

# Encouraging locally-led climate change adaptation

Thank you.

Before I begin the speech I'd prepared for today, I'd like to start by saying that this week, we are expecting significant flooding here in England.

The ground is saturated, previous rainfall and snowmelt means river levels are high, and now a band of heavy rain coming in from the Atlantic threatens parts of Yorkshire, Derbyshire, Lancashire, Greater Manchester, Merseyside and Cheshire.

Today, my speech will be about global climate trends, and how we prepare in the medium and long terms...

...but this week serves as a reminder that those trends are made up of individual events in local areas.

Flooding is often devastating, sometimes fatal, and while I hope we don't see that here this week, we must always be ready.

The Environment Agency is working with partners across the country to reduce the risks, and we are ready to respond.

We are operating flood defences and flood storage reservoirs, and have put up temporary barriers.

If you are listening in England, I urge you to sign up to our flood warnings and check the latest safety advice – all available for free on the government website.

This information could save your life.

Now, I'd like to talk about history.

Just over 200 years ago – in 1812:

- Napoleon introduced the metric system, and invaded Russia;
- the United States was at war with Britain;
- the first edition of Grimm's Fairy Tales was published;
- an earthquake destroyed Caracas in Venezuela...

...and, the Lower River Otter in the South West of England, was separated from its floodplain to create farmland.

You might have heard about the River Otter, as it is home to England's first wild population of beavers in 400 years...

...but the realignment of the lower part of the river is probably not – for you

– one of the key events of 1812.

Yet, it is an example of how we are still rowing in history's wake.

The artificial alignment of the river increases the instance of water pollution from cattle slurry and fertilisers...

... and now, severe and regular storms, brought by the climate emergency, threaten to more regularly overwhelm the embankments...

...as happened in 2012 and 2018.

Ever since 1812, the river has been trying to reconnect with its floodplain – as nature would have it.

To address this, the landowner, Clinton Devon Estates, alongside the Environment Agency, and East Devon Pebblebed Heaths Conservation Trust, have created a £15 million scheme to help the valley adapt to climate change, and create an internationally important wildlife reserve.

Embankments that separate agricultural land and a cricket club from the river will be breached to allow land to flood at high tide.

The move will involve over 150 hectares of the catchment, including 55 hectares of saltmarsh and mudflats that provide habitat for wading birds, and there will also be areas of reedbed and grazing marsh.

The project is partnered with another in the Saône Valley in France, and if successful the model will be rolled out further.

It is a good example of how locally-led adaptation immediately connects to international collaboration and partnership.

The host of this conference, Saleemul Huq, [director of the International Centre for Climate Change and Development], and Clare Shakya, [director of International Institute for Environment and Development's Climate Change research group], recently wrote that:

"The COVID-19 pandemic has made clearer than ever the importance of engaging communities in responses.

"COVID-19 interventions were most effective where people were already connected vertically to policymakers, technical support and finance, and horizontally to develop and share collaborative solutions and learnings across communities and across sectors.

"Together, we can learn from this experience to design a green, inclusive and resilient recovery."

While we search for new technologies to meet the challenges of the coming century, many of the solutions we need are already understood by local communities.

And... are all around us, in nature.

Last week, at the One Planet Summit in Paris, the UK Prime Minister committed £3 billion for supporting nature-based solutions to climate change, and protecting biodiversity over five years.

The funding will be allocated from the UK's existing commitment of £11.6 billion for international climate finance.

It will deliver change in protecting biodiversity-rich land and oceans, transitioning to sustainable food production and supply, and tackling climate change, pollution and desertification.

The Global Commission on Adaptation – to which I am the UK Commissioner – will discuss this further at the Dutch hosted Climate Adaptation Summit next week, when it brings attention to nature's largely untapped role in adaptation.

The work of the Commission to develop a set of 'locally-led adaptation principles' will help ensure that nature-based solutions deliver local resilience to climate impacts.

The UK commitment builds on the release of the Government's 10 point plan for a green industrial revolution, and its adaptation communication, released in December.

The organisation I Chair – the Environment Agency – is delivering these ambitions with local communities in England.

And, we look forward to sharing expertise with, as well as learning from, international partners in the run up to COP26.

For example:

Restoring peatland has many benefits, like reducing downstream flood risk.

