



A right to participate: Securing children's role in climate change adaptation The impacts of climate change are already being felt - most acutely by millions of the world's poor. Millions are already facing hunger, disease and conflict due to climate changeⁱ, and 'children in the world's poorest communities are the most vulnerable'."

Building resilience to climate change is an urgent development priority. Mitigating greenhouse gas emissions is imperative to limit dangerous climate change in the future. However this is only half of the answer. Urgent action has to be taken to adapt to the effects of climate change which are already taking their toll. Without attention to climate impacts, poverty reduction efforts will be severely hampered.

In this context, children have considerable strengths that are a significant resource for families, communities and organisations. Children also have a major stake in the future and a right to participate in decisions that affect them.

Children in a Changing Climate (CCC) is a global initiative spanning research, action, advocacy and learning with the purpose of securing children's influence on adapting to and mitigating climate change at every scale - from their families and communities to the United Nations climate change negotiations.

CCC brings together leading research and development organisations each with a commitment to share knowledge, coordinate actions, and to work with children as protagonists with a voice needing to be heard.

This publication introduces the policy spaces, the challenges and the case for children's participation based on their unique experiences, knowledge and capabilities. It presents policy recommendations for addressing the needs of children under climate change, and the approach that Children in a Changing Climate is taking.

For more information about Children in Changing Climate visit

www.childreninachangingclimate.org

Why is it crucial to consider children in a changing climate?

- affected by it:
 - prone rural areas and urban slums
- the prospects of increasing poverty, hunger, disease and reduced access to education mean that children's futures are more uncertain than ever before
- children's experiences of climate change and disasters are different to those of adults, yet this is rarely considered
- Children are effective communicators of risk and drivers of change in their communities
- adaptation assistance are poorly understood
- generations

Children claiming a voice

The UN Convention on the Rights of the Child (UNCRC), endorsed by almost every nation, asserts that children and young people have a right to be heard, but UN climate change negotiations do not formally allow for this. Many surveys confirm that young people are particularly worried about the state of the environment and they want to do something about it, locally and globally. They, more than anyone, have a stake in the future. Increasing the engagement of children and young people in climate change debates now is critical for a post-Kyoto world.

'Decisions being taken today will affect me more than those taking the decisions.' HANNA, 15, FROM SWEDEN - ONE OF THE CHILD DELEGATES WHO ATTENDED THE BALI CLIMATE CONFERENCE IN DECEMBER 2007

The knowledge gap: There is a need for better understanding of how adaptation policy and practice can be appropriate to local priorities. This requires approaches for gathering accurate and disaggregated data on impacts and adaptation strategies of different groups - including children across different socio-economic, geographic and cultural situations.

provided with the appropriate spaces to do so.

Learning and adapting: Children have a greater capacity to learn and adapt to new things. In the context of climate change, children are therefore well placed to drive forward shifts in behaviour which enable climate resilient development.

Implementing: Children also have an important role as implementers of some of the actions identified under the UN Framework Convention on Climate Change (UNFCCC). For example, at community level children have often proved to be more effective than adults at raising awareness of climate change issues.

• Children in developing countries have contributed least to the causes of climate change but are the worst

• children globally are being affected by climate shocks, particularly in drought, flood and cyclone-

• Children's participation in climate change adaptation debates are limited and children's rights to

• Investment in children's education about how to adapt to climate change is an investment for future

- **Informing and influencing**: This information is best provided by children themselves as long as they are



Introduction: Locating the gaps in policy and practice

1.1 Climate justice

Climate change is not fair. Climate change negotiations are not fair either. Those most seriously threatened don't have a voice in decisions about adapting their future yet people most at risk may know how best to solve many of the problems they face.

For children all over the world, climate change means the future is far from predictable. Although children in wealthy developed countries are affected, it is children in least developed countries that are most at risk. They are far more likely to be killed or be severely affected by disasters triggered by increasingly unpredictable and severe weather. They are in more danger of being drawn into conflict over scarce national and natural resources. For millions of today's children climate change signals crisis. For them and the next generations, climate change is a slow burning fuse priming tomorrow's disasters.

The changing climate means that it is very unlikely that the Millennium Development Goals can be achieved. 'There is now widespread consensus in scientific and policy communities that climate change will have significant impacts on weather, ecosystems, public health and economic development'." The poorest and most vulnerable groups in society will suffer the most from these impacts, particularly those without access to basic needs and social protection. However, while research on the links between climate change and poverty is becoming more prevalent," only a handful of studies disaggregate poverty and examine the specific impacts and adaptive capacities of different poor and excluded groups." This literature suggests that climate change will further compound social exclusion and may fuel social unrest, mass migration and even violent conflict.^{vi} This can only be averted if adaptation measures help to reduce poverty and exclusion and if excluded groups are empowered to influence local, national and international responses to climate change.

