



A photograph showing several people riding bicycles through deep floodwaters. The water is murky brown. The bicycles are partially submerged, and the riders are wearing various casual clothing. The scene illustrates the impact of flooding on daily life.

Degrees of separation

Climate change:
Shared challenges
Shared opportunities

CONTENTS

Page	2	6	8	10	12	14	18	22	24
Chapter	Degrees of separation	Impacts of climate change	From challenge to opportunity	Tackling climate change	Who's taking on the challenge?	Why is climate-smart development important?	How does preparing for climate change help development?	How is DFID helping people to prevent and prepare for climate change?	In a nutshell
									
	John, Kenya Trade drying up	70m The number of Africans who by 2080 could suffer from devastating floods as a result of climate change Intergovernmental Panel on Climate Change		DFID is investing £24 million to research how best Africa can prepare for climate change		Renewable energy Lobbying around food miles and the Kenyan fruit and vegetable industry	Drought-resilient crop strains		
	Yasmin, Bangladesh The power for a cleaner future	35m The number of environmental refugees in Bangladesh by 2100 if the ocean rises according to predictions Christian Aid		DFID is investing £300 million in Bangladesh to support the poorest people in vulnerable places		Training to be a solar entrepreneur	Protecting homes from floods by planting trees		
	Sarah, UK Small actions for a bigger effect	£3bn The impact on the economy of the 2007 UK floods Association of British Insurers		Action to address climate change: preventing further global warming, and preparing for the inevitable effects		Offset energy funds solar entrepreneur training in Bangladesh Buying Kenyan fruits and vegetables	Protecting homes from floods by replacing tiled patio with lawn		

“
Confronting climate change is our shared challenge. Dealing with it could be our shared opportunity. Tackling it must be our shared achievement.
”

Douglas Alexander, Secretary of State for International Development

“Forget about making poverty history. Climate change will make poverty permanent.”

Nazmul Chowdhury,
Practical Action

Only a few degrees of increased temperature separate us from dangerous climate change. The consequences of this will be devastating, especially in poor countries where poverty will increase and development will go into reverse.

In some ways global challenges like poverty and climate change can be seen as great dividers – exposing the degrees of separation between people who can afford to cope and people who cannot.

But equally, they can bring distant communities together, united against a common threat. Although it is the world’s poorest countries that face the greatest challenge, we live in an increasingly globalised world; we’re all in this together. Tackling poverty and climate change is a priority for us all.

Take John Wekesa, Yasmin Rezwan and Sarah Burnell for example, who are based on real people from Kenya, Bangladesh and the UK. Although they live separate lives a great distance from one another, they all have something in common: they are looking to tackle the impacts of climate change and to improve their lives.

Through their stories it becomes clear that their situations, the challenges they face and the opportunities they take are increasingly interconnected, despite living thousands of miles, and seemingly worlds, apart. By exploring the links between these individuals we discover that in fact, the degrees of separation between people around the world, and between them and global issues such as poverty and climate change, are smaller than we might expect.

Our narrators, John, Yasmin and Sarah are fictional characters, but their stories are based on experiences lived by real people in Kenya, Bangladesh and the UK.

75-250m

The number of people in Africa who are projected to be exposed to increased water stress due to climate change

Intergovernmental Panel on
Climate Change

JOHN WEKESA TRADE DRYING UP

40
KENYA

WORKS:

Running a fruit and vegetable export company in Nairobi. John’s business has grown quickly; exporting fruit and vegetables to large supermarkets in the UK has enabled him to make a good living, and to support his family on their small farm in a rural township. Recently however, John’s business has been struggling.

GROWING PROBLEMS

More frequent and lengthy droughts where John’s suppliers are based have made sourcing suitable produce for export harder. When the rains do come, they wash away the top soil from the farms, making the next round of planting more likely to fail.

Heavy deforestation for wood fuel in the area is making this worse: when

it’s hot the soil dries out faster, when it’s wet there is nothing protecting it from downpours.

The unusual weather patterns aren’t just affecting farms. Water levels in the dams that supply Nairobi with hydro-electric power are at an all-time low from the extended dry spell. More frequent power cuts are interrupting John’s business on a daily basis.

MILES AWAY

At the other end of the chain, worries over ‘food miles’ – where UK consumers are concerned that importing food from abroad contributes to climate change – has led them to favour local, seasonal products over his. This reaction has a negative impact on his business, but John knows that the knock-on effects it will have on the small farmers that supply him will be even greater. On their behalf, John is considering how best to encourage UK consumers to make a more informed choice.



YASMIN REZWAN THE POWER FOR A CLEANER FUTURE

28
BANGLADESH

WORKS:

In her family's small road-side restaurant, Yasmin hopes to send all her children to school, but often earnings from the family restaurant aren't enough to buy the school books and uniforms her children need. She dreams of a secure income that will enable her to plan ahead and invest in a safer future for her and her family.

DIRTY POWER

There's no electricity supply to the restaurant, so light comes from burning kerosene lamps. Combined with the wood-burning ovens, this creates a hot, smoky atmosphere which both turns customers away, and means the family suffer from skin and chest complaints.

Yasmin knows a cleaner power supply would not only improve her family's health, but would also enable Yasmin to install a television showing sport, which she knows is a crowd-puller. But her options are limited: wood fuel is in short

supply due to deforestation and the alternatives are unaffordable.

STORM WARNING

Rainstorms are more frequent and intense than Yasmin remembers from her childhood. During the heavy monsoons, she struggles to protect the restaurant from flooding from the nearby river. One bad flood could wash away the business, and with no savings to draw on, she doesn't know how they would recover.

