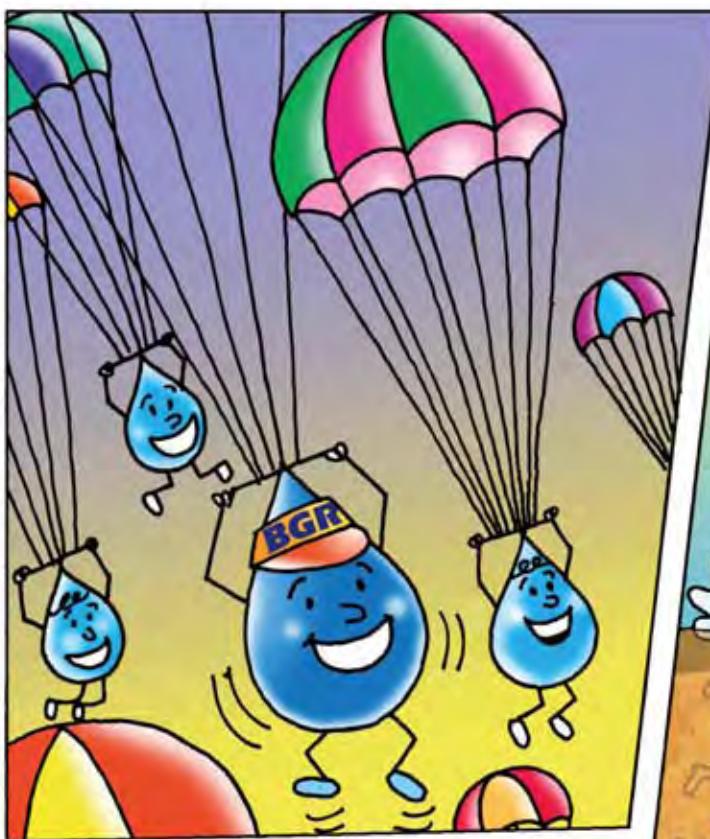
Let's go!

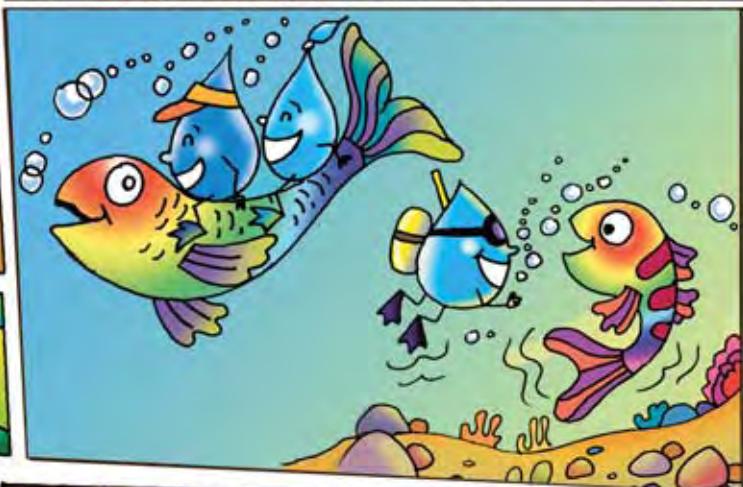
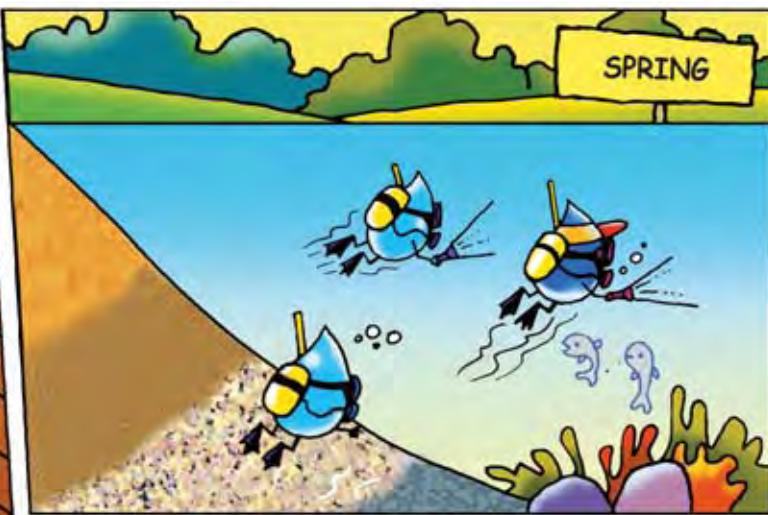
**W-W-W-U-U-U-H-H-H**

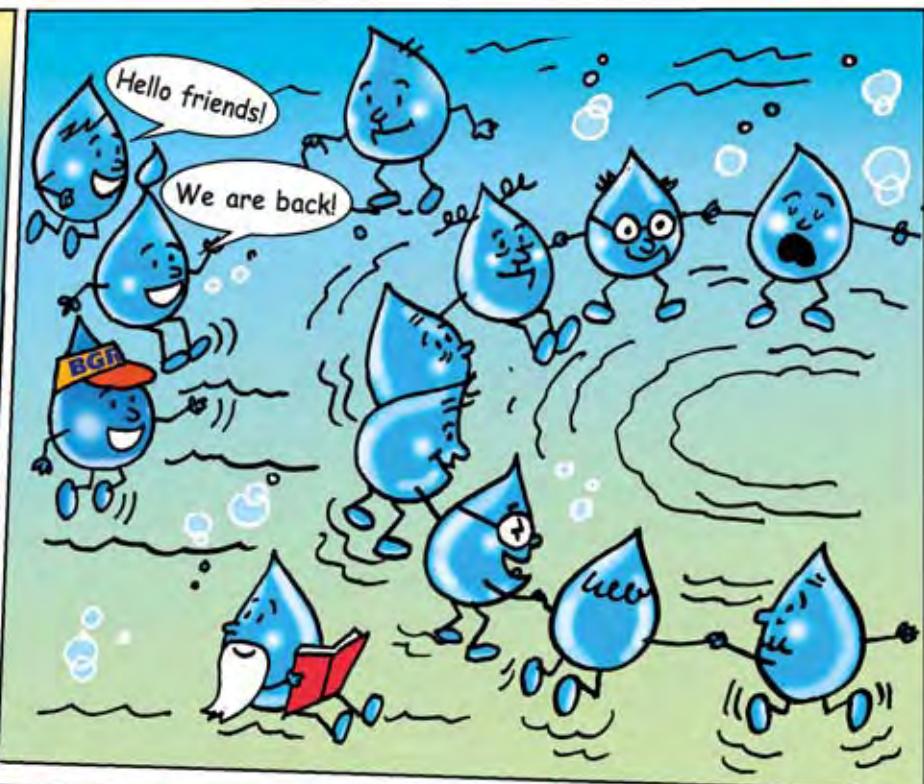
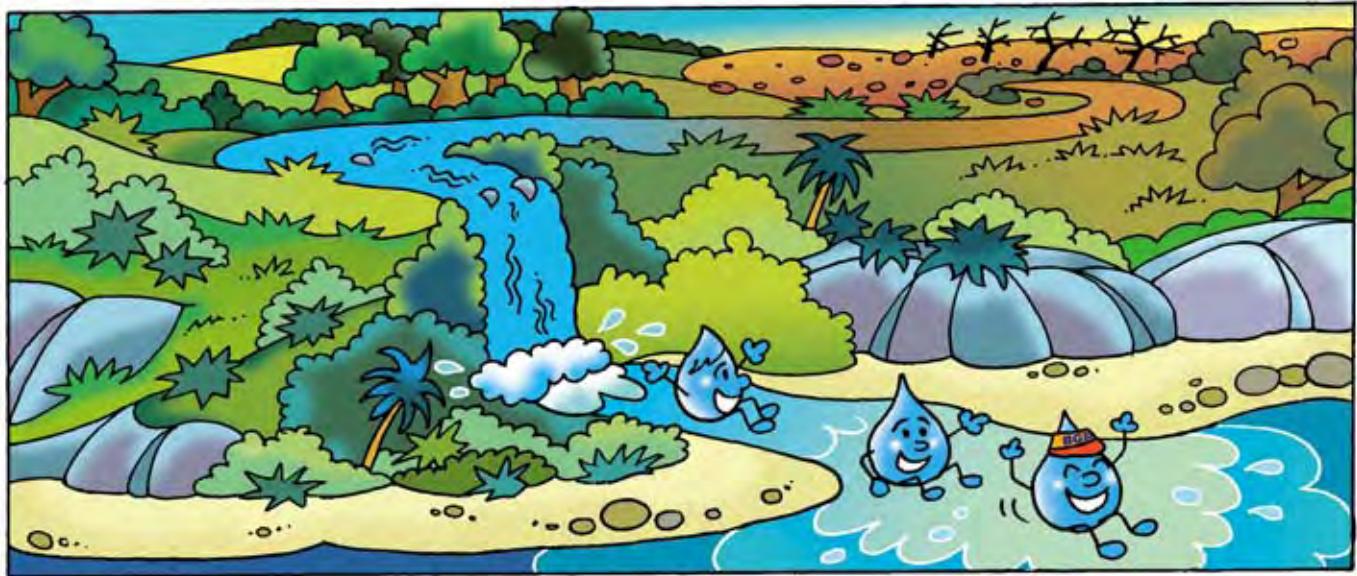
Look over there!

What is that?

