

KS3 Geography. Africa.

6. Achieving sustainability.

[CLIMATE CHANGE]

Climate change is causing temperatures to rise - and here in Africa it's happening more quickly than many other parts of the world.

Fifty percent of people living here on this continent make a living from farming off the land, so we're really vulnerable to the effects of changing weather! We need to find a solution!

['GREEN' ENERGY]

Some are straightforward. In the Southern African region, we're seeing high rates of wind and solar power installation. Clean electricity generation not only reduces carbon emission but increases our power security too.

[FARMING]

In some places farmers are finding ways to safeguard their harvests. Some are adapting by planting different types of seed. They come from high-tech genetic engineering research, creating highly drought-resistant plants.

Others are going back to old techniques - because traditional and indigenous plant varieties of the past are well adapted to the local soil and the local weather, and they're more capable of dealing with extreme weather conditions.

But finding long term solutions can often be complicated. How can we protect our ecosystems and protect the needs of our people, at the same time? It's not easy!

[ELEPHANTS]

For example, the African elephant. It's an endangered species and it's protected across the continent. But in areas of Botswana and Zimbabwe, elephant populations are high, making life very dangerous for local farmers. Wild elephants are dangerous - they're deadly!

So people have to find new ways and find solutions, like placing bees on their land. Because elephants are scared of bees - so a lot of the time, they stay away!

[CAPE TOWN]

I'm here in the Cape - a very special part of the world! It has a totally unique ecosystem, with plants which don't grow anywhere else on Earth! But as the city of Cape Town has expanded, it's taken up a lot of land...

[BABOONS]

And that's not just a problem for our rare plant life. Life has become more complicated for the baboon troops who live here, too.

Baboons are pretty smart, and they've learned that human food can be very tasty! They can easily open the doors of houses and cars, and when they're stealing food, they can be very dangerous!

We have a lot of tourists coming here, too! They're a really important source of income for local businesses. Tourists love baboons! They love taking photos and feeding them! They don't know that feeding them is illegal - and just makes their behaviour worse.

[SOLUTIONS]

These are problems which require local people to get involved. For example, we have staff and some local volunteers who spend their time following baboons around and stop them from going into residential areas. This is a way of trying to protect the wildlife...and the people who live here.

[SUSTAINABILITY]

It's a good example of how any sustainability project needs to be *economic, social* and *environmental*. And it's difficult to find solutions that work in all three ways.

[NON-NATIVE TREES]

Here's a project that's working well. These people are working really hard to get rid of trees. It may not seem like it...but it's actually good for the environment! Trees that naturally grow here are species which need very little water. But we've ended up with a lot of non-native species: they're thirsty, and they suck up a lot of water from the ground in an area where we already have water security problems!

Clearing away these trees over a wide area saves billions of litres of water every year and it keeps the rivers flowing. It's also created hundreds of jobs for local people and it's made space for indigenous trees. It truly is a sustainable solution!