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YOUTH ENGAGEMENT IN LAND AND ECOSYSTEM RESTORATION





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Contents

Key messages	iv
Involving young people in official agencies	iv
Independent initiatives	v
Barriers to youth engagement	v
1. Introduction	1
1.1 Definitions	1
2. The legitimacy of young people in land and ecosystem restoration	2
2.1 Land and ecosystems	2
2.2 Global mandates in land and ecosystem restoration	2
2.3 Young people in land and ecosystem restoration	3
2.4 The diversity of young people	3
2.5 Engaging young people in land and ecosystem restoration	5
2.6 Three key elements	5
3. Youth participation in the restoration agenda	6
3.1 UN agencies	6
3.2 Other global organizations	9
3.3 Regional, national and sub-national levels	10
3.4 Informal youth action	12
3.5 Learning from youth participation	12
4. Barriers to youth engagement	13
4.1 Inadequate education	13
4.2 Inadequate contextual capacity building	13
4.3 Insufficient income	13
4.4 Insecure land tenure	14
4.5 Gender constraints	14
4.6 Financial exclusion	14
4.7 Weak links between policy and implementation	14
5. Case studies	15
5.1 Rakai Environmental Conservation Programme, Uganda	15
5.2 Management Issues of Kaziranga Tiger Reserve, India	16
5.3 Action for Conservation, United Kingdom	18
5.4 Cacao Project, Philippines	20
5.5 Reserva: The Youth Land Trust, Ecuador	20
5.6 Identified patterns from the five cases	22
6. Recommendations	24
6.1 Policy level	24
6.2 Implementation (action level)	26
7. Conclusions	30
7.1 Youth constituencies	30
7.2 Policy	30
7.3 Implementation	31
Endnotes	32



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Key messages

Land and ecosystems lay the foundation of the economy and the wellbeing of society. 85 percent of the world's 1.2 billion young people live in regions that are directly dependent on land and natural resources for sustenance. Land degradation is a youth issue that threatens current and future generations' quality of life. Young people are increasingly becoming eco-anxious about threats to their environment and the possible impacts there may be for future generation.

Young people all over the world participate in both policy and action to avoid, minimize and reverse land and ecosystem degradation. The youth make their voice heard on multiple restoration policy platforms and by taking action on themes such as climate change and biodiversity. But their ability to act as agents of change in restoration is influenced by their geographical, biophysical and socio-economical setting, which in turn affect their access to education, knowledge, skills, land, funding required to engage in meaningful land restoration.

Involving young people in official agencies

Within the United Nations and other international organisations, various environment-related organizations have created initiatives or facilitated the creation of youth constituencies to engage young people in policy dialogue, to raise awareness of and enhance their capacity in environmental issues, and to develop their networking skills.

These initiatives or constituencies include:

- YOUNGO (associated with the UN Framework Convention on Climate Change)
- Global Youth Biodiversity Network (Convention on Biodiversity)
- Youth Caucus on Desertification and Land (UN Convention to Combat Desertification)
- Major Group for Children and Youth (United Nations Environment Programme)
- International Fund for Agricultural Development (supports youth-related projects around the world)

Other international organizations also have similar youth initiatives or constituencies:

- Youth in Landscapes (Global Landscapes Forum)
- Land Accelerator (World Resources Institute).

Regional bodies such as the European Union and African Union Commission, and national and local governments also sponsor and support youth-oriented initiatives focused on land.

Lessons

Each of these initiatives and constituencies offers valuable lessons and opportunities for involving young people in official organizations. They include:

- Support to establish a youth initiative and provide it with adequate support, including dedicated staff and funding.
- Enabling and supporting the initiative to self-organize. Encourage the formation of working groups to focus on specific issues.
- Enabling the youth members to join official delegations, organize events at conferences, and have their voices heard.
- Promoting awareness raising, capacity building and networking. Develop toolkits to assist members to communicate via social and other media.
- Encouraging the formation of alumni associations so current youth members can benefit from the experience of previous members.

Independent initiatives

Many independent initiatives around the world aim to improve land management through on-the-ground activities, and influence policy and public opinion through lobbying and advocacy. Such initiatives may be led by young people or by other organizations that wish to involve young people in their work. This working paper highlights five of such cases:

- Uganda: Rakai Environmental Conservation Programme
- India: Management Issues of Kaziranga Tiger Reserve
- United Kingdom: Action for Conservation
- Philippines: Cacao Project
- Ecuador: Reserva: The Youth Land Trust.

Lessons

Independent initiatives are effective at the following types of activities.

- Raising the awareness of young people about environmental and land issues
- Restoration activities such as tree-planting and sustainable farming practices
- Training young people in relevant skills to facilitate restoration at policy and implementation level
- Educational and awareness-raising activities in the local community
- Fundraising via social media, crowdfunding, and ecologically friendly activities such as beekeeping
- Lobbying local and national government for policy changes.

Barriers to youth engagement

Many barriers prevent young people from becoming engaged in environmental issues. These include:

- Inadequate education and awareness
- Inadequate contextual capacity building
- Insufficient income
- Insecure land tenure
- Gender constraints
- Inadequate finance
- Lack of a two-way street between policy and implementation.

Lessons

Despite these barriers, young people can become effectively engaged in environmental activities, both through their own initiative and with official support. Possible Strategies include:

- Adequate education and capacity building of relevant skills, including in digital communication
- Strong partnerships with both public and private stakeholders
- Developing models for green businesses to incentivize and sustain the interest of youth in restoration
- Easing access to and improved security of land tenure
- Reorienting socio-cultural norms to include all of society.

Such approaches would leverage young people's collective strengths and contributions to elevate their status as equal and valued partners in land and ecosystem restoration.



