

ADAPT FOR OUR FUTURE: YOUTH AND CLIMATE CHANGE ADAPTATION

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Foreword

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Leading to more frequent and intense extreme events and disasters, climate change is one of the main factors reversing the gains of development and pushing more people into poverty. As the largest generation to live on our planet, young people – especially those living in the most marginalised and vulnerable circumstances – are disproportionately affected by the adverse effects of climate change. This background paper on Youth and Climate Adaptation shows how young people are empowering themselves and being agents of change - initiating and supporting adaptation efforts globally. They are creating partnerships, involved in policymaking, demanding action, as well as offering solutions. Young people are experts on the issues that affect their lives. Engaging with them is natural and necessary as it only improves our efforts to build resilience and reverse climate change. It is time for the world to recognise young people as equal partners in safeguarding the earth for all generations.

About this paper

This paper is part of a series of background papers commissioned by the Global Commission on Adaptation to inform its 2019 report. This paper reflects the views of the authors, and not necessarily those of the Global Commission on Adaptation.

Amponsem J., D. Doshi, A. I. Salazar Toledo, L. Schudel & S. Delali-Kemeh. 2019. "Adapt for our Future: Youth and Climate Change Adaptation" Rotterdam and Washington, DC. Available online at www.gca.org

Executive summary

The world is witnessing one of the largest climate protests in its history, sparked by the determination of a 16-year-old and resonating across 160 countries through the efforts of children and young people. While youth populations – including children – are particularly vulnerable to the impacts of climate change, they also have the potential to contribute to climate change adaptation measures when they are empowered to become agents of change. Undertaken from an exploratory research perspective, this paper is informed by background literature reviews and empirical information. Evidence was collected through on-ground consultations (workshops) performed by youth-led entities in Argentina, Canada, the Dominican Republic, Ghana, Haiti, India, Kenya, and Malaysia, as well as online surveys and expert interviews. The objective of this report is to highlight the importance of working with young people in a collective effort to adapt to climate change.

In *Climate Change and Youth*, the paper introduces the disproportionate impacts of climate change on young people today and the adoption of inclusive adaptation strategies to give equal value to the needs of all generations. This relates to the notion of intergenerational equity, drawing attention to the role of adaptation in securing a just, liveable and sustainable future. In this regard, this section provides a description of youth engagement in climate action – particularly the role of YOUNGO in the history of UNFCCC.

In *The Role of Youth in Climate Change Adaptation Strategies*, the policy and action realms are explored to understand the conditions that would enable the engagement of young people in climate change adaptation strategies. It emphasizes the need to engage young people as ‘enablers’ capable of executing adaptation actions, as opposed to only viewing them as passive vulnerable groups. The chapter concludes with examples of capacity building initiatives and youth empowerment actions, which are crucial for raising awareness.

The chapter on *Barriers That Young People Face in Adaptation Actions*, explores ways to overcome institutional and capacity challenges. Some significant challenges include inadequate platforms for meaningful engagement, tokenism in youth participation, restricting contribu-

tions to decision-making by young people, lack of awareness, finance and missing inter-generational knowledge transfer. There are many possible ways to overcome these barriers, for example, by providing an enabling environment, which institutionalizes youth participation in decision-making processes, dedicated climate change education in school curricula and special funds for financing youth actions for climate change.

In *Opportunities for Youth Engagement in Adaptation Efforts*, an overview of the ways young people are acting on climate change adaptation is presented. Adaptation action by youth at the community level requires an increase in capacity building tools and information to enhance impact. Young people can act better when they are involved in the decision-making process, and truly understand the science and complexity of climate change. Institutional support, particularly with tools, knowledge and finance, are crucial to translating young peoples’ ideas into actions. Highlighting the importance of technological and societal innovation for climate change adaptation, youth entrepreneurship has a key role to play. Stakeholders, including governments, financial institutions, businesses and civil society, are urged to support youth led initiatives with innovative financial mechanisms for climate change adaptation projects implemented for and by young people. Finally, the paper calls for action and suggests ways forward.

Abbreviations

ACE	Action for Climate Empowerment
AF	Adaptation Fund
CCB	Community Capacity-Building
CLIC	Movimiento de Jóvenes Latinoamericanos y Caribeños frente al Cambio Climático
COP	Conference of the Parties
COY	Conference of Youth
CPI	Climate Policy Initiatives
FAC	Federal Advisory Committee
GCF	Green Climate Fund
GEF	Global Environment Facility
IFSA	International Forest Student Association
IPCC	Intergovernmental Panel on Climate Change
KIC	European Climate Knowledge Innovation Community
NADMO	National Disaster Management Organisation
NEJAC	National Environmental Justice Advisory Council
NGO	Non-Governmental Organization
SBSTA	Subsidiary Body for Scientific, Technical and Technological Advice
SB	Subsidiary Body
SBI	Subsidiary Body for Implementation
SDG	Sustainable Development Goals
UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNDRR	United Nations Disaster Risk Reduction
UNPY	United Nations for Youth
UNU	United Nations University
US EPA	United States Environmental Protection Agency
YOUNGO	Youth Non-Governmental Organisations

1. CLIMATE CHANGE AND YOUTH

1.1 Climate change and climate impacts

The Earth's climate has been changing slowly over thousands of years, fluctuating regularly through cycles of hot and cold periods. However, in the last century, there has been a sharp rise in global average temperatures, as a result of anthropogenic climate change.¹ In the landmark 1.5°C Special Report, the Intergovernmental Panel on Climate Change (IPCC) warns that average global warming "is likely to reach 1.5°C between 2030 and 2052",² and "climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C."³ Even though everyone is affected by climate change, the impacts are not evenly distributed. Economically and geographically, developing countries have been disproportionately affected due to their inherent vulnerability and difficulties in adapting to the effects of climate change.⁴ Similarly, the impacts of climate change are not the same across age groups, and there are effects on children and youth which are distinct from those experienced by adults.^{5,6,7}

Currently, children and young people are more vulnerable to climate change impacts due to their limited capacities to cope and lack of decision-making power. However, this vulnerability can be reduced through implementing effective adaptation measures. Chapter 4 of the IPCC 1.5°C Special Report, 'Strengthening and implementing the global response', outlines eight general adaptation options and enabling conditions for their implementation.⁸ Many of these options have great potential for engaging young people in achieving effective adaptation outcomes and ensuring the sustainability of process-oriented adaptation measures. For example, one of the options includes "education and learning" which, through "behavioural change and institutional capacity", can strengthen social learning and have a sustainable impact on long-term change.

Given the need for adaptation, the vulnerability of children and youth today, and the relationship between climate change effects and time, the stakes are particularly high for young people. In the future, generations who are young today will experience significant climate change impacts over

the course of their lifetimes.^{9,10} In particular, if adaptation processes experience a time lag in their implementation and impacts, and young people are not included in adaptation decision making, the needs of future generations will not be taken into account.¹¹ Montana et al (2016) suggest that if adaptation action is delayed and it does not consider age and gender in its application, there is the risk of loss of dignity, fewer education and employment opportunities and loss of future livelihoods.¹²

1.2. Connecting Climate Adaptation with the Notion of Intergenerational Equity

From Section 1.1, we can see that part of the need for urgent climate change adaptation is to protect and maintain environmental resources for future generations so that they, too, can enjoy a good quality of life. That is the reason why adaptation policies and programmes should aim to respond to the inherent vulnerability of children and youth. Climate change governance raises questions regarding connecting climate adaptation with intergenerational equity. In the context of climate change, the term 'intergenerational' suggests a value system that gives equal weight to the needs of all generations living today and those not yet born.¹³

It is imperative that intergenerational equity issues are addressed in climate policies since future generations are not in a position to affect the formulation of present-day policies that could have an influence on their quality of life.¹⁴ Thus, in current efforts to economically advance, it is important to evaluate the trade-off between the cost of pursuing a high carbon development strategy against that of pursuing a low carbon development strategy for all generations.¹⁵ This effort weighs the needs of all generations equally. To successfully connect climate change adaptation to intergenerational equity, there is a need for stronger political will from member states and a sense of urgency and justice in their actions about giving equal weight to the needs of all generations.¹⁶ Part of the role the youth plays in incorporating intergenerational equity into climate change

adaptation is supporting their respective member states as equal and strong stakeholders at all levels of climate change governance, and holding them accountable for equity in decisions taken.