Children's development, the MDGs and climate change

- Increased child poverty due to reduced incomes and threatened livelihoods (affecting MDG 1): Climate change could cause an additional 40,000 to 160,000 child deaths per year in South Asia and sub-Saharan Africa through Gross Domestic Product (GDP) losses alone.
- Increased hunger (MDG 1 and 4): With temperature increases of 2°C, an additional 30 200 million people will be placed at risk of hunger globally rising to as many as 550 million with warming of 3°C.
- Fewer children able to attend school, especially girls (MDG 2 and 3): The negative impact on livelihoods may make it more likely that parents remove their children from school - and in most cultures this will almost certainly mean removing girls first - so that they can collect water and fuel and supplement household income.
- Increased childhood disease (waterborne/communicable) (MDG 6 and 7): Malaria: which already kills 800,000 children every year - is now in areas which were previously outside the range of malarial mosquitoes, such as the highlands of Kenya and Jamaica. Diarrhoea: Climate change will increase the burden of diarrhoeal disease in low income countries by between 2 and 5 per cent by 2020. Dengue: Estimates suggest the population at risk could double from 1.5 billion today to 3.5 billion by 2080 due to climate changes.

Source: UNICEF 2008vii

Since ways of adapting to climate change have to be locally specific, the views of young people who know about local conditions are particularly important. To date, strategies to respond to the impacts of climate change have paid little attention to how adaptation measures can be child-sensitive, let alone child led. There is little institutional knowledge and information available on child-led adaptation initiatives or autonomous action taken by children to reduce their communities' vulnerability to climate change impacts.

Children are particularly vulnerable and they do rely on adults for protection and support. However, they are not passive bystanders and should never be treated as helpless victims. Neither are they a homogenous group. The experiences of direct and indirect impacts of climate change will differ for girls and boys and children in different cultural, geographical and socio-economic situations. Emphasising the value of engagement with children is not to expect them to have all the answers. Rather it reinforces the case for adaptation policy-making to include bottomup processes to ensure approaches are context specific and take account of the needs of marginalised groups.

There remains a major gap in determining what child-sensitive or child-led adaptation looks like, despite a great deal of experience from other fields, sectors and child-centred development approaches. For example, childcentred development agencies are beginning to engage with children on adapting to the impacts of climate change, drawing heavily on experiences of child-led disaster risk reduction work. This work is challenging common views of children as passive victims with no role to play in reducing risks. There is an urgent need to document and share learning and experiences from this work.

Children's unique experiences of climate change impacts and their specific insights and priorities need to be recognised in adaptation initiatives. Furthermore, UNCRC insists that children have a right to participate.

Article 12 of the UN Convention on the Rights of the Child states that:

- the child who is capable of forming his or her own views has the right to express those views freely in all matters affecting the child
- the views of the child should be given due weight in accordance with the age and maturity of the child.

There are other reasons why children should be supported with their advocacy efforts: • Children have a good understanding of their own situation. Their advocacy efforts can ensure that legal framework

- and policies respond to their needs and rights.
- Participation in advocacy is excellent preparation for full citizenship; it prepares the adults of tomorrow with a sense of justice, social responsibility and competency in leadership; it helps children to reach their full potential and develop essential life skills such as problem analysis, decision-making, negotiation and communication, and working in groups.
- It increases children's self-confidence and adult respect for children's capacities.

In short, children have considerable strengths that are a significant resource for families, communities and organisations. The value of children's knowledge, creativity, energy, enthusiasm, and social networks should be recognised and encouraged.

1.2 National and international policy spaces

The Kyoto protocol, the closest thing we presently have to a global compact to address climate change, is due to expire in 2012. Negotiations are underway between delegates from over 180 nations, together with observers from intergovernmental and non-governmental organisations to agree a new international climate change deal.

The issues being decided at the UN climate change conferences in Poznan in December 2008, Copenhagen in December 2009 and many other meetings in between, include the architecture of a future international climate change agreement and countries' commitment to reducing greenhouse gas emissions, how to reduce carbon emissions from deforestation, the operation of carbon markets and how adaptation to climate change can be financed. These decisions will affect children for the rest of their lives.

We have reached a critical point in climate change policy making. The decisions and the processes associated with the UN Framework Convention on Climate Change (UNFCCC) will greatly influence national governments' capacity to address adaptation and mitigation and their ability to access money and technology to help them do so. Immediate advocacy efforts are vital if the deal is to be fair and equitable.

