



COPE

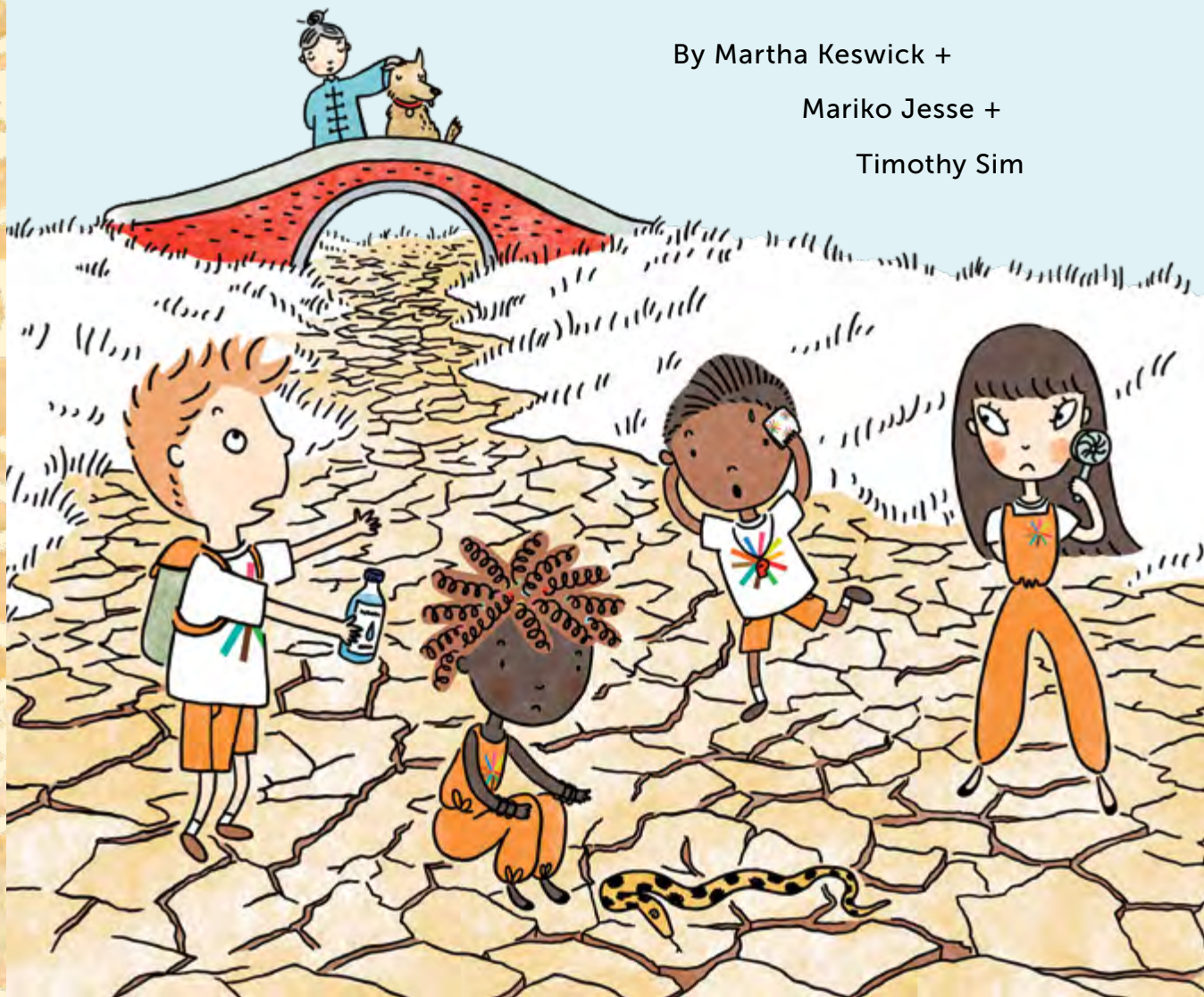
.....
Be ready for disasters!
.....

DROUGHTS

By Martha Keswick +

Mariko Jesse +

Timothy Sim



What are natural hazards ... and disasters?

Forces of nature that happen with little warning and occur all over the world, such as earthquakes, tsunamis, floods, landslides, tropical cyclones (and other storms), storm surges, heatwaves, wildfires, droughts and volcano eruptions. When these **natural hazards** pose a threat to humans or the environment they can lead to **disasters**, and cause destruction in a community.

What is a drought?

A continuous period of dry weather, when an area gets less than its normal amount of rain. Water levels drop in lakes and rivers, soil dries out, plants wilt and animals have trouble finding water to drink. Droughts can last weeks, months or even years. The longer the drought, the more harmful its effects on people.