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), adopted by member states of the United Nations holds much importance for connecting climate change adaptation to intergenerational equity. According to Spijkers (2018), the goal of the SDGs is to try to adapt to the effects of climate change, by protecting the well-being of both present and future generations without compromising the ability of any generation to be able to achieve an equitable quality of life and a sustainable planet.¹⁷ So in many ways, children's and youth's needs are woven into the SDGs. 35 out of the 232 indicators used to measure progress towards the attainment of the SDGs are directly related to the well-being of children and youth.¹⁸ If governments are to achieve their goal of sustainable development as established in the Brundtland Report (1987), then the needs of the present generations should be met without compromising the needs of future generations.¹⁹ This would require meaningful youth engagement as a critical first step at all levels of climate change adaptation processes.

1.3. Youth engagement in climate action

Youth-led climate action has gained significant media attention recently, for instance, through activist movements like "Fridays for Future", an initiative that has mobilized school students in more than 100 countries worldwide to strike every Friday to demand their governments take action in the face of the current climate crisis.

Climate action led by the youth happens at all levels (local, national, international) and in different areas (e.g. social, cultural). While these initiatives or movements are transcendental in generating changes on the ground and also vital to push governments to act, this section will focus specifically on youth engagement within the United Nations Framework Convention Climate Change (UNFCCC).

The Convention was created at the United Nations Conference on Environment and Development (UNCED), also known as "Rio Earth Summit" in 1992. Youth organizations, groups and individuals have been attending and participating actively in international negotiations for many years but did not receive formal recognition as a UNFCCC constituency until 2011.²⁰

At COP10 in Buenos Aires, the creation of a youth constituency was discussed for the first time. Constituency status would allow youth to have conference access, deliver plenary interventions, attend high-level meetings, perform actions, and host side-events and exhibits at UNFCCC conferences. Even though securing official recognition from the UNFCCC took longer, youth delegations from several countries had attended COP events to advocate on behalf of children and youth under the umbrella of the International Youth Climate Movement.

Since 2009, youth non-governmental organizations participating in UNFCCC processes have been formally recognized as YOUNGO (Youth Non-Governmental Organizations). In YOUNGO's first two years as a constituency, its status was provisional but became fully recognized at COP17 in Durban, as one of the nine constituencies working within UN international climate negotiations.²¹ Since then, this constituency has served as both the official conduit for youth participation in the UN climate talks, and as a global network of youth and youth-focused organizations that work on climate change and engage with UNFCCC.²²

YOUNGO is made up of organizations, groups and individuals who identify as youth. The constituency uses dialogue and consensus to make decisions, which represent the gender and geographic diversity of the group.²³ To date, YOUNGO has engaged more than 25,000 children and young people, of whom about 5,500 are currently active.²⁴ Likewise, it has engaged about 200 youth-led organizations and operates through 22 working groups (WGs^a), one of which is the Working Group on Adaptation.

The Adaptation Working Group was established in Doha (COP18) to contribute youth expertise and voices to

^aWGs: ACE (Action on Climate Empowerment), Adaptation, Agriculture, Cities, Communications, Conflicts of Interest, COY (Conference of Youth), Eco-Conservation, Finance and Markets, Gender and Women, Health, Human Rights, IPCC, Loss and Damage, Mitigation, Oceans, Participation, Policy and Operations Team, Renewable Energy, SG Climate Summit, Systemic Change and Talanoa Dialogue.

UNFCCC processes on adaptation. The working group operates mainly during COPs and Subsidiaries Bodies' (SB) meetings, as well as the Conferences of Youth (COY) where the positions of children and the youth regarding the COP Adaptation Agenda are raised and advocated for inside and outside the negotiations. Sub-groups follow agenda issues on Subsidiary Body for Implementation (SBI) and Subsidiary Body on Scientific, Technical and Technological Advice (SABSTA).^b Part of the aim of such sub-groups is to actively engage parties to consider youth perspectives for different points of negotiation, including adaptation.

1.4 Methodology

This background paper makes use of YOUNGO's definition of 'youth', as persons under 35 years of age. While throughout the paper the youth are often described as one group, the authors recognize that they are not a homogenous group, but rather diverse in culture, background, profession and education.

This background paper was developed using different exploratory research methods. First, a literature review was carried out to establish key concepts and to gain an academic perspective on the issue. This provided insights into youth-led initiatives, organizations working with the youth, and the existing challenges young people face in adapting to climate change. The main body of the literature included scientific papers, as well as publicly available reports from different national and international organizations.

Secondly, nine on-ground consultations were held in Argentina, Canada, Dominican Republic, Ghana (two consultations), Haiti, India, Kenya and Malaysia to gather information on adaptation initiatives as well as the challenges and opportunities relating to it. The format for the workshop was focus-group discussions conducted by youth-led entities who invited other young people and climate adaptation stakeholders for discussions. Two on-ground consultations included semi-structured interviews with

representatives of national offices responsible for climate adaptation and disaster risk management. Additionally, more data was collected via online surveys that were carried out through social media channels of YOUNGO and supporting organisations. The survey results were analysed, and the resulting data used to validate information obtained during the on-ground consultations.

Finally, during the development of the report, seven structured interviews were conducted with representatives of international organizations working in the field of climate change adaptation and youth engagement in climate action. The details of the interviewees can be found in Annex 1.

^bSABSTA provides timely information and advice on scientific and technological matters related to the Convention, the Kyoto Protocol and the Paris Agreement. SBI is the heart of all implementation issues and aims at enhancing the ambition of Parties in regard to transparency, mitigation, adaptation, finance, technology and capacity-building. SBI and SABSTA work together on cross-cutting issues that concern both their areas of expertise.

2. THE ROLE OF YOUTH IN CLIMATE CHANGE ADAPTATION STRATEGIES

One of the common narratives of vulnerability to climate change and disasters is one of the passivity and victimhood of children and young people in the process of climate change adaptation. This highlights the negative culture of focusing on the inherent characteristics that make children and youth vulnerable, rather than on their empowerment to become more significant stakeholders in contributing to or implementing climate change adaptation strategies. The youth have a role to play as agents of change in climate change adaptation strategies.²⁵ This chapter brings attention to the emerging counter narrative, which emphasizes the capacities and potential of young people to drive climate adaptation efforts.²⁶

2.1. Policy Perspective: Enabling the implementation of Climate Change Adaptation Strategies

Governments have a key role to play in the process of climate adaptation strategies, through the development of inclusive policies. Member states of the United Nations have recognised that climate change adaptation strategies cannot be implemented by sovereign states alone but have to be implemented together with other stakeholders, including children and youth.²⁷ By establishing YOUNGO as a constituency within the climate change policy negotiation process, young people are recognised as major stakeholders that can help inform adaptation policy at the global level.²⁸ As described in section 1.3, the last ten years have seen many reforms that facilitate youth participation in climate change negotiations and policy making. Through participatory processes, several success stories of youth involvement in policy making have emerged, which is a positive step away from the norm.

Young people's involvement with policies that enable the implementation of climate change adaptation strategies has come a long way from the days when the youth were considered passive actors in international and national debates on agreements about climate change.²⁹ For example, even though the climate change convention (UNFCCC) makes a general reference to vulnerable groups, it does not specifically mention children and youth, nor mentions that the rights of children and youth (vulnerable groups) should be respected in decision-making about climate change. However, the convention states that the climate system should be "protected" for the benefit of present and future generations of humankind, based on equity. Though this understanding gives the legal basis to include children and youth in the climate negotiation process, it also gives the

impression that decision are made for vulnerable people – rather than with them – in planning and implementing climate change adaptation strategies.³⁰

Consultations with youth groups and young people in Ghana and Kenya suggest that enabling the implementation of climate change adaptation strategies at the national level would require a framework that incorporates the views of young people in the policy drafting process (on-ground consultation, Ghana and Kenya, 2019). A vital element of the policy implementation process is that responsibilities and goals are defined by the various stakeholders involved and progress towards their achievements monitored. When young people are included in the formulation, follow-ups, and review of climate change policies, they are engaged on more equal terms, thus engendering their sense of ownership of the process.³¹

2.2 Action Realm: Implementing actions

Youth actions on climate adaptation are critical to drive large scale adaptation efforts. In light of current and future risk, as well as the rising interactions between climate change and increasing vulnerable populations, young people are eager to support and initiate adaptation actions globally in order to secure a safer future.³² These efforts span different areas, including lobbying and influencing political attitudes, advocacy, capacity building, mobilizing, and establishing or working in social enterprises. It has been argued for some time that "the younger generation, in particular, may be at the forefront of those who have adapted to the newer forms of political expression, mobilization and engagement."³³ With the need for increased political commitments towards climate adaptation, youth involvement in newer forms of political mobilization and engagement is essential to drive action.