1. INTRODUCTION

This five-chapter working paper presents an overview of youth in the land and ecosystem restoration agenda. The restoration movement is necessary because current patterns of unsustainable production and consumption put immense pressure on the Earth's resources. Consequently, the aim of the restoration agenda is to balance the pressure on the Earth's resources by promoting activities and interventions that halt, improve, or protect environmental conditions for sustainable development. Young people feature prominently in this agenda because decisions taken in the management of lands and ecosystems have a significant impact on their present and future wellbeing.

Chapter 2 gives an overview of global mandates that highlights how critical responsible land and ecosystem management is for sustainable development. More importantly, by highlighting the impact of land and ecosystem degradation on young people, the legitimacy of their engagement in the restoration agenda is revealed. Furthermore, the diversity of young people, as well as important elements in engaging them in the restoration movement, are also uncovered.

Chapter 3 focuses on youth participation in the global mandates that are interlinked on land and ecosystem restoration. This overview identifies structures at multiple levels that facilitate young people's participation in the development, implementation, review and follow-up of policies and actions in the restoration agenda, as well as in the Sustainable Development Goals agenda and implementation actions.

Chapter 4 focuses on the challenges young people face in being engaged in the restoration agenda.

Chapter 5 demonstrates exemplary actions of young people in land and ecosystem restoration. Case studies highlight land-degradation problems being addressed, the approach adopted, the youth-responsiveness aspects, the stakeholders involved, the challenges and results of implementation, as well as the scalability of the intervention.

Chapter 6 presents lessons learnt in the kind of knowledge, support, enabling conditions, education and skills required by young people in the restoration agenda based on current practices. In addition, the chapter gives some recommendations based on young people's participation in themes linked with restoration to enhance youth participation in the restoration agenda.

This working paper presents a transformative vision of young people's engagement in the restoration agenda at multiple scales.

1.1 Definitions

This working paper uses the following definitions:

Youth or young people. Individuals aged 30 years old or below. This age limit is used by the United Nations Major Group for Children and Youth (UNMGCY), the "mandated, official, formal and self-organized space" for youth to contribute to and engage in certain intergovernmental and allied policy processes in the United Nations.¹

Land degradation. A negative trend in land condition, caused by direct or indirect human-induced processes including anthropogenic climate change, expressed as long-term reduction or loss of at least one of the following: biological productivity, ecological integrity, or value to humans.²

Ecological restoration. Entails the reversal of ecological system functions and biotic structure of a land or ecosystem to its original state before it was disturbed or degraded.³

Restoration/restoration continuum. A wide range of activities and interventions that improve environmental conditions by avoiding, minimizing and reversing land and ecosystem degradation.⁴

2. THE LEGITIMACY OF YOUNG PEOPLE IN LAND AND ECOSYSTEM RESTORATION

Land and ecosystems provide goods and services that are fundamental to sustaining the lives and livelihoods of present and future generations. Global mandates on sustainable development endorse activities that promote sustainable land management and healthy ecosystems. The same mandates recognize the right of young people to engage actively in restoring, rehabilitating and reclaiming land and ecosystems — and the importance of their doing so. Young people are a diverse demographic group who are already taking action but can be further empowered to make more innovative contributions to accelerate the restoration agenda. This chapter concludes with key principles for and consistent youth participation in the land- and ecosystem-restoration agenda.

2.1 Land and ecosystems

Land and ecosystems lay the foundation of the economy and the wellbeing of society. For example, a piece of land used for agroforestry can generate income, control erosion, conserve soil fertility, secure food security and ultimately break down cyclical poverty in a community.⁵ But people's livelihoods are harmed when land and ecosystems are degraded. Countries do not all experience the same negative impact from degraded lands and ecosystems.⁶ Out of the 3.2 billion people affected by degraded lands and ecosystems, the 1.3 billion most affected live in developing countries whose economies are driven by agriculture.⁷

Globally, land degradation costs about USD 490 billion per year. But more alarming is the loss of priceless ecosystem services that money cannot buy.⁸ According to the Global Landscapes Forum, degradation has negatively impacted a minimum of 3.2 billion people. Some key species and ecosystem services may have been permanently lost.⁹ Land and ecosystem degradation also affect food security by reducing the quantity and quality of food-crop harvests. Scientific evidence suggests that when lands and ecosystems are degraded,

climate-exacerbated disasters are likely to increase in frequency and magnitude.¹⁰ These negative scenarios make an urgent, serious and perfect economic case for the world to restore, rehabilitate and reclaim land and ecosystems.

2.2 Global mandates in land and ecosystem restoration

The 2030 Agenda for Sustainable Development calls for transformative pathways in development strategies for all generations to enjoy a decent quality of life. Pursuing sustainable development balances pressure on natural resources, protects livelihoods, cultural identity and indigenous knowledge.¹¹ According to the Brundtland report the term “sustainable development” suggests “meeting the needs of the present generations without compromising the ability of future generations to meet their own needs.”¹² Ensuring that lands are managed sustainably and ecosystems are healthy is a top priority on international development agenda. Although each of the 17 Sustainable Development Goals of Agenda 2030 are interlinked, Goal 15 specifically focuses on protecting, reversing and reclaiming land and ecosystems.¹³ Goal 4 recognizes the important role young people can play in achieving healthy land and ecosystems.¹⁴

The 1992 Earth Summit in Rio gave rise to three major conventions to support member states achieve sustainable development by 2030. These are the:

- **Convention on Biological Diversity (CBD)**
- **United Nations Framework Convention on Climate Change (UNFCCC)**
- **United Nations Convention to Combat Desertification (UNCCD)**

Of the three conventions, UNCCD is mandated to support

“a future that avoids, minimizes, and reverses desertification/land degradation and mitigates the effects of drought in affected areas at all levels – and to achieve a land degradation-neutral world consistent with the 2030 Agenda for Sustainable Development.”¹⁵

The UNCCD secretariat is mandated to support member states under Article 5 to

“...promote awareness and facilitate the participation of local populations, particularly women and youth... in efforts to combat desertification and mitigate the effects of drought.”