Currently no policy arenas or official processes try to harness the views, voices and priorities of children. Children's futures will be inscribed by what happens in and around the UNFCCC process. It is their right to participate. Provided with a suitable environment, children have proved they can play a strong role in informing policy decisions not just at the global level, but also within their own personal networks, such as schools and families, within their communities, and at the national level.

1.3 Bridging development and adaptation at the local level



Climate change adaptation and development programming have been addressed in discrete institutional and policy spaces. Attempts at mainstreaming adaptation are designed to overcome this. However priorities and language often appear conflicting and this poses a barrier to joined up action. Children are not conditioned by sectoral approaches nor constrained or restricted by institutional mandates. Their relatively unblinkered perspectives mean that children can clearly identify vulnerabilities and opportunities for building resilience within their communities. Their unique capacity and knowledge can usefully inform localised adaptation strategies that are integrated with other development realities and programmes.

Unlike mitigation, which can be prescribed and regulated by broad-brush, regional or global policies, effective adaptation policies and strategies depend on an understanding of local circumstances. Community-Based Adaptation approaches stem from this understanding. They emphasise the need to address

root causes and the underlying risks which render communities vulnerable to climate shocks and stresses. Although there is general acceptance that adaptation must be locally focused in order to tackle the needs of the most vulnerable, much more attention has to be directed to responding to disaggregating the needs and capacities of different sets of actors, including children.

Children in a Changing Climate is building both the local and global networks, partnerships and initiatives to fill these gaps. To explore the links between climate change and justice and to ensure that the voices of excluded groups can influence community and policy responses to climate change, CCC offers a programme of action and research focusing on the needs and the voice of children.



2 Children's knowledge and capabilities (we know children can contribute....)

2.1 Participation and Rights

Child participation in decision-making is increasingly recognised as fundamental to policy making that is sensitive to children's needs and well-being, and therefore of value to wider society. It is also fundamental to children's self-esteem and a means of empowerment.

Participation is one of the four fundamental principles of the UN Convention on the Rights of the Child (UNCRC): survival and development; non-discrimination; child participation, and the best interests of the child. Child participation is recognised as a right under Article 12, but participation is also a means to children realising their rights more generally. Child rights programming recognises children as rightsholders and helps engage them as actors in their own development.viii

Not only do children have rights to participate, they also have invaluable contributions to make. Children are as capable as adults of expressing their views, but as non-voters they are faced with a challenge of finding multiple routes to make sure politicians look their way and hear their voices, if they are to have influence on issues of national importance.

Participation may come about through autonomous action by children. Child participation facilitated by external agencies requires carefully considered tools and processes that are suitable for the specific cultural or sectoral context in which information or influence is being sought.

By linking children's local knowledge of changes, impacts and priorities with the work of experts in relevant sectors, development and adaptation approaches, strategies and assistance are more likely to meet their needs. Their active participation in adaptation solutions can be a powerful force for change and resilience to climate shocks and stresses.

Disaster Risk Reduction work has traditionally been dominated by top-down thinking with children being seen as passive victims in need of protection. Recently agencies such as Plan International and Save the Children have been working with children as active participants in efforts to reduce the risks faced by themselves and their communities. The experiences of Plan UK working with youth volunteer teams in El Salvador and the Philippines on community risk mapping and mitigation activities have shown that children and youth have a much greater capacity to participate in disaster risk reduction than many people assume.^{ix}



Child-led climate change resilience in action

Save the Children in Mozambique strives to promote child participation in all programmes. In disaster preparedness and response, Save the Children has been involving children in a variety of sensitisation activities including identifying causes and effects of flooding, how to prepare and respond as well as engaging children in a 'child parliament' to develop sensitisation material on a range of health and risk reduction issues. Children have also played an important role

in decision-making in a community grants scheme for disaster recovery.

Save the Children involves children in the process of selection of Community Based Organisations' project proposals for community grants aimed at supporting livelihood recovery in flood-affected areas. Older children from the Child Parliament are trained by Save the Children staff to facilitate project proposals. They hold review sessions with children from the target communities, who are asked to share their views about the proposed projects and their expected impact on children. Involving children as facilitators of these sessions has had a positive impact on children's participation, as they sometimes feel intimidated when talking to adults.

Children are willing and able to participate actively to tackle issues that affect their environment, their communities and the lives of others. Harnessing and supporting this enthusiasm is a moral obligation if climate change policy is to genuinely be in the best interests of the child. This requires appropriate education on climate risks, mitigation and adaptation that engages children, provides them with knowledge and skills and avoids creating the fear that may disrupt belief in their own agency.