Despite the ability and potential of young people to contribute as active partners in climate action, many areas across Latin America, Sub-Saharan Africa, Asia and parts of Europe only categorize young people as vulnerable, together with the elderly, disabled, and other groups in society who may be unable to act during emergency climate events.³⁴ In communities where culture suppresses the voices of young people, common in both the global north and global south, such categorization reinforces the inactiveness of young people as actors in climate change adaptation.³⁵ This view inhibits effective engagement of young people to harness their capacity to contribute to adaptation efforts, and classifies them as passive actors. However, despite their lack of a voice during decision making processes, young people are the most important workforce for the implementation of climate adaptation activities.

leaders. This has also been observed in low, middle and high income countries, where the youth are implementing large scale afforestation projects and other agroforestry initiatives, local weather stations for improved agriculture, drainage constructions and land mapping aimed at reducing the frequency and impacts of floods (and subsequent droughts), while providing livelihood options for their peers.^{39,40} Hence, young people are exposed to the practice, and challenges associated with anticipatory actions. This demonstrates the need for increased integration of youth action at the national and regional levels for replication and knowledge exchange where possible.

In many sectors that need adaptation efforts, young people are actively engaged in adaptation action, for example, through entrepreneurship in the energy and agricultural sectors in urban and rural areas across the globe, as was seen in the consultations held in nine countries. In many developing countries, adaptation efforts in local communities are executed by young people in consultation with local government representatives and local traditional

BOX 1

Young people strategize on implementing adaptation efforts in Ghana.

In Ghana, youth have been engaged in adaptation efforts at the community and national level in the implementation of adaptation efforts. The Green Africa Youth Organization, Ghana Youth Environmental Movement, and 350 Ghana, among others, are leading multiple campaigns aimed at increasing government commitment towards adaptation efforts. During the 2019 Africa Climate Week, the organizations mobilized over 200 young people from across Africa to take part in a climate march in Accra to demand climate justice and call for urgent adaptation actions.

Ghana's capital city, Accra, is affected by perennial floods which affect the livelihood, health, and well-being of its residents. On the side of the government, the National Disaster Management Organisation (NADMO) is putting up several strategies to reduce the vulnerability to flood related hazards, especially in urban centres. Through the Community Resilience through Early Warning (CREW) project – developed in accordance with the Ghana Plan of Action for Disaster Risk Reduction and Climate Change Adaptation – NADMO has engaged young people in conducting risk assessments and updating of risk maps for effective early warning system operations. Additionally, young people in hazard prone communities volunteered to share weather information from the Ghana Meteorological Organisation with the broader community during the rainy season. In situations where floods are inevitable, young people organise to establish short-term coping mechanisms, such as building makeshift levees of sandbags, clearing drainage systems, and cleaning the community to reduce the impact of the floods. Subsequently, young people are responsible for implementing adaptation actions agreed by the community (on-ground consultation Ghana, 2019).^{36,37,38}



BOX 2**17-year old girl leads adaptation action in the Philippines**

In the Philippines, 17-year-old Marinel from Eastern Samar is leading adaptation actions in her community. After surviving Typhoon Yolanda in 2013, which destroyed her home, Marinel learned more about climate change and started taking action in her own community. She participated in Plan International's climate change adaptation projects and was teaching at youth camps to pass on the knowledge she had gained to the younger children in her community. She organised mangrove plantings, a community clean-up, recycling and waste-segregation activities, and wrote a song with children and young people to teach her community about climate change.⁴¹

BOX 3**Kenya: Adaptation through a youth-led social enterprise**

In Kenya, climate change is distorting the presence and mobility of invasive species, hence innovative initiatives are needed to reduce expected harm, while providing livelihood options for local communities. One example of a project addressing this adaptation is directed by Takawiri Craft Enterprise, a youth-led enterprise that harvests the invasive water hyacinth (*Eichhornia Crassipes*) from the shores of Lake Victoria in Kisumu and uses them to produce hand-made stationery and craft items. Water hyacinth dominates aquatic ecosystems rapidly and diminishes the ecological health, which results in loss of native species. The activities of the enterprise reduce the effects of water hyacinth on the Lake Victoria aquatic ecosystem, which have led to the loss of livelihood for fishermen in the community as well as inhibiting water transportation from the islands to the mainland.⁴²

2.3 Capacity-building and Action for Climate Empowerment

Action for Climate Empowerment (ACE) is a UNFCCC term that refers to the 6th Article of the Convention and relates to education, training, public awareness, public access to information, public participation and international cooperation on these matters.⁴³ Article 12 of the Paris Agreement reinforces the necessity of ACE in the Post-Paris era of climate change governance.⁴⁴ The current work programme on ACE/Article 6 of the UNFCCC^b notes the importance of the role of the youth and provides further guidance for governments looking to develop robust policies to ensure they deliver against this important article of the Convention.^c Each year, ACE is discussed in participatory dialogues at the UNFCCC intersessional meetings, where governments, intergovernmental organizations and NGOs, including

youth organizations, share best practice on implementation of this crucial policy.

Capacity building refers to the process by which organizations or individuals gain, strengthen, and retain knowledge or skills, and equipment or tools that enable them to achieve determined purposes. In its social approach, Community Capacity-Building (CCB) points out the importance of providing tools and strengthening the abilities, competencies and skills of communities or individuals in order to maintain or improve their condition and organize themselves to better act when facing new contexts.^{45,46,47}

^bACE/Article 6 of the UNFCCC <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=12>

^cSee decisions: FCCC/SBI/2012/L.47; FCCC/SBI/2016/L.15

^dOn education and training: 1st Dialogue;3rd Dialogue: 5th Dialogue; On public participation, public awareness and outreach: 2nd Dialogue, 4th Dialogue,6th Dialogue

Climate change awareness has increased over time; however, existing work on knowledge and awareness-raising indicates that there are gaps remaining in information and public knowledge about climate-related issues.⁴⁸ Young people can play an important role in raising awareness and building capacity by influencing their peers and communities. Hence, it is crucial to include the youth as partners and leaders within projects, rather than regarding them only as beneficiaries.⁴⁹

Examples of different youth-led organizations working on CCB and ACE are provided as follows:

BOX 4 International Forestry Student Association (IFSA)

IFSA is an organization that connects forestry students from all over the world through different activities (e.g. conferences, courses, field trips, among others), in order to broaden their knowledge and understanding to achieve a sustainable future for forests, as well as to provide a voice for the youth in international forest policy processes. In addition, IFSA's mission is to provide a platform for students of forest sciences to enrich their formal education, promote cultural understanding by fostering collaboration with international partner organizations and facilitating students' practical training with a global perspective. Currently, IFSA is present in 52 countries on 5 continents.

In 2018 alone, the organization created five open-access courses through infographics, podcasts, and videos related to measures that halt deforestation, and improve landscape restoration and conservation, among others. In the same year, they delivered several on-ground workshop and courses were delivered. For instance, at the World Urban Forest Forum, IFSA conducted a full day youth training workshop with approximately 100 students who learned how to think strategically and collaboratively through group project challenges. Likewise, within the framework of the International Day of Forests, the organization lead 13 world cafés in different countries on the topic "Forests and Education".

Finally, IFSA is one of the founding members of the "Youth in Landscapes Initiative", a partnership coordinated by youth entities to empower young people to take positive action in their own landscapes. The program focuses on providing science, real-world practices and stories to students, enabling them to further develop their own ideas and projects that include education and ecosystem restoration topics.^{50,e}

BOX 5 Capacity building and mobilization in Latin America

The Latin American and Caribbean Youth Climate Front connects and coordinates youth climate organizations and movements across the region. CLIC's organization members work either in local climate adaptation projects, or within the international context in regard to UNFCCC negotiation processes. This youth front seeks the union and mobilization of young people and youth led-organizations within Latin America and the Caribbean to positively impact climate adaptation strategy at the local and international level.

At the international level, CLIC started its work in education and ACE in Marrakesh (COP22) through YOUNGO. The group negotiating and advocating the youth's position under the Article 12 of the Paris Agreement are mainly from Argentina, Colombia, Mexico and Peru. Additionally, CLIC creates awareness and spreads knowledge about UNFCCC processes to educate, inform and engage other young people in climate matters.

