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United Nations Environment Programme P.O. Box 30552 Nairobi, Kenya Tel: (254 20) 7621234 Fax: (254 20) 7623927 E-mail: uneppub @unep.org web: www.unep.org



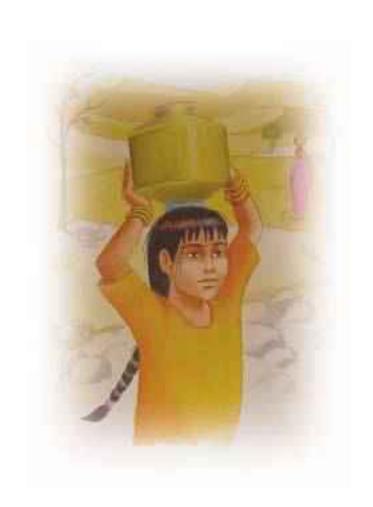


Trishna and the Dream of Water

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TUNZA

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Trishna and the Dream of Water is part of the Tunza Environmental Series for Children, sponsored by the United Nations Environment Programme (UNEP).

"Tunza" means "to treat with care or affection" in Swahili. UNEP hopes to inspire caring for the Earth through creative literature that sparks the interest and awareness of children, their parents and teachers.

Director of Publications Eric Falt

Chief, UNEP Outreach Unit Theodore Oben

Writer
Carole Douglis

Illustrator Adrienne Kennawa

Other UNEP Contributors Design and Layout - James Mwaniki Editorial Support - David Simpson, Naomi Poulton, Cecilia Kibare

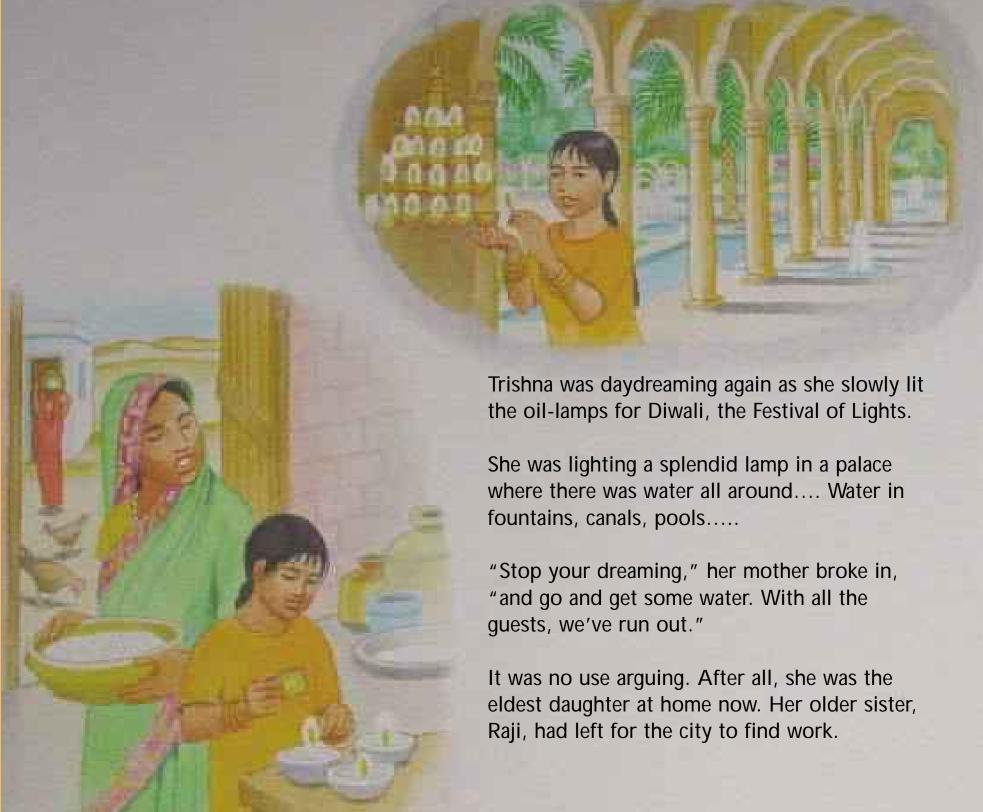
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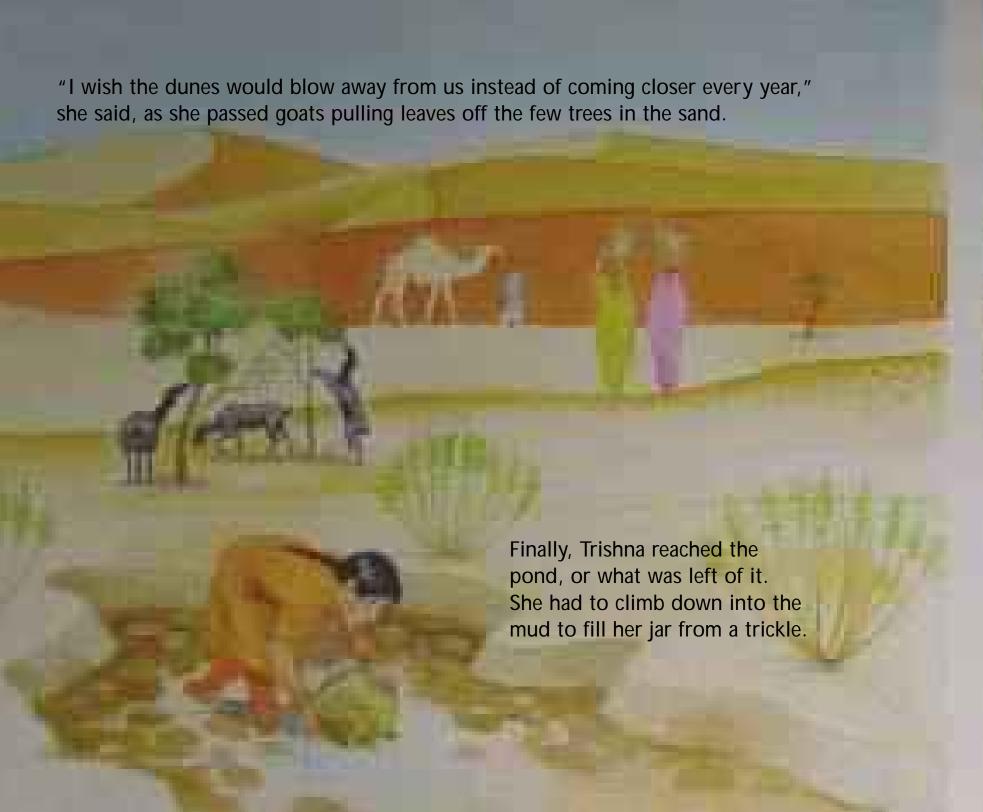