An example of such a support is the [Land Degradation Neutrality](#) Target Setting Programme.

In the same spirit, chapter 25 of [Agenda 21](#) (agreed at the Earth Summit in Rio de Janeiro in 1992) distinctively recognizes young people as a diverse demographic group of people who are “affected” by decisions on land management and have a legitimacy to “affect” decisions on the same.¹⁶

The urgency of restoring degraded land and ecosystems galvanized the United Nations General Assembly to declare 2021 to 2030 as the [Decade on Ecosystem Restoration](#).¹⁷ The Resolution which was declared in March 2019 calls for the empowerment of young people and mainstreaming their participation. Many young people are participating in the UN Decade initiative by making their voice heard on multiple platforms, peacefully protesting and striking. Youth activists from different part of the globe include Alexandria Villaseñor, Vanessa Nakane and Patricia Kombo,¹⁸ who are united in their common goal of saving the Earth, believe the actions of young activists have the potential to influence political systems that currently drive unsustainable modes of development.¹⁹ The youth strategy of the UN Decade on Ecosystem Restoration 2021–2030 suggests that youth actions should emphasize and amplify practical solutions that give hope.²⁰

2.3 Young people in land and ecosystem restoration

Youth is a transitional and crucial phase in human development where a person becomes independent and responsible for their own needs and wants. To develop the skills needed to become self-sufficient, youth have to be offered guidance and support. In most parts of the world, young people are guided to participate as in the restoration process through their engagement in project implementation and educational programs. The participation of youth is a fundamental human right acknowledged by international organizations like the World Programme of Action for Youth and the Universal Declaration of Human Rights.²¹

Of the world’s 7.7 billion people, about 1.2 billion are below the age of 25 years.²² Developing countries are home for about 1 billion of these (Table 1). Out of this estimate, about 85% live in regions that are directly dependent on land and natural resources for sustenance.²³ Sub-Saharan Africa, Asia and Latin America house more than half of the world’s youth, yet experience high levels of land degradation and desertification. It is projected that by 2050, approximately 700 million people may be displaced as a result of degraded land resources, the majority in Africa, Asia and Latin America.²⁴

2.4 The diversity of young people

Youth are a diverse group of people whose ability to be agents of change in restoration are dependent on their geographical, biophysical and socio-economical setting,²⁶ among other factors. These factors determine young people’s access to education, knowledge, skills and funds needed to engage in restoration.²⁷

Geographical location

There are differences in the ways youth in the Global North and South participate in restoration.²⁸ Generally, in the Global North, youth participation in restoration is more formal and guided by some form of written rules whilst in the Global South, young people’s participation is more informal and mostly guided by verbal and non-verbal rules. There are also differences in the way rural and urban youth engage in restoration. Whether in policy or implementation, the participation of such a heterogenous group in restoration requires a soft natural resource management system that is influenced by geographical location.²⁹ This kind of soft management allows stakeholders such as young people to interact and express their desires in a defined context in order to amicably reach trade-offs and mutually benefiting consensus for all generations. Chapter 4 of this working paper presents five case studies from Europe, Latin America, Africa and Asia to illustrate key elements in exemplary actions of how youth are or could be engaged and supported in restoration.

Rural youth in subsistence agriculture

In developing countries, land-based agriculture is the single largest employment in rural areas. Nearly 40% of all land is estimated to be used for farming,³⁰ and farming is a major socio-economic activity for young people in rural areas. Because rural areas are home to such large numbers of young people, decisions taken on land and ecosystem management will affect their livelihoods and the overall wellbeing of their society.

TABLE 1
Projected population of youth aged 15 to 24 years in 2020, 2030 and 2050

Year	2020		2030		2050	
Region	Youth population (1000s)	% of regional population	Youth population (1000s)	% of regional population	Youth population (1000s)	% of regional population
Sub-Saharan Africa	217,653	19.9	282,939	20.2	398,921	18.8
North Africa and West Asia	86,427	16.4	102,436	16.8	110,096	14.6
Central and South Asia	362,697	18.0	365,152	16.4	347,206	13.9
East and Southeast Asia	304,385	13.0	303,162	12.5	261,429	10.8
Latin America and Caribbean	107,583	16.5	103,483	14.7	93,853	12.3
Australia and New Zealand	3,742	12.3	4,230	12.7	4,467	11.6
Oceania (excl Australia and New Zealand)	2,354	19.1	2,689	18.5	3,198	16.9
Europe and North America	124,742	11.2	129,786	11.5	119,327	10.5
Total (world)	1,209,584	15.5	1,293,877	15.1	1,338,497	13.8

Adapted from World youth report: Youth social entrepreneurship and the 2030 Agenda²⁵

Indigenous rural youth

Indigenous youth in rural areas are especially essential in the land and ecosystem restoration agenda. The number of indigenous young people globally is estimated to be 67 million. They know of natural methods of managing lands, ecosystems and livelihoods that are in harmony with the functioning of the landscape.³¹ Indigenous people and local communities rely directly on the environment for sustenance and are therefore significantly impacted by environmental changes.³² Many graze cattle and other ruminants on pasture, or grow crops on rainfed land,³³ both of which are prone to productivity losses caused by climate change. Moreover, indigenous youth in particular have a vested interest in restoring the lands and ecosystems that they will eventually inherit and pass on to their children.³⁴

Urban youth

Young people's engagement in ecosystem restoration are not only confined to rural areas. Indeed, the attractiveness of land-based agriculture to the youth is on the decline because the financial returns from farming are limited. The difficulty in owning and affording land for farming discourage young people's interest in agriculture.