Why child participation?

- Participation is a right. Children and young people's rights to be involved in decisions that affect their lives are enshrined in the UN Convention on the Rights of the Child
- Children and young people are the best authorities on their own lives
- It promotes health and well-being by developing confidence and skills
- It ensures policies and services are improved

A right to adaptation

Calls for equitable solutions to the climate crisis present a strong case for a right to effective and preferential adaptation assistance for those who have contributed the least to climate change but are being impacted the worst. Children in flood, drought and cyclone prone areas in poor rural communities and urban slums should be first in line.

Furthermore the UNCRC, supported by other major human rights treaties, is designed to guarantee children's basic rights to health, shelter, food, clean water, education and freedom from harm. Considering the projections for the severe impacts of climate change on children's health, well-being, and poverty reduction efforts^{*} establishing this right to adaptation is an urgent imperative. As resources begin to flow from North to South to help developing countries adapt to climate change, rights-based adaptation programming can help ensure that adaptation assistance is directed to those with more marginalised voices who will be impacted the worst.

Children in a Changing Climate will be providing crucial support to children's organisations to fill some of these gaps. Through drawing on experiences of child rights work in other areas (disasters, HIV/AIDS, conflict, social protection, poverty) and the work of established researchers^{xi} combined with new innovative action-research with children in multiple countries, CCC is currently investigating:

- children's views on their right to adaptation and a secure future
- characteristics of a rights frameworks for child-centred adaptation and mitigation
- a child rights-based approach to adaptation programming

2.2 Perceptions and knowledge

It has been hypothesised that, on balance, children often know more about the climate change issue than their parents or grandparents, because issues about climate change are being taught in school and/or because children are accessing environmental and other media through electronic communication sources more regularly than their elders are. During fieldwork conducted in the Philippines and El Salvador by Children in a Changing Climate in 2007 the researchers found that children were keen to discuss climate change, stimulated by what they were learning in schools and what the media was saying about the causes of the most recent disasters.

Children's perceptions and knowledge of climate change have been documented through a small number of initiatives by leading development and child support agencies. For example Oxfam organised a children's art exhibition displayed at the Bali COP-13 meeting in December 2007.^{xii} The media too, has reported on the worry factor associated with the way climate change is being communicated with children.xiii In 2007 the UK National Children's Bureau initiated a consultation with children and young people on the climate change dimensions of The London Plan, a project conducted in partnership with the Greater London Authority.xiv

There remains a major gap in understanding of how children in different contexts perceive climate change, understand the risks it poses, and what they do with this information. Given the influence of the information sources children draw upon, further studies could inform learning resources and initiatives that can help children understand the risks whilst inspiring participation and action.

"The main risk of climate change is hunger. My area has been affected by changes to crop growing cycles."

Children in a Changing Climate partners have been investigating how children communicate risk and within which policy spaces. This aims to provide empirical evidence to strengthen the enabling environments children require and to open up or sensitise policy spaces. The challenge is linking their local knowledge with scientific knowledge, policy expertise and resources to respond to local adaptation needs.

"The flooding causes huge unemployment and poverty in the villages as no-one can work."

Establishing how children communicate risk

How children communicate risk is a major research theme underpinning Children in a Changing Climate. Research is being carried out in Indonesia, Philippines and El Salvador in a programme led by the Institute of Development Studies. The studies ask how children's understanding and communication of climate and disaster risk within their households and communities influences knowledge and action. This research has considerable implications for legitimising child-led adaptation and disaster risk reduction programming, as preliminary findings suggest that children have a greater focus on long-term, high magnitude but low-frequency risks, whereas their parents and grandparents place more importance on day-to-day survival and the high frequency but lower magnitude risks that threaten their livelihoods.**

MARTYN, 15, MATHANDANI, MALAWI

RUPLA, 14, GODDIMARI, BANGLADESH.



Philippines: The power of children's voice in coping with extreme weather

Heavy rain early in 2007 caused several landslides in the Philippines. One village was buried with terrible loss of life. Subsequently the Philippines Mines and Geosciences Bureau conducted a risk assessment of potential landslides in Southern Leyte province in 2006, determining that eight barangays were at high risk within the Municipality of San Francisco. These included Santa Paz Sur and Santa Paz Norte, with recommendations to relocate affected houses. These two barangays were home to a high school and an elementary school, both of which were considered to be extremely exposed to landslides.

Following debates about whether and how to relocate the school, the headmaster opened the decision to a community-wide referendum, with a vote for each of the children of the school. Broadly the children were in favour of the relocation. But their parents were opposed because they did not want their children to travel to school located in a different community and local shops feared loss of business.

