

SAFARI'S ENCOUNTER WITH FLOODS



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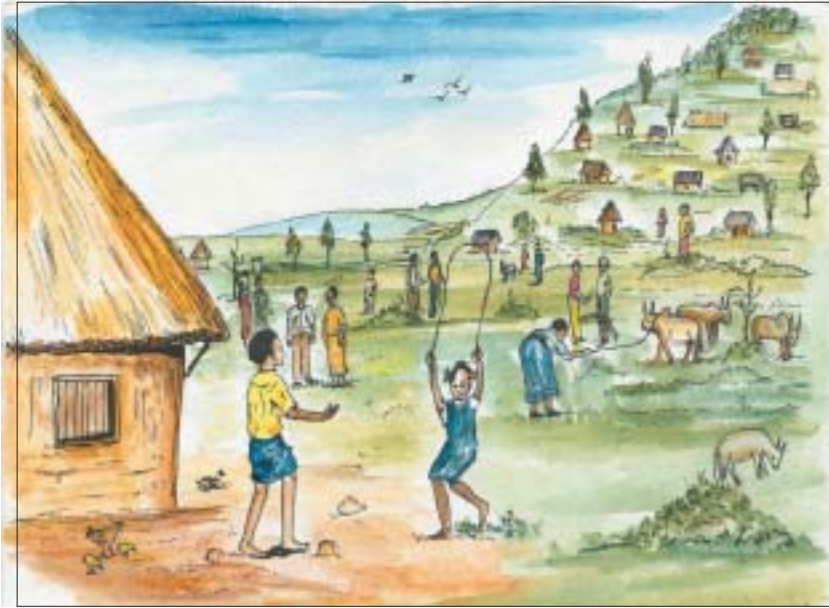
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From a distance, Kilima is a very tiny village next to Simba hill. The clouds in the horizon looked heavy and dark, signaling the start of the long rainy season.

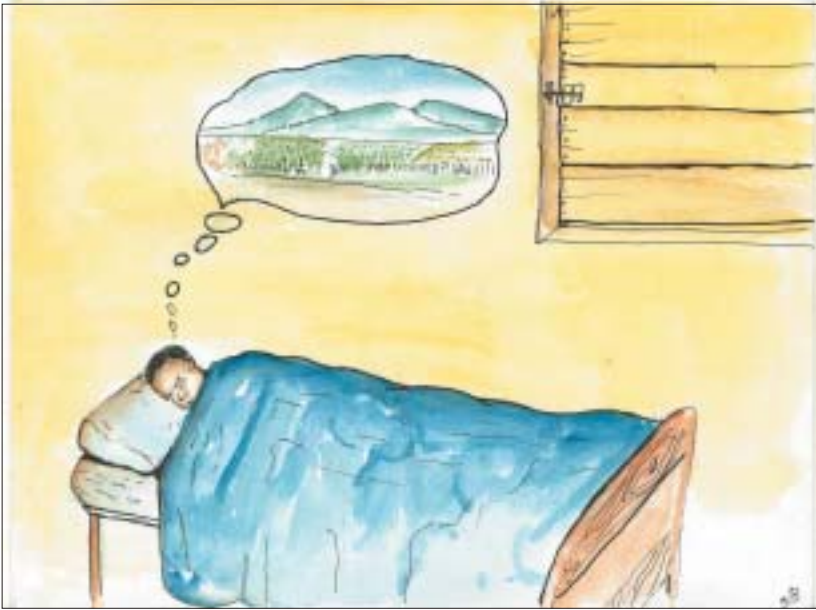
Kilima is also home to a little boy named Safari who lives with his mother, father and little sister Zawadi. Safari has many friends and relatives who live in Kilima. His grandmother lives far away from Kilima in Pacho village.



Every three months, Safari has a school holiday, during which time he enjoys playing with his friends.

One day just after the school holiday began, Safari's mother sprung a surprise on him and told him they were going to visit Grandma.

Safari was very excited. He loves traveling. The long trip would allow him to see the countryside that he never had the chance to.