Such challenges push the youth to migrate to urban centers.³⁵

According to Patricia Espinosa, executive secretary of UNFCCC, "cities are where the climate battle will be won or lost." It is clear that cities are also central to land and ecosystem restoration.³⁶ Young people in cities can help restore lands and ecosystems by caring for forests in urban settings. Moreover, urban youth can influence land degradation by adopting more sustainable consumption patterns. Increasing sustainable consumption reduces the productive demands placed on lands and ecosystems, including forests and wildlife.

Gender

In certain socio-cultural settings, the gender of a young person affects their "agency" (their capacity to act independently and make their own free choices) in land and ecosystem restoration. It is common to find young women in rural areas spending hours planting, tending and harvesting crops—and caring for their families at the same time. This scenario places young women at both an advantage and disadvantage in managing lands and ecosystems.³⁷

2.5 Engaging young people in land and ecosystem restoration

Inclusion and participation

For young people to be agents of change in land and ecosystem restoration, their participation has to be meaningful and have an aggregate effect. Restoration is facilitated by raising awareness in tandem with participants acquiring knowledge and skills to take action.³⁸ They can do this through systematic, formal or non-formal training and guidance. The diverse categories of young people should be represented throughout the process, from conceptualization, through implementation and follow-up to review. Achieve active youth participation in land and ecosystem that leaves no one behind will require a mechanism that is co-driven by the state, other stakeholders, and youth themselves. An example is a youth-led initiative in India in the project, Management Issues of Kaziranga Tiger Reserve (Chapter 4).

Equal and valued partnerships that are sustainable

To leverage young people's collective strengths and contribution, they must be regarded as equal and valued partners in the restoration process. Youth constituencies and lobby groups such as YOUNGO, the Global Youth Biodiversity Network, Youth in Landscapes, and the Youth Caucus on Desertification, whose activities are highlighted in Chapter 2, strive to achieve equal and valued partnerships in the policy arena. Young people's proactiveness in developing and implementing initiatives at multiple scales demonstrates their competence and trustworthiness.³⁹ Successful initiatives and best practices of young people in restoration work need to be supported, replicated and upscaled for an aggregated effect.

Long-term commitment

Land and ecosystem restoration is a long-term goal that needs consistent and sustained effort from all stakeholders. Policies that promote youth participation should be enshrined in long-term development strategies.⁴⁰ An excellent example is the Malawi Youth Forest Restoration Programme (Chapter 5). Inclusive and robust policies recognize the contribution of young people and facilitate their engagement in land and ecosystem restoration. In addition, enough resources (financial and non-financial) should be invested in building the capacity of young people and amplifying their innovative contributions in the restoration agenda.

2.6 Three key elements

Global mandates on Sustainable Development recognize the crucial need for youth involvement promoting sustainable land management and healthy ecosystems. Over 40% of the world's population are young, and current patterns of production and consumption threaten their present and future wellbeing. Young individuals, youth-focused and youth-led institutions are participating in policy processes and are taking action to restore and rehabilitate degraded land at all levels.

This paper identifies three key elements in engaging young people in lands and ecosystem restoration:

- Inclusion and participation
- Equal and valued partnership
- Long-term commitment

These elements are at the crux of effective youth engagement in land and ecosystem restoration. They run throughout the paper and through most of the recommendations made to inspire youth-focused interventions in both policy and implementation.

3. YOUTH PARTICIPATION IN THE RESTORATION AGENDA

Youth are important actors whose active participation is key in the creation, implementation, review and follow up on sustainable development processes.⁴¹ Young people may be engaged in restoration through both formal and informal mechanisms.⁴² This chapter gives an overview of various formal mechanisms at the global, regional, national and other levels, as well as informal actions.

Various UN organizations have established youth-led or youth focused entities. They include:

- YOUNGO (UNFCCC)
- Global Youth Biodiversity Network (CBD)
- Youth Caucus on Desertification and Land (UNCCD)
- Major Group for Children and Youth (UN Environment Programme)
- International Fund for Agricultural Development

Youth initiatives associated with non-UN institutions include:

- Youth in Landscapes Initiative (Global Landscapes Forum)
- Land Accelerator (World Resources Institute)

3.1 UN agencies

Climate change: YOUNGO (UNFCCC)

The Rio Convention established the United Nations Framework Convention on Climate Change (UNFCCC) secretariat to support member states reduce and stabilize greenhouse gases in the atmosphere. UNFCCC recognizes youth as important, innovative and proactive stakeholders that can contribute to decision-making and taking action on climate change issues.⁴³

Youth engagement with the UNFCCC takes place officially through YOUNGO (Youth + NGO). This is one of the most active of the nine observer constituencies (non-party stakeholders) of the UNFCCC. As a self-organized and independent “youth-focused” and “youth-led” stakeholder group, YOUNGO brings together enthusiastic young people and youth-focused organizations. Its aim is to represent the interests of present and future generations in climate-change-related issues on UN platforms, especially the annual climate-change negotiations at the Conference of Parties and the intersessional in preparation for this Conference. Every year, YOUNGO holds the UNFCCC to account to keep fossil-fuel companies out of the climate negotiation spaces. Through YOUNGO, young people build their capacity, share and increase their knowledge on climate change, and hold governments accountable to their climate-change promises.⁴⁴

YOUNGO is anchored by consensus decision making. It operates a flat, non-hierarchical organizational structure. This simply means that “no one” and “everyone” is the boss. To ensure that decisions taken in YOUNGO are as consensual and inclusive as possible, there are two focal points: one from the Global North, and one from the Global South. These focal points are elected virtually every year and act as the bridge between the Youth Constituency and the secretariat of UNFCCC, as well as, representatives of the Conference of Parties, the Subsidiary Body for Implementation, the Subsidiary Body for Scientific and Technological Advice, among others.²⁵ According to Chiagozie Udeh, the 2019 Global South focal point, YOUNGO has over 200 youth non-governmental organizations and 5,000 individual youth as members from all over the world.⁴⁵

Individuals up to the age of 30 may join at no cost and under no binding agreements. Young people up to the age of 35 from Africa are allowed to be members because that is the official age limit of the African Union.