18%

The portion of Bangladesh that will be submerged by 2100, according to predicted ocean rises. This would create 35 million environmental refugees

Christian Aid

£3bn

5

The 2007 floods in the UK had an impact on the economy estimated at over £3 billion

Association of British Insurers

SARAH BURNELL SMALL ACTIONS FOR A BIGGER EFFECT

35
UK

WORKS:

As a loss adjuster for the insurance industry.

Investigating local residents' insurance claims has made Sarah more aware of the impacts of flooding in the UK. However, having recently followed the news coverage of floods in Bangladesh, she's concerned that people there don't have access to the kind of insurance and support she provides. She now gives some money each month to help

Bangladeshi people prepare for and deal with the heavier monsoon rains.

THINKING GLOBAL

Sarah knows a little bit about climate change, and thinks the extreme weather in Tewkesbury could have been connected. She's become increasingly aware that her contribution to climate change is larger than it should be, but was surprised to read that her annual carbon footprint is over 35 times larger than those of most Kenyans.*

She's concerned that, through her contribution to climate change, her lifestyle could be having an indirect

impact on other people. She wants to change that, and is exploring ways to cut down her own impact on the climate.

ACTING LOCAL

Sarah's partner, Paul, runs a small haulage firm. Lately, rising fuel costs have had a real impact on his business, and are forcing the firm to think hard about the fuel efficiency of their fleet and making each lorry load as efficient as possible. Reducing fuel consumption is another way to tackle climate change so Paul and Sarah feel they're both making some contribution.

*World Development Movement

THE IMPACTS OF CLIMATE CHANGE ON DEVELOPMENT

600m
400m
1.8bn
1%

☞ The impacts of climate change will fall disproportionately upon developing countries and the poor persons within all countries, thereby exacerbating inequities in health status and access to adequate food, clean water and other resources.

R. K. Pachauri,
Chairman of the Intergovernmental Panel
on Climate Change

Climate change is already beginning to affect the world's poorest countries and we are only a few degrees of global warming away from far more serious consequences, which will impede, or even reverse, development. Further climate change will prevent poor people from lifting themselves from poverty.

600 million
400 million
1.8 billion

By 2080, an extra 600 million people worldwide could be affected by malnutrition. An extra 400 million people could be exposed to malaria. And an extra 1.8 billion people could be living without enough water

**Intergovernmental Panel on
Climate Change**

1% global
GDP per
annum

The amount that must be invested in order to avoid the worst effects of climate change. Failure to do so could lead to global GDP being up to 20% lower than it otherwise would be