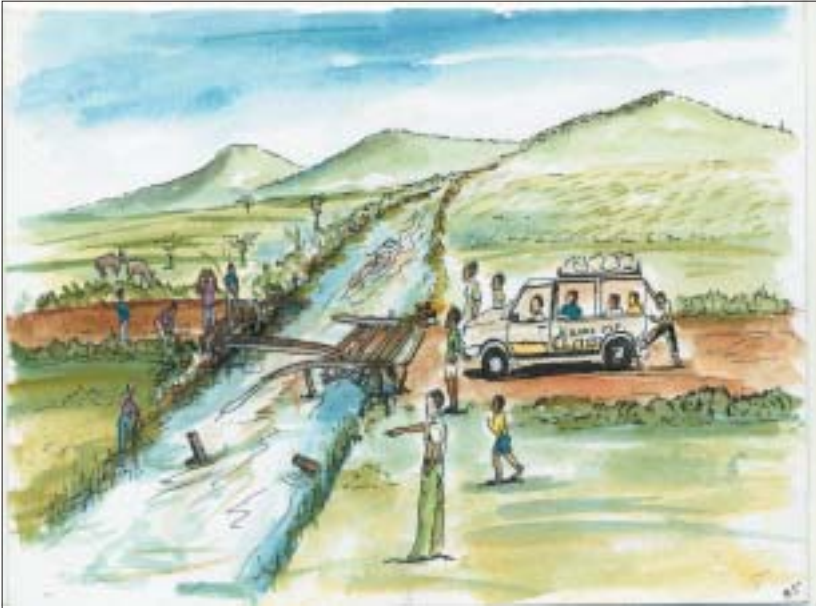


That night, Safari went to sleep dreaming about the journey to Pacho village. The blue glow of the mountains in the evening light and endless maize fields he would see on the way to his grandmother's home.



Early the next morning, when it was still dark, Safari's mother woke up Safari and Zawadi. The three of them set off from Kilima to visit Grandma.

As they walked to the road, the sky brightened a little but the sun remained hidden behind the thick grey clouds. Just as the bus arrived, large drops of rain began to fall. Safari, Zawadi and their mother got in the bus.



As the bus sped along, it rained heavily. Safari tried to look out the window to see the tall mountains and green fields. The drumming rain did not let him see clearly the hills and trees.

Suddenly, the bus slowed down and then stopped. Safari could not understand the reason for the abrupt stop. The passengers finally filed out quietly.

The driver then led the way to observe what had happened. To Safari's surprise, the bridge was damaged and part of it was washed away.



Safari then tried to get close to the bank of the river to get a clear view of what was happening. But, his watchful mother held him firmly and warned him: “Be careful! This is dangerous! The water has destroyed the bridge and you could drown if you fall into the river.”

The river was wide. The flow of the water was very fast. He saw bicycle parts and something that looked like the roof of a house.



In a sad voice Zawadi asked: “When are we going to get to Grandma’s house?” Her mother quietly sighed and looked at her two children, too shocked to think straight.

“We might not make it to Grandma’s home today,” she said as she looked at the raging water.

This did not go down well with Safari who had slept in anticipation of the enjoyable journey to the village to see his grandmother.

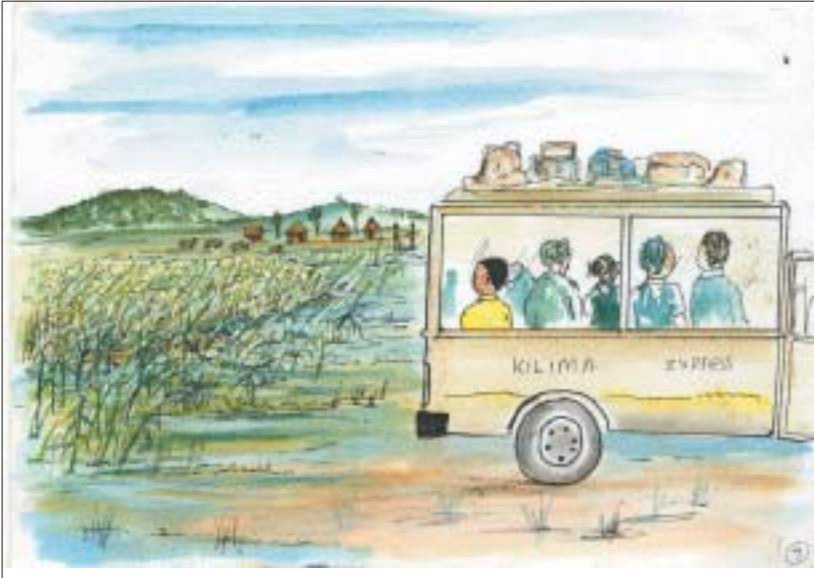
As the mother started the journey back home, the two children followed her knowing the journey had been cancelled until the following day.