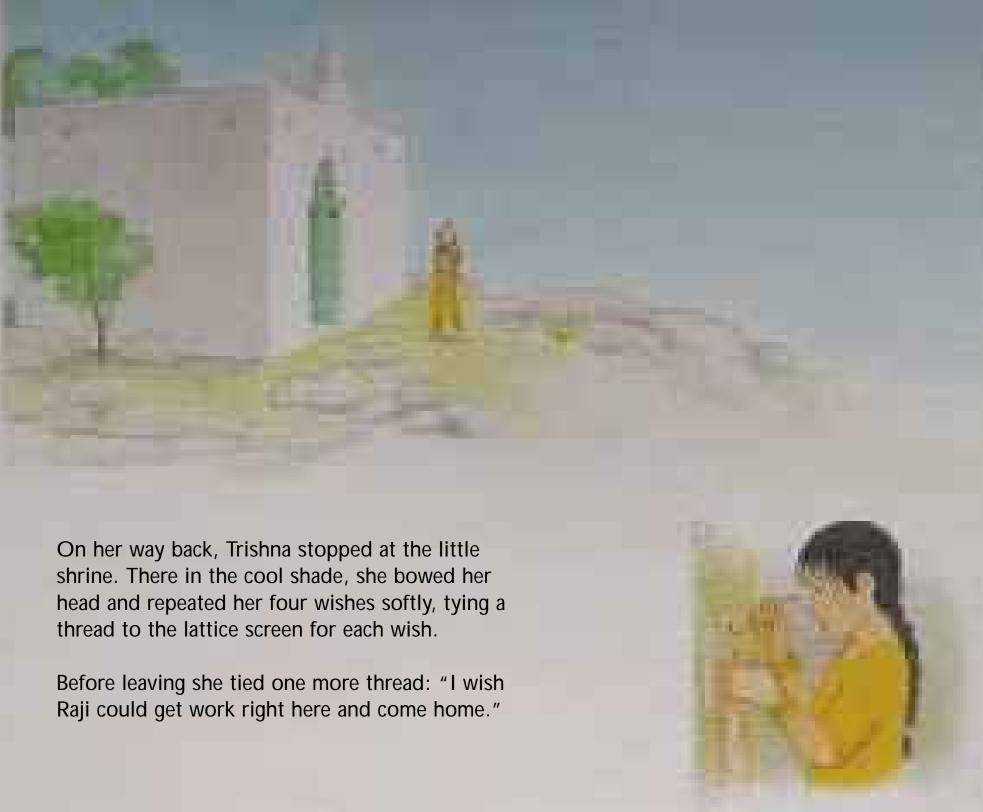


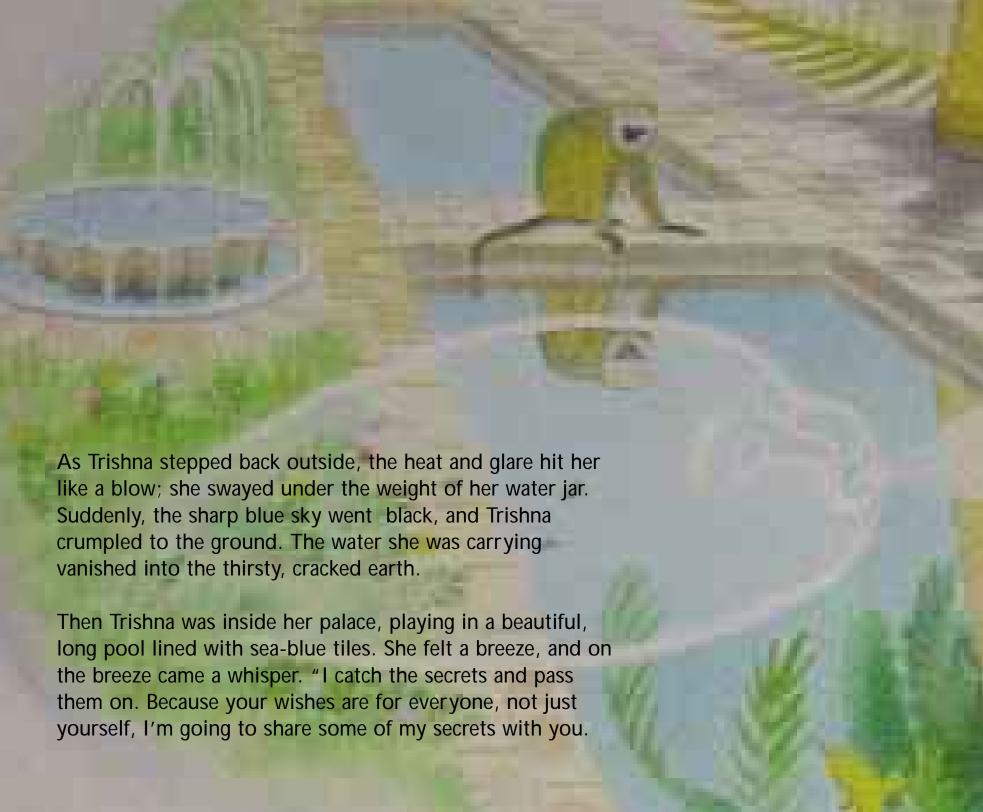
Trishna put down the match, lifted the water jar onto her head—and stuck some red and blue threads into her pocket before starting down the dusty path.