FIGURE 1

A group of YOUNGO representatives⁴⁶



YOUNGO has around 30 working groups focusing on different aspects of climate change. These are thematic groups that exchange knowledge and prepare young people to participate in discussions on defined themes. The working group topics include agriculture, gender, finance, mitigation, human rights, education and adaptation. Each group is facilitated by young people who dedicate their time and resources to leading the group.

Neither the facilitator nor the members of the working groups must be experts before joining the group. What is important is their enthusiasm to learn, share and contribute to the subject matter. However, young people cannot engage in these spaces for long because they do not stay young forever. Furthermore, there is no dedicated sponsorship to compensate the young people for their work.⁴⁷

Social media are a big part of how young people communicate in the 21st century.⁴⁸ But no social media strategy currently exists between UNFCCC and YOUNGO. Nonetheless, UNFCCC does have a UN Climate Change app, which is used to disseminate information in its conferences during live webcasts sessions and press conferences. In addition, conversations taking place on social media channels like Twitter during UNFCCC conferences are accumulated and displayed in real-time on the app.⁴⁹ YOUNGO and other groups use the app to schedule meetings and connect with other agencies and participants taking part in UNFCCC conferences.⁵⁰

YOUNGO also runs its own social media accounts such as Twitter, Facebook, and Instagram to engage with people both within and outside the youth constituency. YOUNGO invites both members and non-members to follow its social media accounts to learn about the latest developments and opportunities within the group. It creates content and hashtags to educate and inform followers and keep them engaged. YOUNGO also uses channels

such as Zoom, Trello, Slack, Facebook and WhatsApp for communication within the working groups. Through its working groups, YOUNGO internally strategizes as to how it can best participate in and organize (or co-organize) events within both the formal UNFCCC policy forums and informally. These multiple avenues that young people use in communication both internally and externally build their capacity, gives them an opportunity to express their opinions, creates a network, and legitimizes their contribution to the policy process.⁵¹

Biodiversity conservation: Global Youth Biodiversity Network (CBD)

The Convention on Biological Diversity (CBD) guides and supports member states in setting development agendas that ensure the fair use of the Earth's biodiversity for the equal benefit of both present and future generations.⁵² The convention recognizes the important role young people play in the biodiversity conservation agenda, and so facilitates their participation through the Global Youth Biodiversity Network. As in UNFCCC, young people have participated in the CBD processes right from its inception, though their participation was made official through the Network only in 2010 at CBD's 10th Conference of Parties.⁵³ The CBD explicitly called on governments and other actors within the CBD to not only involve youth in decision-making regarding biodiversity conservation but also to support their engagement in biodiversity conservation processes and to promote young people's innovative interventions in conserving biodiversity.⁵⁴

The Global Youth Biodiversity Network is a youth network with almost 300 organizations as members, which translates into over 600,000 people from over 100 countries. Young people who are part of the Network learn, exchange, and share information that increases the awareness of the benefits of biodiversity conservation, as well as the challenges

FIGURE 2

Global Youth
Biodiversity
Network COP14
delegation⁵⁶



encountered in preserving it. As in YOUNGO, any individual that falls into the UN categorization of youth or is a member of a youth-focused organization can join the Network at no cost and under no binding agreement.⁵⁵

The Network is an inclusive and transparent platform coordinated by a 15-member steering committee. The committee is geographically balanced and has representation from indigenous groups and the COP presidency. Like YOUNGO, the Network has two global focal points, one from the South and one from the North, to act as a bridge between the youth constituency and the CBD Secretariat. Again like YOUNGO, there are working groups to build the capacity of members in terms of policy development, outreach activities and other empowering means. Furthermore, task forces are constituted on a needs basis to carry out specific activities, including knowledge sharing and skill development.^{57, 58}

The functioning of YOUNGO and the Network are similar in terms of structure, communication and digital strategy for stakeholder engagement. However, unlike YOUNGO, the Network has national chapters and an alumni community. The national chapters are meant to facilitate youth engagement in biodiversity conservation within their geographical context. The alumni community is composed of people who are over 30 and are still interested in engaging with the youth constituency. This alumni community is led by a board composed of former steering-committee members who wish to pass on the lessons from the time they were engaged with the youth constituency.⁵⁹

The Network contributes substantively to facilitating the progressive inclusion of youth engagement in political and decision-making processes on biodiversity at local, national, regional and international levels.

Land management: Youth Caucus on Desertification and Land (UNCCD)

UNCCD supports member states to develop policies and take actions on land degradation. As with the other conventions, UNCCD believes that to successfully manage lands, there must be participation of both state and non-state actors, strong partnerships and true decentralization of land management's processes.⁶⁰ UNCCD received permission to formalize youth engagement in March 2019 after extensive discussions with YOUNGO and the United Nation Environment Programme's Major Group for Children and Youth.⁶¹

The youth constituency of the UNCCD is officially referred to as the Youth Caucus on Desertification and Land. This group had its first official forum in New Delhi on the sidelines of UNCCD's 14th Conference of Parties in 2019. The forum convened over a 100 young people from all over the world to build their capacity, share knowledge, and create networks in sustainable land management and desertification so they could engage in the UNCCD processes. The UNCCD secretariat facilitated the participation of almost half of the young people who participated.⁶² This first forum set the pace in how young people would be engaged in the process of UNCCD.