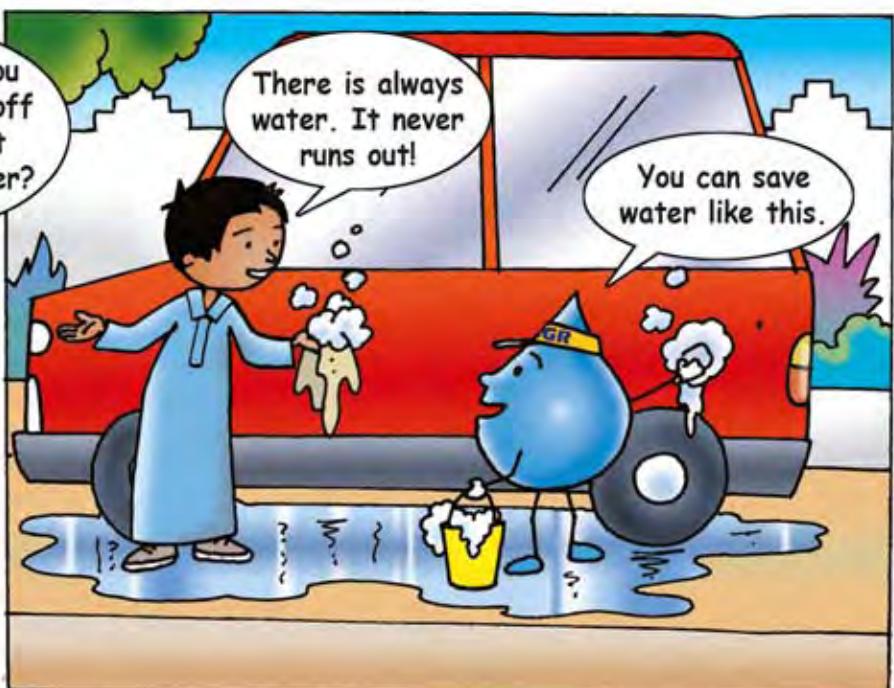


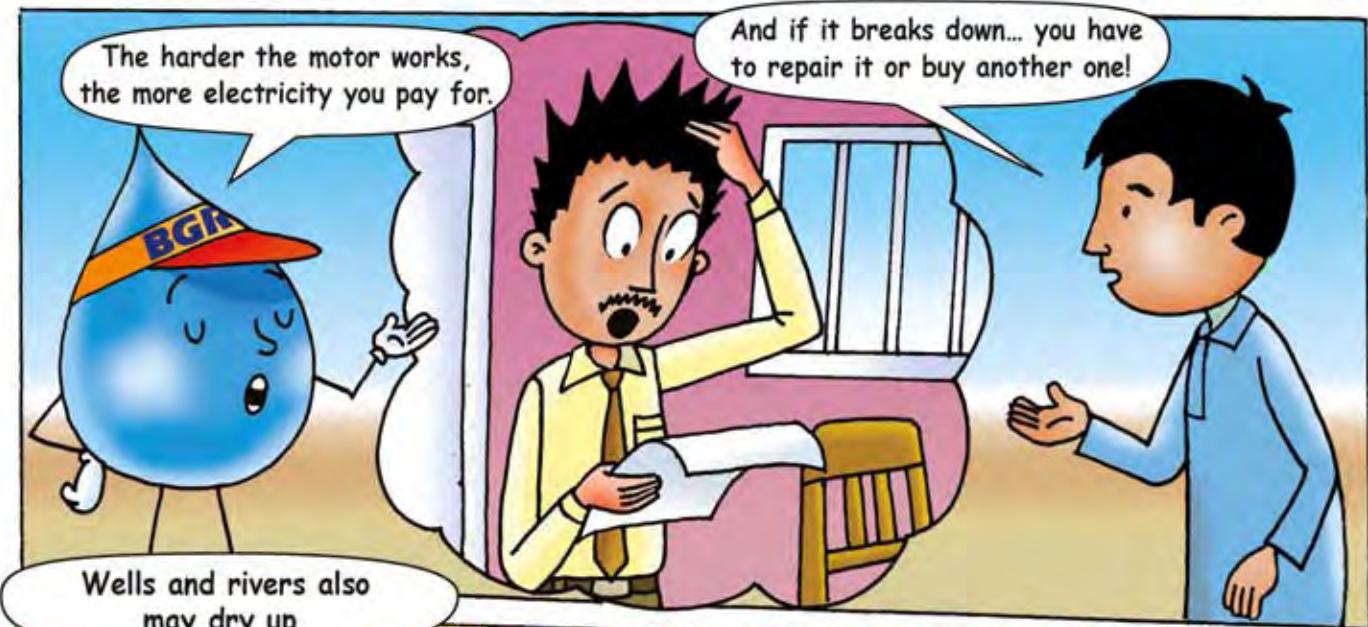
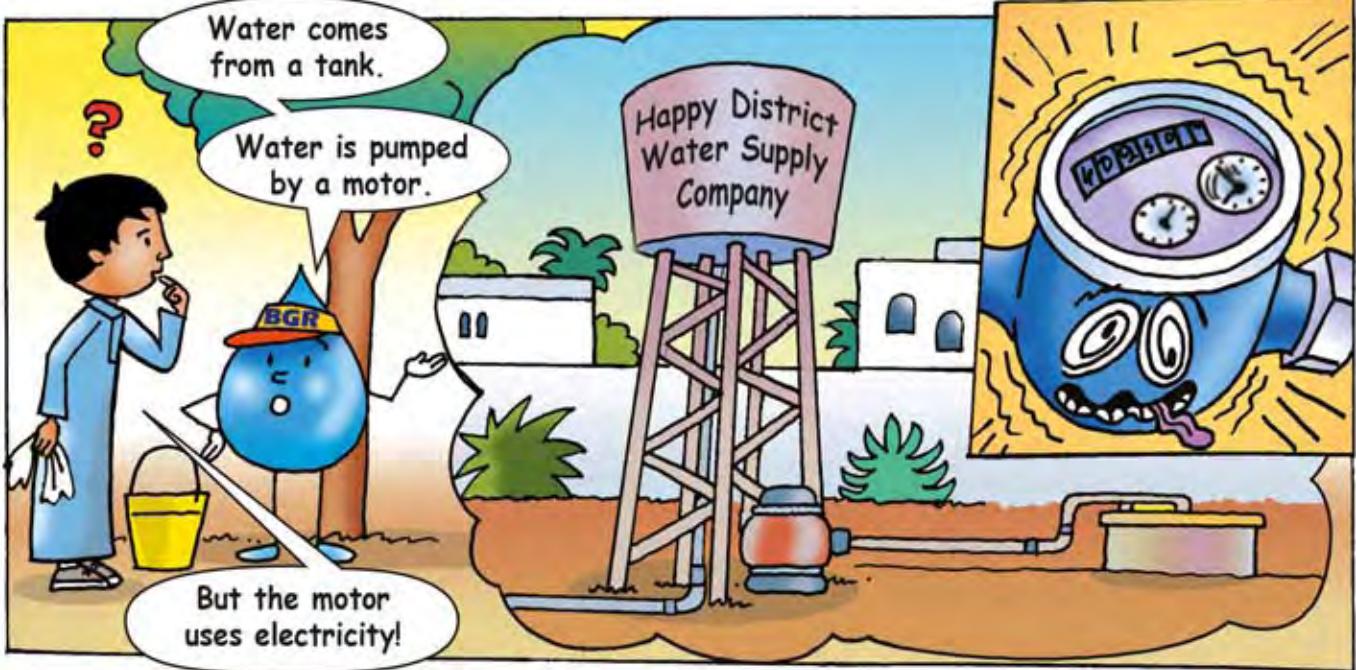






# Water is Precious





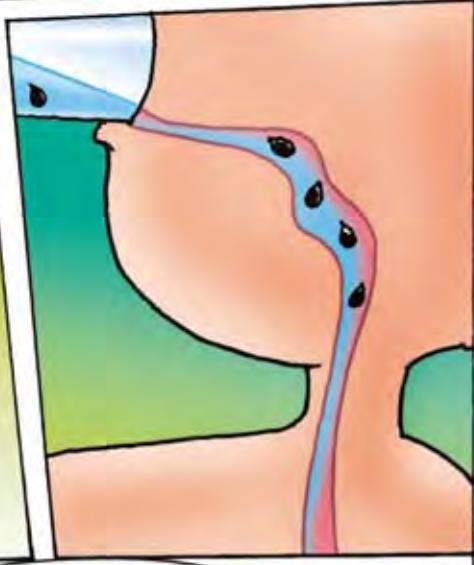
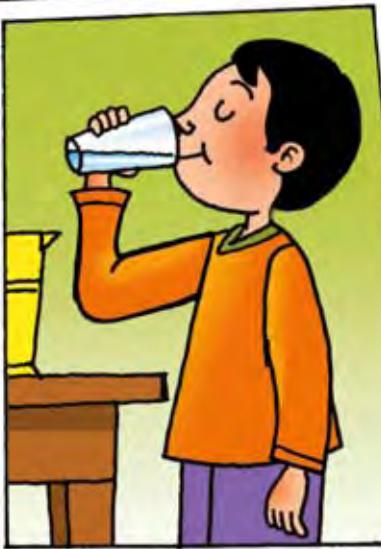
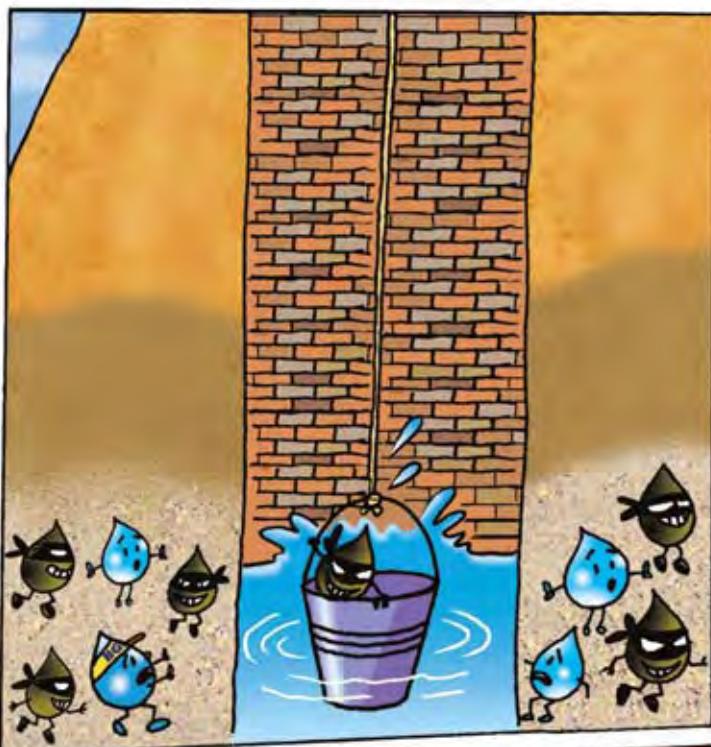




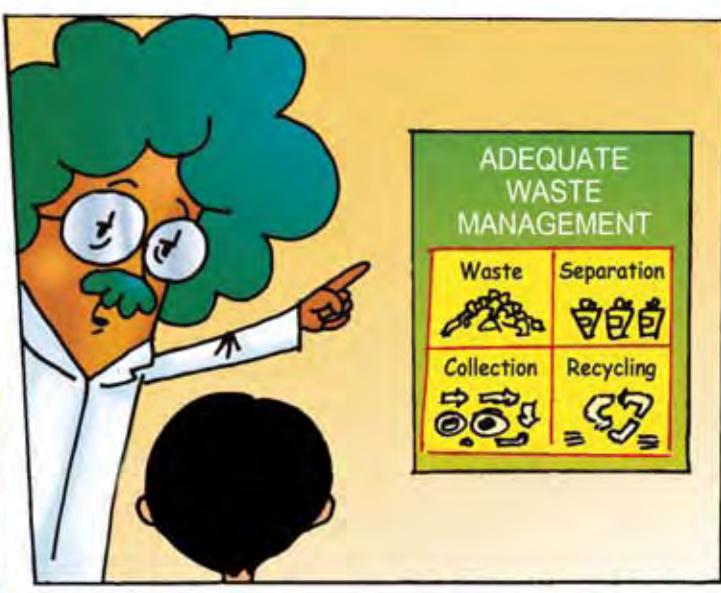
# 3 The Heavy Metals Escape

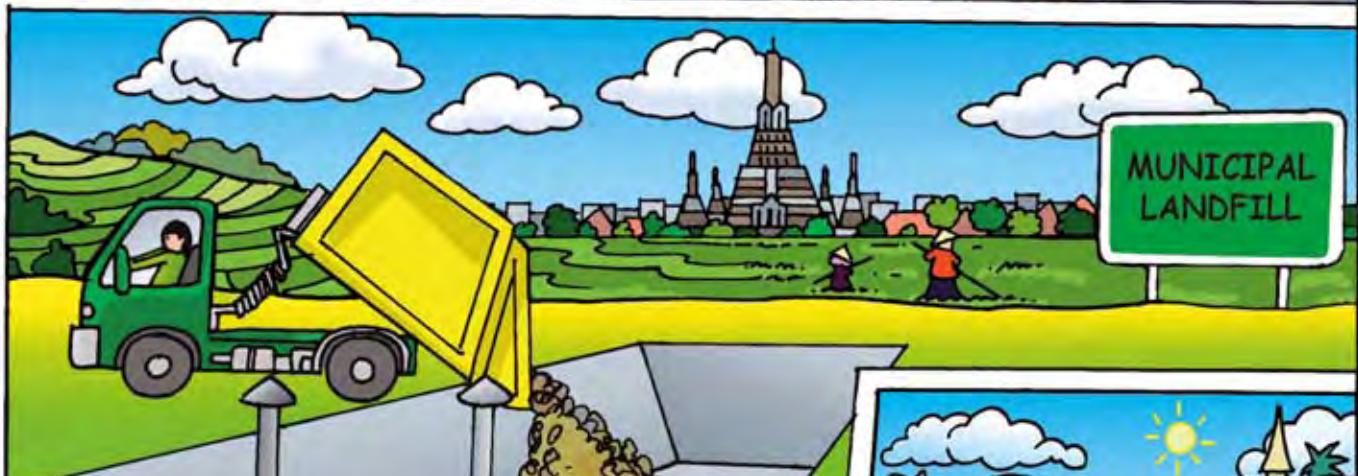




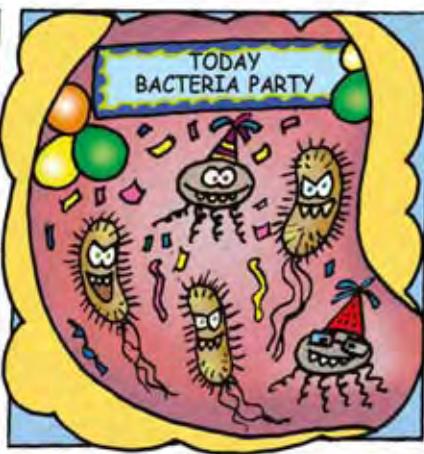


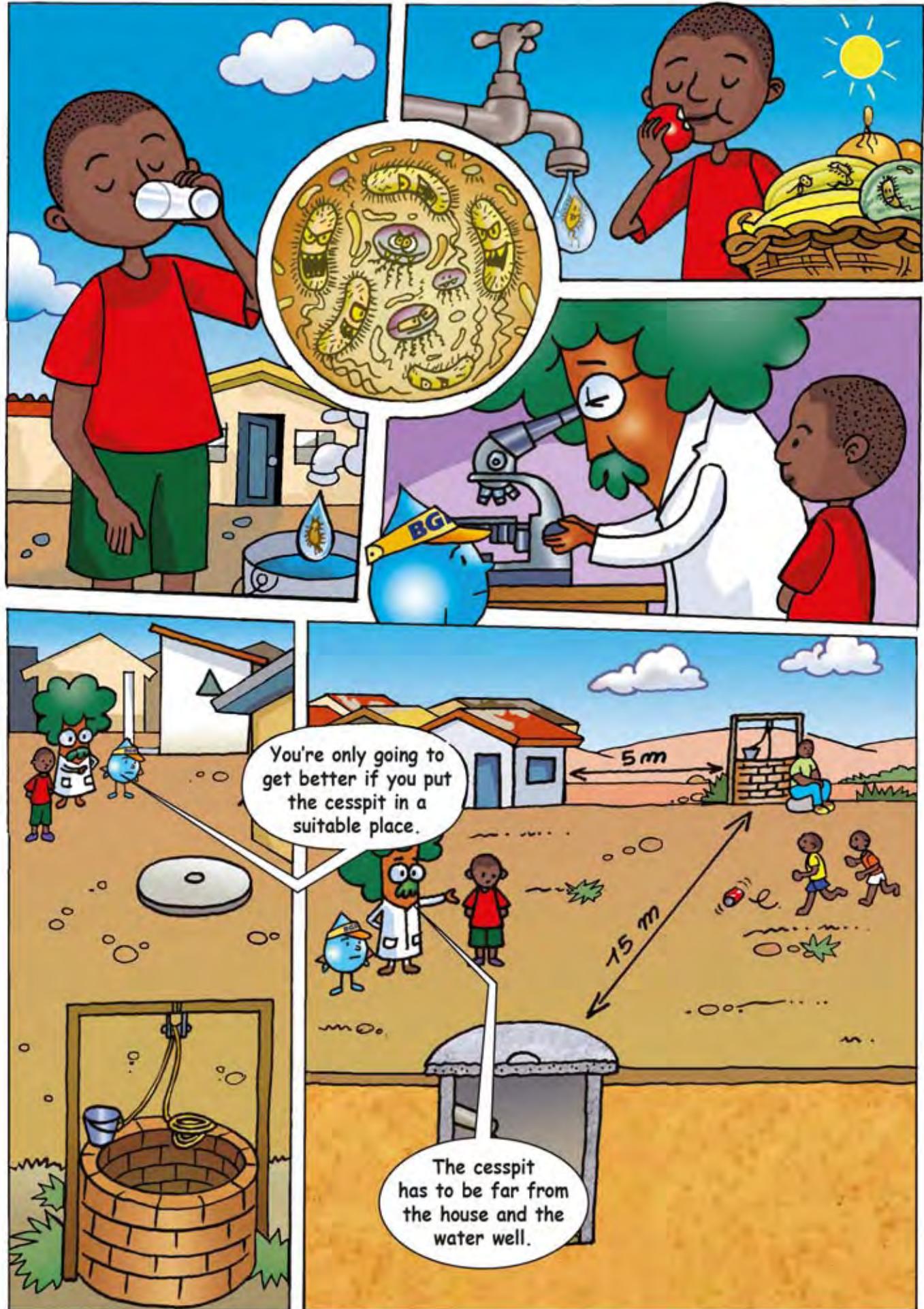
What's the matter  
with me?