Stern Review

FROM CHALLENGE TO OPPORTUNITY

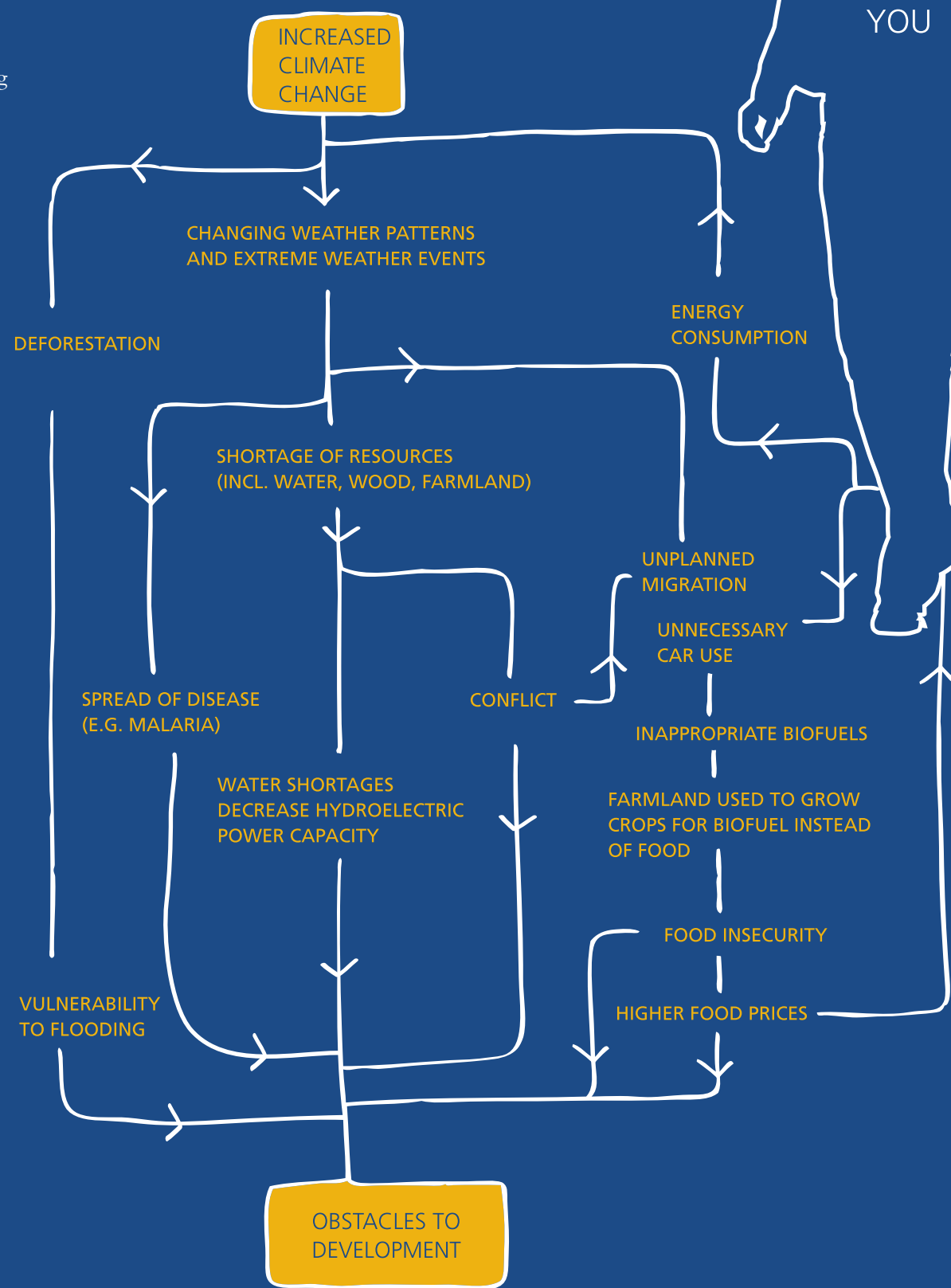
Shared Challenge

Climate change and development are inextricably linked. What's more, the linkages affect us all.

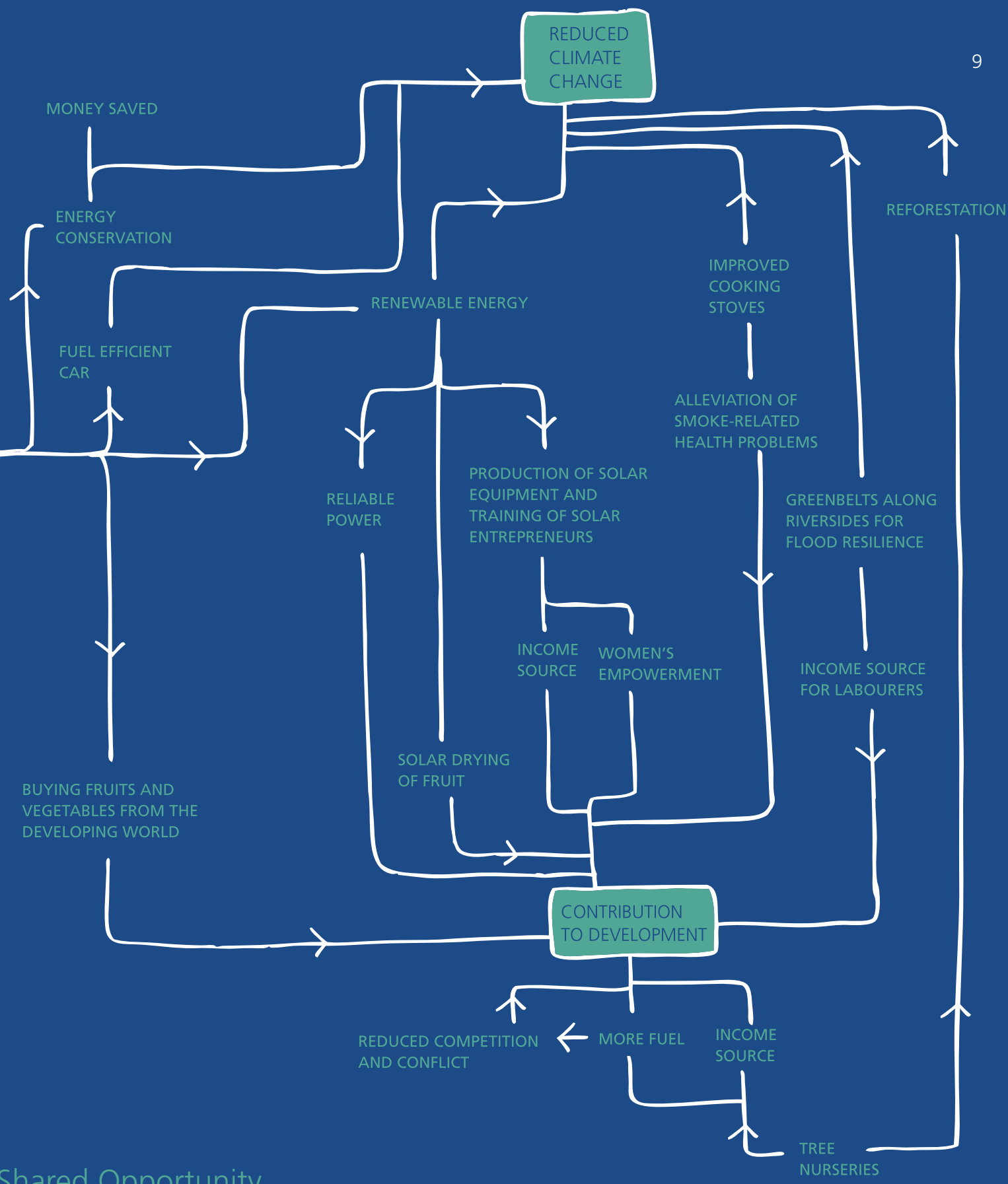
In rich countries, we contribute more than our fair share towards climate change. Although developing countries will be hit hardest by the consequences of this, John, Yasmin and Sarah demonstrate that we live in a connected world. The diagram below shows how

our contributions to climate change impact on developing countries in a way that will have a knock-on effect on us all.

Climate change poses a universal threat to development and people's livelihoods, all over the world.



YOU



Shared Opportunity

However, this connectivity also means that if we can alter our own behaviours to be more climate-smart, we can reduce the impacts of climate change and in doing so, help poor countries to develop.