The children's organisations in the school embarked on an education campaign about the physical processes of landslides and a great many students wrote to the local government expressing their desire to relocate.

The student's proposal won the vote by 101 to 49. Due to concern from the Provincial authorities, the schedule for relocation was shortened to just two days following more heavy rains. A temporary tent school was erected over one weekend with children and parents helping to put up the tents and children digging drainage channels.

The children were very pleased that they had influenced this important decision and said they had no regrets about the decision to move. The new school was opened in July 2007 in Pasanon, a safer location a few hundred meters from the temporary school, with co-financing from Plan. The school is safe from landslide and flood and also includes earthquake mitigation measures such as steel ties on the roof.





3 Strengthening children's knowledge, capacity and voice

3.1. Strengthening the knowledge base

Not only will the impacts of climate change be felt disproportionately by vulnerable groups such as children, older people and the displaced, future generations will be tasked with the continued implementation of climate change mitigation and adaptation strategies. Knowledge of the issues and meaningful participation from an early age will lead to an informed and skilled generation of decision makers and greater potential for global solidarity. Working alongside children and promoting learning is also fundamental to bringing about urgent action on climate change today.

Children are already accessing information on climate change and its associated impacts through the media and through formal and informal education. There is an increasing array of climate change education resources being developed, mostly targeting children in more developed countries and focusing on more sustainable living.

A recent audit of resources available for teaching about climate change in the UK showed that there is a great deal of information for children on the causes of climate change and its biophysical impacts, but far less on the social impacts in developing countries and climate justice debates. Besides some emerging strong resources by lead development agencies, few materials discuss climate change in a comparative, international context including child testimonies, and few are yet to be integrated into school curricula.^{xvi} Climate change learning resources, like any other, must be appropriate for the context in which a child is learning.

(...when the right support and opportunities are provided)

"To get people to tackle climate change you MUST make it relevant. While people believe it is a problem for tomorrow they will be less inclined to do anything about it. By showing people how it will affect them and what they can get out of being energy efficient they will want to take a much more active role in making a difference"

YOUNG MEMBER OF ENGLAND DCSF YOUTH BOARD

Learning comes in many forms. Youth radio projects, reading clubs, art projects and many others sit alongside formal education systems. These initiatives both locally and internationally provide important opportunities for children to learn from others, express their views and have their voices heard by people beyond their immediate peers and community.

Linking children through international forums or remotely through sharing testimonies or online communications can help contextualise the experiences of their peers and help make the connections between lifestyles in countries based on high levels of consumption and waste and those feeling the impacts of climate change the hardest.



"I have realised that the actions that are carried out from people in developed countries have a negative effect on the less developed countries and therefore it hit me to push for young people to influence the decision makers."

> THOMAS, 15, UK. THOMAS WAS ONE OF THE FOUR CHILDREN WHO ATTENDED THE ANNUAL UN CLIMATE CHANGE CONFERENCE IN DECEMBER 2007 IN BALL.

Formal and informal learning initiatives enable children to:

- be better equipped to build a future and a world that is environmentally sustainable and promotes health and well-beina;
- be supported and committed to promoting sustainable communities and climate change adaptation programmes that will make a difference now and in the future;
- care about the impact of their lifestyle choices on other parts of the world and be able to take individual action:
- become ambassadors for positive change in the home and global communities in which they live, learn, play and socialise.

Children in a Changing Climate is establishing communication platforms run by children and for children, based on a wide range of communication mediums, including artwork, videos, Web 2.0 / social networking, to discuss and debate climate change, in order to stimulate further action.

Children in a Changing Climate will provide a hub and gateway for learning resources and activities related to climate change focusing on those that provide insight and inspire action on the global justice dimensions of preventing and adapting to climate change.

3.2. Strengthening voice and influence

Children on the Road to Copenhagen Building on successful children's participation in the 13th Conference of Parties (COP13) of the UNFCCC in Bali in December 2007, Children in a Changing Climate is creating a network of partners to help secure the voice and participation of children in the national and international negotiations of a successor to the Kyoto Protocol.



Sustained representation of children at all major conferences up to and including COP15, to be held in Copenhagen in December 2009 is being achieved through:

- experiencina.

Through broad, international, child-led consultation children are determining the issues they wish to advocate around. Through learning about different experiences of climate impacts on children around the world, and sharing stories of action other children are taking to adapt to climate related changes, children will be able to identify grounded and context specific policy recommendations.

Through a global dialogue initiative, children from the UK recently put a series of questions to their peers in Sierra Leone and India.