The World Meteorological Organization helps countries to better forecast and manage droughts.

*COPE will teach you how to be
ready for droughts!*







Be ready for disasters – Droughts

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Mariko Jesse & Timothy Sim.
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*Who is
Grand Mistress Fu?*

A famous Chinese martial arts teacher and founder of the Mount Emei Wushu School. Grand Mistress Fu, also known as Shifu, is disciplined and tough yet has an enormous heart. She narrowly escaped death as her school collapsed during the Wenchuan Earthquake in May 2008 and has since dedicated her life to Disaster Risk Reduction.



*What is
The COPE Academy?*

An international disaster hub, hidden in Sichuan Province, set up by Grand Mistress Fu. The COPE Squad – Candy, Ollie, Ping and Eddy are teenage orphans who were plucked out of their care homes to live at The COPE Academy and trained to be disaster risk reduction agents.



Sense
THE SNAKE

A beautiful 25-year-old python. Sense has a special gift for predicting disasters. Grand Mistress Fu feeds her mice every month.

Rescue
THE DOG

A huge 8-year-old Kunming Wolf Dog, Rescue tracks missing people. His favourite hobby is catching flies.



The COPE Squad



Candy

THE CARER

12 years old from Kranshoek, South Africa, Candy is kind, strong, lively and loves playing drums and hula-hooping. Her role is to care for vulnerable groups affected by disasters such as children, elderly or disabled.

Disaster Experience:
Wildfires



Ollie

THE SCIENTIST

13 years old from Christchurch, New Zealand, Ollie is clever, popular, sporty and loves astronomy and rugby. His role is to understand weather patterns, climates and ecology.

Disaster Experience:
Earthquakes



Ping

THE NETWORKER

12 years old from Hong Kong, Ping is practical, chatty, creative and loves cooking and Wushu. Ping is the networker and spokesperson within the COPE squad.

Disaster Experience:
Floods



Eddy

THE ENGINEER

12 years old from Bahia, Brazil. Eddy is curious, witty, chilled out and loves Lego and skateboarding. Eddy is a talented engineer focusing on the safety of buildings.

Disaster Experience:
Landslides



COPE Signs

Since Eddy is hearing impaired, COPE sometimes chat using the Brazilian sign language, Libras. Can you spot the signs for **Droughts**, **Mindful** and **Water**?

It was early April on Mount Emei.
Grand Mistress Fu was in her garden,
hoping rain would come soon.
Sense helped with weeding.
Rescue chased butterflies.



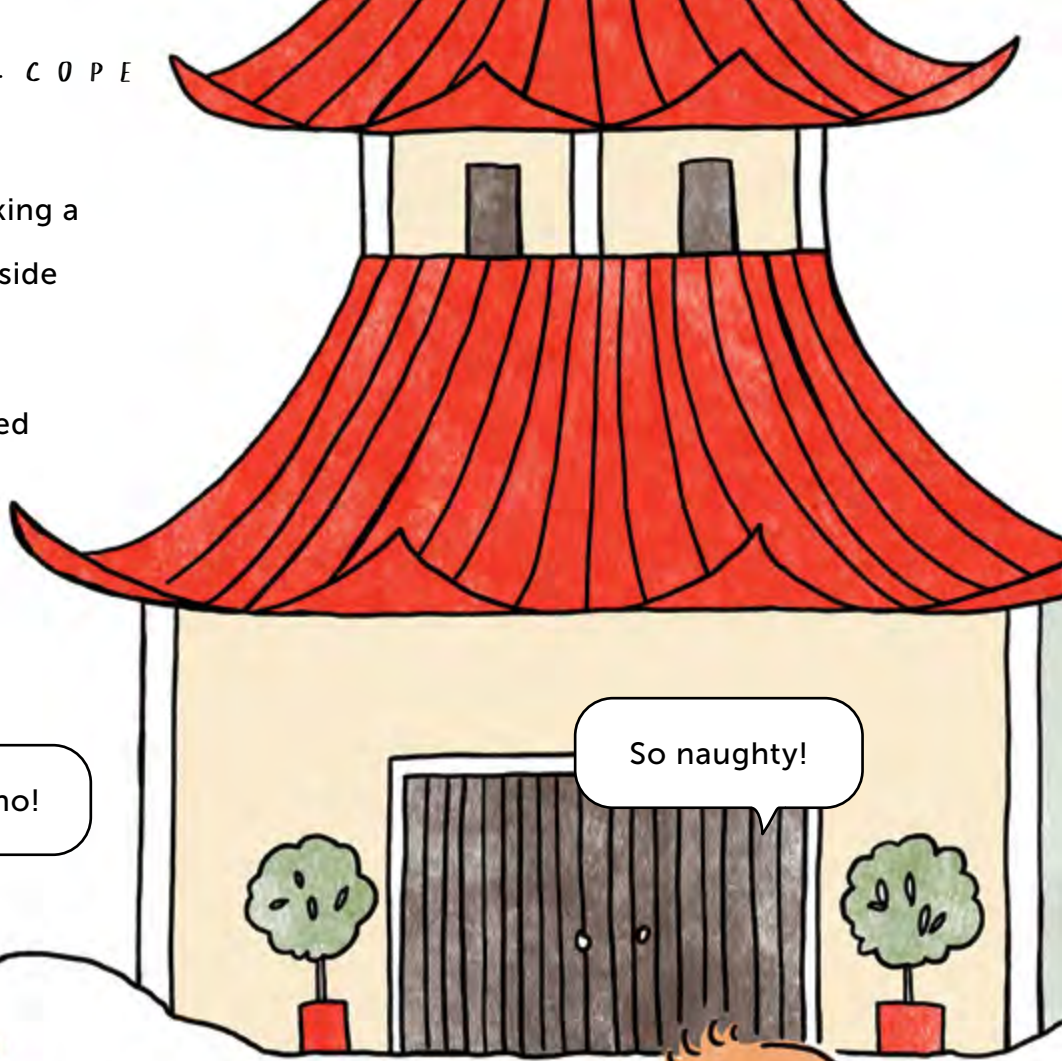
Thank you, Sense.