The knock-on effects of this will contribute to a more optimistic future: we all have the opportunity to make changes that will be positive for everyone.

This diagram only shows some of the many links between you, climate change and development.

TACKLING CLIMATE CHANGE

Action to address climate change falls under two broad themes: preventing the worst extremes of it happening, and preparing for the inevitable effects that are already too late to prevent.

Prevent

Preventing further climate change is vital to securing long-term growth for developing countries. Achieving it depends on action from people, organisations and governments all over the world, to reduce global levels of carbon emissions. Because people in rich countries emit the most carbon, they must lead the way in securing a global agreement to tackle climate change.

Prepare

The impacts of climate change are already evident, especially in developing countries. Before poor people can work to prevent further climate change, they must be able to predict, prepare for and protect themselves against current impacts. However, preparation alone will not tackle climate change. The more we can do to prevent climate change, the less will have to be done to prepare for its impacts.

WHAT IS DFID DOING TO TACKLE CLIMATE CHANGE?

DFID’s main aim is to secure a global deal that will enable developing countries to grow in a climate-smart way and to help the poorest people prepare for climate change.

Preventing further climate change so that development can take root is essential. DFID is aware that, as poor countries develop their economies, their energy needs grow. In order to make sure they can sustain their growth, developing countries must look to develop in a climate-smart way. Simultaneously, we must help the poorest people around the world prepare for the inevitable impacts of climate change.

Achieving these aims will deliver rewards for developing countries well into the future.



Children play at night beneath a solar-powered electric light in a village in Mali

£800 million 10% £100 million £24 million

The value of the UK’s International Environmental Transformation Fund, jointly managed by DFID and Defra. The fund is for the purposes of reducing poverty through environmental protection and helping developing countries respond to climate change

DFID has committed up to 10% of humanitarian aid towards helping communities reduce the impact of natural disasters

The amount of money DFID has committed to climate change research. DFID is establishing a network for sharing climate change knowledge, which developing countries can access

As part of DFID’s commitment to climate change research, £24 million is being provided to research how best Africa can prepare for the impacts of climate change. This is set to be expanded to Asia and Latin America with a further £50 million

WHO'S TAKING ON THE CHALLENGE?

Making sure poor countries are protected against and prepared for increased climate change is a big challenge. Tackling climate change needs a global framework of support. This will require urgent attention, agreement and action from global leaders, as well as a wide range of different organisations and individuals all over the world.

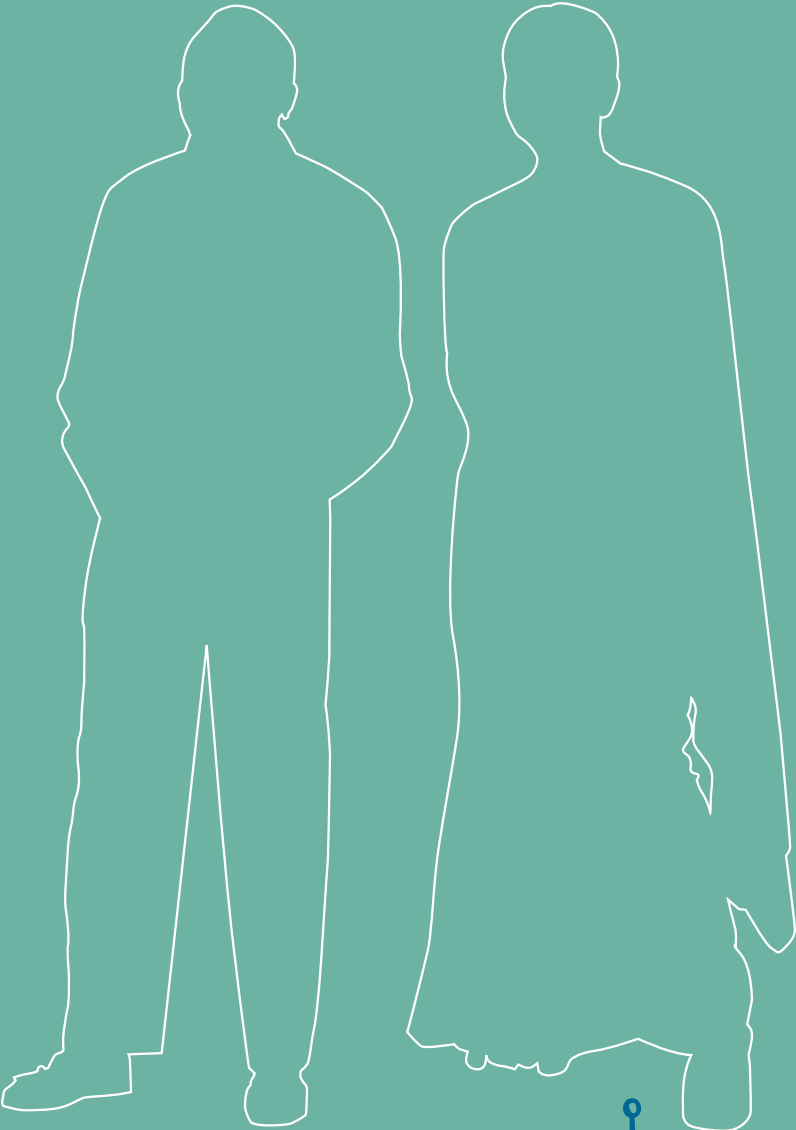


International development banks

“We are putting the environment and tackling climate change at the heart of our work.”

Researchers and academics

“We are helping to research what the impacts of climate change will be in different parts of the world, so the world’s poorest people can best prepare.”