"If you had a message for people in the UK regarding climate change what would it be?"

"I want to know if there is any link between your government and our government with the impact of climate change. And I want to know if the things happening to us in Sierra Leone are also happening to you, like shortage of water and food".

This dialogue is expanding to include children from West Africa, Southern and East Africa, North Africa, South Asia, South East Asia, Latin America, Europe, and North America. Representatives from each region are being selected through child-led processes such as radio competitions, inter-school competitions and youth group elections. These 'climate champions' will be the spokespeople for children in their country and region and inform regional policy analysis and recommendations. A number of climate champions will represent Children in a Changing Climate at COP14 and COP15 to deliver these recommendations to the conference delegates.

Beyond COP15

Supporting children's engagement and dialogue at the national level will reach far beyond the UN negotiations in Copenhagen. Any decisions reached at COP15 will take some time to come into force, but there will continue to be increasing programmatic support and finance for adaptation. Children will be better equipped to access this support and help ensure these funds are reaching those most vulnerable and helping secure their futures.

• collecting, synthesising and present the views of children from many countries on their adaptation priorities and the effects they are already

 identifying child climate change champions who are able to articulate their views and the views of other children in these policy spaces.

LEON, 16, UK

KALIDY, 15, SIERRA LEONE

Children make a splash at UNFCCC COP13 - Bali, December 2007

Four children, from Philippines, Indonesia, Sweden and UK attended the United Nations Framework Convention on Climate Change annual Conference of Parties in Nusa Dua, Bali. During the conference, the group exchanged ideas and opinions about how they were being affected by climate change, and how they were engaged in trying to tackle climate change and other environmental issues in their community. The group then met with members of the national delegations to urge them to act now to mitigate climate change and help poor countries to adapt.

"I was able to share with everyone the views and opinions of Filipino children about climate change".

"A lot of people attending the UNFCCC Conference in Bali looked really serious. But I enjoyed it and felt satisfied when me and my friends from other countries discussed the most important issues in climate change from a

child perspective because I could finally express my feelings. I had a rare opportunity to interview people from different countries about the conference."

HEZEL, 15, PHILIPPINES,

"We worked hard to create some questions that we could ask the delegates of other countries so that we could get a wide spread of opinions on what adults are doing in their

home countries to include

the voice of young people." THOMAS, 16, UK

"It was hard work to approach foreign adult persons that I have never spoken to before! But I did it! I talked to the organisation Women in

Europe for a Common Future about bringing in children into important decision making processes and they (she) thought it was a great idea."

ENI, 17, INDONESIA

HANNA, 16, SWEDEN

3.3 Strengthening child-led adaptation

Child-led adaptation is about enabling children to make a positive contribution to this process of risk reduction and climate resilient development. The negative impacts of climate change on children must be minimised but they must also be able to benefit from opportunities it may present.

Experience from other sectors demonstrates that starting from what children know about the risks they face and recognising what activities they are already engaged in to reduce these risks helps empower young people to engage further.

Given that climate change is expected to increase the frequency and intensity of extreme climatic events, learning lessons from child-led disaster risk reduction (DRR) is both relevant and critical.

Lessons from child-led Disaster Risk Reduction

In many developing countries children form a high proportion of the victims of disasters. Excluding children from the disaster planning process threatens their safety when the disaster strikes and ignores a valuable resource for risk communication, education, advocacy, and help with practical risk reduction activities.

"Children's participation in DRR activities gives them skills, confidence and psycho-social support following a devastating event such as a natural disaster. Children participate in all aspects of DRR activities including planning, identifying hazards and vulnerabilities as well as completing community emergency evacuation and preparedness plans. Children also share and communicate the results with their families and wider community."xvii

El Salvador is the smallest and most densely populated country in Central America - and one of the most disaster-prone. Rampant deforestation and changes in climate have caused huge flooding during the hurricane season and the Red Cross estimates that 71 per cent of the population lives in extreme poverty.

But young people are forming groups working with local government and community members to tackle the direct threats to life from floods, earthquakes, landslides and disease.

In the village of Las Grenadillas, Monica, 17, works with younger children, organising and teaching them how to reduce the risk of disaster in their own village, which is vulnerable to mudslides during the torrential rain of the hurricane season. "The committee for disasters was started after an earthquake," says Monica. "They started to train the young people so we had about 20 youngsters between 12 and 17 years old."

Children have been a key to preventing the landslides by planting a spiky grass called vetiver on the slopes of hills. The plant's deep tangle of roots burrows metres into the ground and locks the soil into place, preventing further landslides. The village of Rosario has suffered less from landslides due to flooding thanks to the children's groundwork.