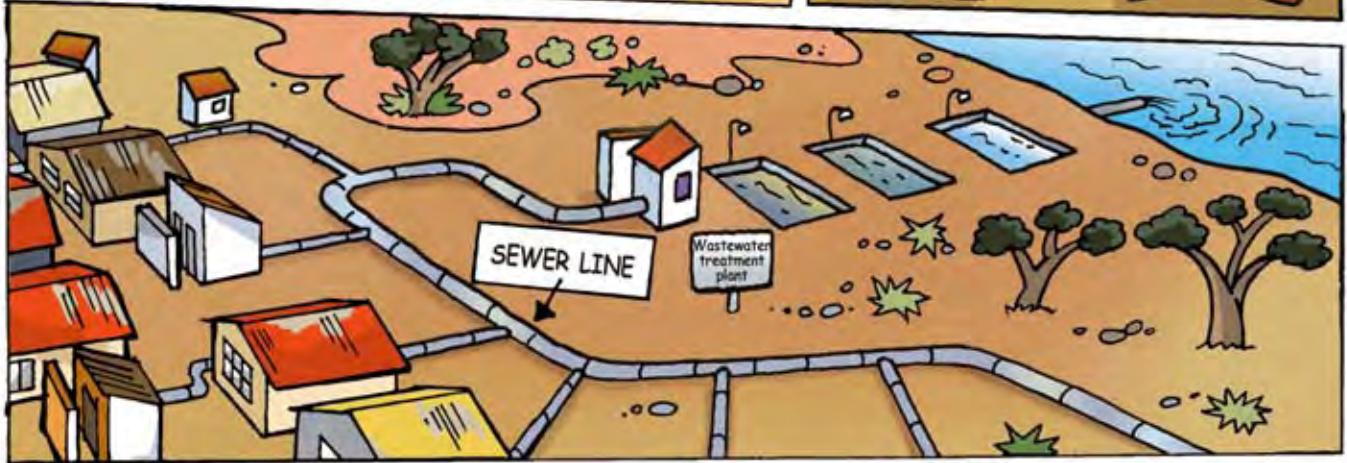
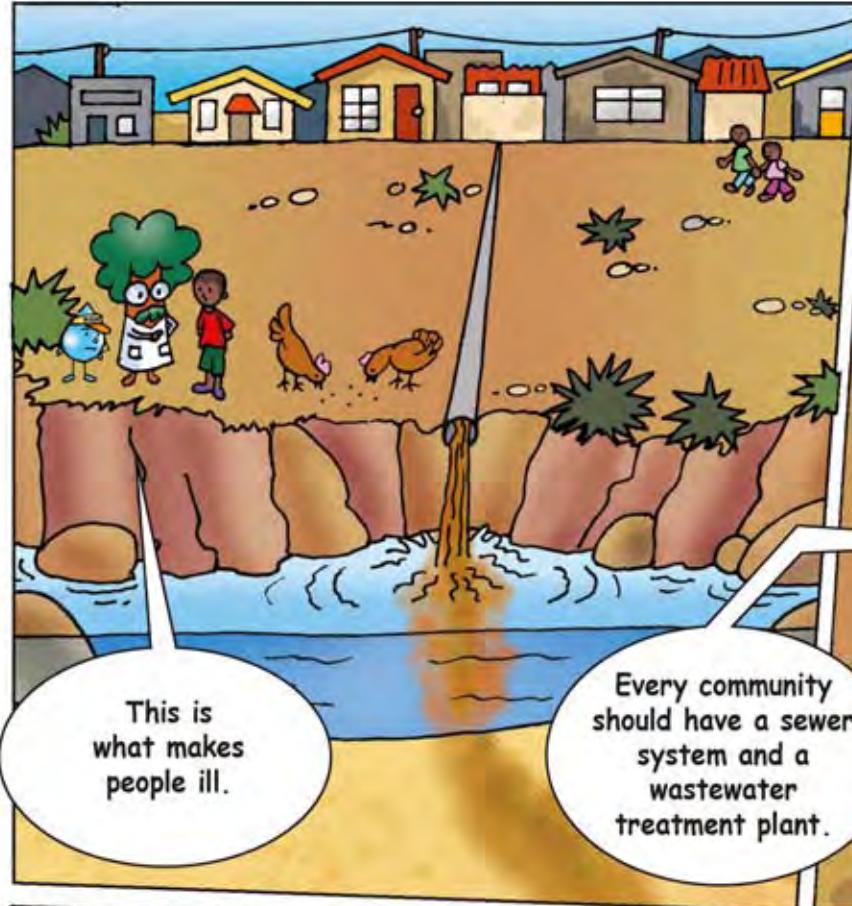




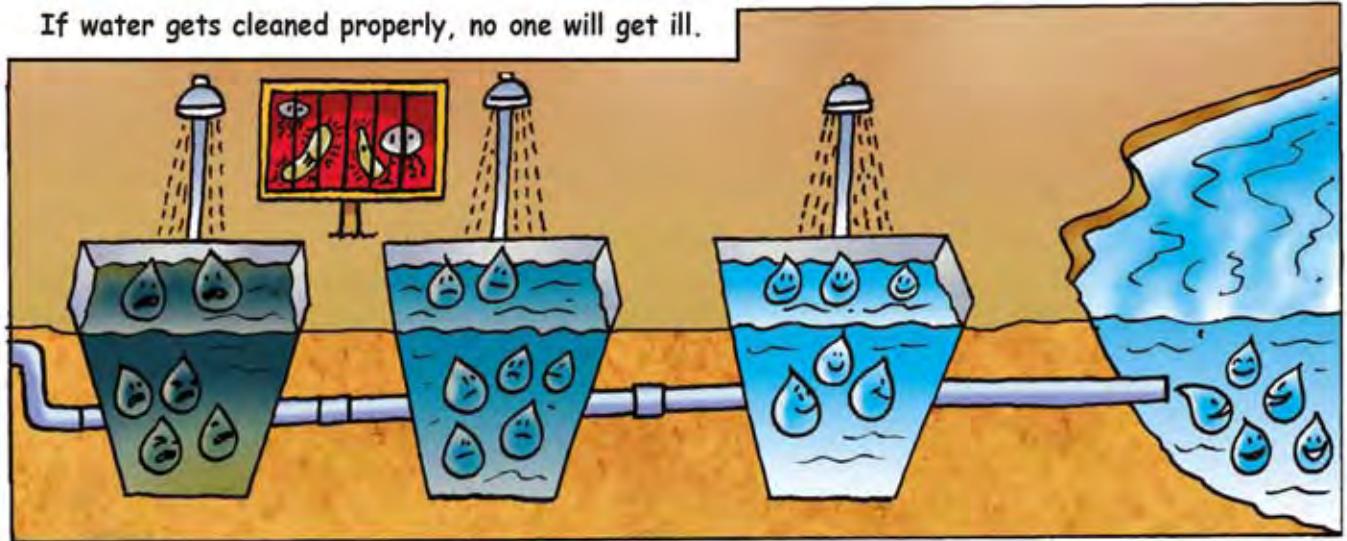
# 4 Health Starts at Home





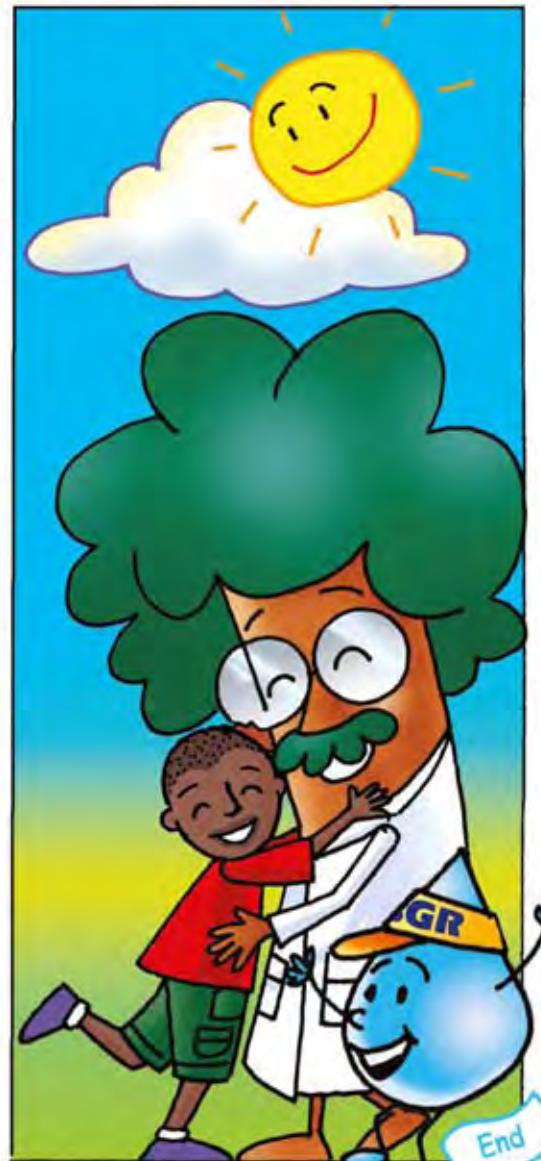
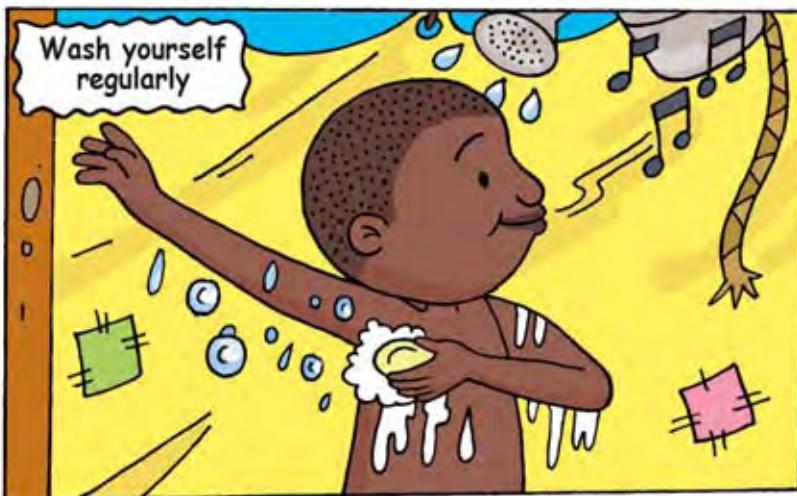


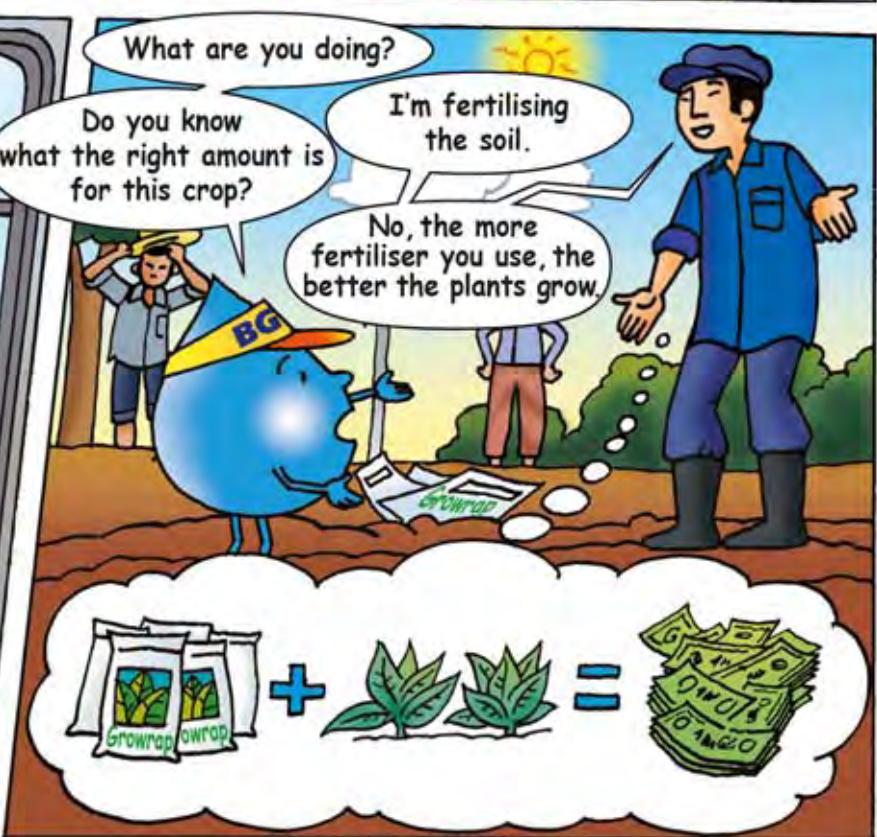
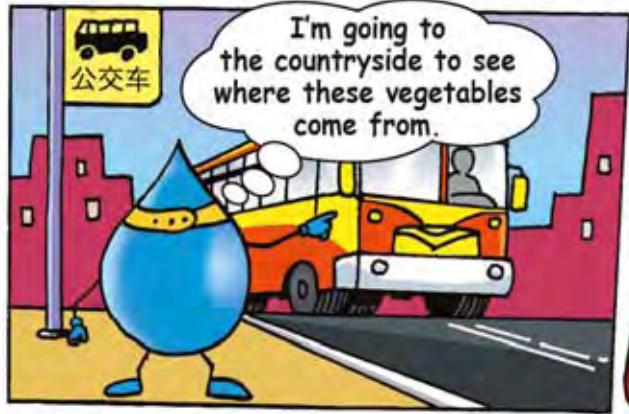
If water gets cleaned properly, no one will get ill.