John

“I am helping lobby the Kenyan government and international trade bodies to prove that fruit and vegetables grown in Kenya can be more climate-friendly than those grown in the UK.”

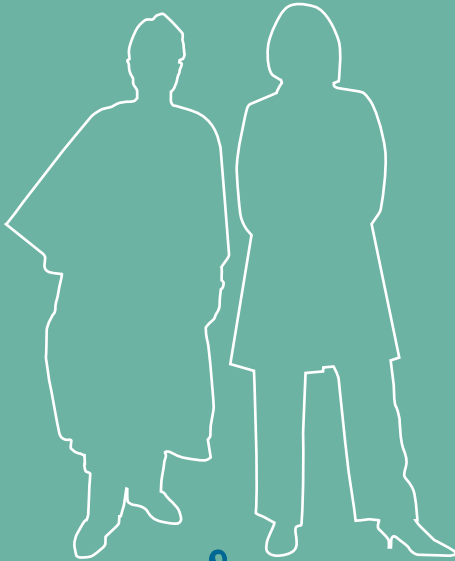
Yasmin

“Funding has helped me train as a solar entrepreneur. Not only am I earning a good wage, but I’m also helping my community to develop in a climate-smart way.”



Sarah

“I’m looking at how I use energy in my home and at work to cut my contribution to climate change.”



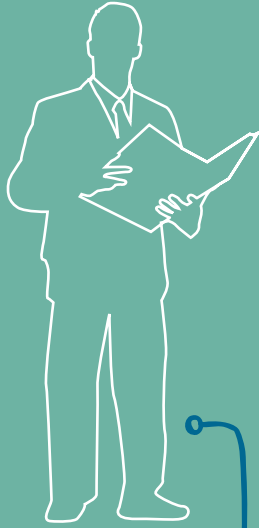
Developing country governments

“We are engaging with DFID on the issues and they are helping us build our capacity to negotiate on the international stage. In return, we are helping them understand what we need most from the negotiations.”



NGOs

“We are putting pressure on governments to take action on climate change. We are also running programmes to address climate change and alleviate poverty all over the world.”



DFID project partner

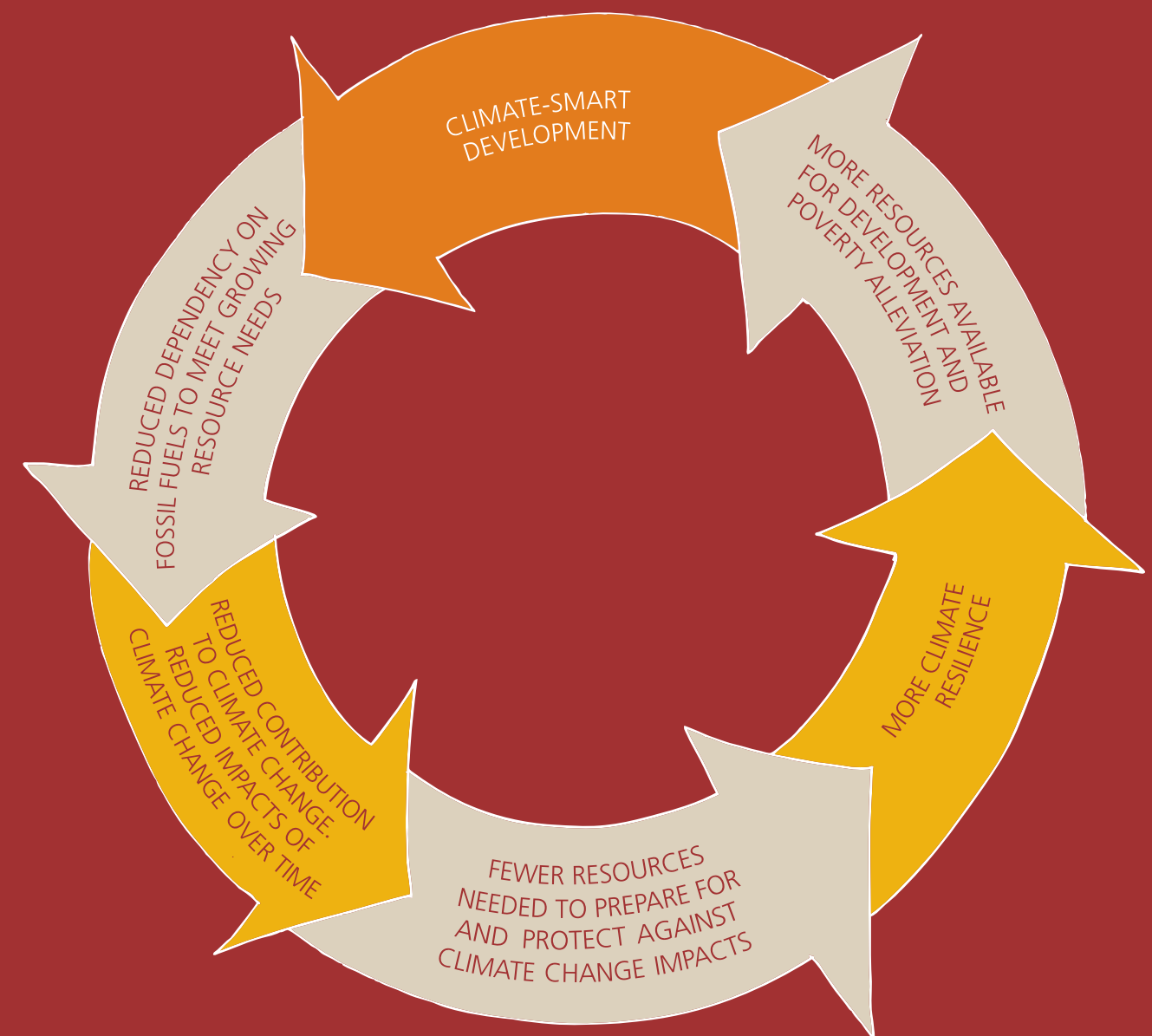
“We are integrating climate change into the way we approach development. Where we can, we are promoting climate-friendly options to enable the people we work with to prepare for and prevent climate change.”