In some areas there is a grassroots movement among children to reforest the hillsides. Roberto Carrilo is part of a youth committee that plants trees in the Canton El Cedro district. "First we fill small bags with earth and seeds and when they've grown into saplings we plant them out," he says.

The threat of insect-borne disease such as dengue fever is also a constant problem, sometimes fatal especially to young children. Dengue fever is spread by disease-carrying mosquitoes that lay their eggs in pools of stagnant water and discarded rubbish. At present children, accompanied by a health worker, visit households every month to explain the dangers caused by dumping rubbish and allowing stagnant water to collect. Their work is paying off in Potonico, as town authorities told Plan that there has been a drop in dengue fever cases there, whereas in the rest of El Salvador infection rates are rising.

This work is making a generation aware of the link between climate change, their environment and the safety of their communities.

These experiences along with tools and guides developed on child-led disaster risk reduction, xiii provide important lessons for climate change adaptation and support the case for greater child participation in adaptation policy and practice.

Through innovative action-research into risk communication, perceptions, knowledge and participation in different policy spaces CCC will be driving forward the engagement of children in risk reduction in their communities. CCC will facilitate the sharing amongst agencies of experiences and the development of tools and methodologies for child-led adaptation programming.



Children hold back mudslides: Children in El Salvador take the lead in tackling climate hazards

In El Salvador, where mudslides have killed thousands of people, destroying homes and livelihoods while disease remains rife, youth groups are taking steps to minimise the worst effects of natural disasters...

3.4 Averting Future Crises

"Climate change and local environmental change may destroy all my dreams and aspirations." JEN, 15, BALUDENO, PHILIPPINES.

It is difficult to predict with certainty the exact way climate change will play out in the future. However, it will impact children alongside other existing trends including rapid urbanisation, population growth, and greater displacement and migration. The international community must pay urgent attention to the impacts climate change scenarios will have and ensure such investigations are used to stimulate debate and lead to the necessary actions to avert future crises.

Some of the areas in urgent need of further investigations include:

Employment opportunities

Climate change is already altering ecological systems. The percentage of the earth's land surface that suffers from severe drought has trebled in the last ten years from one to three per cent and this trend is set to continue. With estimates suggesting that around 75 per cent of the world's poorest people rely directly on natural resources for their livelihoods including agriculture, forests and fisheries, these are worrying trends.

Research must focus on exploring the impacts of climate change on livelihoods and children's employment prospects, and the potential for diversification away from livelihoods focused purely on agriculture and natural resources must be part of these investigations.

Migration

People are on the move. For a number of reasons including more frequent and intense natural disasters and a lack of job opportunities in rural areas, people are moving to urban areas in search of improved livelihood opportunities. Climate change is predicted to rapidly increase this trend - some estimates suggest that there will be up to 50 million environmental refugees by 2050.

The motivations and incentives for migration vary dramatically and these reasons have a bearing on the experiences of child migrants. Research is needed to help understand the impacts of migration on children and the associated risks and dangers. In the case of disasters, rapid displacement might mean that children are separated from their caregivers and sometimes left behind. They are also at greater risk of exploitation.

Conflicts

Climate change has the potential to contribute to heightened tensions and conflict, especially in fragile states. A report in November 2007 highlighted 46 countries at a high risk of conflict due to the consequences of climate change.xix Decreasing rain and crop yields, reduced livelihood options and increased food prices all increase the possibility that competition for scarce resources could contribute to increasing tensions and violent conflict.

The effects of conflict on children can be severe - their protection can be compromised, girls in particular face increased threats of sexual violence and access to regular education can be interrupted for weeks, months or years.

Education and training as climate insurance

Investing in children and young people's education and engaging them now in adaptation and strategies and technologies for a low carbon future will lead to a greener next generation. Driving forward the opportunities for children in developing countries with the education and skills in science and climate related expertise will lead to a society that can be more adaptable to future climate change rather than relying on external 'expertise' from donor countries.

72 million children around the world are currently out of school - 38 million of which are from fragile and conflict affected states.** Recognising the value of both formal and informal learning, and the integration of climate resilience strategies into development programming, can help ensure that those unable to access formal education are not excluded from processes to strengthen their adaptive capacity.



4 Conclusions & Policy recommendations

1. Ensuring children's voices are heard in national and international policy in line with the UNFCCC's priority for adaptation - to enhance the integration of climate change issues into national and sectoral planning and policies, including through a bottom-up process. Children have a valuable insight to offer here and have a right to be consulted;

- Poverty Reduction Strategy Proposals (PRSPs), national climate change legislation, disaster management and environment policies and legislation.
- Institutional donors: Ensure children's views and insights on climate change adaptation are climate change strategy.