Early the next morning, the three - mother, Safari and Zawadi, walked to the road to catch the very first bus.

They boarded the bus and made the second attempt to get to Grandma's home.

This time the driver did not take the same route. On the way, they got to a shallow river and a set of rocks were plied across it. The driver managed to manoeuvre to the other side of the road.

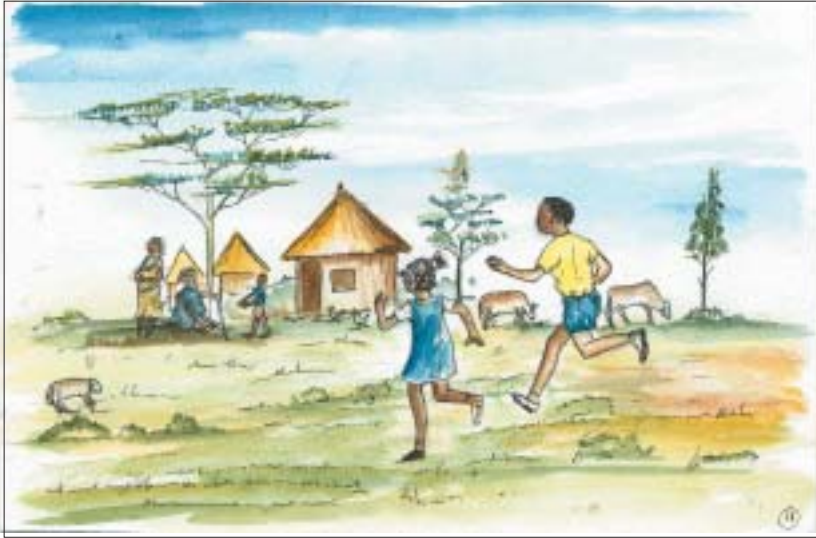


As they sped towards Grandma’s village, he was able to now see the huts that formed homesteads in Pacho village. Safari felt a sigh of relief, his dream was just about to come to true.

He looked out over the maize fields, they looked sick.

“Mother, why is there so much water ?” Zawadi asked, “yet the maize stalks look sick and lying on their side”.

Safari looked and saw that indeed the fields were filled with water. There was water all around. Itching for an answer, the two children looked at their mother.



The bus finally slowed down and came to a stop. Safari, Zawadi and their mother got out.

As the bus drove off, Safari looked up. A short distance away stood an acacia tree, beneath it was Grandma waiting for them and wondering if they were safe at all after the heavy rains of the previous day.

“Grandma, Grandma,” screamed Zawadi as she ran into her grandma’s open arms. Safari too ran after his sister and he too landed into his grandma’s warm hug.



Soon they started competing telling Grandma the story why they did not come the previous day. They talked so fast and Grandma just smiled, nodding her head in satisfaction.

“Grandma, what happened to the bridge? How come there was so much water in the fields on the way here?” Safari asked, as he looked up for an answer.

Grandma looked at the ground pensively, trying to choose the words she could use to explain the concerns raised by her grandchildren, so that they could understand what it was that had happened to the bridge and the fields.

As they walked to Grandma’s house, she began to explain.



“What you saw on your way here were two kinds of floods. One was a flash flood while the other was a river or lake flood.”

“Grandma, what is the difference between a flash flood and a river or lake flood?” Safari asked. “Does a flash flood also occur on a river?”