The developing world needs to stop viewing climate change solely as an environmental issue, and begin approaching it as a development concern. Our changing climate is a result of unsustainable development practices. And it is a serious threat to human progress everywhere.

Ban Ki-moon,
UN Secretary-General

WHY IS CLIMATE-SMART DEVELOPMENT IMPORTANT?



Heavy dependence on fossil fuels poses risks to development because fossil fuels are not only limited in quantity and going up in price, but using them contributes to further global warming which will hinder development.

Developing in a climate-smart way means reducing dependency on fossil fuels and their contributions to climate change. Climate-smart development will help developing countries sustain their growth and secure a route out of poverty.

80%

Developing countries will generate nearly 80% of growth in world energy demand between now and 2020

DFID

CLIMATE-SMART DEVELOPMENT



Degrees of separation

Impacts of climate change

From challenge to opportunity

Tackling climate change

Who's taking on the challenge?

Why is climate-smart development important?

How does preparing for climate change help development?

How is DFID helping people to prevent and prepare for climate change?

In a nutshell

John, Kenya

John believes that money does grow on trees. Deforestation is damaging the environment and hurting his business because people believe trees are more valuable as firewood or timber than as forests. With DFID's help, John is demonstrating the profitability of protecting trees.

He's also involved in a project planting fast-growing trees for fuel – turning trees into a cash crop, rather than a disposable resource.

The press coverage of John's lobbying work around food miles has attracted the attention of a UK fair-trade group. With their support, he is trialling new efficient solar drying technology – where fruit is dried in the sun, which preserves it and enables it to be exported by sea with less damage to the environment.

Yasmin, Bangladesh

Prospects are looking up for Yasmin and her family. She's enrolled on a course to be a solar entrepreneur, where she'll be trained to sell, install and repair home solar panel systems. The programme is funded by carbon offsets from people in the UK.

Yasmin has not only been able to equip her own restaurant with a reliable power source for a TV and earn a steady

income, but is also able to help her local community develop in a climate-smart way.

With her increased income, Yasmin has also invested in a smoke-free cooking stove that uses less charcoal. It has improved the family's health and helps make their restaurant more attractive to customers.

Sarah, UK

Sarah's concerned about her impact on the climate (and the impact climate change is having on her wallet). To save money, and carbon, she's decided to cycle to work instead of driving. She's also considering taking the train to France for her holiday, rather than flying.

To find out how to be more climate-smart she has calculated her carbon footprint using the Act on CO₂ calculator*, and is now making changes to how she uses energy around the home and in the office. What she can't cut, she offsets through a certified

offsets provider. Paying for her excess emissions contributes to a project in Bangladesh that trains poor women as solar entrepreneurs.

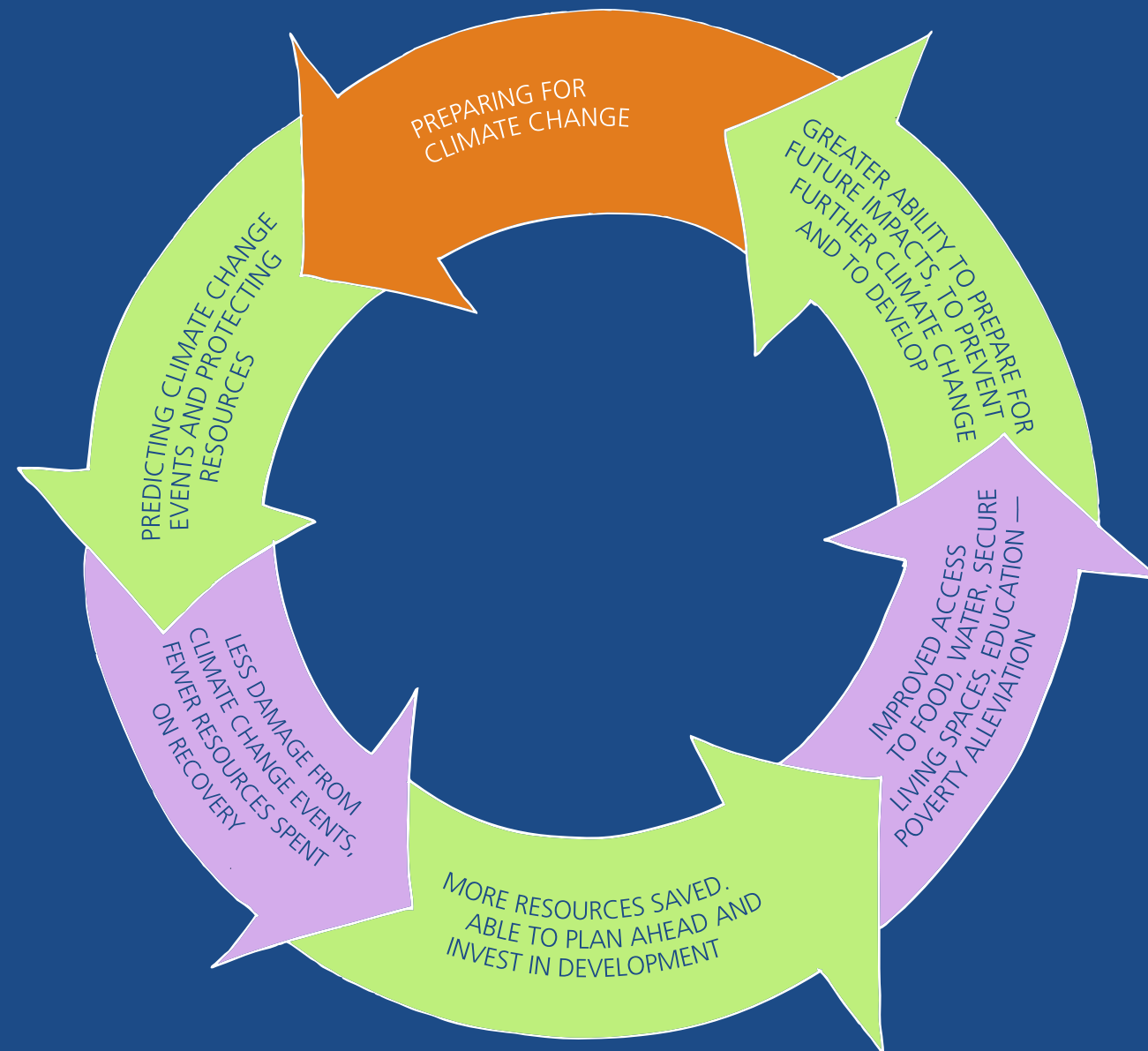
Sarah has also read John's story in the papers, about how farming for export sustains communities in poor countries, and how Kenyan vegetables are often grown in a more climate-smart way than those grown in the UK. She's decided to keep buying vegetables grown in Kenya, and looks out for the fairtrade label when she's doing her weekly shop.