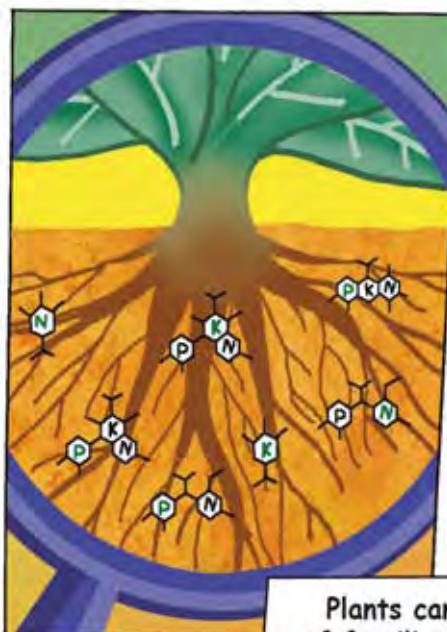
# **HEALTH**

IS ALSO IMPROVED BY:

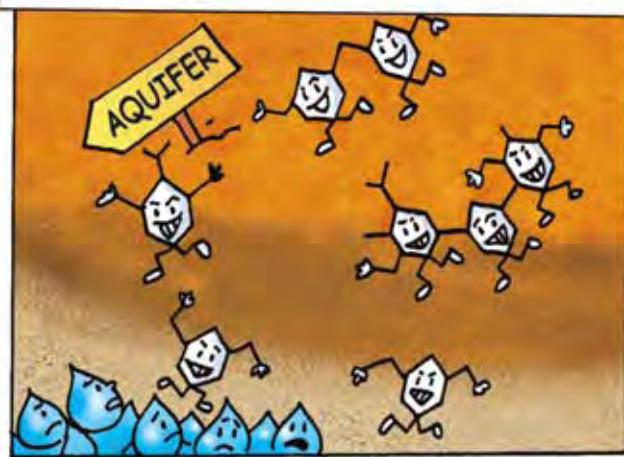
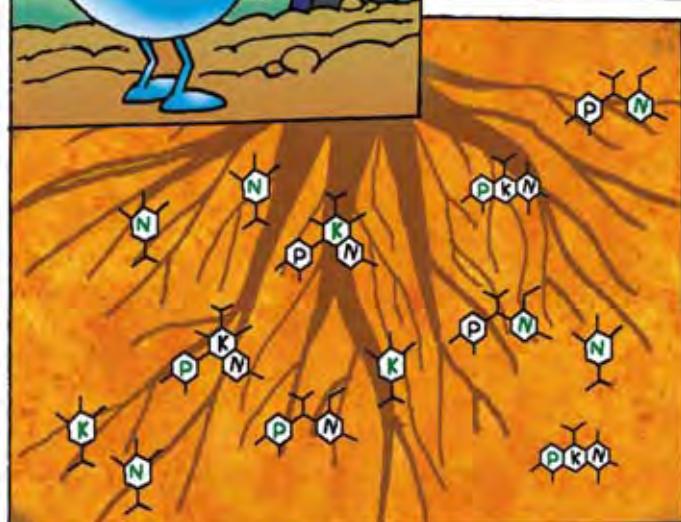




I'll show you how it works.

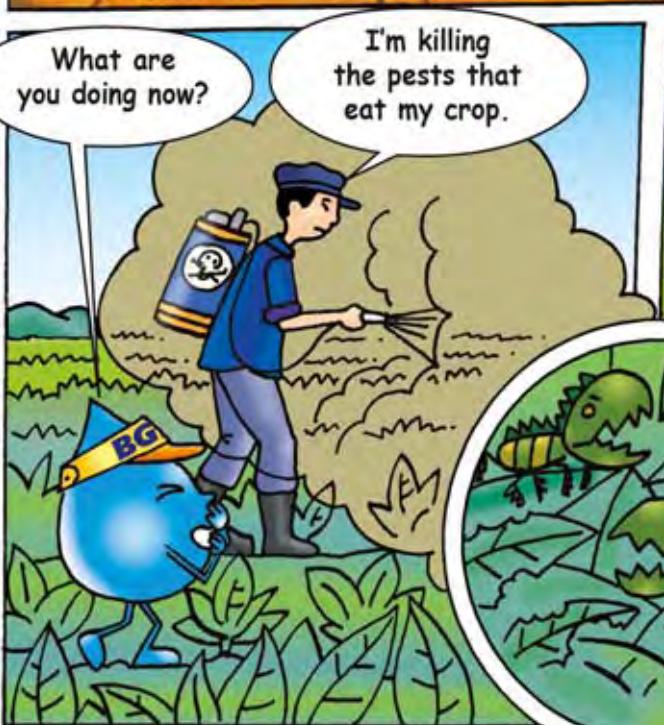


Plants can only absorb a certain amount of fertiliser. Any excess serves no purpose and infiltrates into the aquifer.



What are you doing now?

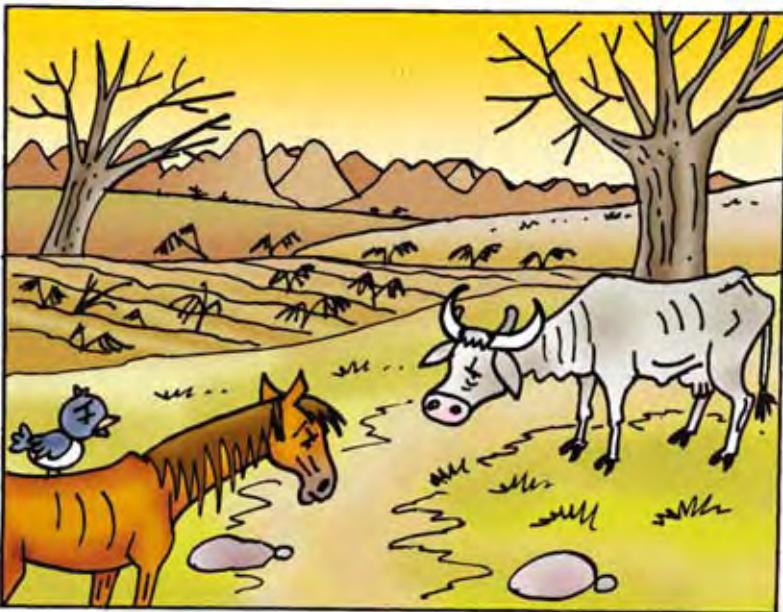
I'm killing the pests that eat my crop.



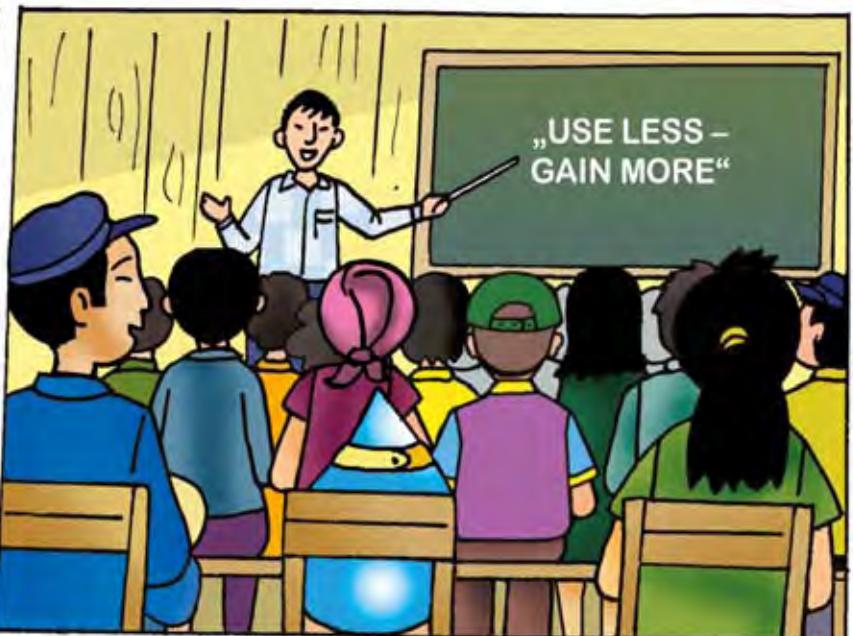
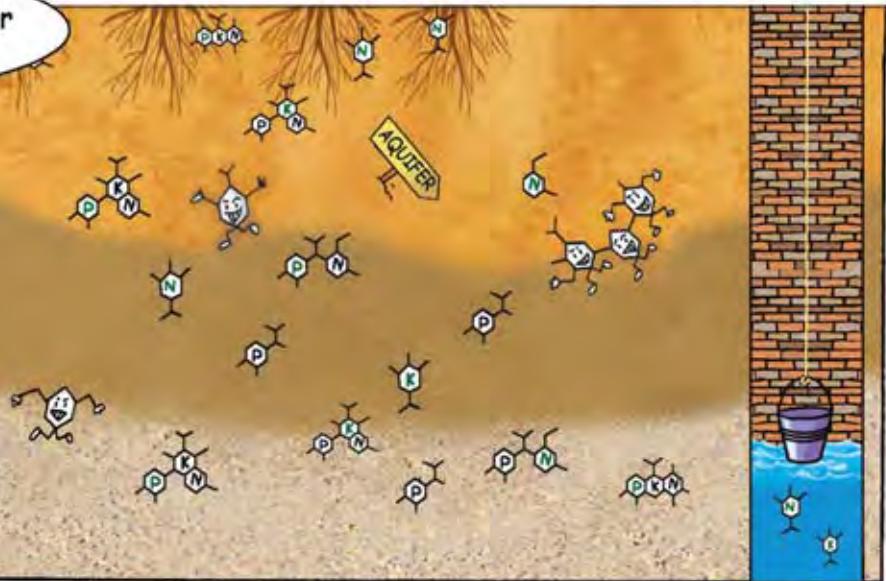
Do you know what the right amount of insecticide is for this crop?

No, but the more you use, the fewer pests remain.





It also pollutes the groundwater  
and the wells.

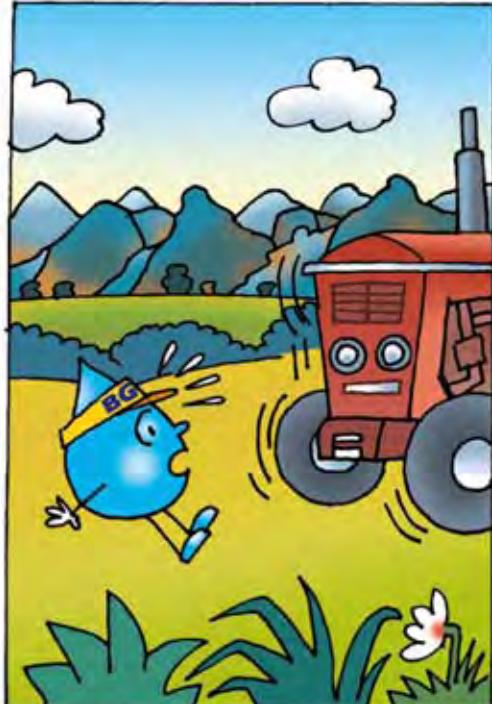


Some time later Droppy is watching the farmer to see what he has learned.





Droppy is walking back home.



I'm a farmer too. The machines help me to work in large crop areas.