At the local level, organization members carry out several actions. For instance, in Mexico, its members worked closely with the Ministry of Foreign Affairs in all matters related to the Article 12 of the Paris Agreement, and gave input to the

^e Further information gathered through personal conversations with IFSA representatives: Lisa Prior (Vice President), Dolores Pavlovi (President) and Salina Abraham (Former President).

decisions taken towards the Paris Rule Book in education and ACE. This action also served as a tool to mainstream education in climate change towards the Mexican National Development Program. Also, in Argentina, its members carried out the Local Conference of Youth (LCOY) alongside COP24, which served to establish the necessities for climate adaptation from its different regions regarding energy, forests, and capacity building. LCOY was also key in strengthening relations among youth, other civil society actors and their central government. In Peru, a member founded the “Talanoa Dialogue Project”, where young people exchanged knowledge and good practices in climate adaptation and mitigation. This initiative was replicated in 12 other Peruvian regions and formed the basis for replicating it in Argentina, Mexico and Paraguay.

Finally, CLIC members have been building the capacities of and providing guidance to other children and youth in its member countries to carry out climate demonstrations within the framework of the “Fridays For Future” initiative.^{51,f}

3. BARRIERS THAT YOUNG PEOPLE FACE IN ADAPTATION ACTIONS

Despite the increased engagement of young people in climate change adaptation, as highlighted in the above examples, they still face many barriers in the sector. These barriers may be institutional, structural or financial and stem primarily from a deficit in young people’s capacity and knowledge. The barriers described in the following chapters were identified through on-ground consultations in nine countries that brought together youth interested and active in climate change adaptation. Being involved in climate adaptation efforts themselves, they were able to identify the most significant barriers they faced so far. The list is not exhaustive and not all the identified barriers intersect in all contexts.

Chapter 3.3 will highlight some pathways forward on how to overcome these barriers.

3.1 Institutional Barriers

Over the last several years, the importance of youth involvement in global climate change governance has been increasingly recognized. As previously mentioned, youth groups are involved in many international climate change adaptation programs, such as the United Nations Joint Framework Initiative on Children, Youth and Climate Change, the annual Conference of Youth, Young Champions of the Earth (with UN Environment) and YOUNGO activities. At the national level, the youth’s involvement ranges from their inclusion in national del-

egations (like in Norway, for example) to their not being involved in any significant way at all. Despite their efforts to get involved with climate adaptation actions, young people still face many of such institutional barriers.

LACK OF PLATFORM / RECOGNITION AS KEY CONTRIBUTORS

As highlighted in chapter 1.1, youth and children are particularly vulnerable to climate change. In post-disaster studies especially, vulnerable groups have often been framed as passive victims of climate change.⁵² This is also true of literature on youth and children, in relation to climate change and disasters. Unfortunately, this framing neglects the capacities and agency of young people to cope with and adapt to climate change.⁵³ This neglect of their capacities is a prevents some organizations from viewing the youth as active key stakeholders, and thus lack platforms to include young people in climate policy and decision making. The on-ground consultation in Buenos Aires, Argentina, criticized “the absence of spaces where young people can participate in the design and implementation of actions and measures to adapt to climate change” (On-ground consultation Argentina, 2019). A similar lack of platform for political engagement was recognized by Canadian youth. The on-ground consultation mentions, “Barriers related to voting were noted, including the 18-year age limit, the need to be a citizen, and the need to have an address” (On-ground consultation Canada, 2019).

^f Further information gathered through personal conversations with CLIC’s National representatives: Alexandra Carranza (Peru), Danae Espinoza (Mexico), Maria Luz Falivene (Argentina), and Santiago Aldana (Colombia).

Young people acting against climate change in their communities are often encouraged to collaborate with local actors, such as local governments, to enhance the effectiveness and implementation of their project(s). Despite this, in many countries, there is an institutional gap between young people and local governments when it comes to meaningful exchange on climate adaptation. Even though youth actions continue to appear in local news reports, efforts to integrate these actions in national strategies, or the adaptation actions of governments at the district and municipal level, are lacking. Consultations from Ghana showed a lack of youth engagement in the development of adaptation plans in local government offices (mainly district and municipal assemblies), although there may be some youth involvement at the national level. The lack of policy frameworks and specific directives/guidelines on youth engagement in action against climate change and environmental protection strategies has systemically inhibited youth participation in climate change adaptation. For example, Ghana's National Youth Policy and implementation plan does not address climate change or offer measures to promote youth engagement in climate action. Likewise, Ghana's National Climate Change Policy,⁹ Climate Change Adaptation Strategy, Climate Change Master Plan and other institutional climate change policies do not make specific provisions for youth engagement. However, Ghana's new National Adaptation Plan Framework provides space for the involvement of youth in climate adaptation. This appears to be a starting point to advocate further youth involvement in climate adaptation.

TOKENISM

Even with platforms – such as YOUNGO, the formal youth-NGO constituency to UNFCCC – giving the youth a voice in policy conversations, that voice is seldom listened to. Often, young people feel as though their participation in consultations and in decision-making does not extend beyond a symbolic gesture. During one of the consultation meetings, a young participant mentioned how decision-makers are “hearing us but not listening to us,” and that inclusion is often considered just a token to “check off a box”. This results in a disconnect between young people and decision-makers. (On-ground consultation Canada, 2019). Having, thus, such little influence on formal politics and policy decisions, the youth critique those in power through other forms of engagement, such as public gatherings for discussions or demonstrations.⁵⁴

A further issue that emerges from tokenism is a generalization of the youth as a homogenous group. If youth participation is reduced to a photo opportunity or other pseudo-participatory activities, a small number of young people is asked to represent the whole generation. However, as it has been noted, “considering the sheer number of youth[s], any attempt to identify globally relevant ‘youth’ attributes and political issues has to be treated with caution. Youth

and young people should not be seen as homogenous.”⁵⁵ For example, the younger generation is often referred to as “digital natives” without accounting for inequalities between the global north and global south, and the resulting unequal access to technology.⁵⁶ With this outlook that the youth are a monolith, young adults are met with the unfair expectation to represent children as well as youth around the world.

INSUFFICIENT TRANSPARENCY / BUREAUCRACY

The consultations held in India and Ghana found that insufficient transparency in institutions and government entities, and excessive bureaucracy poses a barrier for youth participation. This does not only increase the difficulty in receiving information, but also poses bureaucratic constraints for financially weak organizations, as is the case for many youth organizations. For instance, “Ghana's National Youth Authority requires all youth NGOs to register with the Authority at a high fee, which is renewed annually. Meanwhile, prior to registering with the Authority, they must first be registered with the National Registrar General's Department at a fee which is also renewed annually. The same youth NGOs are expected to register with the Social

⁹ Ghana's National Climate Change Policy and other documents only recognised youth as climate vulnerable groups

Welfare Department as well as their respective district assembly of operation – all at a fee and renewable annually” (On-ground consultation Ghana, 2019). These high recurrent fees discourage youth NGOs from registering and getting formally recognized, which further reduces their broader engagement on a national level.

EDUCATION

A lack of education can be both a structural barrier and a capacity challenge. However, the systematic problem of continuous lack of education in many countries is a big barrier for youth to get informed and involved in climate action or be trained to gain appropriate skills for a greener future labor market. In addition to a general lack of education access in many places, a lack of climate change education was specifically noted in many on-ground consultations as a challenge. For instance, youth groups in India argued that although environmental education is compulsory in all schools and higher education curriculum, the data in the course books is outdated. The language and narratives used for explaining climate science and related subjects such as adaptation and resilience are often too complicated for young students to understand. These narratives also tend to highlight climate change impacts faced globally or in remote regions of the world. This usually fails to generate urgency about climate change among the youth, since they are given the impression that climate issues are not a direct concern to them and are not context or locale-specific (On-ground consultation India, 2019).

Another education related barrier is the perception of a lack of education of the youth. Many people of older generations underestimate the knowledge of young people and thus perceive them as not being informed and knowledgeable. This presents a problem for political engagement in general, not only related to climate change adaptation. As a newly elected Swiss politician, Martin Neukom, recently stated in a newspaper interview: “I would say: As a 32-year old I have to be more competent to be perceived as competent as the other candidates.”⁵⁷

3.2 Capacity challenges

Capacity barriers comprise of a lack of technical skills, economic resources, motivation - especially to participate in formal, adult-led processes, and awareness and knowledge.⁵⁸ Often, the line between capacity challenges and institutional barriers is blurred. Structural elements such as

the education system or curricula can have a big impact on the individual capacity of young people. Nevertheless, looking at these barriers from a capacity perspective can increase meaningful capacity-building opportunities.