The COPE Squad was taking a break, playing rugby outside The COPE Academy.

A cheeky monkey grabbed the ball.



Oh no!

So naughty!





We won't see that again!

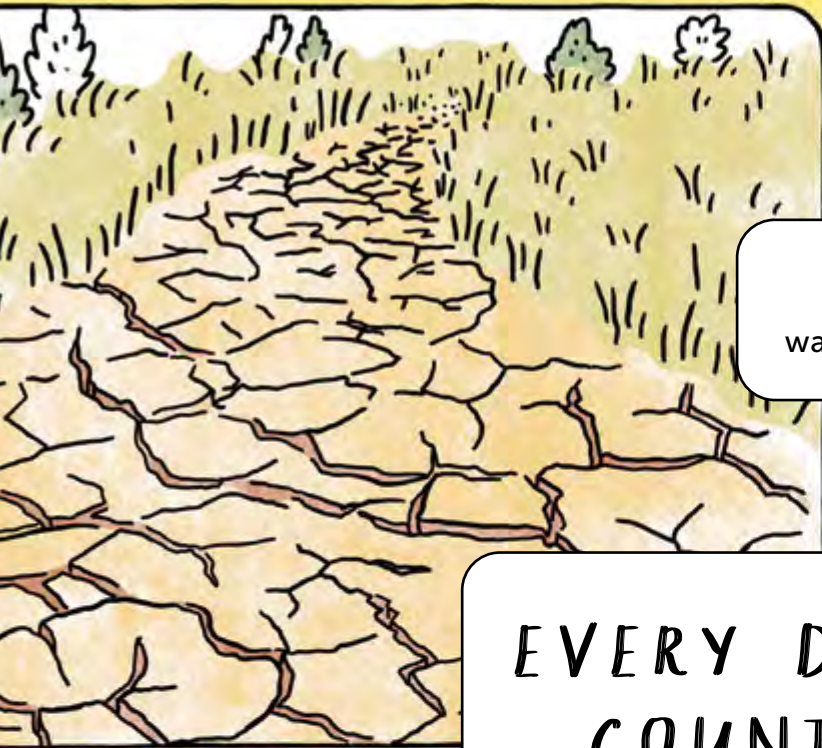
Ha ha!!

Soon it was back to work.

Now COPE, how can we
prepare for droughts?

Unlike earthquakes, tsunamis or tropical cyclones, droughts happen slowly ... and can last for years.





We must try not to use so much water during times of normal rainfall.

EVERY DROP COUNTS.



HOW ARE DROUGHTS MADE WORSE BY CLIMATE CHANGE?

Global warming is caused by more *greenhouse gases* in the atmosphere.

This has led to a rise in temperatures and sea level as well as a change in rainfall patterns.





Less rain means farmers
cannot grow crops ...

and there is *less water* for
people to drink, wash and cook.

Saving water will help cope with droughts
and long term global warming.



Water is too precious.
How can we save it?



Take a short shower.

Turn off the water when brushing your teeth.



Use a washing up bowl,
instead of the sink.