* <http://actonco2.direct.gov.uk>

“I believe that mankind has all the necessary skills, resources and ingenuity to tackle climate change effectively.

HRH The Prince of Wales

HOW DOES PREPARING FOR CLIMATE CHANGE HELP DEVELOPMENT?



Preparing for climate change is fundamental to allowing the most vulnerable people to cope with the inevitable effects of climate change.

Unless they can prepare for and protect against these impacts, they will not be able to lift themselves out of poverty.

66%

Small national economies are often hit the hardest – Antigua lost the equivalent of 66% of its GDP to Hurricane Luis in 1995

Disaster risk reduction: a development concern, DFID

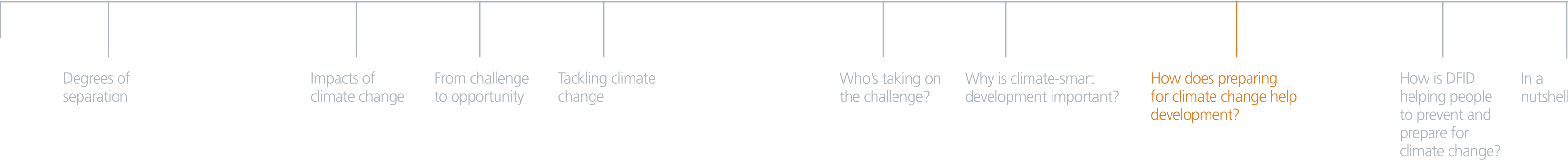
“

The UN recommends forest cover of at least 10%, but in Kenya it is less than 2%. Reforestation and conservation programmes are two ways in which Africa can help face the huge challenge of climate change.

Wangari Maathai,
Nobel Peace Prize
Laureate 2004



PREPARING FOR CLIMATE CHANGE



“ So many of us live on the margins that the smallest difference in climate can mean the difference between sufficiency and famine, survival and death.

Seyoum Mesfin,
Foreign Minister, Ethiopia



John,
Kenya

To prepare for the increasingly extreme weather that threatens his business, John is helping his producers develop more drought-resilient crop strains. He's also working with them to develop ways of capturing, storing and reusing rainwater which can be used to irrigate their crops during the dry spells.

Yasmin,
Bangladesh

To cope with more frequent power cuts in Nairobi, John has bought a solar panel system from a local company that offers good credit terms. This gives him a back-up power supply to keep his company online at all times.

Yasmin's looking to protect herself from the more regular flooding. She has joined a local women's group who plant and maintain trees to form a greenbelt along the river, which acts as a barrier to the flood waters. The women's group is supported by the charity in the UK that Sarah gives money to.

Sarah, UK

She's found that being protected against the flooding means she doesn't have to spend all her earnings repairing the damage. Instead she has saved the income she gets from her restaurant to send her children to school.

Sarah's experience of the Tewkesbury floods has made her conscious of the need to protect her home from the risk of flood water. She's looking into replacing her tiled patio with a lawn to absorb the water, and makes sure her gutters and drains are clear of leaves. She also keeps a close eye on the weather forecast! She is part of a local action

group that is drawing up a flood action plan, and raising funds to strengthen flood defences along the river. With a sharp rise in the number of flood-related claims, Sarah's also working with the insurance industry to establish how best to cope with these.

HOW IS DFID HELPING PEOPLE TO PREVENT AND PREPARE FOR CLIMATE CHANGE?

These are just some of the many projects that DFID is working on around the world.



NEW LIVELIHOODS

The £50 million Chars Livelihoods Programme is working with some of the poorest and most climate-vulnerable people in Bangladesh. They live on islands in the River Jamuna, and have to cope with annual floods, which are already becoming more frequent and more severe.