2. Urgency of the situation means we must build on what works

Strategies for climate change adaptation in developing countries should make use of strategies and tools that have proven to be effective in dealing with the weather-related hazards that will be exacerbated by climate change. These include poverty and vulnerability and risk assessments, early warning systems, landuse planning and building code regulations, and building of institutional capacities. Furthermore, Governments should use the guidance of relevant existing tools, namely the Hyogo Framework for Action 2005 and OECD-DAC guidelines for action in fragile states to facilitate a comprehensive, system-wide riskreducing approach to climate change adaptation.

• National governments: Ensure children's views and insights on climate change adaptation are represented in all relevant policy processes such as National Adaptation Plans of Action (NAPAs),

represented in all relevant policy processes. In particular: the World Bank Group's forthcoming Strategic Framework on Climate change and Development should include consultation with children and young people, especially around the issue of adaptation, policy research and capacity building; as should bilateral donor's policy strategies around climate change and development, such as DfID's

3. Prioritise adaptation spending in line with national priorities

Adaptation funds should be allocated to reduce the most urgent underlying and growing vulnerabilities to climate change and their use should be informed by successful community-based experiences in vulnerability reduction. Given the historically unprecedented nature of climate change, local knowledge alone is not enough for climate change resilient strategies. For this, there is a pressing need to bring together local knowledge together with scientific expertise on climate impacts to understand adaptation needs and solutions.

4. Education as climate "Insurance"

Ensuring that children have access to better quality education is a major priority for the climate change adaptation agenda. Climate change adaptation should address the root causes of vulnerability to climate change impacts. For children in the developing world, this would take the form of education, skills and livelihood opportunities. Better educated children will have better livelihood opportunities which is one of the strongest forms of climate insurance. Knowledge and understanding of climate change will leave children better placed to cope and adapt themselves.

5. More and better disaggregated research and knowledge on children and climate change

All new development projects should examine impacts on boys' and girls' adaptive capacity as part of project planning, implementation, monitoring and evaluation. Bilateral donor research strategies, such as the DFID Research Strategy 2008 - 2013, should prioritise research into the indirect impacts of climate change, such as access to education, migration, violent conflict and unemployment, upon the lives of girls and boys.

6. Good governance

Climate change will be most serious where governments lack the will or the means to respond to the needs of their citizens. Effective adaptation to climate change is essentially a matter of better governance - the capacity of government institutions, the state's efficiency in providing basic services, and the influence of regional and international cooperation. Without open, consultative and effective government, efforts towards climate sensitive development and adaptation cannot take root. Children have a strong role to play in holding their governments to account. Climate change provides a pressing advocacy space through which they can do so.

Endnotes

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Children in a Changing Climate is a global initiative spanning research, action, advocacy and learning with the purpose of securing children's influence on tackling climate change at every scale. The programme brings together leading research and development organisations, each with a commitment to share knowledge, co-ordinate their actions and to work with children as protagonists rather than just as victims.*

Guiding principles:

- 1. Urgent attention, support and action is required to address the issues faced by children across the work as a result of increasing climate shocks and stresses
- 2. Children are effective protagonists of change and therefore opportunities for their learning, action and influence on climate change policy should be maximised
- 3. No single organisation leads Children in a Changing Climate and all partners are committed to working collaboratively to avoid duplication and redundancy and to present a coherent voice and strategy in a critical period for securing children's futures.

Children in a Changing Climate is managed by an advisory board and is being developed with guidance from a children's advisory group. Each area is coordinated by one or two partner organisations.

ccc-action creates opportunities for children to take action on climate change, whether through organised initiatives or enabling autonomous action.

ccc-learning will increase children's understanding and knowledge about climate change science, focusing on adaptation through collating and developing resources, and innovative global learning initiatives.

ccc-research is leading a programme of innovative action-research that provides the evidence base to enable practitioners, policy-makers and children themselves to take action to adapt in a changing climate.

ccc-policy is facilitating children's advocacy campaigns at local, national and international levels, ensuring they are informed on the issues, understand the policy spaces, and have the requisite resources and ensuring more child-friendly policy spaces.

Programme Partners include: ActionAid, Institute of Development Studies, UK National Children's Bureau, Plan International and Save the Children

For more information contact info@childreninachangingclimate.org

or visit www.childreninachangingclimate.org

*Children are under 18. Child protection standards require that individual children cannot be identified – so this document does not give children's full names.