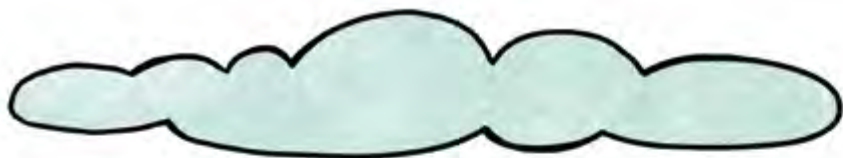


Wear clothes more than
once before washing them.



EVERY DROP COUNTS!

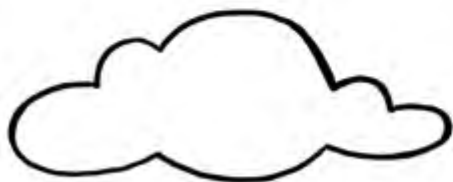




The next day, COPE set off to Yunnan which was in a drought.



Flying time approx.
2 hours. All ready, over?



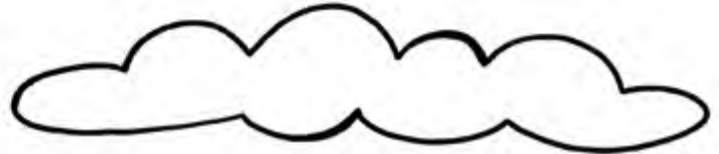
Yes, Shifu, Over.





Our first mission in
CHINA!

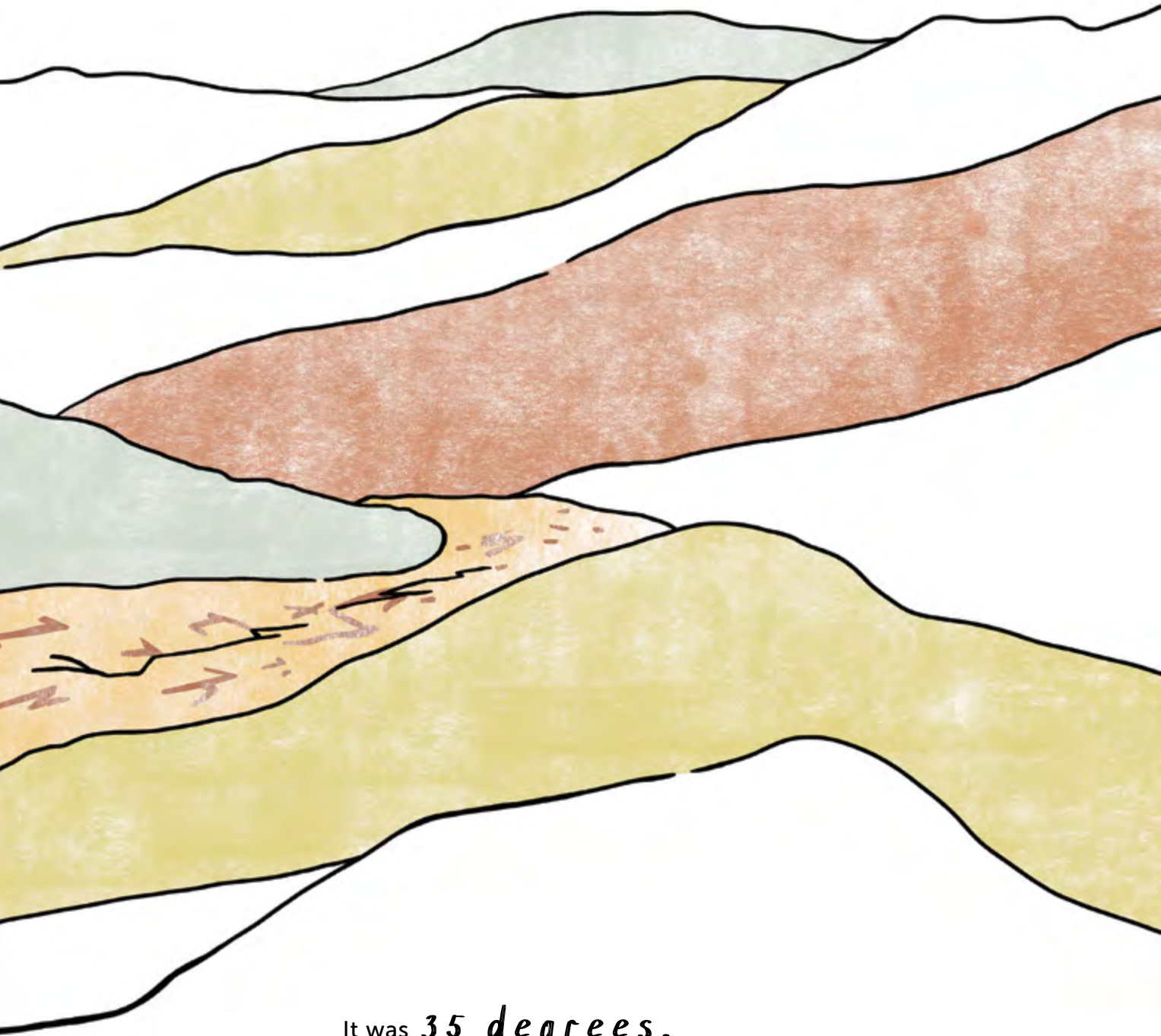
Woof Woof!