The structure of the Youth Caucus on Desertification and Land is currently being set up to support the participation of young people in the restoration agenda. Juliet Grace Luwedde, interim facilitator for the Caucus, says it will have a similar set up to YOUNGO, with a self-organized and flat structure.

Even without a fully developed structure, the Youth Caucus has organized activities to engage young people on land management. As part of celebrations to mark the 2020 UN Day for Drought and Desertification on 17 June, it conducted the

“Land Heroes” campaign. This was a call for young people to submit initiatives that showcased their initiatives on land and desertification. The most outstanding initiative received a prize of USD 500 to invest in its development. The success and reach of those activities led UNCCD and the Youth Caucus to collaborate again in fall 2020 with a series of six webinars moderated by members of the Youth Caucus, inviting Land Heroes to discuss the question “What can the youth do to address climate change through land conservation and restoration?” The six episodes were viewed by 10,000 young people worldwide. These engagements give a good indication of how young people will be engaged by the youth constituency when its structures are more defined.

Environment: Major Group for Children and Youth (United Nations Environment Programme)

The Major Group for Children and Youth is the official youth constituency of the UN Environment Programme. It brings together young people and youth-focused organizations to deliberate on environmental issues. It represents young people’s interests in decision-making processes in the activities of UN Environment.⁶³ For instance, the Major Group developed the Youth #ForNature manifesto and open letter to invite youth from different genders, geographies, social backgrounds, languages, constituencies, ethnicities and causes to bring their voices together for decisive and sustainable action. The open letter tells world leaders the restoration priorities that require priority attention so as to achieve the vision of “living in harmony with nature” in 2050.⁶⁴

UN Environment leads the implementation of the UN Decade on Ecosystem Restoration and has demonstrated its belief in young people by launching “ecosystem community champions.” This initiative, which was co-developed with its youth constituencies, identifies young people who are proactively taking initiative at the community level in ecosystem restoration. UN Environment aims to have “local champions” who are everyday people taking action in their community to inspire their fellow youth to take action. UN Environment is also building a dedicated digital space on knowledge for ecosystem restoration. It is also developing formal and informal communication strategies to inform and inspire youth action in ecosystem restoration through the media.⁶⁵

Rural development: International Fund for Agricultural Development

The International Fund for Agricultural Development (IFAD) considers rural youth as critical in the restoration agenda. It developed an action plan from 2019 to 2021 to empower young (rural) people.⁶⁶ Unlike other UN agencies, IFAD does not have a defined youth constituency. Rather, it supports projects and activities that enable young people to take action in restoration on the ground.

The Youth Agropastoral Entrepreneurship Promotion Programme in Cameroon is a good example. This is a 7-year project that supports young people in rural southwestern parts of the country to develop successful businesses in land and ecosystem restoration.⁶⁷

3.2 Other global organizations

Sustainable land use: Youth in Landscapes (Global Landscapes Forum)

The Youth in Landscapes Initiatives is a partnership that connects young people engaged in landscapes around the world. This network was an outcome of a youth event at the 2013 Global Landscapes Forum in Warsaw.⁶⁸ The Global Landscape Forum is a platform that connects, shares and teaches knowledge on sustainable land use to stakeholders.

Youth in Landscapes is a growing network with a membership of over 50,000 young people from all over the world. It is a strategic partnership led by three youth groups —Global Agroecology Alliance, Young Professionals for Agricultural Development, and the International Forestry Students’ Association— that want to build and strengthen the capacity of young people in taking action to halt and reverse degradation, as well as protect landscapes.⁶⁹ The age limit to be directly engaged is 35 years.⁷⁰

The Global Landscapes Forum/Youth in Landscapes “Generation Restoration” initiative supports global restoration efforts by bringing together young leaders in restoration. It is hoped that mainstreaming their activities will become easier, the necessary community support will be given, and innovative, multi-functional, restoration solutions will be designed. This will involve supporting the young leaders in Generation Restoration to increase their network, strengthen relationships, learn skills, and increase access to sustainable funding opportunities for collective substantial action.⁷¹

FIGURE 3

A group of youth delegates at the Global Youth in Landscape Initiative forum⁷²



Similar to the Global Youth Biodiversity Network, Youth in Landscapes has an alumni network and an advisory team. The team that coordinates the youth group are employed by the Global Landscapes Forum.^{73,74} Youth in Landscapes has a dedicated knowledge virtual platform that allows members to interact in defined communities of practice on land and ecosystem restoration. The platform, known as GLFx, empowers young people with knowledge and connects them with networks that can support their actions.⁷⁵ In addition, once a year, a youth forum is organized by the Global Landscapes Forum to bring together young people who are implementing initiatives on sustainable land use. Unlike other youth forums, which are temporary, participants of the youth forum become part of the Global Landscapes Forum family and keep interacting through a dedicated Google group long after the forum is over.⁷⁶

Entrepreneurship: Land Accelerator (World Resources Institute)

The World Resources Institute (WRI) is a global research organization focusing on critical issues at the intersection of environment and development, of which forests are one. WRI considers strategic partnerships to be a primary pillar of environmental sustainability. In collaboration with the International Union for Conservation of Nature (IUCN) and the Global Partnership on Forest Landscape Restoration, the WRI introduced the Restoration Opportunities Assessment Methodology (ROAM). ROAM provides a flexible and affordable framework for national or sub-national analysis of forest landscape restoration (FLR) potential. The youth are outlined as primary (direct) stakeholders in FLR assessments. Moreover, WRI's Global Restoration Initiative created the Land Accelerator to support young entrepreneurs whose companies restore degraded land. WRI believes entrepreneurship is key to resolving both

the high unemployment among the youth and restoring degraded lands and ecosystems. The Land Accelerator initiative connects youth entrepreneurs to mentors, investors, capital and network to scale up their youth action in land and ecosystem restoration.