Grandma smiled and said “A flash flood is a sudden rush of water that speeds down, knocking down everything in its way. Heavy objects like rocks, trees and bridges are not spared. They are pushed down by the strength of the water. Flash floods are very dangerous. They cause a lot of destruction.”

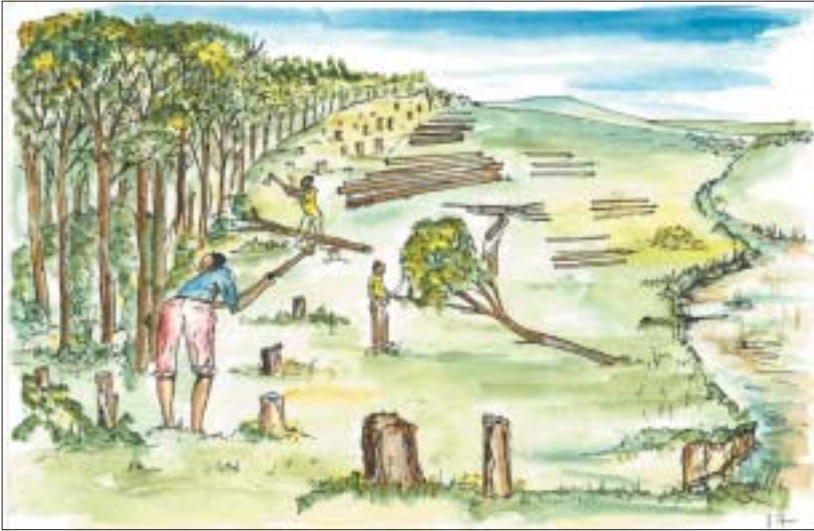


“A river or lake flood, “ Grandma said, “is less violent but equally destructive, very much like a flash flood. Usually river or lake floods occur in flat areas where rising water spills over the banks of a river or lake and into the surrounding flat land.”

“I see, I see”, said Safari. “Are floods always bad?” he asked.

“Yes, floods can cause a tremendous amount of damage to food stocks, crops, roads, houses, infrastructure like bridges, water pipes, power lines, sewerage systems and everywhere else where the water could pass in large volumes,” said Grandma.

She was not over yet when Safari asked another question.

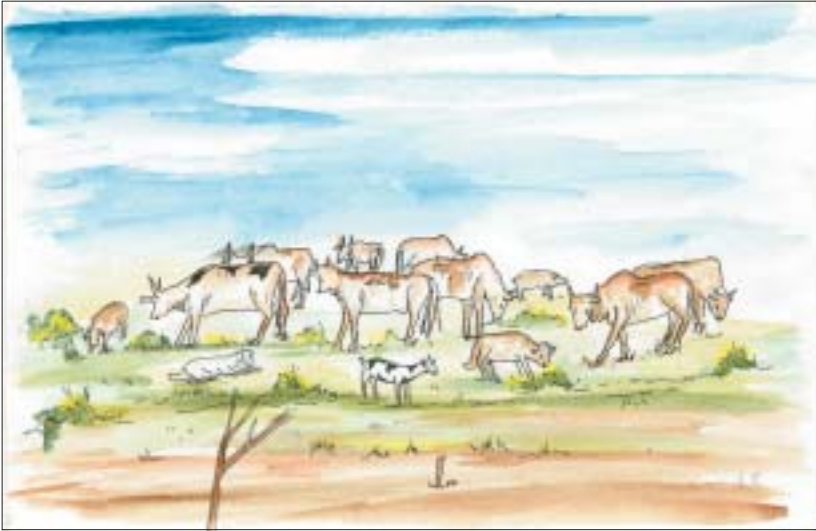


“Grandma, what caused the bridge to collapse and the fields to flood?”

“There are many reasons,” she said, adding: “Human activities can be the cause. They can make a natural occurrence like rain become a hazard which can turn into a disaster, like the destruction of forests.”

“How does this happen Grandma?” asked Safari.

“Oh my little ones, listen,” she said, “trees in a forest suck in rain water to stay alive and healthy. When trees are cut down, water that would have been held by the trees flows freely into the fields and can cause floods.”