COPE could not believe their eyes.

The drought was already quite severe:
Rivers were cut off. Reservoirs had dried up.
Wells had run out of water. Fields that should
be green were yellow. There were deep
cracks in the dry land.



It was *35 degrees,*
with weeks of intense heat and no rainfall.

COPE stayed on a tea plantation in Xishuangbanna, home of the famous Pu'er tea.

Yang was there to greet them. He belonged to the Aini ethnic minority, and was in charge of the plantation.

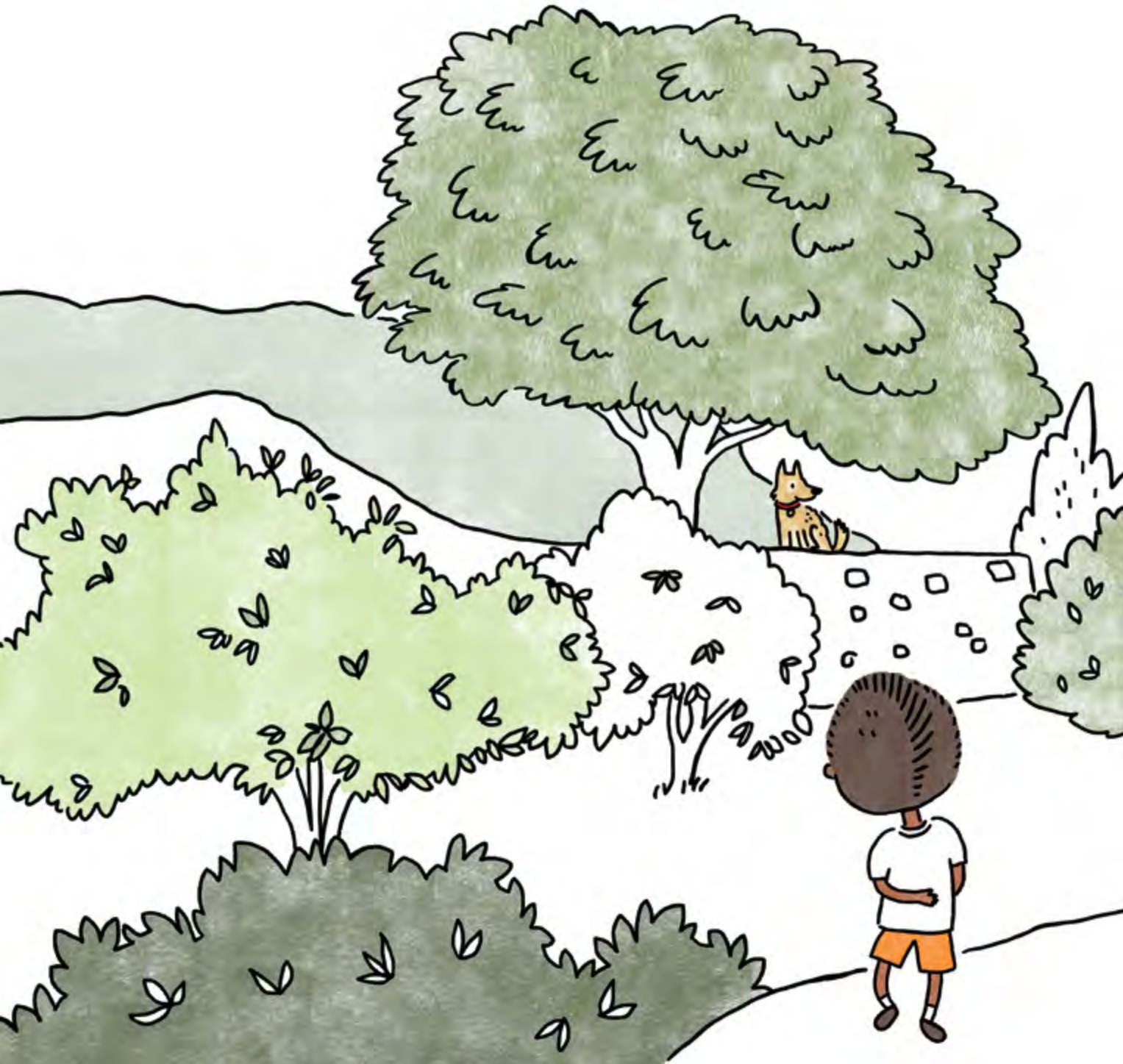
COPE, welcome. Let's try some tea!