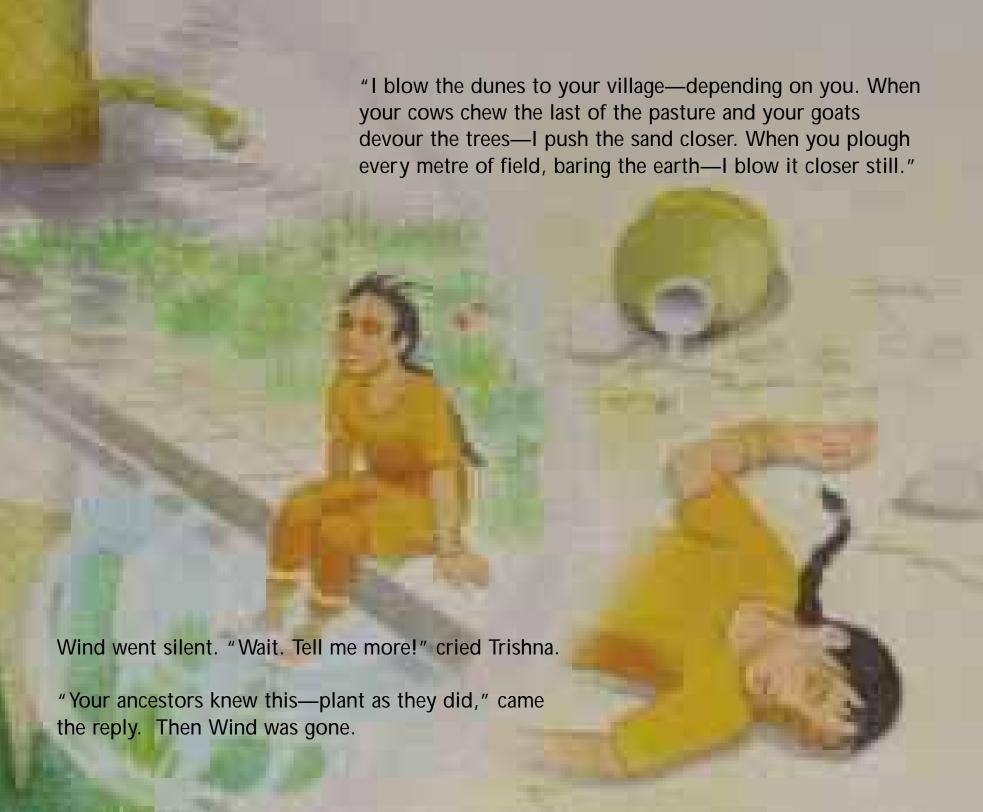
"I wish there were water all year long in our village so girls didn't have to carry it so far," she thought, strolling by the old well—out of use for years.

"I wish our village stayed green so we could have more of a harvest. And people wouldn't have to leave to look for pasture for the animals," she mumbled, passing the dry riverbed, then the abandoned borehole pump.











In a moment, a small wave in the water turned into a whirlpool.

"I'm the life-blood of your planet," it gurgled.

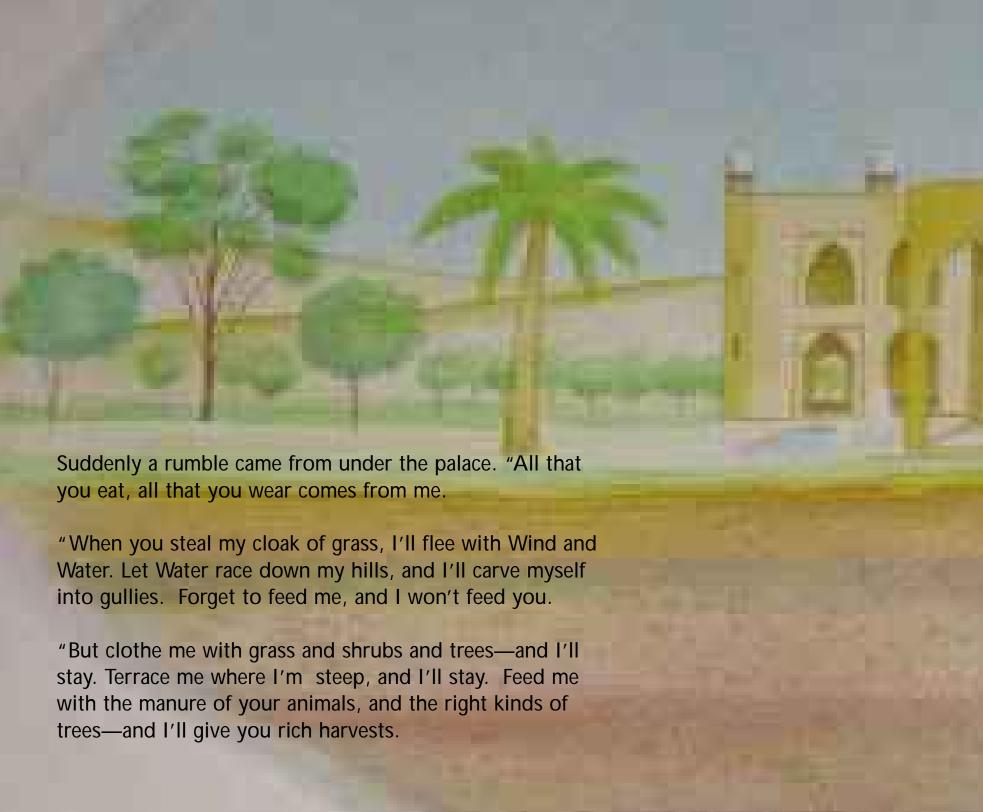
"I'll fly down from the sky, but run from your village—depending on you. Where no plants stay to hold me, I'll flood your land and vanish. If people take too much upstream, my riverbeds run dry. When your machines chase me deep in the ground, I'll hide deeper.