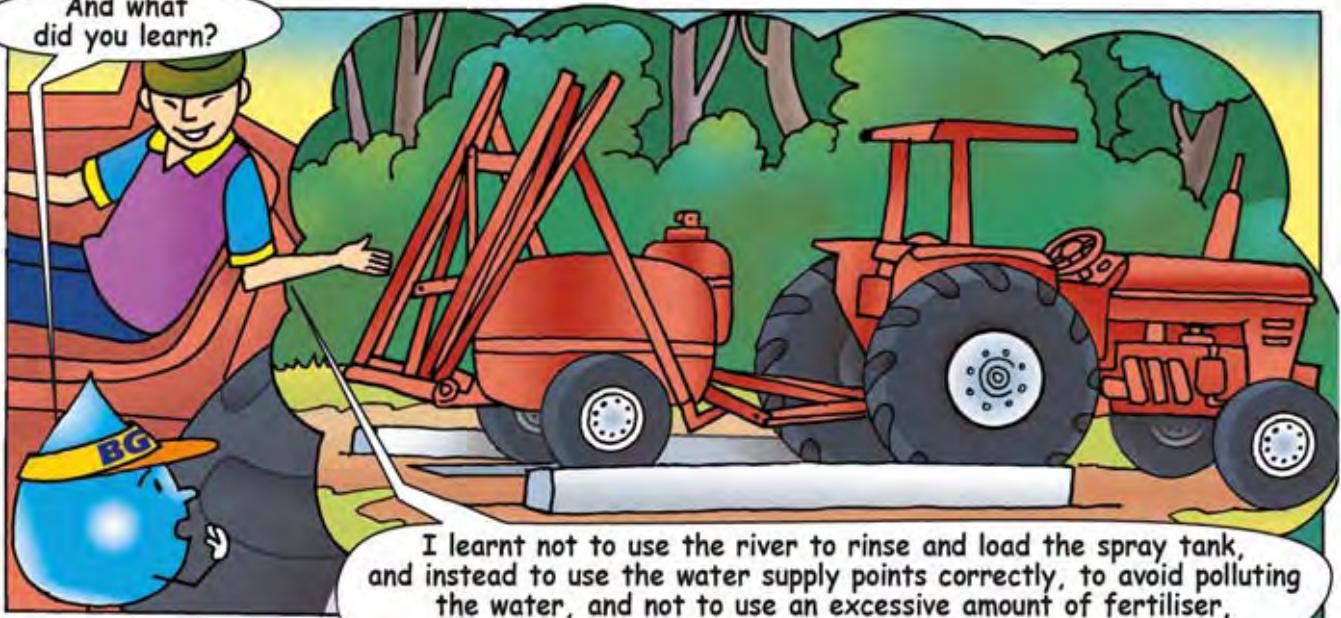
But they cause a lot of damage to nature and water, and spray large quantities of fertilisers and pesticides.

Don't worry, I've attended several training courses.

Adequate use - less damage

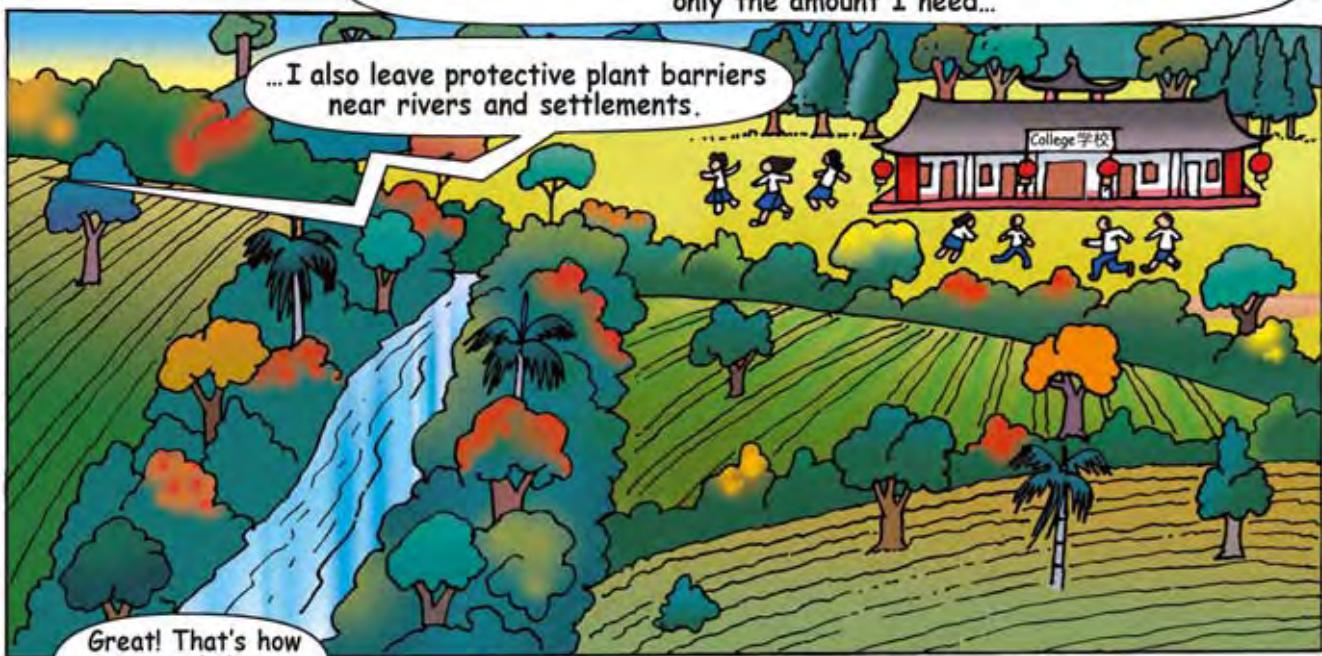


And what did you learn?



I learnt not to use the river to rinse and load the spray tank, and instead to use the water supply points correctly, to avoid polluting the water, and not to use an excessive amount of fertiliser, only the amount I need...

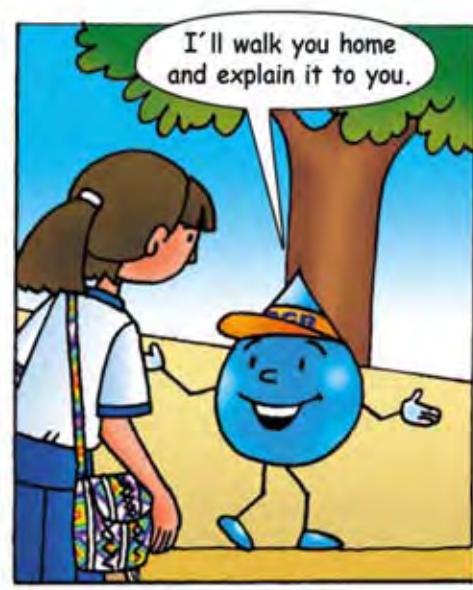
...I also leave protective plant barriers near rivers and settlements.



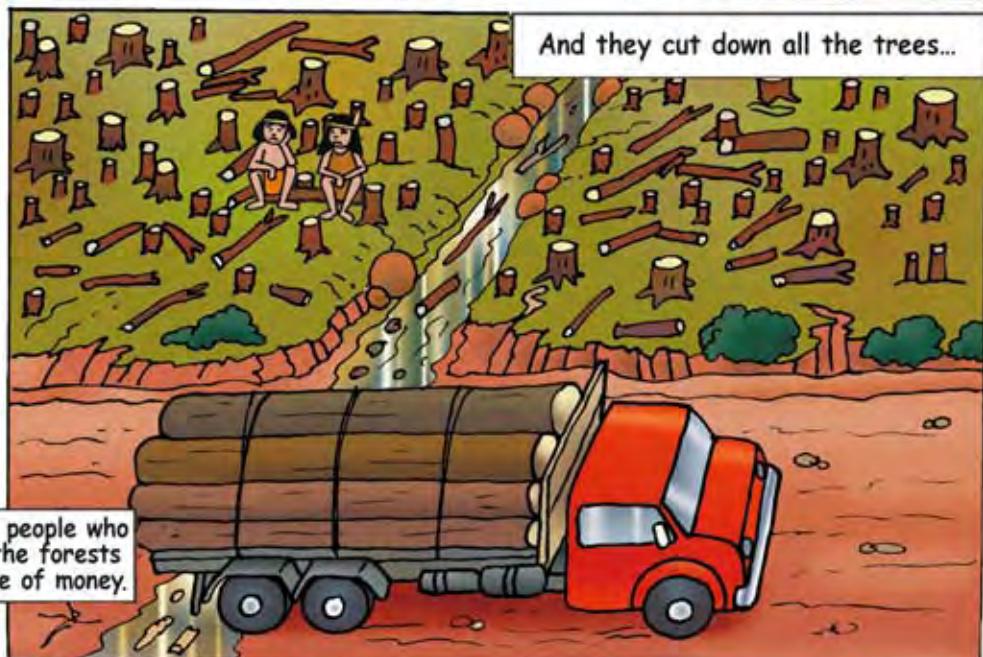
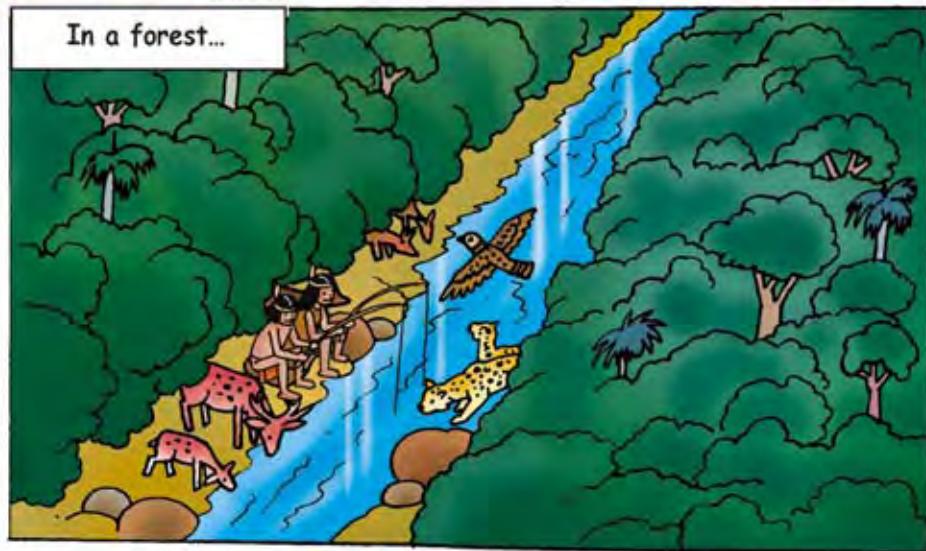
Great! That's how you can help me protect water!

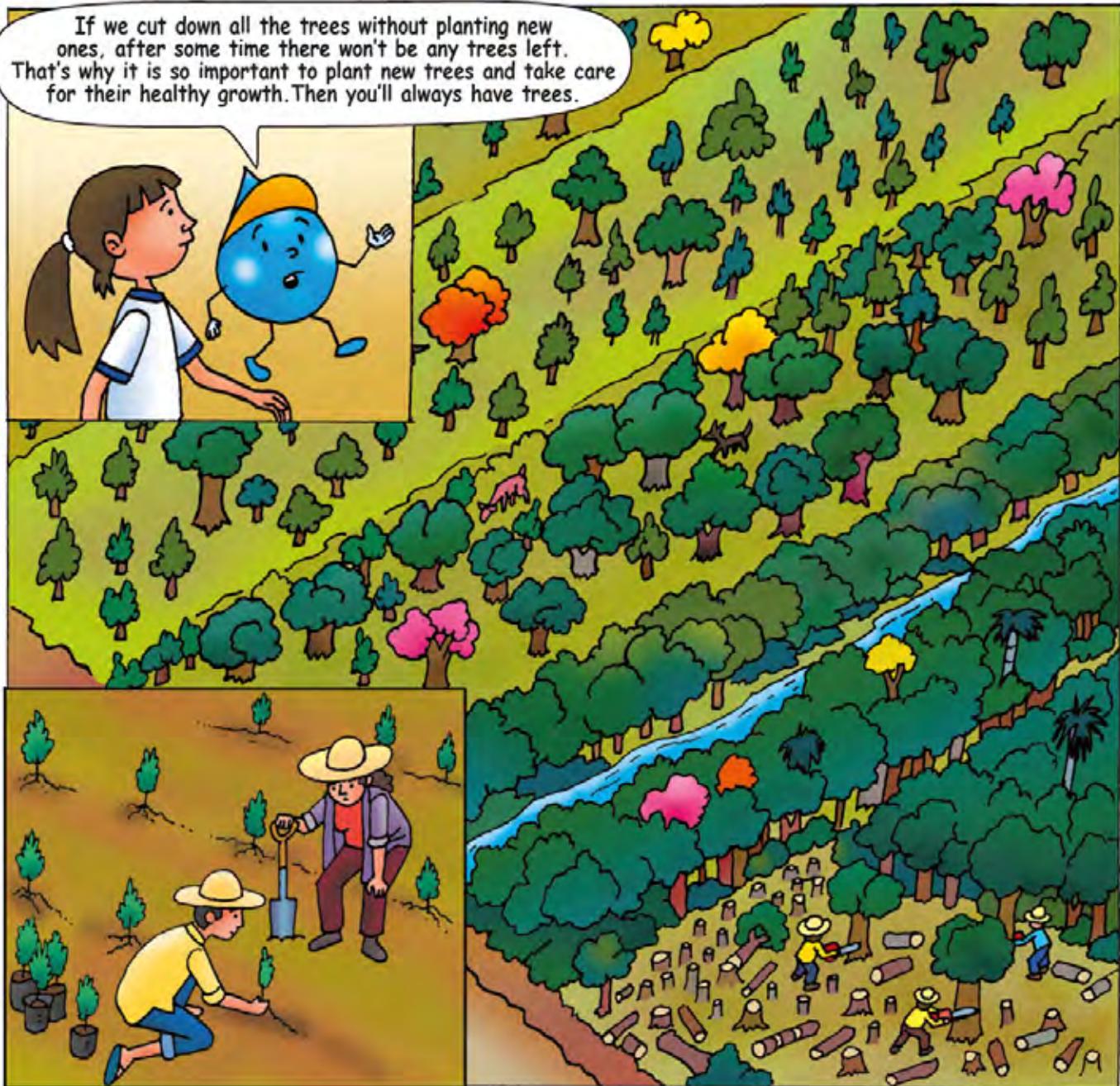
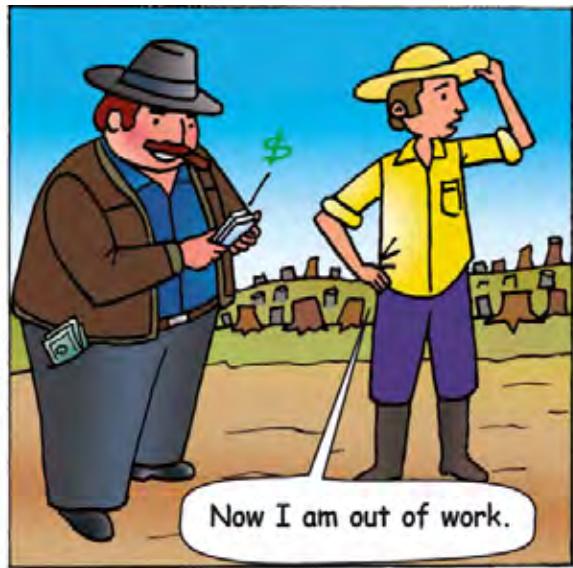