KNOWLEDGE CAPACITY CHALLENGES

In almost all the on-ground consultations, the lack of technical or organizational knowledge was highlighted as a barrier to implementing adaptation action (on-ground consultations in Argentina, Canada, Dominican Republic, Ghana, Haiti, India, Malaysia). This is not restricted to technical knowledge on climate change adaptation, but also includes access to funding, organizational management and understanding national and international politics and policy processes.

In a self-critical way, some youth consultations also revealed that many young people are not aware of climate change and its impacts, much less what adaptation options are available (on-ground consultations in Ghana, Malaysia, India). There is little awareness on climate related topics, thus young people have little knowledge or incentive to take collective responsibility to initiate adaptation and community resilience-building projects (on-ground consultation Malaysia, 2019).

This combination of individual and structural barriers was summarized by the on-ground consultation in Ghana thus:

“A combination of low literacy, educational barriers, lack of effective communication and information dissemination, limited research capacity of youth, lack of information, platforms and online sources, and general disinterest of youth to participate in development discourse and processes can all be blamed for less youth-led climate adaptation” (on-ground consultation Ghana, 2019).

Youth organisations and constituencies often have high participant turnover because a significant number of their participants are volunteers and thus, cannot sustain participation over a long time or fund in-person capacity-building training sessions. This leads to reduced institutional memory for these youth organizations and poses challenges to understanding relevant policies and decisions in climate change negotiation processes, which is a complex and cumulative endeavour.

Another knowledge capacity challenge relates to intergenerational knowledge transfer and influence. This has proven to be an important tool in raising awareness for climate action among different generations. The growing global movement of children and youth activism towards climate change shows that many young people are aware of the climate emergency, but their lack of influence on adult behaviour (especially, policy makers) presents a significant challenge.

Traditionally, in many cultures, indigenous knowledge is handed down from one generation to the next through oral history. Indigenous knowledge is defined as “a cumulative body of knowledge, belief and practice, evolving by adaptive processes and handed down through generations by cultural transmission.”⁵⁹ It encompasses a unique way of being, including traditions and linguistic, ecological and governance systems that are intrinsically valuable to the society, rather than an extraneous lifestyle. Fernandez-Llamazares et al. (2015) found that declining interaction between older and younger generations results in disconnection with the landscape, and write, “If old generations do not tell younger generations how ecosystems resembled in the past, ecological changes remain unnoticed to younger generations.”⁶⁰

Nearly 70 million indigenous people, like the Pygmies and San – of Central and Southern Africa, respectively – depend chiefly on the surrounding ecosystems for their livelihoods. Indigenous youths among these peoples inherit significant land and ecosystem practices essential for climate adaptation. It has been proven that biodiversity and ecosystems flourish when indigenous communities have control of the land.⁶¹ Hence intergenerational knowledge transfer is important to preserve practices that prioritizes ecological health. Indigenous knowledge represents both detailed ecological information as well as resource management strategies and thus fosters adaptive capacity to environmental variability.⁶² Such knowledge is critical for the environmental sustainability of the ecosystems surrounding the regions of human habitat.⁶³

However, in the African, Latin American and the Asia-Pacific regions, this social memory and environmental knowledge is at risk of loss due to increasing globalization and urbanization.⁶⁴ In younger generations, a decrease in their motivation to exchange indigenous knowledge can be observed in gradual migration trends towards nearby

towns and cities. This might be a combination of changes in their occupational profile, their level of contact with their ecosystems - due to loss of land and livelihood, and level of immersion in an urban lifestyle.⁶⁵ As such, intergenerational knowledge transfer must be promoted in indigenous communities. Governments must acknowledge the contribution of indigenous people towards climate adaptation and develop policies that inhibit land grabbing and forced urbanization on indigenous people.⁶⁶ Indigenous youth who inherit and practice these unique ways of life – which protect and preserve their surrounding ecosystems – need to be engaged and participate in the development of adaptation strategies at the global level. If shared, the diverse knowledge possessed by indigenous communities can complement modern science to expedite adaptation actions across diverse communities globally. For instance, in Canada, a partnership among the Inuit community, government, industry and academia led to the launch of a climate change adaptation tool called Sea-ice Monitoring and Real-Time Information for Coastal Environments (SmartICE). The tool combines modern technology and indigenous knowledge to generate real-time hazard monitoring to inform Inuit on safe sea-ice travelling and hunting. In contexts where indigenous youth face linguistic barriers to communication and exchange with non-indigenous communities, as is the case of the Inuit people of Canada, there should be increased efforts to overcome such barriers, such as by investing in research and programs to improve communication and cultural exchange between indigenous and non-indigenous youth.



Adapt for our Future on-ground consultation in Malaysia, 2019

In South America, the Warning System Pilcomayo project (implemented by Redes Chaco Network) brought together adults and young people to merge indigenous knowledge and modern technological knowledge to mitigate climate risks through adaptation. The Pilcomayo is a river that runs through Argentina, Paraguay and Bolivia. Over the past few decades, increased rainfall due to climate change has led to increased flooding of this river, causing significant material and human losses. This project developed an early warning system, which uses the traditional knowledge provided by adults of native communities together with modern technological tools that younger people are savvier with, which may be unfamiliar to much of the older generation. The early warning system is helping all members of the community to understand the risk of flooding better, plan further adaptation measures, explore livelihood options from the new trend of precipitation, and enhance intergenerational knowledge transfer. Through on-ground consultations in Argentina, it was found that similar measures have also been identified in Brazil and Peru.⁶⁷

FINANCIAL CAPACITY CHALLENGES

Almost all the on-ground consultations named lack of funding as one of the major challenges facing the youth in climate adaptation. (Canada, Ghana, Haiti, India). Many youth-led organisations blamed their lack of skills, expertise and experience to develop climate adaptation proposals as a reason for being unable to attract funding and other resources needed for their climate adaptation initiatives (on-ground consultation, Ghana, 2019). This barrier is also shaped by their capacity at the individual level, and is rooted in structural constraints such as a general lack of funding options for young people (this will be further discussed in section 4.3). It is difficult for the youth to view themselves as major stakeholders and as such, they may feel manipulated – rather than empowered – in climate adaptation frameworks. Scoones et al. (2018) found that in some countries, such as South Africa, “state-sponsored youth organisations aim to “tame” and channel youth aspirations in ways that suppress autonomous political mobilisation.”⁶⁸

INSTITUTIONALIZING MEANINGFUL YOUTH ENGAGEMENT

According to UNDP (2013), effective and meaningful political youth participation can take place in three forms. Firstly, it can be consultative, meaning that young people’s voices are considered in high-level consultation processes about climate adaptation. Consulting the youth should take place on a clear mandate with transparent and comprehensive information provided, so that youths can fully and effectively participate in climate adaptation strategies. Secondly, youth engagement can take the form of youth-led involvement. In this form of engagement, young people directly influence decision-making within their communities through platforms such as student councils, youth parliaments, and other youth-led movements and civil society organisations. The third approach is youth collaborative participation, where young people actively take part in regular political decision-making processes as voters and members of parliament, political parties or advocacy groups.⁶⁹

3.3 Ways to address and mitigate these barriers

Recognizing the need for youth participation is the first step to overcoming these barriers. It is crucial, however, that this participation is meaningful. This chapter is a collection of best practices and ideas on how the challenges described above can be addressed.

To recognize the youth as key contributors and avoid tokenism, all three forms of youth engagement should be simultaneously fostered through institutional instruments. A concrete measure could be to provide the youth a seat at the table in decision making processes. For example, a Federal Advisory Committee (FAC) to the United States Environmental Protection Agency (US EPA) recommends advisory youth work groups in every federal agency, as well as requiring at least 20 percent of federal advisory bodies to be composed of young people.⁷⁰ Considering that the youth of today will be the ones most affected by current political decisions, and that 26% of the world's population is below 14 years of age, it is not prudent that they have almost no political say. Recommendations such as those from the FAC in the US EPA provide a reasonable path to creating more inclusive and youth-oriented governance. Engaging the youth in today's political decision-making, means governing for the future.⁷¹

INCREASING TRANSPARENCY

Ensuring transparency at all levels will require easy access to public information. One suggestion based on the on-ground consultation in Kenya is to “demystify the policies in place in[to] a simpler language for the youths and people at the grassroot level to understand the terminologies used during negotiations and in policy papers” (on-ground consultation Kenya, 2019). With capacity-building support, experienced young participants could perform this role. Youths do not lack the intelligence to do this, but they require institutional memory to do so effectively. Easing complicated bureaucratic processes on all levels can improve and help create more efficient systems of youth participation. This can include streamlining administrative processes and increasing consultation periods with young citizens.