COPE enjoyed the tasting. Rescue drank some too!



Yang showed them the pu'er trees, growing in the cloud forests.
Some are nearly 2,000 years old! The older the tree, the more
valuable the leaves.



These trees need water and minerals ... and may not survive the drought. Our crops will be ruined.

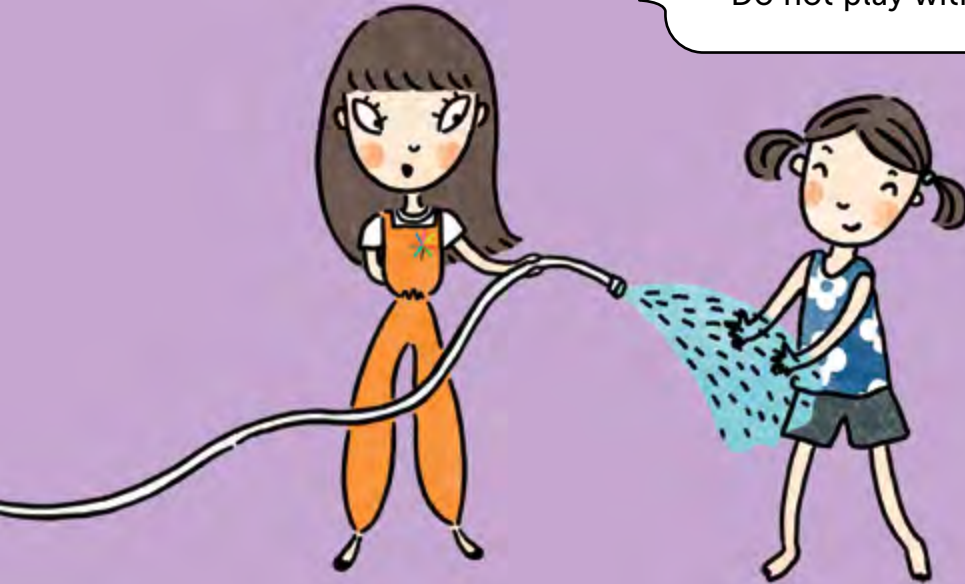
Sooooo dry!

Rain, please come soon!



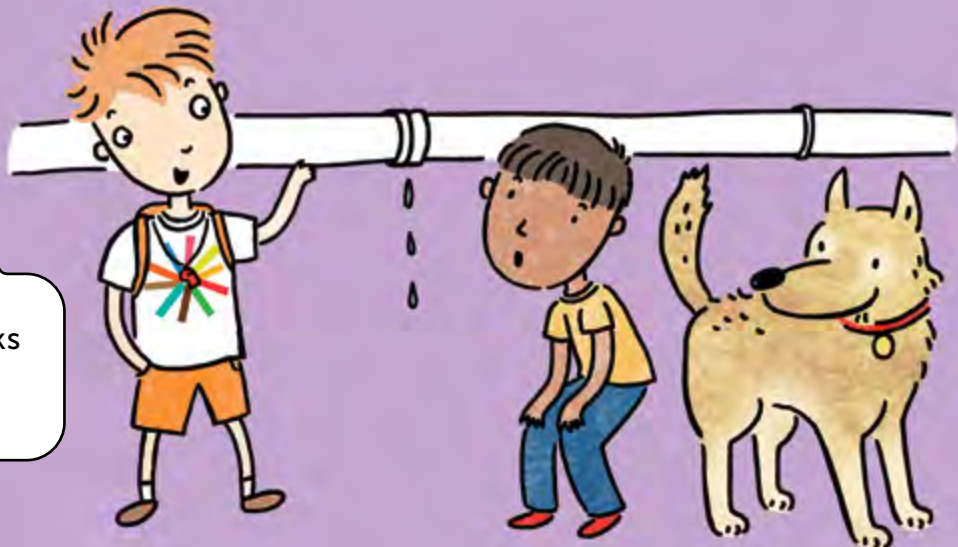
COPE set off on their mission to teach kids tips and tricks on how to *save water*.