According to Sofia Faruqi, who used to lead the Land Accelerator, business models that restore land and generate income are a win-win situation that should be upscaled and replicated. The implementation of the initiative started in Africa, and it is planned to upscale it to Latin America and South Asia by 2021. The IKEA Foundation, the German Ministry of Economic Cooperation and Development and the DOEN Foundation fund this initiative. Young people can take part free of charge. So far, over 14 startups have benefited from this initiative.

3.3 Regional, national and sub-national levels

For the global restoration agenda to have real impact on the ground, restoration strategies have to be translated to regional, national and local actions. State-initiated approaches to engage young people can be categorized as formal mechanisms. The development of national strategies is to guide the mainstreaming of youth into land and ecosystems restoration agendas. Mainstreaming youth in restoration enhances young people's contribution to developing, implementing, reviewing and following up on national restoration agendas.⁷⁷

Youth Guarantee Programme (European Union)

At the regional level, members of the European Union have developed and are implementing the European Green Deal policy to make Europe cli-

TABLE 2
Patterns in youth engagement in restoration

Patterns	Agency		
	UN-related youth agencies	Non-UN youth groups	Regional, national and sub-national
Structure and functioning	Flat hierarchical structure and self-organized (except IFAD). Decisions arrived at through consensus. Geographic and thematic facilitators, who are unpaid	Functional organization structure and a combination of self-organization and “adult” support. Some decisions are through consensus; others are not. Sometimes facilitators are remunerated.	Vertical hierarchical structure, not self-organized. Decisions not mandated to be a consensus. Most often facilitators are remunerated with institutional funding.
Participation and membership	Age limit for individuals. Youth-led or -focused organizations can join. Participation is always “for” and “with” young people (except IFAD).	Age limit for individuals Youth-led or -focused organizations can join. Participation is always “for” but not always “with” young people	Limit according to entity laws. Youth-led or -focused organizations are considered as stakeholders. Participation is mostly “for” but not always “with” young people.
Communication	Equal balance between physical and virtual communication platforms with both internal and external stakeholders.	Equal balance between physical and virtual communication platforms with both internal and external stakeholders.	Lean more towards physical than virtual communication platforms with both internal and external stakeholders.
Enabling factors	Global mandates. Self-motivated young people. Alumni communities (some cases). Digital strategies. Some committed partnership support.	Organizational mandate. Young people with enthusiasm to learn. Alumni communities (some cases). Digital strategies. Strong partnership support.	Presence of political structures to support. Balance between political will, structures and motivated young people. Dedicated resources and support.
Barriers	Access to participation – more towards “elite” youth. Inadequate funding. Inadequate education, knowledge and capacity. Youth is a transitional phase (some cases) Coordination with affiliated agencies	Inadequate funding Inadequate education, knowledge and capacity	Absence of political structures and political will. Corruption and nepotism. Inadequate funding. Policies not informing action, actions not informed policies. Youth mostly considered “passive” actors.
Impact	Contribution to policy formulation and review decision-making processes. Educate, build capacity and empower young people on relevant restoration themes. Development of a community/network.	More impact on implementation than policy. Conferences/trainings (physical, virtual), toolkits, etc. Educate, build capacity and empower young people on relevant restoration themes. Development of a community/network.	More impact on implementation than policy. Multiple societal problems are addressed, e.g., unemployment and land degradation.

mate-neutral in 2050. The Youth Guarantee Programme was established under the European Green Deal policy as a strategic response to deliver outcomes that have multiple benefits: youth employment and sustainable development. The Youth Guarantee equips young people with skills to be employable in the emerging green and digital economy that supports sustainable consumption and production.⁷⁸

AFR100 (African Union)

Meanwhile in Africa, 30 of the 55 countries in the African Union are taking actions through an initiative to restore 100 million hectares of land by 2030. This initiative called AFR100, is a response to the Bonn Challenge set in 2011 by African countries.⁷⁹ As part of engaging young people in the initiative, the AFR100 Secretariat selected five young people who demonstrate exemplary action in restoration to inspire other youth to take action, similar to the UNEP youth champions initiative.⁸⁰

Malawi Youth Forest Restoration Programme

An excellent example of country-level engagement of young people in restoration is Malawi. Of the 30 countries taking part in AFR100, Malawi is the only one that has explicitly established a national youth program to train young people in restoring lands and ecosystems. The Malawi Youth Forest Restoration Programme (MYFRP) uses indigenous knowledge and planting of bamboo and fruit trees to restore degraded land. It is an excellent example of an innovative restoration agenda creating significant employment and contributing to restoring the degraded forests. MYFRP is a proactive nationwide program that combines capacity building with knowledge on environmental protection.⁸¹ At the end of the program, the hope is that 50,000 hectares will have been restored. The young people employed through this initiative are paid a daily wage of USD 1.25. This ambitious initiative by the President of Malawi is co-implemented by the Malawian Department of Forestry and the Ministry of Labor, Youth, Sports and Manpower Development. The program costs USD 2 million, which comes completely from Malawi's domestic budget, making the country a pacesetter in funding forest landscape restoration from domestic sources.⁸²