“Overgrazing by animals in open fields also depletes pasture and vegetation, just like cutting down trees. Clearing pasture leads to soil erosion. This is because less water is held in the soil,” she said, adding: “Water then moves freely over the land and can damage fields and villages.”



“Another cause for this menace is the construction of houses and roads without considering a proper drainage system.”

“How does this cause flooding, Grandma?” asked Safari.

“Without proper drainage, the amount of water that penetrates the soil is reduced and, as a result, water moves freely over land, causing a lot of damage,” said Grandma.



“Blocking of rivers and improper maintenance of drainage systems can also block water from moving freely. Water then builds up and becomes so heavy that the blockage gives way, resulting into a flash flood.”

As they drew closer home, Safari thought for a moment and asked: “How come flash floods do not occur on every river every time it rains?”

Grandma explained: “The main factor that causes a flash flood is an obstruction in the river that suddenly breaks. An obstruction can be natural but most of the times, it is due to human activity.”



Safari kept quite for a moment and asked again: “If floods are sometimes natural and some other times human made, what can we do to reduce the number of human-made floods?”

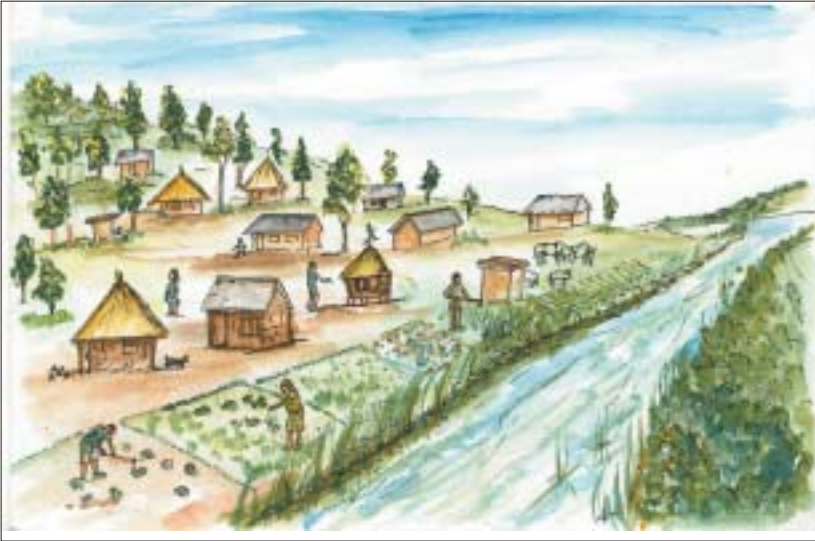
Grandma looked at her grandchildren proudly, knowing that they had understood her explanations. She then attempted to answer Safari’s question.

“We must look at both flash floods and river floods more closely,” she said, adding “To reduce the risk of flash floods, we must reduce the number of obstructions on the rivers to allow the natural free flow of the water.”

“We must make sure that drainage systems do not block the free flow of rain water.”



“We should ensure that dams are built using the correct material that can withstand heavy water pressure. Dams need to have safety valves that will allow excess water to move freely.”



“Homes should not be built nor plants grown along river beds. Flash floods can occur on river beds that have been dry for a long time.”