Do not play with hoses or sprinklers.



..... **EVERY DROP**

Check for leaks in pipes.



Only flush the toilet
when you have to.



COUNTS!



Turn taps off properly.



COPE trained up *COPE Champions* to help spread the word.

Remember to place a bucket in the shower to catch water.



Be careful not to waste water when washing food.

Store water bottles for an emergency.



Try to use recycled water for your plants.



COPE held special workshops.

How many 125ml bottles of water are used in our daily activities?



164 bottles



9 bottles



122 bottles



36 bottles



This *adds up* to 331 bottles of water per day, per person.

Let's be mindful.

EVERY DROP COUNTS!



1



2



3



Weeks went by. The *temperature* rose. The sun was burning.
Sense found it hard to keep cool.



Pant. Pant. Pant.





Millions were affected by the drought.

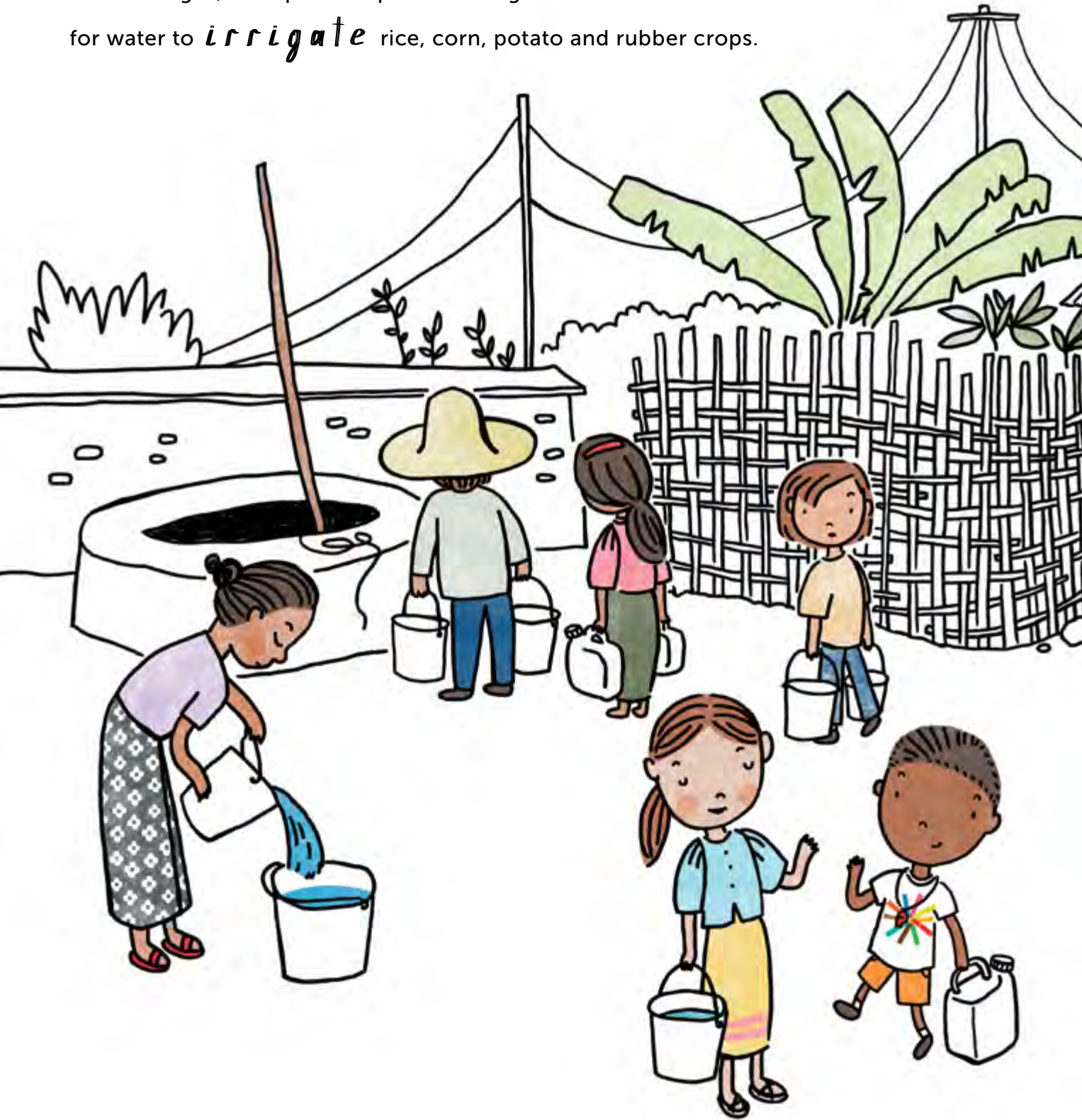
In the cities, kindergartens and primary schools were closed.