# A Difficult Word

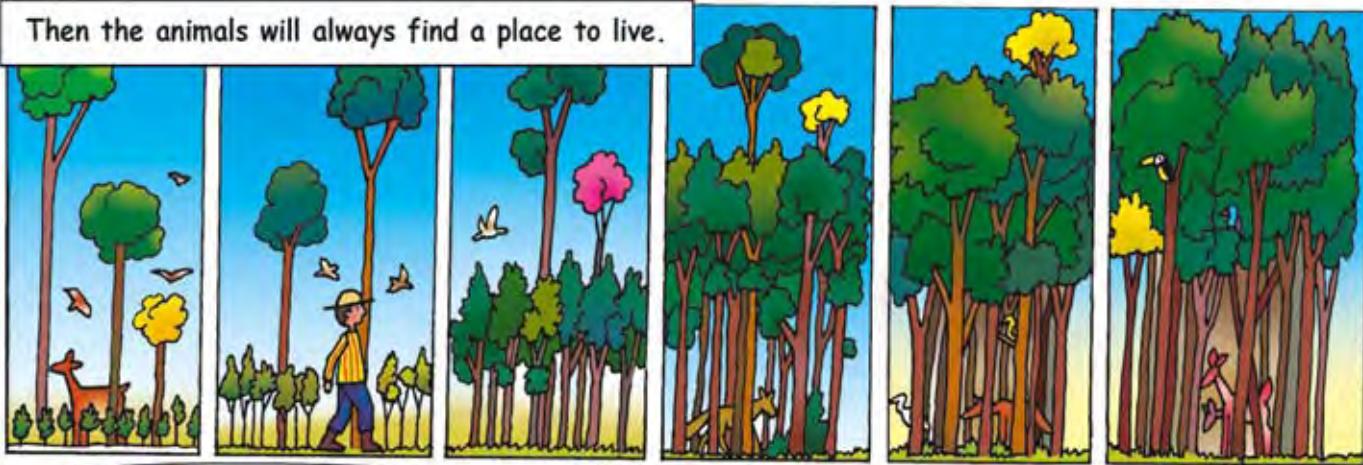


In a forest...

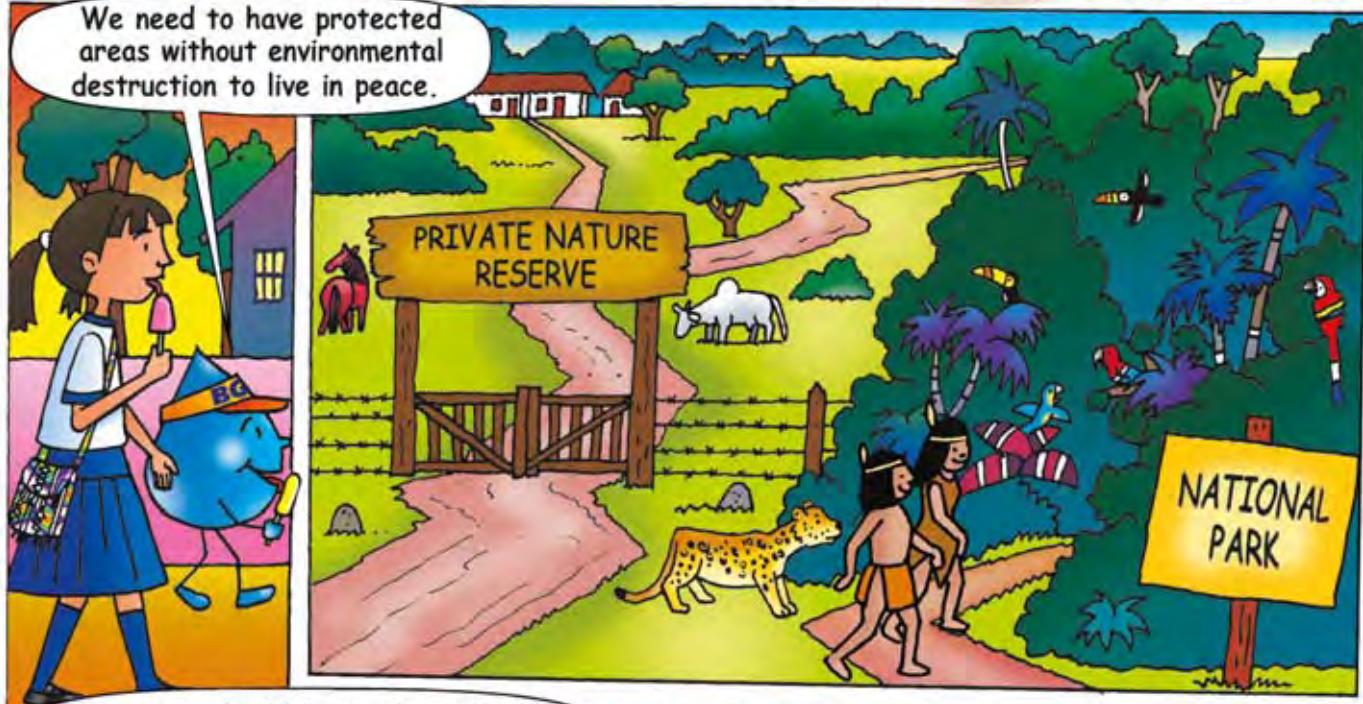




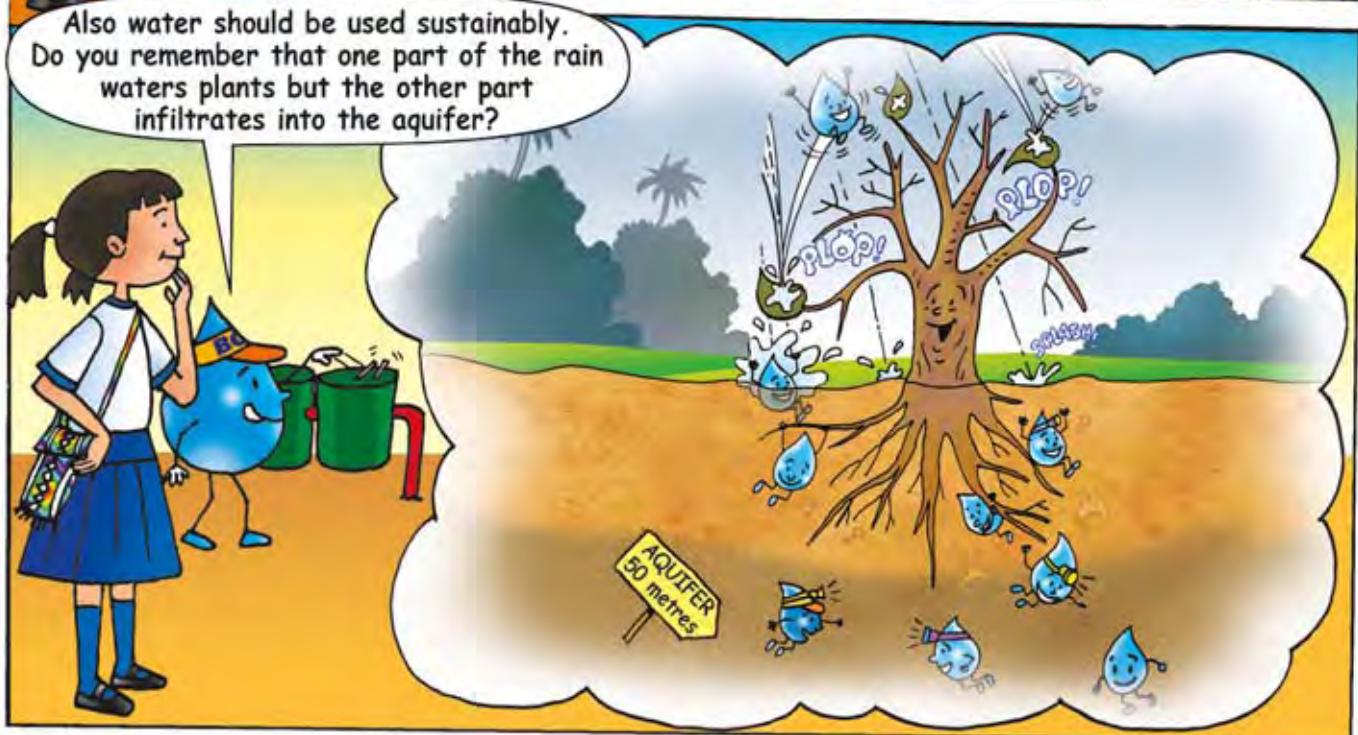
Then the animals will always find a place to live.



We need to have protected areas without environmental destruction to live in peace.



Also water should be used sustainably.  
Do you remember that one part of the rain  
waters plants but the other part  
infiltrates into the aquifer?



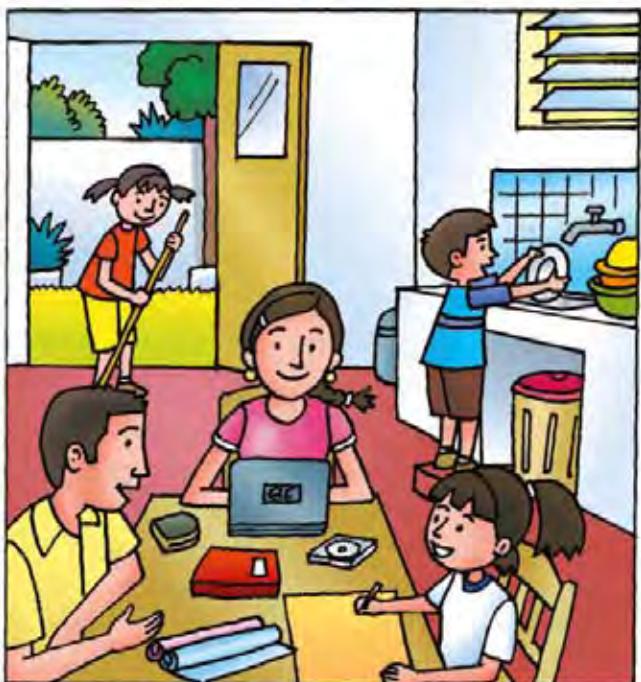
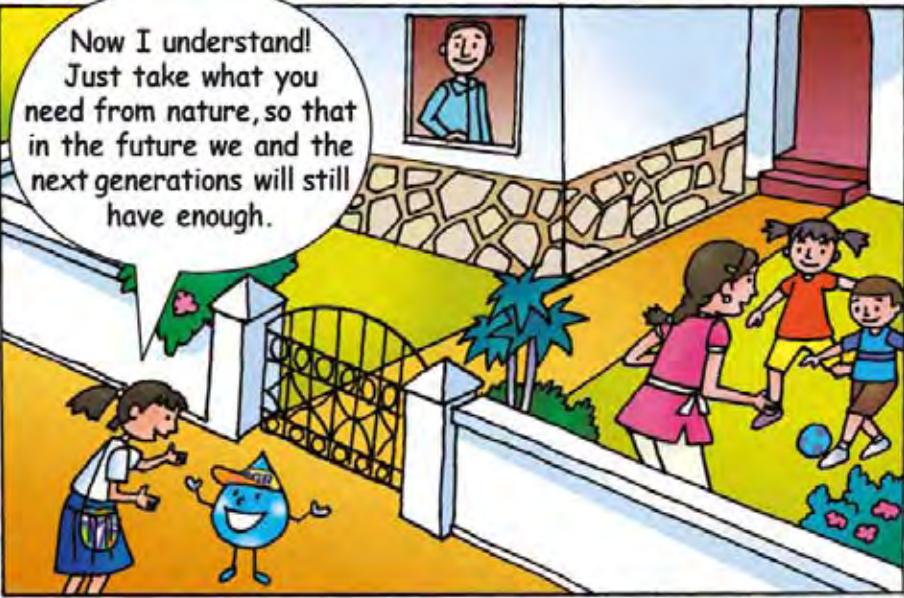
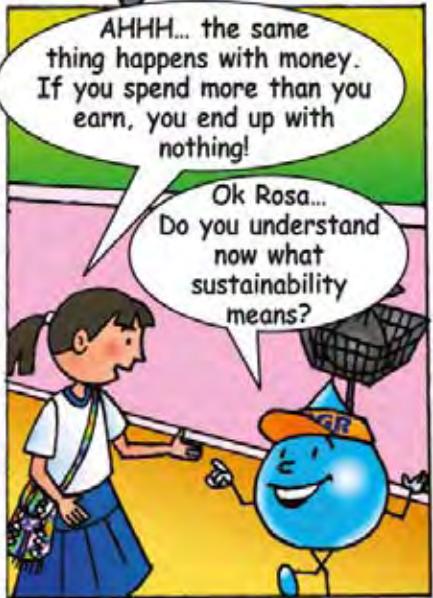
If we take more water from the wells than nature provides...