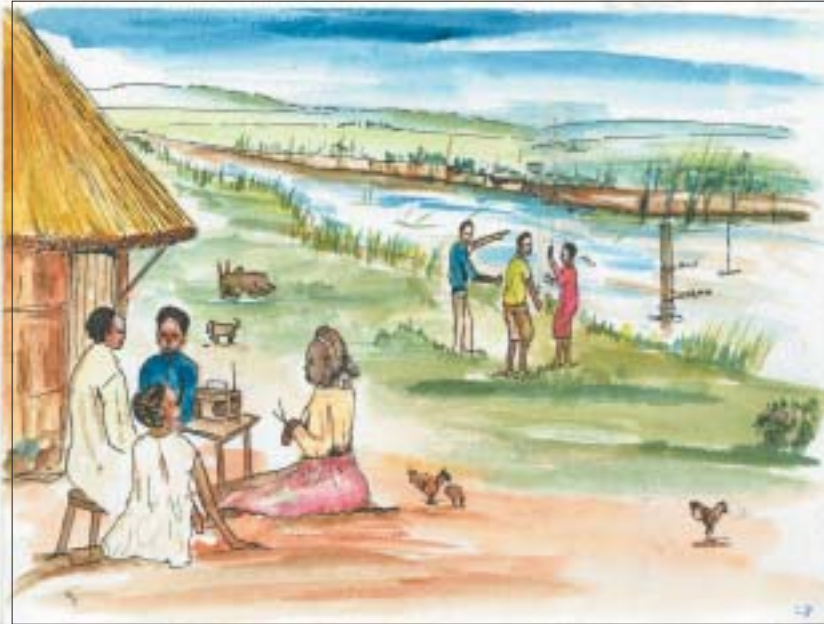
“If you are walking on a river bed and know that it could be raining upstream, move off the area quickly enough before the water comes gushing downstream. You risk drowning.”

“Grandma, how can families avoid the risk of river flooding in their homes?” asked Safari.

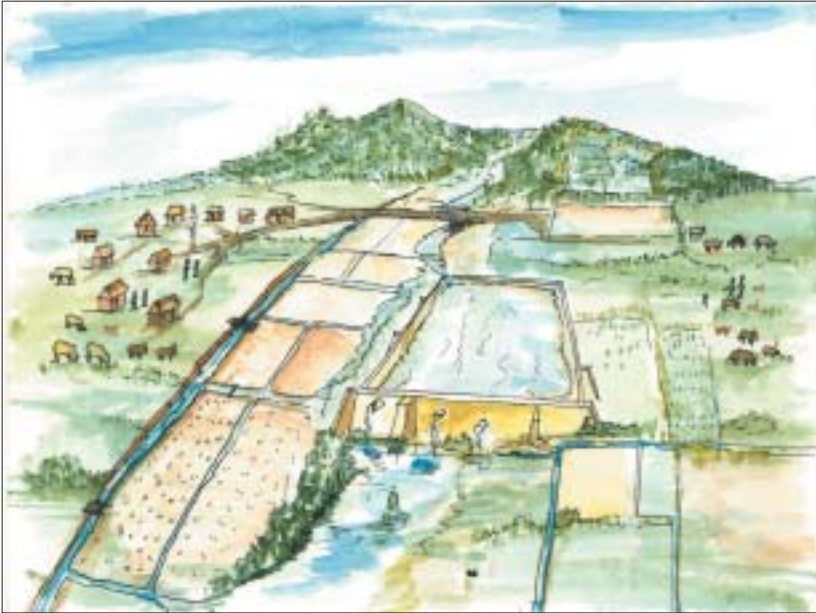
Grandma, who now appeared too tired to answer the string of questions from her grandchildren, summoned her energy and said: “There are several steps individual which families can take to avoid serious damage.”



“First of all, find out where the floods are bound to occur. This can be done by drawing maps that show the low areas where floods are bound to take place. These are the hazardous areas.”



“Secondly, families should monitor the weather and listen to rainfall reports on radio or watch out for warning on television and even obtain information from newspapers. In this way, if you learn from the reports that heavy rains are coming, and if your area could be the one, you could ensure that every one moves to higher ground to avoid being harmed.”



“Thirdly, we should use the land in such a way as to control flooding. Build water channels and drainage systems that will move the extra water away from populated or field areas, so as to prevent damage to human life, property and crops.”

“Build houses in a way that people can be safe from heavy rains and floods.”



As they walked in the pathway leading to Grandma's house, he promised himself: "When I get back to Kilima, I shall make sure that everyone in the village knows about risks posed by floods and what they can do to avoid being washed away or inconvenienced by floods."

Zawadi asked: "Is that your house Grandma?"

As soon as Grandma finished the word yes, Safari's sister let loose her hand from Grandma's grip, raced ahead followed by Safari.

Safari's mother and Grandma smiled at each other and walked behind quietly.



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