EDUCATION AND CAPACITY BUILDING

Education and skills training are a widely recognised way of strengthening capacity of youth and overcoming barriers. Many programs that provide such opportunities already exist and should be fully utilized. For example, the YOUNGO Working group for Adaptation regularly holds webinars for first-time young people who want to be engaged in the intergovernmental process of climate change negotiations. This is embedded in ACE to some extent.

See chapter 2.3 for further information.

During the on-ground consultations, further suggestions were made on how access to climate change education could be improved, one of which was to include climate change education in the compulsory curriculum (on-ground consultations in Canada, India, Kenya, 2019). Initiatives like the Trans-disciplinary Research Oriented Pedagogy for Improving Climate Studies and Understanding (TROP ICSU) support teachers globally by providing a platform for teaching tools and lesson plans on the topic of global climate change.⁷²

Participants in the consultations also suggested awareness campaigns targeted at motivating youth-led climate action. It is crucial to raise awareness that climate change is happening right now and right here and not only in some far-away place. This can help foster the sense of responsibility in young people to take positive action against climate change.

Beyond primary and secondary education, academia can also play a big role in improving climate change knowledge. An associate academic officer at the United Nations University (UNU) for Environment and Human Security stated, “Knowledge is Power. If we understand the current situation and what we might be confronted with in the future, then we know we have to adapt. If we know this, we can be creative, so this learning process is really important.” This is the reason why the UNU does not only conduct research regarding the youth, but also involves them in the research process itself. The associate academic officer attests that “we are doing a lot to embed young people in our research. On the one hand we conduct research with them to understand their perspective. On the other hand, we do capacity building through a Master program and a PhD program. This is a must-have – if we don't have a new generation growing with us, where does this all go? We need young people to come in with a new drive and new vision. So, it is very important to work at eye level independent of age.”

KNOWLEDGE TRANSFER

To improve intergenerational knowledge transfer and learning, there needs to be a platform that promotes exchange between people of generations. This could be achieved through environmental education programs suggested by Hu and Chen (2016). Furthermore, to improve the relations between generations, it should be ensured that respect and

recognition is mutual between younger and older generations. At the community level, reciprocal mentorship is key to developing strong relationships across generations. This gives young people a greater stake in the climate action work in their communities.⁷³

Hu and Chen (2016) provided a suitable case study related to the implementation of a new climate change educational program based on focus group discussions between adolescents and seniors over the age of 60. Together they discussed local climate over the past decades and, by the end of the program, the adolescents' uncertainty about climate change had morphed into concern, risk perception, and greater sense of responsibility. Based on mediation analysis, the shift in adolescents' concern and greater sense of responsibility translated into greater willingness to support climate change mitigation. They concluded that climate change education should include place-based intergenerational communication to promote higher engagement in climate action.⁷⁴

Lawson et al. (2018) stresses that apart from receiving knowledge passed down from older to younger generations, children can actively influence adult behavior through intergenerational learning. Environmental education programs directed at children, but designed with intergenerational learning in mind, also result in the successful transfer of environmental knowledge, attitudes and behaviors to adults. Empirical research of such programming reveals successful child-to-adult intergenerational learning, including education about waste, floods, energy conservation behaviors and general environmental conservation knowledge.⁷⁵ This phenomenon of child-to-adult intergenerational learning is exemplified in the ongoing Fridays for Future (or School Strikes for Climate) movement, where parents, teachers – and in some cases grandparents too – start to get involved.⁷⁶

Many scholars have proposed mechanisms to maintain indigenous intergenerational knowledge transmission, one of which is fostering storytelling. "Storytelling helps to forge a number of purposes, such as entertainment, passing down a repertoire of culturally built knowledge, maintaining a sense of community, and instilling moral values, all of which laid the groundwork for social collaboration. A key feature of indigenous storytelling is the intergenerational transmission of experience, allowing for human adaptation to different environments."⁷⁷ The storytelling approach

helps maintain broader indigenous knowledge systems for young generations. It attempts to reconnect older indigenous knowledge holders with younger generations, and by this, ecological knowledge can be preserved. For climate adaptation action by young people who are not within formal education settings, this opportunity is a good way to learn how to protect their communities against the impact of climate change using contextual information. Other ways also include creating and implementing experiential learning programs, in addition to formal education, to connect the youth with their natural environment and its resources.⁷⁸

ACCESS TO FINANCE

Young people have proven to be capable of initiatives where their leadership has increased climate adaptation outputs. More opportunities need to be created to improve the financing of youth action in adaptation. This could take the form of national or regional climate change funds for youth, increased government support, or more cooperation with international organizations. In the youth consultation in Ghana, participants suggested the creation of a funding scheme that would incentivise young people to devise climate change mitigation and adaptation solutions (on-ground consultation Ghana, 2019).

Almost all on-ground consultations stressed on the need for coaching when it comes to developing technical proposals to attract funding. One idea that was suggested is to hold workshops or e-learning courses to not only develop the skills of young people, but to also make them aware of the different funding avenues available to them. Furthermore, a platform to collate and disseminate information about different climate-related funding opportunities for youth would be beneficial.

Additionally, financially supporting youth participation lifts the great burden on them of self-financing their attendance of conferences, negotiations and other adaptation events. This does not only foster youth participation, but also helps build young people's capacity to execute adaptation initiatives.

4. OPPORTUNITIES FOR YOUTH ENGAGEMENT IN ADAPTATION EFFORTS

Opportunities for young people to engage in adaptation efforts can be found in policy formulation and implementation, livelihood protection, environmental conservation, activism and academia, among others. There must, however, be enablers for young people to be able to utilize the opportunities mentioned. These enablers are not always present and thus, young people must rely on their ingenuity to contribute to adaptation efforts. Subsequent paragraphs will highlight opportunities that young people have leveraged to contribute to adaptation efforts.

4.1 Community-based climate action

Adaptation actions at the community level are essential for the community's survival and the protection of resources needed for its development. To ensure meaningful engagement of young people, it is important to provide tools that present the complexity of climate change in simple and easily understood terms (On-ground consultation Kenya, 2019). One such tool is participatory video, where young people are provided video cameras to capture a topic from their perspective in video format. Participatory videos help engage and empower young people in local communities, giving them an opportunity to voice their concerns on disaster risk reduction and climate change adaptation. Empirical research from the Philippines, supported by Plan International, showed that participatory video was an effective tool for advocacy, influencing decision-makers and most importantly, empowering young people to understand the role of climate change in altering livelihoods and impacting their future.⁷⁹ Additionally, updating current educational curricula to include the science of climate change and adaptation actions in elementary and high schools will help vernacularize the complexity of climate change among young people, and enhance their capacity to take action within their communities.

Initiatives that allow young people across the globe to compete with their climate action ideas have been instrumental in the development of youth-led adaptation efforts. Such initiatives, including UNEP's Young Champions of the Earth^h and Connect4Climate's Youth4Climate,ⁱ use compe-

titions to recognize young people as active stakeholders in climate adaptation, while raising awareness and connecting their solutions to relevant partners. Similarly, Deutsche Welle's Eco Africa, Eco India and Global Ideas initiatives are examples of global platforms which gives wide publicity and media coverage to community-based innovations, which otherwise may not have been recognized by the international community.^{80,81,82} Practical and scalable youth-led innovations in rural and urban centres across the globe that have been featured on the Deutsche Welle platforms include diverting waste from landfills and converting it into valuable commercial items, saving the south coast of Tierra Bomba from blast fishing in Colombia, expanding education and awareness on climate change through poetry, comics and photography, and indigenous ecosystem restoration and farming practices. In urban centres, the formation of cooperatives, entrepreneurship hubs and other youth associations have led to the implementation of community initiatives such as sustainable transport and urban gardening. These local climate adaptation actions, when highlighted in international media, inspire other youth also to act on climate change.⁸³

At the national level, the Dominican Republic proved that youth engagement in climate adaptation is successful when young people are provided with the right environment and support. As part of the country's Third National Communication to the UNFCCC, the government held an event called Climathon during its National Climate Forum. The Climathon was a hackathon that provided a space

^h Seven Young Champions of the Earth are selected each year from each global region and they receive cash prizes as well as training and capacity building support.