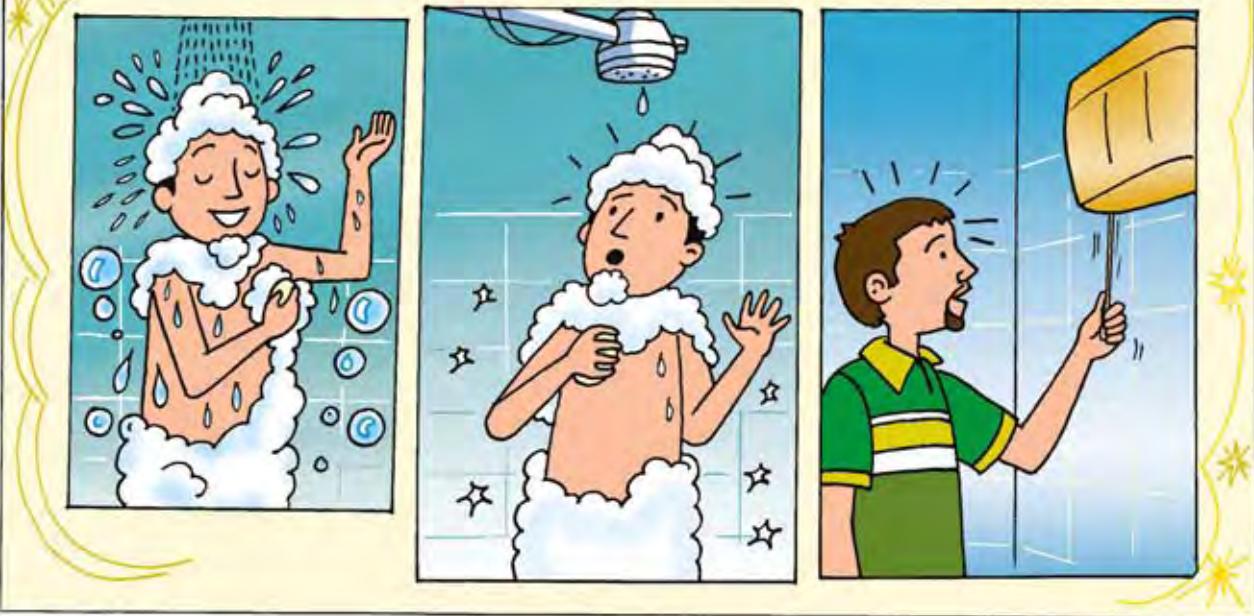
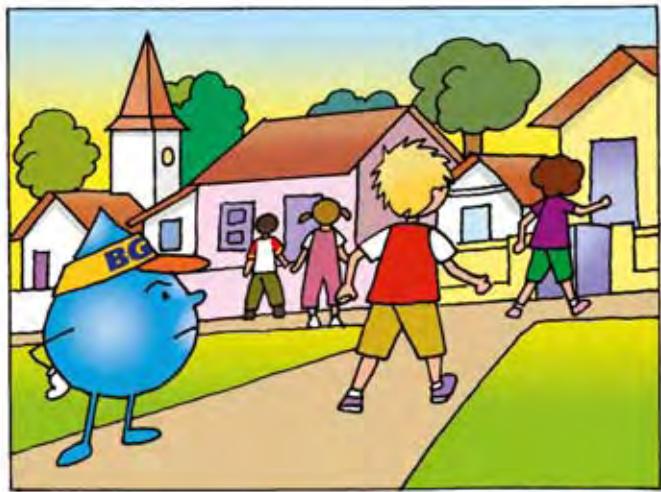
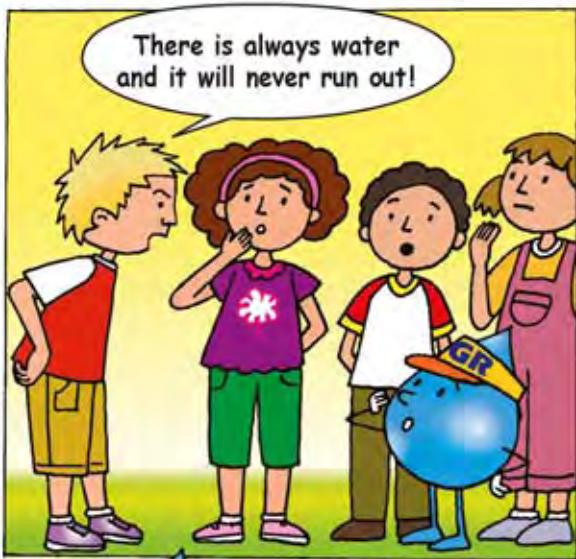
AHHH... the same thing happens with money. If you spend more than you earn, you end up with nothing!

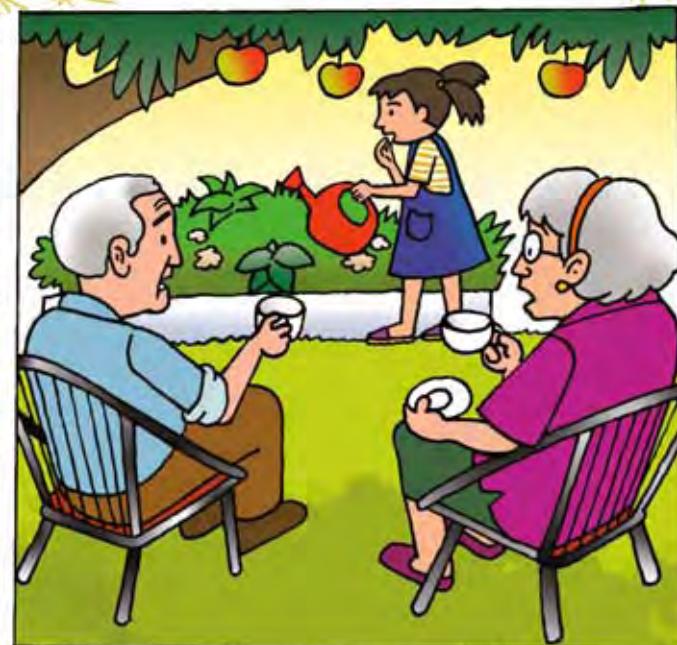
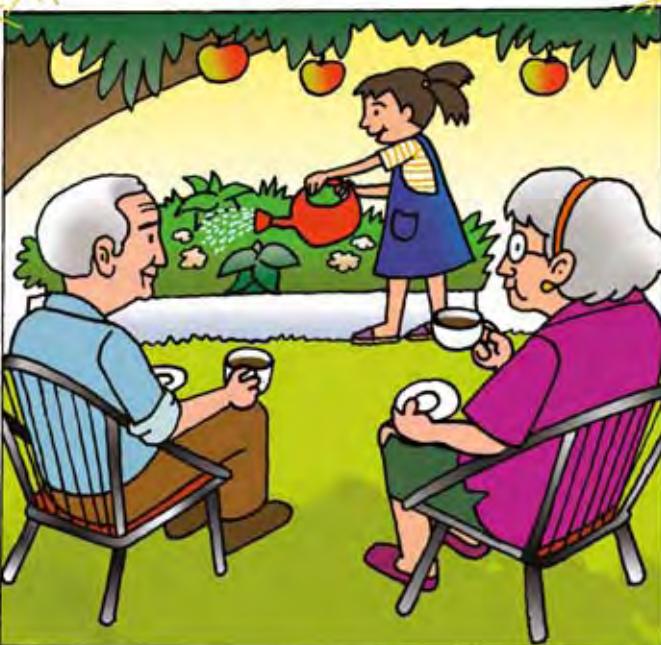
Ok Rosa... Do you understand now what sustainability means?

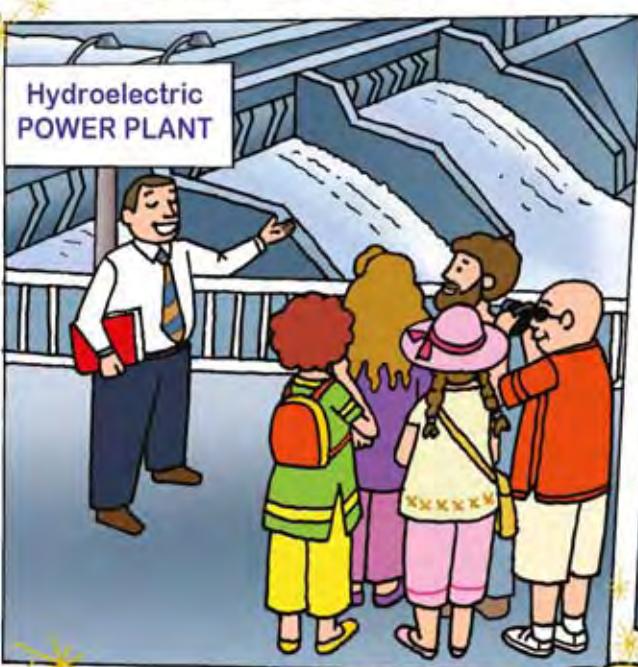
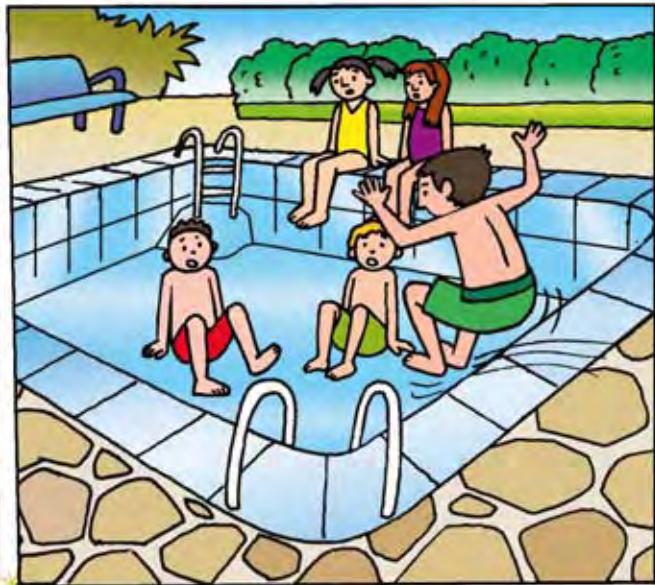
Now I understand! Just take what you need from nature, so that in the future we and the next generations will still have enough.

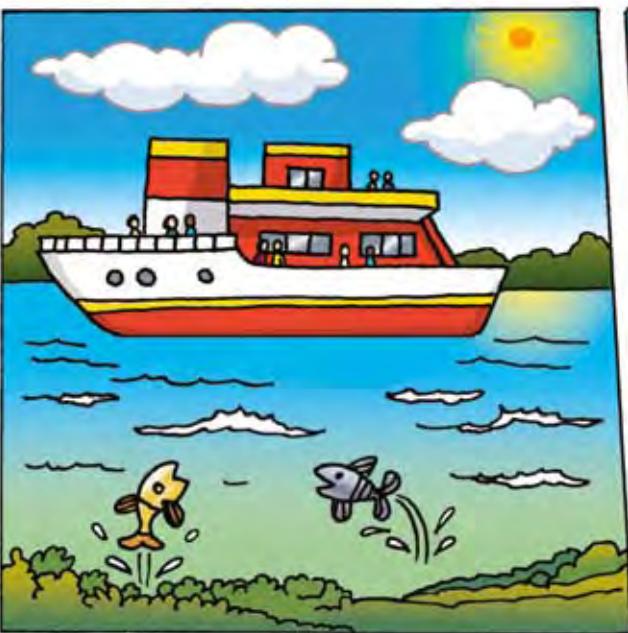
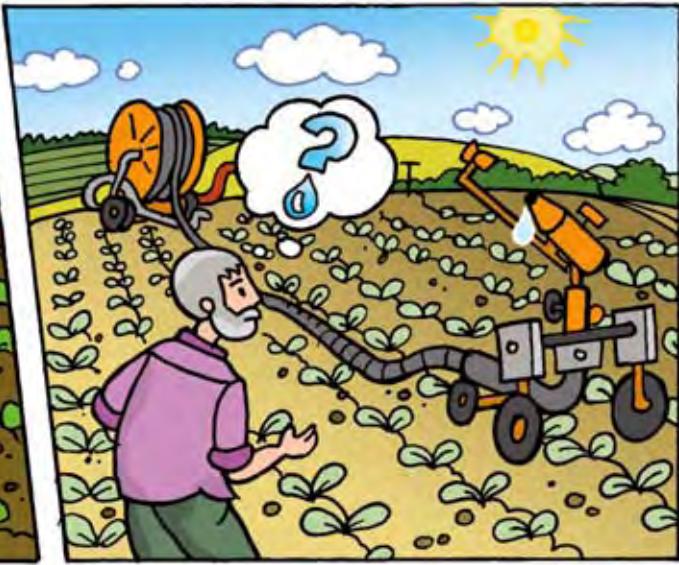