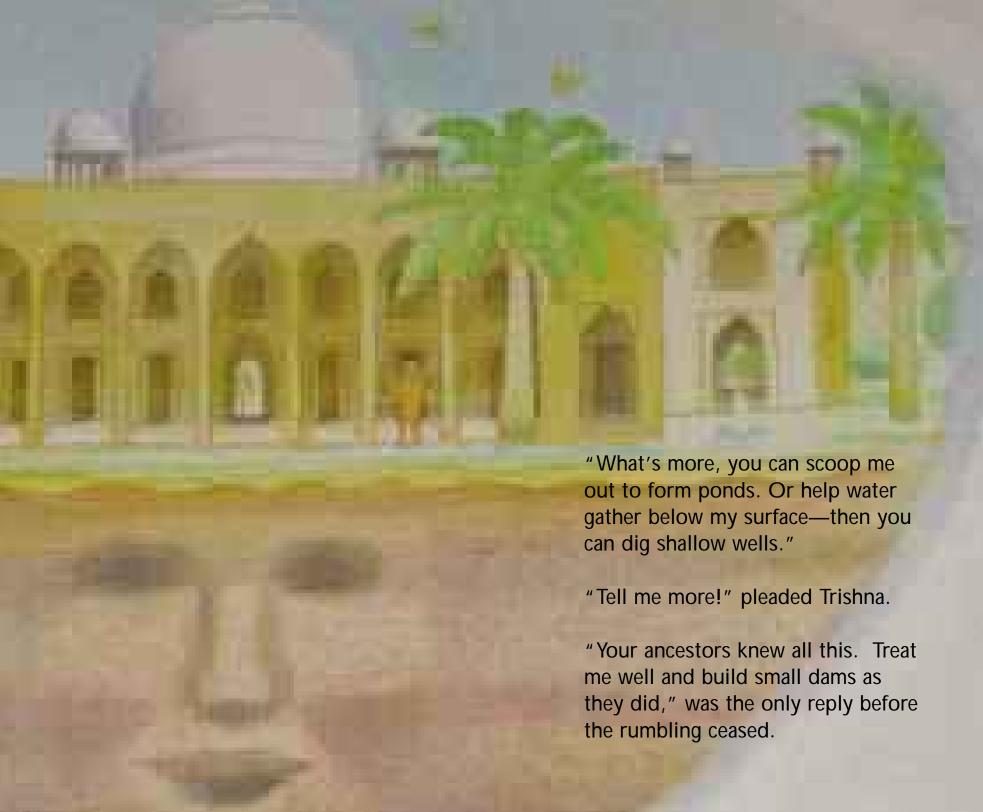
"But catch me if you can, and I'll stay. I'll live in the soil where you plant trees and grass. I can live beneath your feet if you build me a little dam. In some places, I'll live in a pond if you take out the silt. I'll wait in a tank if you collect me from your roof.

"Please tell me more," Trishna begged.

"Your ancestors knew this hundreds of years ago. Catch the rain as they did."

The whirlpool calmed and Water was gone.





A ray of light bounced off the water.

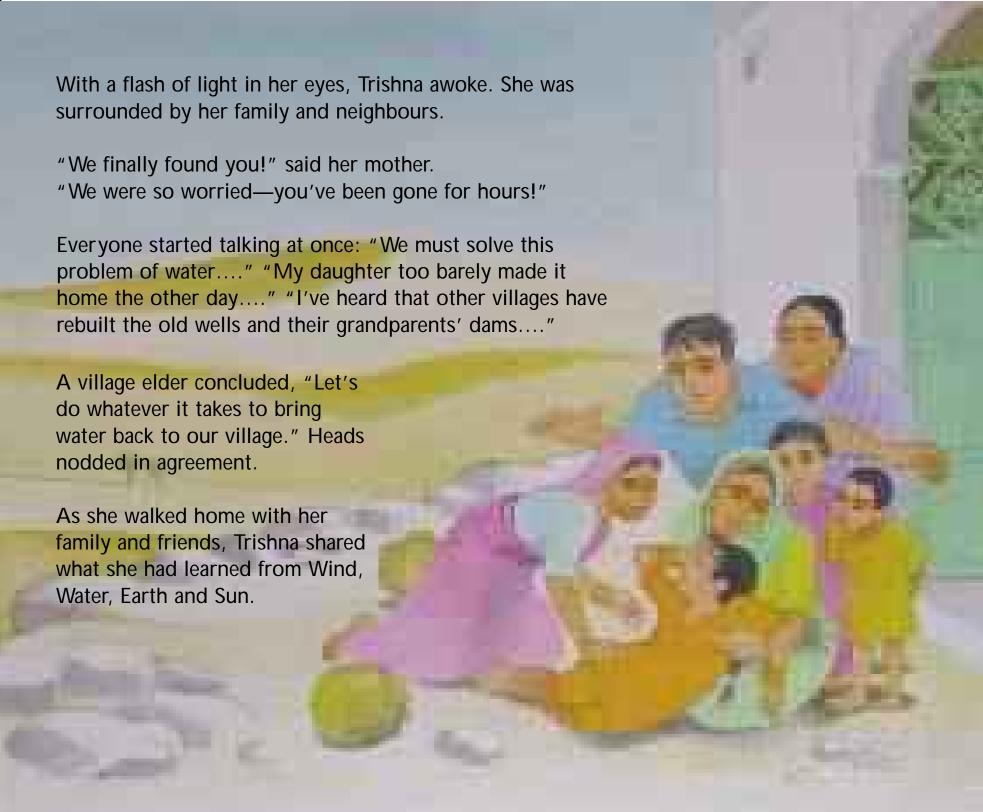
"I shine on all. Years ago I saw your people plant trees and grass and crops. The roots held Earth and Water tight and kept the dunes away. I saw the people live lightly—keeping animals, but not too many in one place.

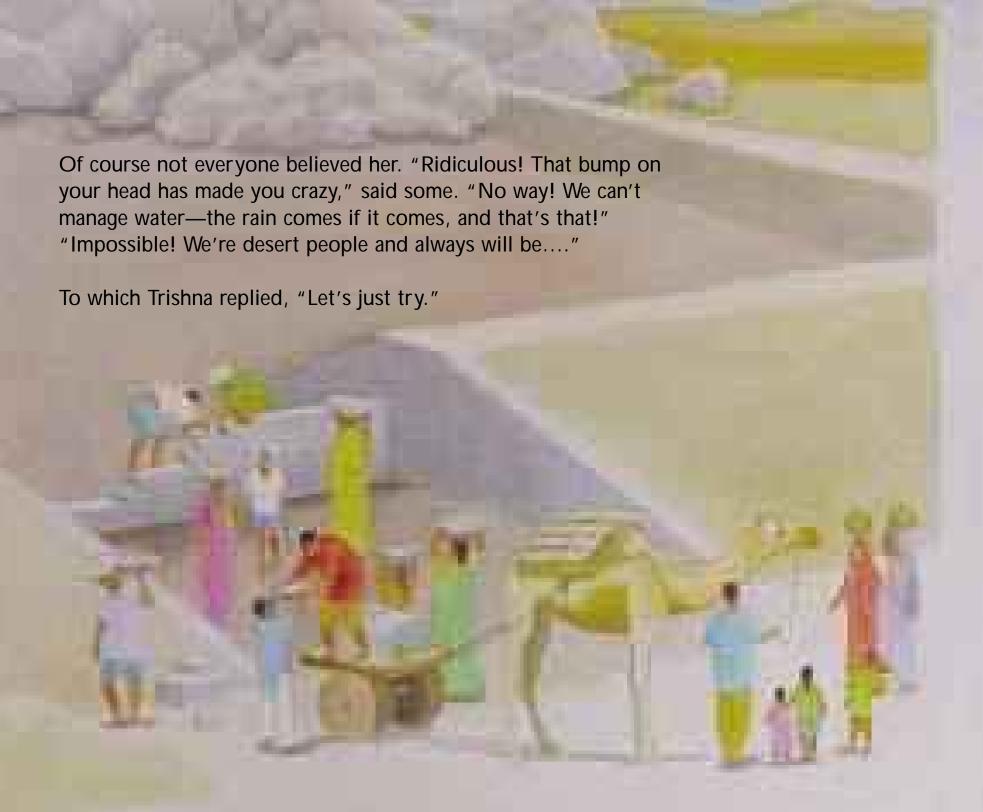
"So I helped their trees bear nuts and fruit and medicine; fodder for the animals and firewood for the stoves. I helped your ancestors grow grains, vegetables and everything they needed.