In 2007, thanks to the Programme, over 1 million people were able to save themselves and their homes and livestock from being washed away, as their homesteads had been raised above the flood line on 'plinths'.

9

The number of times Jahan Ara's house was washed away before she was supported by the Chars Livelihoods Programme

A BRIGHT FUTURE

One of DFID's Rural Livelihoods Programmes, run by The National Institute of Rural Development in Hyderabad, has established a Women's Association to introduce solar-powered lighting to remote villages. Illiterate women are trained to make and install the solar energy system, which has had a range of

benefits. These include children being able to study in the evenings, village women making brooms in the evenings to supplement their income, and removing the danger of fire from kerosene lamps. All these contribute to the development of the villages in a climate-smart way.

£110m

The amount invested in DFID's Rural Livelihoods Programmes that support people-focused approaches, in partnership with government programmes



0.6

Malawi greenhouse gas emissions: 0.6 tonnes per person, per year.

UK emissions: 11 tonnes per person, per year.



TAKING ACTION

Every year Thangadzi-1 Primary School is flooded by a nearby river. The school cannot afford to repair the building.

Since the early 1990s Malawi has experienced a food crisis caused by erratic rains and regular floods, which has hampered

communities' capacities to recover between one disaster and the next. Many are becoming poorer and more vulnerable to climate change.

DFID is now supporting the charity Action Aid to help the school. Children are preparing

for future floods, with first aid training and evacuation planning, by planting trees as a barrier and, by learning new farming practices to adapt to the changing rain patterns.

FOREST MANAGEMENT

One in ten people in Nepal are part of a community forest user group that has support from DFID and helps to manage the forest in a sustainable way.

Forests managed by DFID-supported groups turn around 3.5 million tons of carbon into

wood each year. This carbon could be worth between US\$18-43 million each year in the carbon markets.



£19m

The amount DFID has invested in the transfer of state forests to communities, which have been supported to sustainably manage these forests and share the benefits equitably

IN A NUTSHELL

Threat

We are only a few degrees of global warming away from dangerous climate change. This climate change poses a unprecedented threat to development. If we fail to tackle it together, global poverty will increase – development will go into reverse.

Shared Challenge

Climate change poses the greatest challenge to the world's poor countries, who are least responsible for its cause, but most vulnerable to its effects. However, poverty anywhere on the planet will impact on all of us. Our lives are connected. We therefore face a shared challenge: tackling climate change is an imperative for us all.

Shared Opportunity

The most effective way for poor countries to reduce the impacts climate change has on their lives is to develop. The potentially disastrous effect of climate change is the imperative for action; development is the opportunity for a solution.

Solution

The best way to prevent further climate change is for all countries to reduce their dependency on fossil fuels. The high-emitters in the developed world must lead the way to a climate agreement that helps countries adopt a climate-smart, climate-resilient development pathway, according to their means and capacities.

For all developing countries, climate-smart development will help reduce poverty and secure long-term growth. However, the world's poorest people need support to prepare for and cope with the inevitable impacts of climate change, so that they are able to invest in development.

None of us are insulated from the impacts of climate change, whether they are felt directly or indirectly through their effects on others around the world. Our perception of separation by degrees of distance or lifestyle is just that; perception. The reality is that climate change and the rest of the world are closer to us than we might think.

It is vital that people all over the world seize this opportunity to take a giant step towards eliminating poverty around the world whilst simultaneously tackling climate change. It must happen, and it must start now.

DFID Department for International Development

DFID, the Department for International Development: leading the British Government's fight against world poverty.

WHAT IS DEVELOPMENT?

International development is about helping people fight poverty.

This means people in rich and poor countries working together to settle conflicts, increase opportunities for trade, tackle climate change, improve people's health and their chance to get an education.

It means helping governments in developing countries put their own plans into action. It means agreeing debt relief, working with international institutions that co-ordinate support, and working with non-governmental organisations (NGOs) and charities to give communities a chance to find their own ways out of poverty.

WHY IS THE UK GOVERNMENT INVOLVED?

Getting rid of poverty will make for a better world for everybody.

Nearly a billion people, one in six of the world's population, live in extreme poverty. This means they live on less than \$1 a day. Ten million children die before their fifth birthday, most of them from preventable diseases. More than 113 million children in developing countries do not go to school.

In a world of growing wealth, such levels of human suffering and wasted potential are not only morally wrong, they are also against our own interests.

We are closer to people in developing countries than ever before. We trade more and more with people in poor countries, and many of the problems

which affect us – conflict, international crime, refugees, the trade in illegal drugs and the spread of diseases – are caused or made worse by poverty in developing countries.

In the last 10 years, Britain has more than trebled its spending on aid to nearly £5 billion a year. We are now the fourth largest donor in the world.

WHAT IS DFID?

DFID, the Department for International Development, is the part of the UK Government that manages Britain's aid to poor countries and works to get rid of extreme poverty.

We work towards achieving the Millennium Development Goals – a set of targets agreed by the United Countries to halve global poverty by 2015.

DFID works in partnership with governments, civil society, the private sector and others. It also works with multilateral institutions, including the World Bank, United Countries agencies and the European Commission.

DFID works directly in over 150 countries worldwide. Its headquarters are in London and East Kilbride, near Glasgow.

For more information go to www.dfid.gov.uk

ACT ON CO₂

To calculate your carbon footprint and find out how you can make some simple changes to tackle climate change, have a look at <http://actonco2.direct.gov.uk>.





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