Basketball and gymnastic classes were cancelled.

Many people suffered from *heatstroke*. It was difficult to buy fresh fruit and vegetables.



In the villages, kids queued up for drinking water. Farmers looked for water to *irrigate* rice, corn, potato and rubber crops.





Nai Nai's back is painful. We help carry water from the distant well to our fields.



Meanwhile, the annual Water Sprinkling Festival was called off.



I'm in the Xishuangbanna swimming team. Every year we take part in the Dragon Boat Race. We swim behind the boats. I love the cheers from the banks. Last year, the river was very deep. Recently though the water level has fallen, and the pebbles are exposed on the bank.



Even with his hearing aid on, Eddy struggled to hear Xiao Lan.
Candy used some *Libras* signs to help him.



A Grade I *emergency* response was declared in Yunnan Province. The government set up projects to make rain, such as *rockets* fired into the clouds.



In the villages, deeper wells were dug. In the cities, drinking water was supplied at *limited* times of the day.



Cranes migrated. Elephants moved on to new territories.
Takins travelled further to find water. Lizards were the
most *vulnerable*.



Let's help them.



Ssssssssssss.





Finally ... at the end of June, there was *rain!*



The rainstorms kept coming.

Lakes and rivers slowly filled up. The soil started recharging. Plants grew.

There was hope in sight.

Look — the pu'er leaves are sprouting!



Grand Mistress Fu was proud of her squad. They had worked hard to teach the people of Yunnan all about droughts, and to always remember – **EVERY DROP COUNTS.**



Thank you COPE!

Goodbye!





As they landed safely back on Mount Emei,
Grand Mistress Fu was relieved her garden
was still in bloom.



COPE, we are home, over.



T H E C O P E C O N T R I B U T O R S



Martha Keswick

**COPE
AUTHOR**

Martha Keswick is the author of the popular bilingual *Max and Mei* picture book series, the factual *Zhongguo Mingren Series* about famous people of China and the action-packed *Pangu* comic book series. Martha's work for the Keswick Foundation often supports disaster related projects in China.

Martha lives in Hong Kong with her husband, their four children and two dogs.



Mariko Jesse

**COPE
ILLUSTRATOR**

Mariko Jesse studied at Central St Martins, where she went on to be an Associate Lecturer. She is an acclaimed freelance illustrator, working on a variety of projects around the world from picture books to ceramics.

Mariko lives in Tokyo where she is always in a state of preparedness for earthquakes.



Timothy Sim

**COPE
EDITOR**

Dr Timothy Sim started out as a social worker specializing in family therapy. His focus on disaster risk reduction stemmed from his work with the children, families, schools and communities who were affected by the horrific Wenchuan earthquake in 2008. He has written many books in Chinese and English on the subject.

Tim is currently an Associate Professor at the Singapore University of Social Sciences



In a time when children are increasingly aware of climate change and the impact weather can have on their lives, this COPE Droughts book is an excellent way to understand water conservation and being prepared for periods without rainfall.

— **DR WENJIAN ZHANG**
Assistant Secretary General,
World Meteorological Organisation

Drought, water scarcity and heatwaves are some of the serious and complex challenges affecting many countries in Asia-Pacific due to climate change. We thank the COPE contributors for putting together this booklet to help children better understand these issues and empower them to make a difference.

— **MR. MARCO TOSCANO RIVALTA**
Chief, UNDRR Regional office for Asia and the Pacific

The COPE book series can be a knowledge hub and source to increase children's awareness, capacity, and resilience to disasters worldwide.

— **PROFESSOR ZIQIANG HAN**
School of Political Science and Public Administration,
Shandong University

The future we are leaving our children is tenuous. The threat of disaster from a changing world is already upon them. Our children are being forced to deal with these extreme, hostile environments and need the tools that will help them COPE in emergency situations.

— **CRAIG LEESON**
Filmmaker and Broadcaster

COPE Academy, Sichuan Province.

Under Grand Mistress Fu, the COPE squad receive intensive training on disasters and how to be prepared. Join their epic droughts mission to Yunnan, China where they have to put their disaster risk reduction skills into action.



www.cope-disaster-champions.com

  COPEdisasterchampions

COPE TITLES

- Earthquakes
- Floods
- Cyclones
- Storm Surges
- Landslides
- Wildfires
- Droughts**
- Tsunamis
- Heatwaves
- Volcanoes



COPE

.....
*Make the Difference.
Be Ready!*