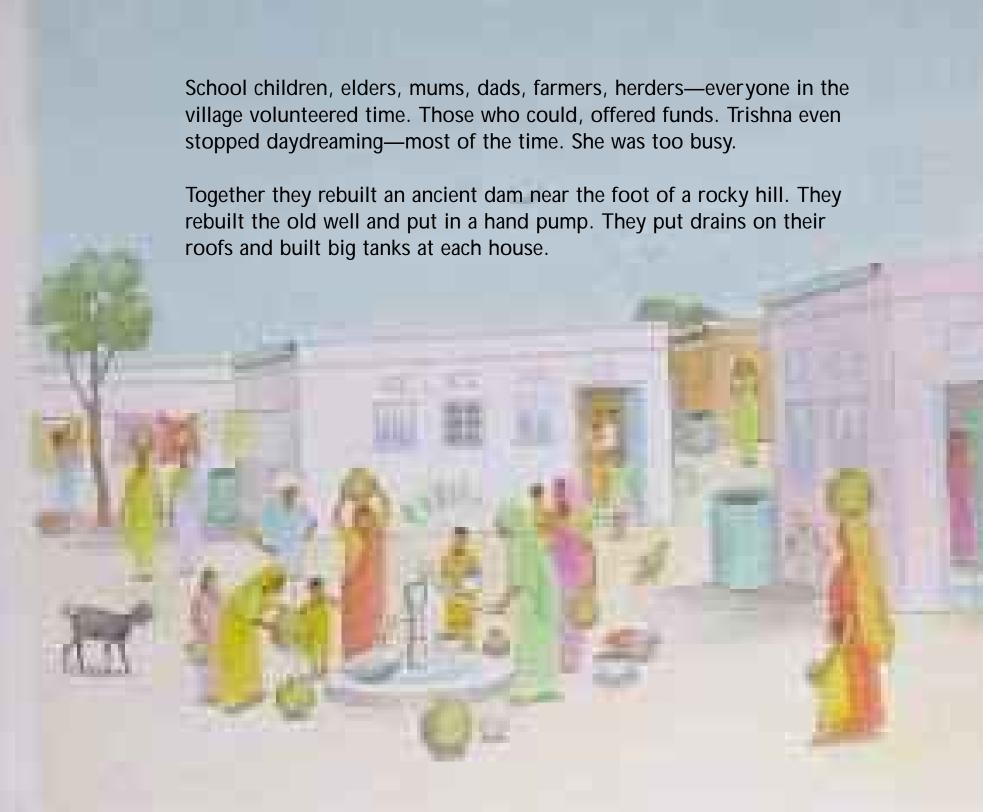
"Your ancestors enjoyed all this. Try it again...."