ⁱ The Connect4Climate community connects about 500 partners around the world including civil society groups, media networks, international organizations, academic institutions, youth groups, and the private sector.

for young people (mostly university students) to receive mentorship and technical support from 20 experts in developing climate action projects using technology. Through this government-led event for youth participation, 80 young people were engaged and 12 projects were developed, which included adaptation efforts in renewable energy and capacity building.⁸⁴ This event and similar ones across the world have been reported as an effective way for active youth engagement in local adaptation efforts towards climate change.⁸⁵

Over the past three years, the European Climate Knowledge Innovation Community (Climate-KIC) has been organized worldwide Climathons, with events taking place simultaneously across the globe. In 2018, the event reached 114 cities and attracted over 4,000 participants, including young people, policy makers, professionals and entrepreneurs, among others, who exchanged ideas for the purpose of developing adaptation projects for their local communities.⁸⁶ The event has helped to get ideas implemented in regional planning, such as in Scotland, where the Climathon event in 2017 led to a solution for sustainable urban food production in the city of Edinburgh. For this, a team of young people developed the world's first autonomous, ultra-small-scale organic waste digester, called IntelliAD. The Edinburgh Centre for Carbon Innovation adopted the proposed idea into its Climate-KIC Accelerator and supported the team to develop the idea into a climate-smart business, which is now successfully commercial.⁸⁷ These kinds of events build the legitimacy of climate change knowledge imparted to the youth and help in the development of climate action efforts needed at the community level. It gives the youth, as well as the general community, a sense of ownership of the process that fosters their understanding of the problems and solutions.⁸⁸

There are many youth-led actions worldwide, but sustainably scaling them up remains a challenge. Lack of funding, and institutional and technical support for early-stage adaptation efforts makes it difficult for young people to scale up their actions beyond their community. It is important to highlight here that the support needed from local government for youth-led climate action should not be limited to funding. We encourage governments to explore and establish citizen science programs and volunteering opportunities that focus on climate adaptation. More effective combined efforts, knowledge sharing, and continu-

ous learning are some of the main benefits of adaptation. Hence, local institutions should provide such knowledge exchange platforms for young people, as well as opportunities for self-organizing and partnerships towards their adaptation action. Finally, young people leading adaptation action at the community level must be involved in agenda setting, strategy development, and long-term adaptation planning in their local community and government institutions.

4.2 Climate empowerment and capacity building opportunities

Previous chapters have highlighted the challenge of inadequate resources, tools and knowledge that children and youth face in carrying out projects that can lead communities to better adapt to climate impacts. Possible responses to these challenges involve increased support from governments and non-government entities, as well as private enterprises, foundations and research institutions. This achieved by giving the youth more opportunities to translate their ideas into action, and providing them with the necessary tools, knowledge and financial support, thus empowering them to boost their impact.

Enabling the youth starts by including them in discussion groups, until they are fully involved in negotiations and decision-making at all levels. Likewise, enabling the youth can be also understood to mean creating a safe and enabling environment to carry out their adaptation initiatives, e.g. through creating laws that mandate youth participation and foster free speech.

Nowadays, the most important topic of discussion within the climate change agenda is the implementation of the Paris Agreement. The recent approval of the Paris Rule Book of implementation shows the challenges and opportunities that governments face when incorporating the Paris mandates into their local legislations. Although youth participation in the international climate context has grown, it does not necessarily mean that the readiness of governments to include youth has also increased. Apart from a few who enjoy funded opportunities, most children and youth pay for their own participation at different levels of climate change events. Young people not only take these initiatives to hold governments and the international community accountable to their ambitious targets, but also

to demand their governments mainstream a local climate agenda and increase youth inclusion.

BOX 8

The Belgian and Dutch initiatives for empowering youth action

The Governments of Belgium and the Netherlands carry out programs that enable youth to be part of UN processes regarding environment and climate change as part of their national delegations. For instance, in the case of Belgium's two-year program, the youth representative serves as an apprentice during the first year, and as a trainer for the successive representative during the second; this program offers youth guidance and training in climate change-related topics, both politically and scientifically. Likewise, in the Netherlands, the youth representatives receive coaching and support with task management. In both cases, youth representatives are democratically elected, and receive funds from their home countries to attend meetings and events – locally and internationally – where youth representation is appropriate. Likewise, they serve as communicators and a nexus between local youth groups, politicians and the national delegations in order to advocate for their positions and interests. Ultimately, this program aims to be replicated and expanded to other countries in order to make the youth active participants in decision-making, and allow their voices to be heard and considered.^j

4.3 Youth entrepreneurship and financing

Young people as innovators play an important role in small and medium enterprises, which have potential for investment and/or financing. The rate of youth entrepreneurship is growing in developing countries where unemployment is particularly high, and adaptation actions are critical to secure the investments, jobs and incomes of many young people.^{89,90} These youth enterprises feed into the supply chain of larger private sector firms, which means their adaptation efforts are an integral part of adaptation in global supply chains. Across Sub-Saharan Africa and Asia Pacific, there is a growing presence of youth-led tech start-ups providing and using adaptation solutions in agriculture, energy and waste management, which foster local private sector growth.⁹¹ Financiers should recognize the potential of investing in youth-led SMEs, and support the skills and capacity development of young people working on innovative adaptation solutions.

In 2018, a report by Ecosystem Accelerator, an entrepreneurship support programme funded by UK AID and Australian Aid, showed that since 2016, the number of active tech hubs across Africa has grown by over 50%:

from 314 in 2016, to over 450 active tech hubs as of 2018.⁹² Most enterprises in developing economies function within the tech sector, with many offering hybrid solutions towards climate adaptation. These solutions are mostly in energy and agriculture, such as mobile farming digital platforms that allow young farmers connect to stabilized markets and obtain climate insurance for their farms. These initiatives are important for increasing economic growth on the continent and achieving sustainable livelihood and economic models that are less vulnerable to the impacts of climate change. More finance and technical capacity building are needed for young entrepreneurs working specifically on adaptation, in both local and international jurisdictions. Innovative financing options from local governments are needed to enhance scaling up of youth-led adaptation efforts in the entrepreneurship sector to facilitate proper integration of such efforts into national adaptation strategies.

At the global level, large multilateral climate funds such as the Green Climate Fund (GCF) and the Adaptation Fund (AF) remain largely inaccessible to youth-led programs. These are important institutions to engage with to bring youth-related climate change issues to the fore. Moreover, they present an important opportunity as a source of

^j First-hand information obtained from National Youth Representatives to the UN: Eefke van de Wouw (The Netherlands) and Clemence Janssens (Belgium).

financial support for achieving youth-led and youth-focused climate adaptation projects and programs. Owing to insufficient literature on finance for youth-related adaptation efforts, the following paragraphs draw largely on the views of the experts from the Independent Evaluation Unit of the GCF and the Board of the Adaptation Fund, who we had the opportunity to interview.

The mission of the AF is to support climate adaptation for the most vulnerable. Young people are included in this group with an understanding of having a very specific kind of vulnerability. Youth issues are also included in all the 15 principles that the AF has to adhere to, including human rights, labour laws and others.^k The AF recently launched its medium-term strategy, in which it received two project proposals focused on youth, as part of its third pillar on innovation. For the GCF programming strategy, there is no explicit priority on youth. The GCF takes either of two tracks: to do no harm to the different sections of the population – which is predicated on inter-generational equity, or to proactively engage with certain sections of the population to benefit them.

Financial institutions, large multilateral funds like GCF and AF, and smaller regional and national funds, as well as philanthropic organizations must launch special initiatives focused on financing adaptation efforts led by young people. It is important to incorporate the needs of the youth in missions and strategies of financial institutions and sensitize their investments to youth-related climate issues. The Small Grants Programme of the Global Environment Facility is an example of a financial instrument that prioritized youth-led climate mitigation and adaptation projects, providing grants of up to 50,000 USD. The AF along with UNDP and UNEP will launch a similar modality to support innovative projects. Such an innovative financial modality is an example of a concrete channel for youth to benefit from AF funding. In contrast to other funding avenues, it is possible to apply for these grants without having an accredited entity. Hence, this could be a big opportunity for youth groups and organizations to obtain the funding and investment they need.

Young people have immense potential and a role to play in galvanizing financial institutions and ensuring that financial commitments made today do not have an adverse impact in the future, by asking the right questions to donors and financiers – such as the impacts of GCF resources on the ground in quantitative and qualitative terms. It is particularly important for the youth to question the impacts of climate finance as these issues affect intergenerational equity and climate justice.

