

Building resilience to climate change

Rapid change is underway across our planet

The latest generation of satellite observations is providing us with a planetary intelligence system and depth of knowledge about changes on Earth that could never have been imagined just a decade ago. Variations in salinity, soil moisture, air quality and land use and temperature can be monitored accurately and reported on a near-real time basis. By coupling this with big data and localised information from the internet of things, social media and citizen science, we can now visualize the ever growing imprint of climate change.

And what this is telling us is that parts of our natural world and some societies are already losing their resilience or ability to withstand the shocks of rapid climate change and socio-economic development.

Rediscovering the roots of resilience

So where does resilience come from? Millions of years ago in the Great Rift Valley of east Africa, our Palaeolithic ancestors were already able to withstand periodic shortages of food, but when the climate cooled 5-10 million years ago, causing the rain forests to shrink and woodland habitats to expand, early hominins responded by developing the ability to chew more forcefully, and becoming bipedal. Standing upright meant using less energy to harvest food and gave them the ability to travel over longer distances to “find dinner”. The age of humans has its roots in resilience and a unique talent for innovation and problem solving and led to the hunter-gatherer’s ability to thrive across the world.

Today, hunter-gatherers and semi-nomadic peoples such as the iconic Maasai tribe, continue to survive climate change. The Maasai way of life and culture are highly attuned to a constantly changing environment with regular periods of food scarcity. Their sustained resilience is based on social co-operation, food sharing, extended families and a well-established form of egalitarianism. In the highly-cooperative world of the Maasai, not sharing or being open is the difference between life and death in the face of today’s extreme droughts and floods.

How to build resilience to climate change in a modern society?

From the perspective of modern society, many traditional peoples are essentially like professional athletes. Their livelihood requires them to be physically active and mentally alert and they certainly lead more demanding physical lives compared to the majority of post-industrial humans. Yet many hours are also spent “busy doing nothing” - thinking, talking and resting, helping to build a strong sense of community identity. This, combined with a deep understanding of the environment and natural resources, has helped them maintain an awareness of how to cope with external changes, remain resilient to environmental shocks and manage change in the natural world.

This talk explores how we can draw on this diversity of knowledge to recreate a more resilient world.