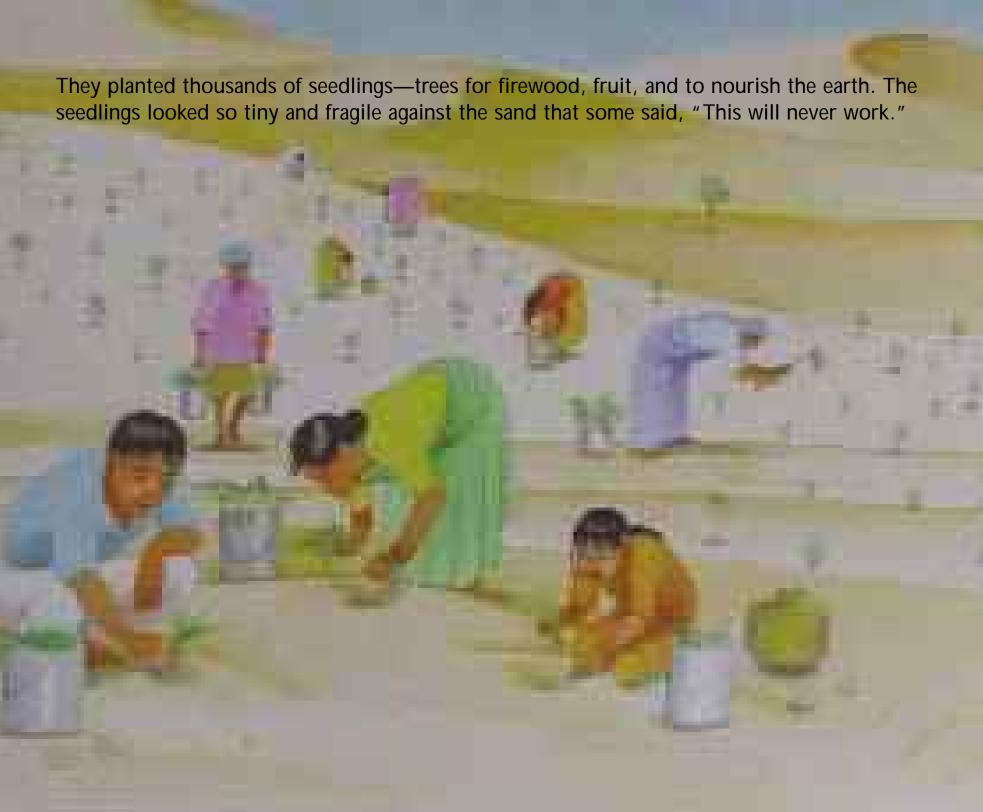


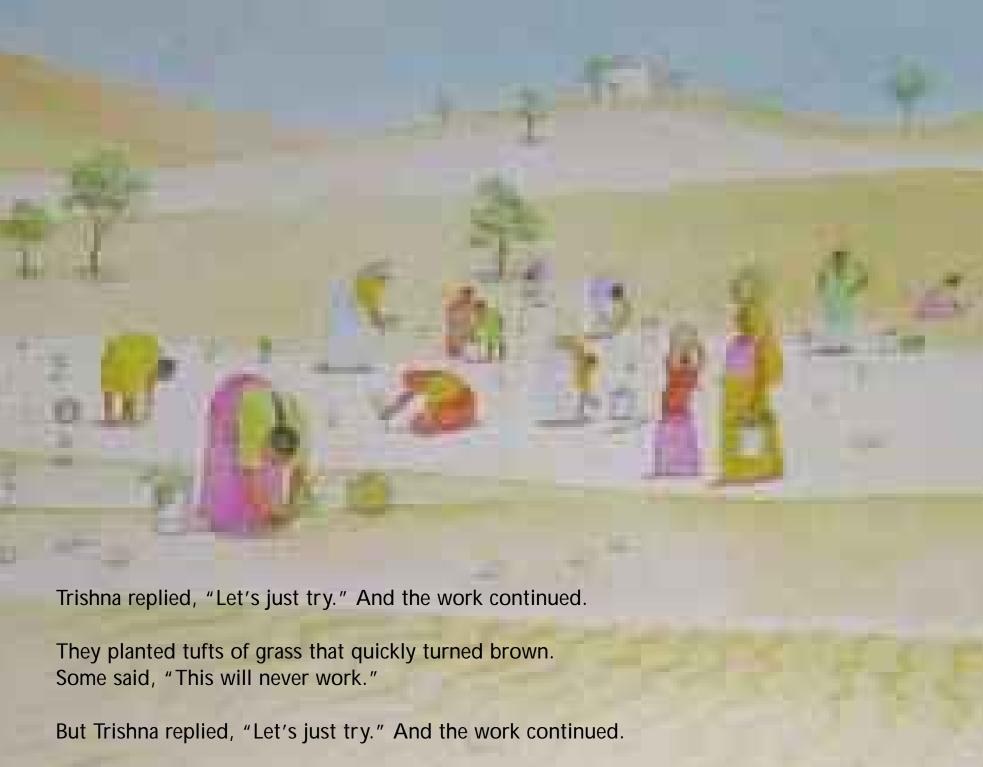




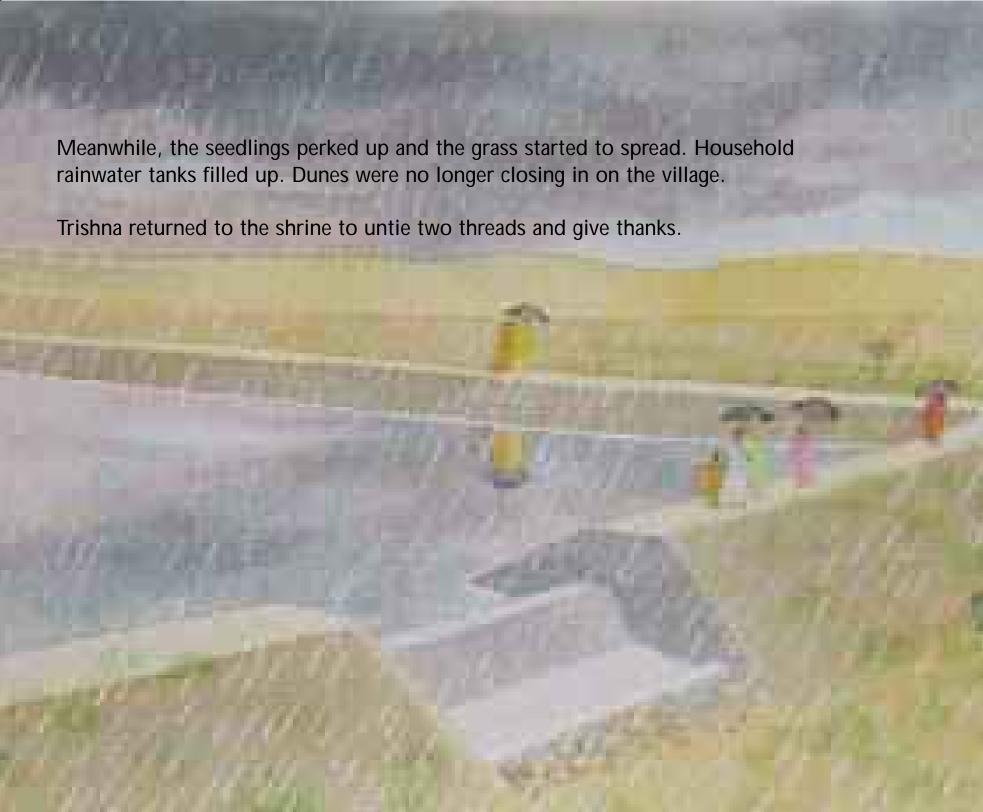


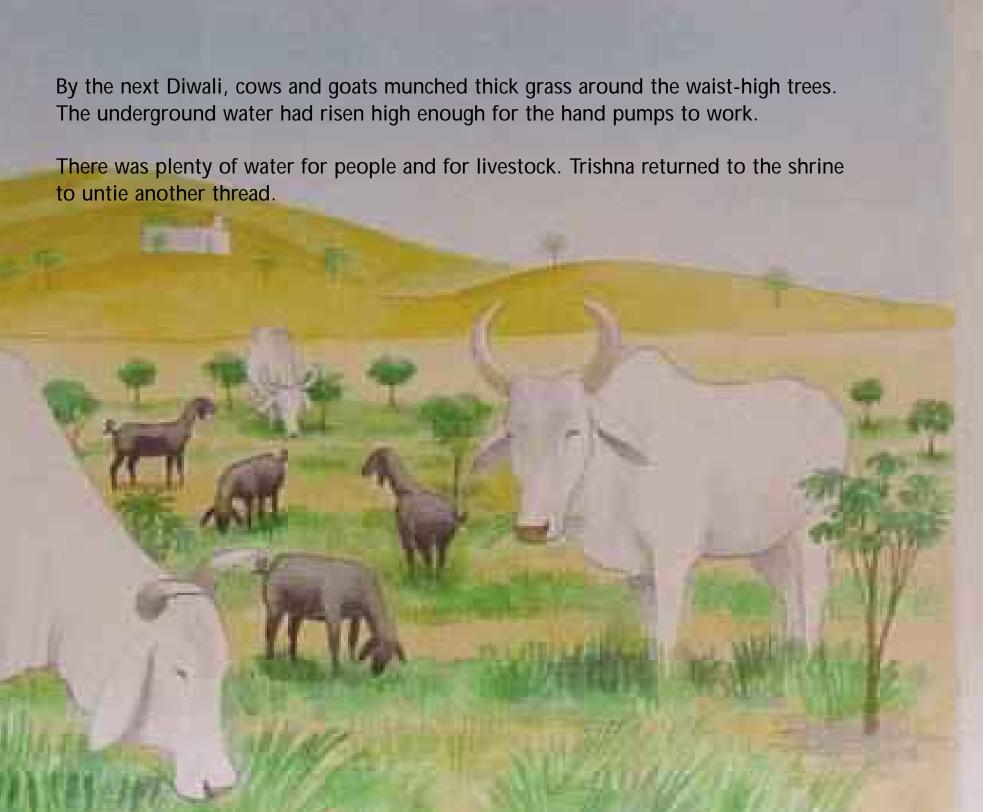


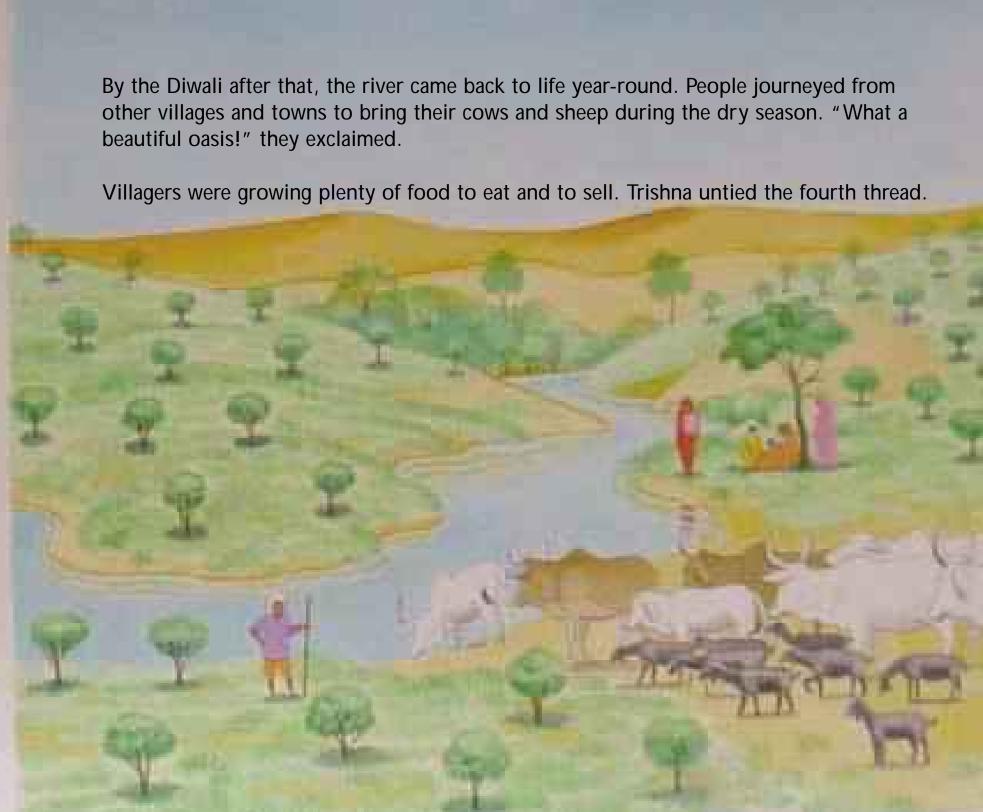


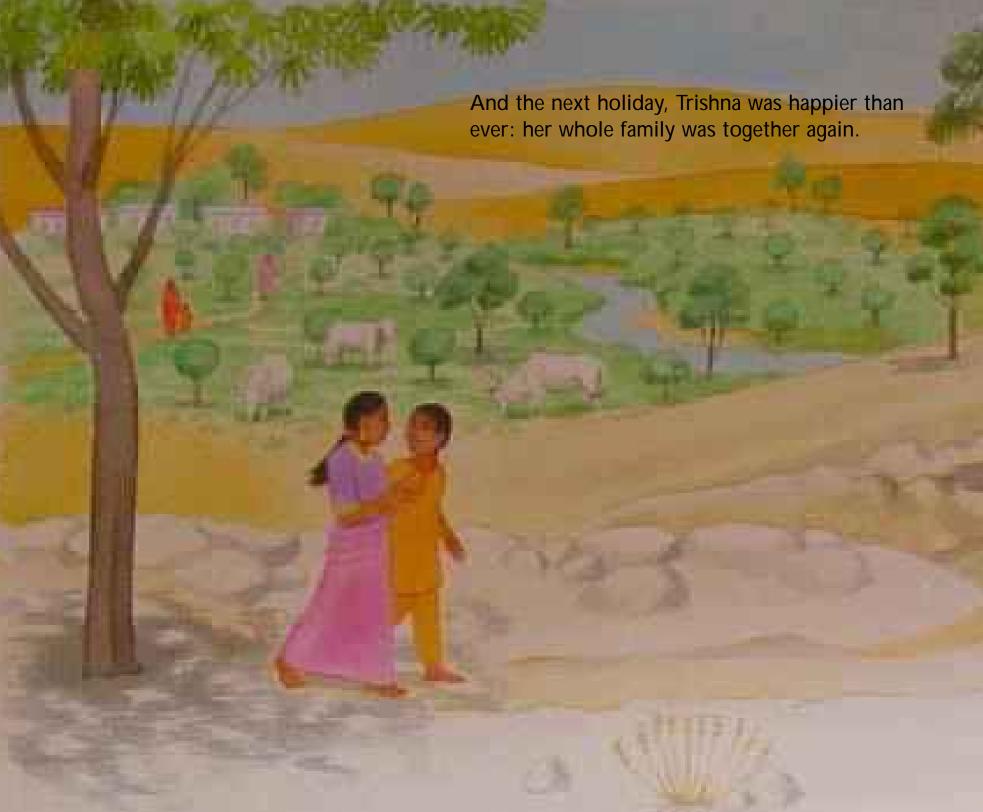


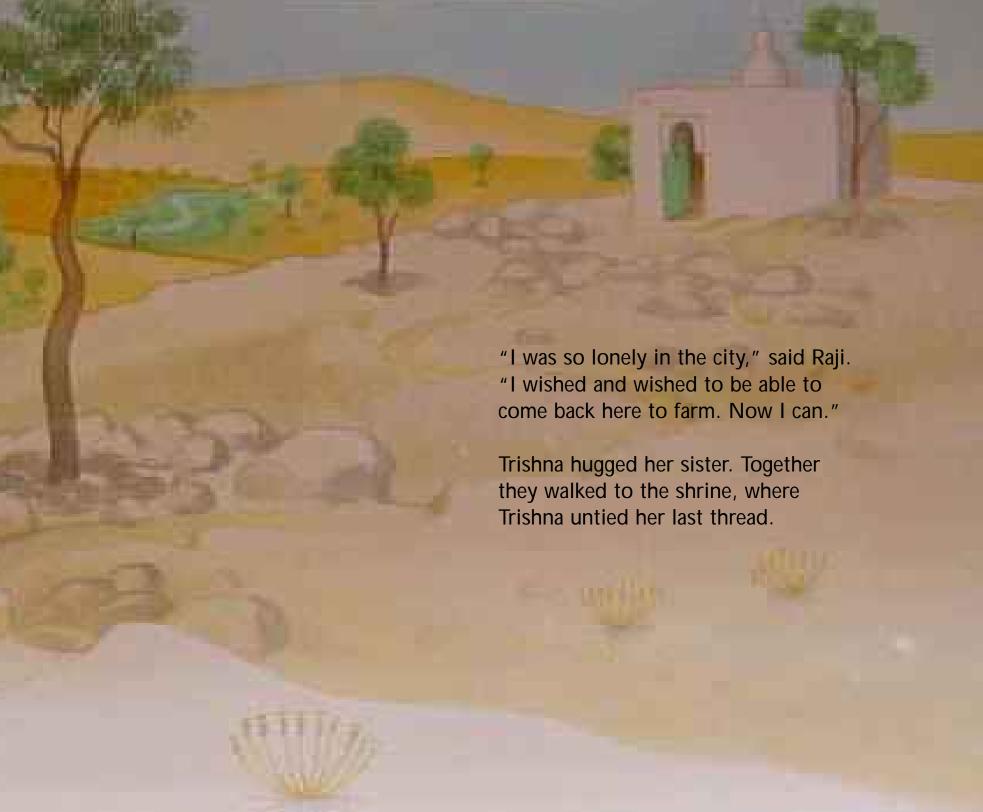
Then one day the clouds puffed together and darkened. Monsoon rain roared down the hillside. pooling behind the dam. Within a few hours, the lake drained down into the sand. The next day, more rain came, and then more. Each time the water collected before sinking underground. Some said, "See? The water's leaving us again." But Trishna replied, "Let's just give it a chance." She knew that if their efforts were working, the water would be collecting in the soils underground and rising closer to the surface.











Some facts and figures on drylands

- 1. More than 40 per cent of the Earth's land surface is desert or "drylands". Drylands are not quite desert, but dry and difficult for humans. More than 2 billion people live in these areas, including half the poor people of the world.
- 2. Although true deserts grow and shrink naturally, drylands can also "desertify"—basically turn to desert—because of the way people use land and water. Today, drylands in more than 110 countries are desertifying or at risk of doing so. Scientists estimate that up to one-third of the Earth's land is desertifying, mostly in Africa, Asia and Latin America.
- 3. Human population has more than doubled in the past 40 years, to 6.2 billion today—and it's still increasing. So we need to grow more and more food. People cut down trees for fuel and also to make more farmland. They try to raise more livestock—usually cows, sheep and goats. But too many animals in one place will eat and trample grass and other plants faster than they can regrow.