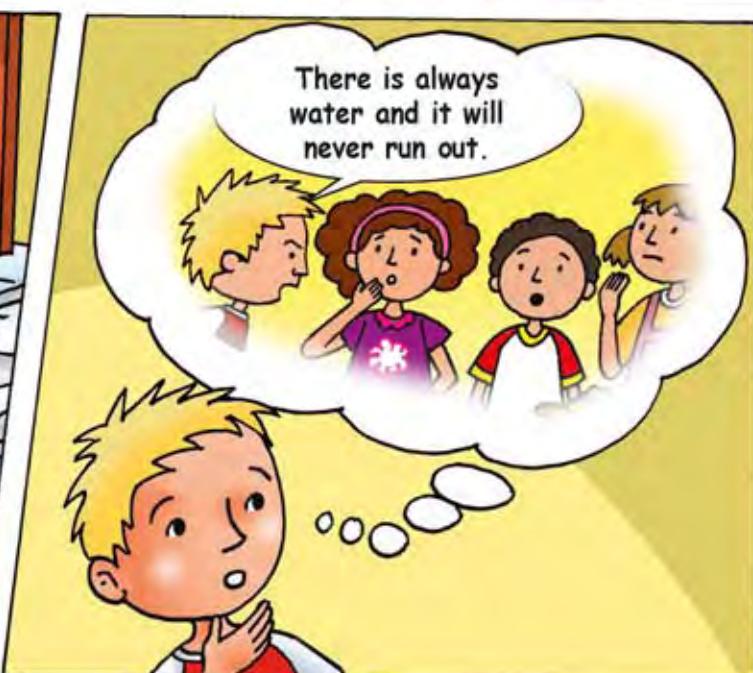
# The Protector of Life





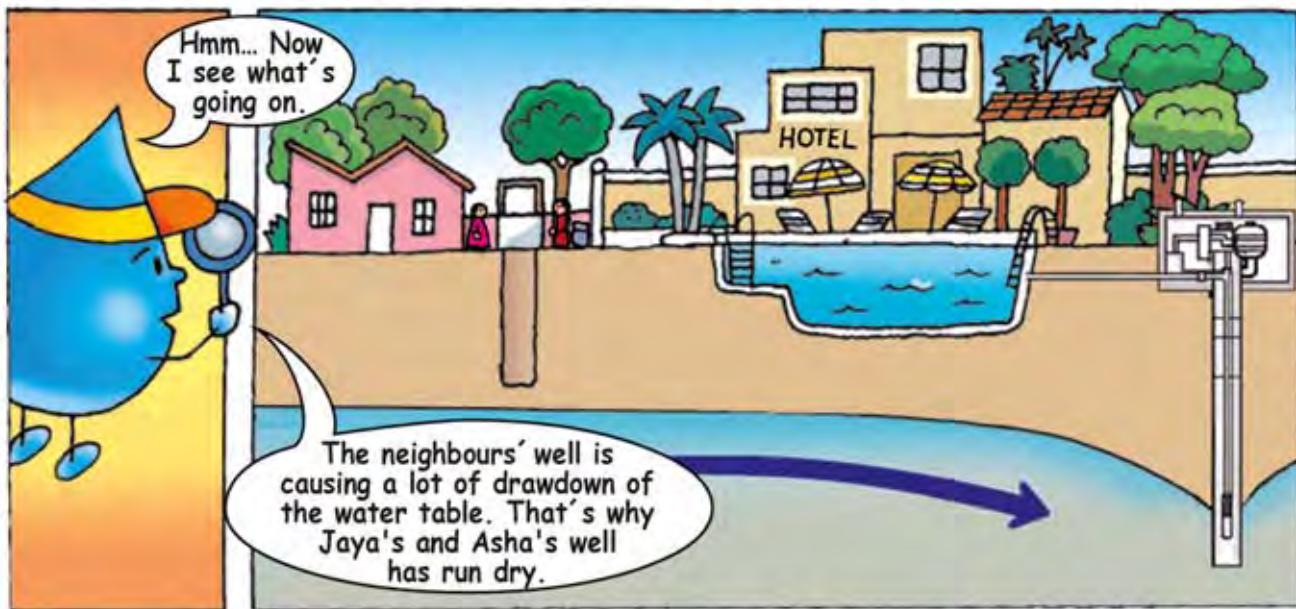


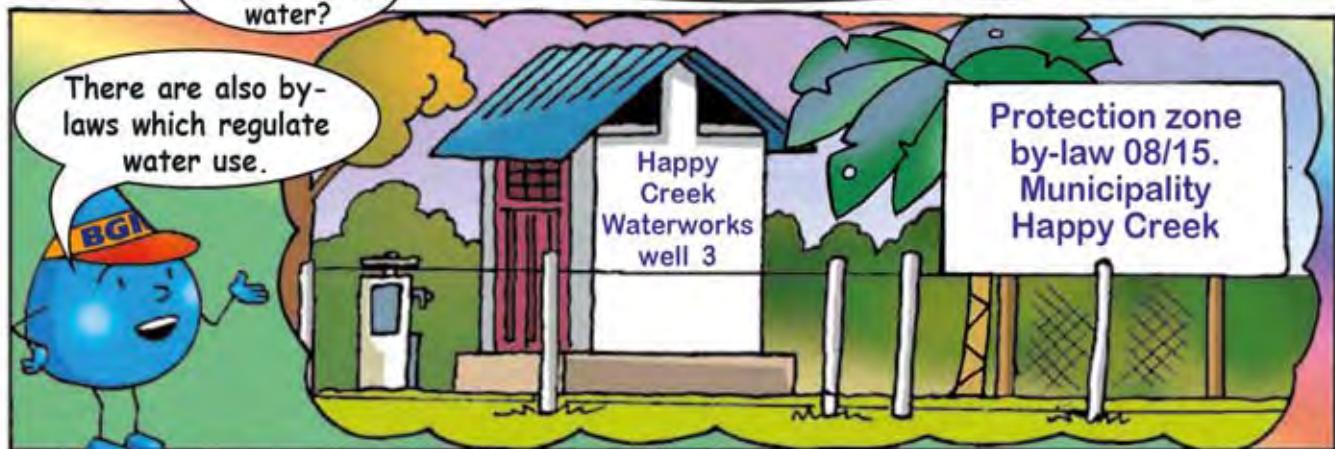
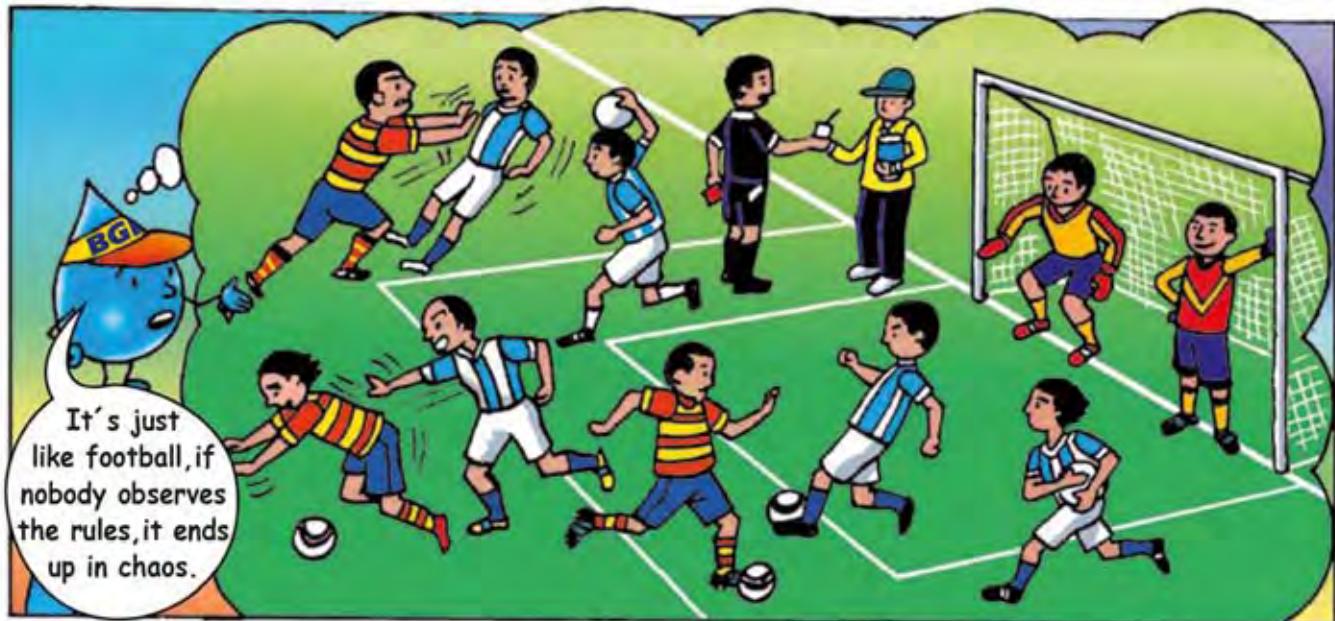




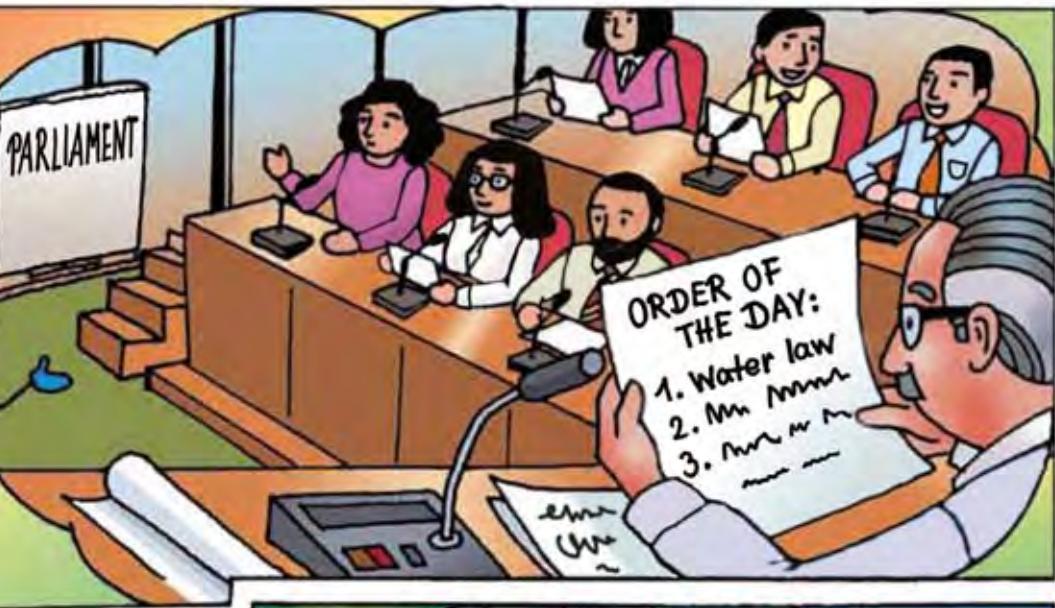


# Without Rules You cannot Play



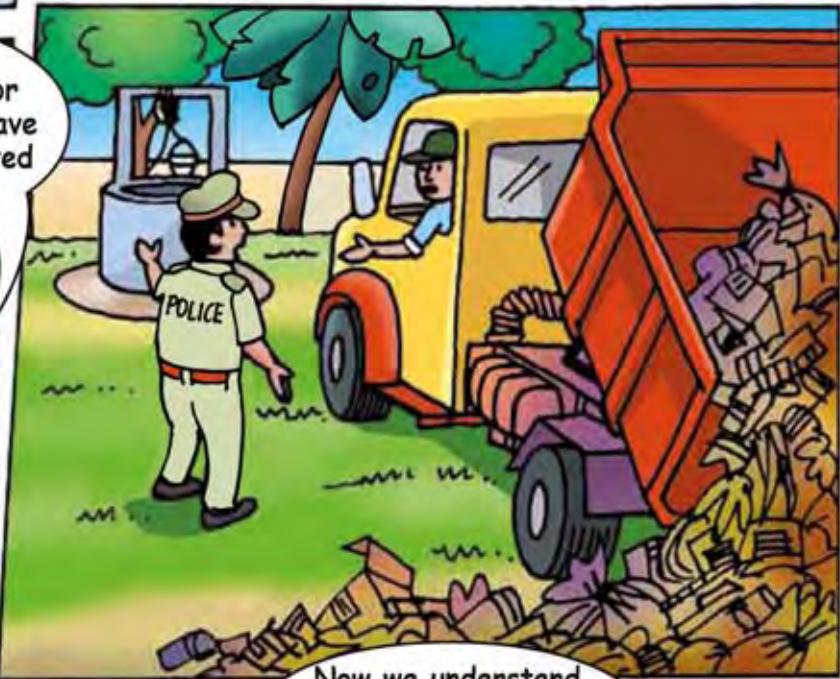


We also have laws regulating water use for the whole country.



And if somebody breaks the rules?

People who contaminate or waste water have to be prosecuted and fined.



Now we understand.  
If everybody plays along  
the rules, we all win!



End

## **Sustainable Groundwater Management for Tomorrow's Livelihoods**

### **BGR's Guiding Principle in the Field of Groundwater Management**

As Germany's official implementing agency for development cooperation (DC) in the geo-sector, BGR supports partner countries with science based advisory services to manage their water resources in a sustainable manner.

With adapted advisory instruments, BGR contributes to the broader process of implementing Integrated Water Resources Management (IWRM) and hence supports structural reforms in the water sector.

BGR has a long lasting experience in advisory services to partner countries. The services range from activities such as groundwater exploration, quantitative and qualitative assessment of groundwater resources and their use, groundwater protection, geothermal use of groundwater and capacity building at various levels.

Since the 1960's BGR has been working in more than 60 countries all over the world.





# The worldwide Adventures of Droppy

BMZ



Federal Ministry  
for Economic Cooperation  
and Development

BGR

Federal Institute for  
Geosciences and Natural  
Resources