^k The 15 principles which the AF has to adhere to are: compliance with the law (1), access and equity (2), marginalized and vulnerable groups (3), human rights (4), gender equality and women's empowerment (5), core labour rights (6), indigenous peoples (7), involuntary resettlement (8), protection of natural habitats (9), conservation of biological diversity (10), climate change (11), pollution prevention and resource efficiency (12), public health (13), physical and cultural heritage (14) and lands and soil conservation (15)

5. CALL TO ACTION

Current education and knowledge on adapting to climate change does not yet reach the people who will be most affected by its intensifying impacts. Today's children and youth are not only some of the most vulnerable groups, but also the ones who will live in a future impacted by climate change. Though some progress has been made in meaningfully engaging children and youth in climate change adaptation strategies, much more needs to be done to help them become holistically resilient in the face of the ongoing and future climate crisis. Therefore, governments, organizations and other stakeholders should foster formal and non-formal education in adaptation to climate change. Education on climate change and adaptation should be mainstreamed into national curricula, and priority should be given to strengthening young people's capacities to take part in adaptation efforts.

To put the acquired knowledge into practice, young people need an enabling environment. This means having the right policies in place to facilitate youth contribution to the creation, implementation, and review of climate change adaptation strategies. This includes, but is not limited to, their rightful contribution to high level processes and policies. Institutional structures need to be revised to include participation of indigenous youth in the learning, sharing and developing of adaptation practices. Creating an enabling environment also means creating conditions to foster inter- and intragenerational adaptation knowledge and experience transfer. Young people are ready to work with, and for, all stakeholder groups to achieve a resilient society in the face of climate change. Thus, young people should be given the same chance as other stakeholder groups to speak, share their views and concerns, and to actively engage.

In many instances, young people are asked to share their opinion in a tokenistic manner. This practice must cease and rather focus on encouraging youth-led participation. In this way, indigenous and non-indigenous young people will be able to directly influence decision making at all levels. Regarding adaptation action, this means that young people must not only be viewed as a vulnerable group or beneficiaries of adaptation projects, but also as equal partners, with unique strengths that can be leveraged to improve project outcomes.

Finance for climate change adaptation is increasing through many different means. However, there are little or no existing adaptation finance schemes that are focused on financing, replicating or scaling up youth-led or youth-focused adaptation action. Innovative financing options from multilateral funds, development agencies and local governments are needed to enhance and scale up youth-led adaptation efforts in the civil society and entrepreneurship sector, so these can form a part of national adaptation efforts. Considering the institutional challenges faced by youth, large-scale climate change adaptation financing bodies should create specific financing initiatives that focus on and encourage adaptation efforts led by young people.

Much more needs to be done for meaningful youth engagement. However, waiting until the necessary structures are created may be too late. Currently, the global movement of youth against climate change is increasingly being taken seriously, thanks to the hard work of dedicated young people. Tokenistic inclusion and the feeling of not being taken seriously can be discouraging to youth, and if they are excluded from climate change adaptation strategies, many opportunities and innovations for adaptation action will be lost or not be created. This is a call on governments, policy makers, and other responsible agencies to consider the propositions made in this report and take urgent action to include and champion youth inclusion in adaptation action, giving them agency to change the future. Lastly, we call on every young person in the world to actively engage and – for those already engaged – to remain steadfast, and to proactively pursue opportunities and not get discouraged!



Young people call for climate justice during SB50 Negotiations, Dom Evans 2019

6.ENDNOTES

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ANNEX 1: LIST OF EXPERTS INTERVIEWED IN MARCH 2019 FOR ADAPT FOR OUR FUTURE BACKGROUND PAPER

No.	Name	Affiliation
1	Yvonne Walz	United Nations University - Institute of Environment and Human Security (UNU-EHS)
2	Saliha Dobardzic	Adaptation Fund (AF)
3	Jyotsana Puri	The Green Climate Fund Independent Evaluation Unit (IEU)
4	Richard McNally	Climate Change Unit, Stichting Nederlandse Vrijwilligers (SNV) Netherlands Development Organisation
5	Liam Upson	Former Climate Policy Unit, Department for International Development (DFID), UK.
7	Prof. Dr. María del Pilar Bueno	Adaptation Committee, United Nations Framework Convention on Climate Change
8	Pablo Peña	Plan International

ANNEX 2: LIST OF YOUTH-LED AND YOUTH-FOCUSED CONSULTATION CONDUCTED IN MARCH 2019 TO INFORM ADAPT FOR OUR FUTURE BACKGROUND PAPER

No.	Name of Implementing Youth Entity	Region
1	Kenya Small Scale Farmer	Nairobi, Kenya
2	Juventud Sostenible	Caribbean, Dominican Republic, Santo Domingo
3	Greener Impact International	Tamale, Ghana, Sub Saharan Africa
4	HATOF Foundation, Abibiman Foundation and Agorvie Youth for Sustainable Development (AY4SD)	Sub-Saharan Africa, Ghana, Accra
5	Centre for Environment Education	Central, South and East Asia; conducted in Ahmedabad, India
6	Malaysian Youth Delegation (MYD)/ Persatuan Belia Perubahan Iklim (Malaysian Youth Climate Change)	South Asia, Malaysia, Kuala Lumpur
7	Caribbean Youth Environment Network-Haitian Chapter Region	Small Island Developing States, Haiti, Port-au-Prince
8	Fundación TierraVida	Latin America, Argentina, Buenos Aires
9	Climate Guides Foundation and CityHive	Vancouver, British Columbia, Canada

GLOSSARY

1. **Adaptation:** The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.¹
2. **Adaptive capacity:** The combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities.^m
3. **Capacity:** The combination of all the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to achieve established goals.ⁿ
4. **Climate Action:** stepped-up efforts to reduce greenhouse gas emissions and strengthen resilience and adaptive capacity to climate-induced impacts, including: climate-related hazards in all countries; integrating climate change measures into national policies, strategies and planning; and improving education, awareness-raising and human and institutional capacity with respect to climate change mitigation, adaptation, impact reduction and early warning.^o
5. **Climate Change:** A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.^p
6. **Coping:** the use of available skills, resources, and opportunities to address, manage and overcome adverse conditions with the aim of achieving basic functioning in the short to medium term.^q
7. **Exposure:** the presence (location) of people, livelihoods, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected by physical events and which, thereby, are subject to potential future harm, loss, or damage.^r
8. **Mitigation:** In Disaster Risk Reduction (DRR), it is the lessening or minimizing of the adverse impacts of a hazardous event. In Climate Change, it is a human intervention to reduce the sources or enhance the sinks of greenhouse gases (GHGs).^s
9. **Preparedness:** The knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.^t
10. **Resilience:** The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation.^u
11. **Response:** Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.^v
12. **Risk:** The potential of losses in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period. It is the probability or likelihood of occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur.^w
13. **Vulnerability:** The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.^x
14. **Youth:** YOUNGO defines youth as persons between 15 and 35 years.

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ACKNOWLEDGMENTS

The development of this Paper has been funded by the government of the Netherlands through the Global Center on Adaptation and administered by the Plant-for-the-Planet Foundation. As part of the former, Ms. Laura Scheske and Ms. Imogen Jacques provided strategic guidance and administrative support from the project's design to finalization. The authors would like to express our appreciation of the experts and youth-led local organizations that provided input through virtual and on-ground consultations, respectively.

From the YOUNGO team, we further express our thanks to the Central Coordination Team: Jeffrey Qi, Yugratna Srivastava, Sarah Voska, Krishnee Appadoo, Jonas Haller, Chiagozie Udeh, Mahugnon Serge Djohy, Serena Bashal, McLaren Mandaza and Luwedde Juliet Grace for their voluntary work. Likewise, our gratitude toward our expert reviewers: Harriet Thew, Pramisha Thapaliya, Paola Villavicencio Calzadilla, Chandra Sekhar Bahinipati, Luis Rodriguez, Michael Gameli Dziwornu, and Environment and Climate Change Canada for their support.

Finally, we would like to thank every single child and youth taking climate adaptation actions in their communities. Without all of you, a better world would not be possible.

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ABOUT THE GLOBAL COMMISSION ON ADAPTATION

The Global Commission on Adaptation seeks to accelerate adaptation action and support by elevating the political visibility of adaptation and focusing on concrete solutions.

It is convened by 20 countries and guided by more than 30 Commissioners, and co-managed by the Global Center on Adaptation and World Resources Institute.