- 4. When trees and other natural vegetation disappear, and farming isn't done carefully, topsoil blows away or washes off when it rains. The land becomes less productive and begins to desertify. In many parts of the world, people have to leave their homes because the land has become impossible to farm or graze.
- 5. Many ancient civilizations developed in drylands where people learned to collect rainwater or floodwater and conserve land. "Water harvesting" is at least 9,000 years old. People have harvested water in parts of the Middle East, Pakistan and India, North and West Africa, and North America.
- 6. Traditional ways of collecting and using water have been disappearing as machines for drilling and pumping become more easily available. The new machinery allows people to pump so much out of lakes and rivers that sometimes they dry up. In many places, people also pump far too much from "aquifers"—the rocks and soil underground that hold water like a giant sponge.
- 7. When water gets "mined" faster than rain can replenish it, the water level underground drops. Water levels (called "water tables") are now as far down as 1,000 meters (a kilometre) or even more in parts of Asia and the Middle East. The aquifers in some important food-growing areas are in danger of running dry in the next few decades.
- 8. Most of the water pumped from aquifers goes to irrigate rice, wheat, maize and other crops for people and livestock. Irrigation can waste lots of water, especially when sprinklers spray it into the air, where much of it evaporates.

- 9. In contrast, a check dam like the one Trishna's village builds allows the rainwater to sink and refill the aquifer. If the dam is in the right place, the water table soon rises close to the surface. Then shallow wells and hand-pumps can supply all the water the villagers and their livestock need. In some places, people dig out land for a pond, and line it with mud. Then the check dams create small lakes or ponds.