It slows the flow while filtering water, meaning water companies can use less chemical treatment.

Working with local authorities, businesses and community groups, we have created 531 hectares of blanket bog, and restored a further 2,148 hectares across England in 2019/2020.

These projects also lead to an increase in biodiversity to promote our native species, and help store carbon to mitigate the impacts of climate change.

The Environment Agency has also published a National Strategy for Flood and Coastal Erosion Risk Management to 2100.

It will seek to adopt a range of innovative flood and coastal resilience measures: from the construction of hard flood defences, river channel maintenance and sustainable drainage systems, to nature based solutions, property level resilience and alternative land management practices.

But, crucially, it does not operate a “top down” approach: we will work with local communities to identify the best combination of measures that tackle the unique risks experienced in specific places.

We rely on local intelligence for our warning and informing on flood risk.

I know this is critical for you in Bangladesh, where deaths from tropical cyclones declined more than 100-fold in 40 years, from 500,000 deaths in 1970 to just over 4,000 in 2007.

This achievement was made possible by developments in early warning systems, cyclone shelters, evacuation plans, coastal embankments, reforestation schemes, and increased awareness and communication.

It is just another example of how local experience can inform global responses.

In a speech to Columbia University in December, UN Secretary General António Guterres said:

“The impacts of climate change and environmental degradation fall most heavily on women. They are 80 percent of those displaced by climate change.

“But women are also the backbone of agriculture and key stewards of natural resources. They are among the world’s leading environmental human rights defenders.

“As humankind devises strategies for natural resource governance, environmental preservation and building a green economy, we need more women decision-makers at the table.”

Dr Tamsin Edwards, a climate scientist at King’s College London, has said:

“When women stay behind [after climate shocks] to care for children and the elderly, and suffer increases in domestic violence, trafficking and child marriage: we cannot ignore the connection between gender inequality and climate impacts.

“But the story to tell here is not just the suffering of women. We have an unprecedented chance to design a better future. We know that policies that reduce climate change or its impacts can reduce gender inequality, and vice versa, as long as they are truly designed in consultation with women.”

In December, I put my name to an open letter from the campaign group “She Changes Climate” to the UK Prime Minister. It said:

“Inclusion of women also leads to stronger outcomes on implementation. Evidence shows that involving people in decision-making who will be affected by these decisions influences policy support among the public.”

The data shows organisations that embrace gender diversity get better financial results and environmental outcomes.

This applies to locally led adaptation efforts as much as it does to global politics.

For instance: in Niger, where farmers have led reforestation efforts by boosting crop yields, improving soil fertility and lifting communities out of poverty...

...Tree cover has soared ten-fold and the daily time spent gathering firewood – a task that mainly falls to women – has dropped from three hours to 30 minutes.

Of course, in order to scale up such efforts you need a lot more money, and political will.

It is important to emphasise the role that private finance can play building climate resilience in the economy through greater financial disclosure on climate risks.

The Coalition for Climate Resilient Investment was launched in 2019.

It represents a commitment from the global private sector towards the development of practical investment solutions to physical climate risks.

By pricing climate risks (particularly for infrastructure) and including them in upfront financial decision-making, CCRI's aim is to incentivise a shift towards greater resilience.

It has grown rapidly to 63 members, with more than \$10 trillion in assets under management.

This is good, we need to be talking about trillions of finance – not billions.

The CCRI will be an important part of the adaptation & resilience and finance workstreams for COP26.

It will support the Taskforce for Climate-related Financial Disclosures, and work alongside the Indian-led Coalition for Disaster Resilient Infrastructure.

Ahead of COP 26, the UN launched a race to zero emissions.

The race to resilience has also begun.

We need to point it towards the trillions of finance

Kristalina Georgieva, the Managing Director of the International Monetary Fund, has said:

“Power is the ability to influence the world around us, but more than anything it means responsibility to do the right thing.”

I began this speech by talking about decisions made in 1812.

In another 200 years' time, I hope that the leadership shown at COP26 will be lived and enjoyed, much more than it is debated by historians.

That leadership must be informed by the expertise of men and women living in the world as it is now.

A fast-changing world.

The impacts of that change are already being managed by local communities.

If we are to do the right thing, their voices need to be heard.

Thank you.