- 10. An estimated 20,000 villages in India are now harvesting rainwater. Countries such as Mexico, Peru, China and Tanzania are also trying it out. Many nations have tree-planting programmes to keep the soil in place or stabilize sand dunes.
- 11. In addition, people have developed ways of irrigating that use much less water. For instance, farmers in western India fill large clay pots with water and bury them underground, where the water slowly leaks out to the crops' roots. Other places use "drip irrigation," which uses pipes or tubes to release water to the plants' roots one drop at a time.

What you can do:

- 1. Join an eco-club at your school or place of worship—or create one. Together, club members can learn about the condition of the land in your region and practice ways to keep it healthy.
- 2. Use manure and compost to nourish your garden or farm. Making compost—natural fertilizer from plants and waste—can be one of your club activities. Compost helps keep soil healthy and able to absorb water.
- 3. Letting the land rest, or lie "fallow," every few years also helps to keep it in good condition.
- 4. Plant grass and other vegetation to reduce soil erosion. Try to use types that grow naturally in your area.
- 5. Plant trees. Trees reduce erosion, act as wind-breakers, and can give you fruit, nuts, fodder for livestock, and wood for building or fuel. Some trees even take nitrogen from the air and add it to the soil through their roots, creating a natural fertilizer. Check out the best types for your area.
- 6. If you live in a farming community that irrigates, have your club experiment with drip irrigation.