3.4 Informal youth action

Informal youth stakeholders are very important actors in restoration because they take proactive initiatives to restore, rehabilitate or protect their environments. They do so because they experience a firsthand effect of degraded lands and

ecosystems, and not necessarily because they are influenced by formal structures.⁸³ These methodologies can be contextualized to inform youth engagement in restoration for various countries. Some examples:

- **United Kingdom:** The Youth Climate Coalition, run by unpaid volunteers aged 18–29, empowers local youth to take positive action for global climate change.⁸⁴
- **India:** The Youth Climate Network promotes youth activities to mitigate climate change at the national and local levels.⁸⁵
- **South Asia:** The Martha Tilaar Group has targeted and trained about 1,000 young women from forests communities to become self-sufficient entrepreneurs while preserving herbal plants and landscapes.⁸⁶

Informal activities of young people are further motivated by the extent of individual or collective knowledge and skills they possess. Empirical studies reveal that there is a positive correlation between youth action and skill acquisition in the field of action.⁸⁷ Consequently, the import of knowledge and skill development in youth action towards sustainable development cannot be understated.

3.5 Learning from youth participation

From evidence presented in this chapter, young people are capable of self-organizing to engage in both policy and implementation in restoration at any scale. For young people to be engaged in restoration, requirements include:

- Education, relevant skills and capacity development
- Innovation
- Strategic partnerships internally and with other external stakeholders
- Resources such as adequate financing
- An enabling environment such as political will, reform in land administration,
- peer to peer and intergenerational learning and a community of practice to grow
- Most important: plenty of enthusiasm

Subsequent chapters will make further recommendations for youth engagement in restoration.

4. BARRIERS TO YOUTH ENGAGEMENT

This chapter discusses barriers hindering young people from becoming engaged in restoring land:

- Inadequate education
- Inadequate contextual capacity building
- Insufficient income
- Insecure land tenure
- Gender constraints
- Inadequate finance
- Lack of a two-way street between policy and implementation.

4.1 Inadequate education

For young people to be agents of change in restoration, they need to be educated about what restoration is and the various ways they can contribute to the process. Unfortunately, many young people are ignorant about restoration and that makes them passive actors in the restoration agenda.

In developed countries, programs such as the Ecological Restoration Education in Sweden⁸⁸ and the Youth in Restoration Program⁸⁹ in the **United States** try to educate young people about what restoration is and how they can contribute to it.

In developing economies, education programs targeted towards the youth tend to be more theoretical than practical.^{90, 91} Programs such as “Growing with my tree” by Environment Research and Development, a civil society organization in **Cameroon**, introduces students to the concept of restoration.⁹²

4.2 Inadequate contextual capacity building

For young people to be active participants in restoration, they need to have relevant skills. The inefficiency of forest land restoration is associated with the absence of adequate capacity-building initiatives and holistic approaches to planning and implementation of FLR targets⁹³ In addition, when capacity-building activities are not tailored to the context and needs of stakeholders, the intervention most often does not achieve its intended impact.⁹⁴ Initiatives such as the virtual UNCCD capacity-building marketplace contribute to resolving this problem by connecting different entities that want their capacity built. In addition, the marketplace offers capacity-building opportunities related to restoration (among other themes) on land. The platform is especially exciting because opportunities are varied and come in different languages.⁹⁵

4.3 Insufficient income

Insufficient income causes unsustainable land management and acts as a barrier to the participation of young people. Young farmers in Latin America are reported to have indigenous and inventive methods of farming but little capital to sustain or improve on their use.⁹⁶ A study in **Uganda** found that income was a key variable that affected sustainable land management.⁹⁷ The level of income of young farmers had a huge role to play in the adoption of sustainable land management practices.

“Farmers put in the hours and dedication of Silicon Valley entrepreneurs, but without the pay check and this discourages young people from farming in the first place.”

Chris Newman, Sylvanaqua Farms.⁹⁸

4.4 Insecure land tenure

The rules of engagement between land, its resources and people are shaped by constitutional and legal frameworks within a society. For youth, their access and right to lands are a challenge because they are largely not acknowledged or respected.⁹⁹ The approximately 85% of youth who live in less-developed countries are subject to weak and inefficient land policies that are not responsive to youth.¹⁰⁰ The majority of the land in Africa and South Asia are owned and controlled by the older generation either in the form of communal land or family land. Young people cannot engage in restoration when their land tenure is insecure. Insecure tenure breeds uncertainty and disputes over land ownership and control, discouraging the responsible use of land and its resources.¹⁰¹

Youth without Borders Organisation for Development is a youth-led non-government organization in [Yemen](#) which targets different themes of youth access to land – including public space, tenure security and access to decision-making spaces. It has been able to facilitate youth engagement in the recording, distribution and protection of state and endowment lands.¹⁰²

4.5 Gender constraints

Encouraging the participation of young women improves the sustainability and effectiveness of forest management.¹⁰³ In [Niger](#), the regeneration and management of degraded forests, and resolution of land conflicts were positively impacted by the inclusion of young women in the decision-making process. Unfortunately, in many settings, socio-cultural norms prevent young women from fully participating in land and ecosystem restoration since women are stereotyped as the “weaker sex” who should be confined to domestic duties and taken care of.¹⁰⁴ When men and women work together in a land-based activity, women’s efforts are too often regarded as supplementary and not as actually making a contribution.¹⁰⁵ This “passive” image and the toxic narrative young women have been tagged with make it difficult for them to be equal actors in the land and ecosystem process.

4.6 Financial exclusion

Young people need adequate finance to initiate, replicate and scale up their innovation and strengthen their participation in restoration. However, financial exclusion of young people restricts their access and use of a wide range of appropriate and high-quality formal financial services. Globally, young people access financial services at roughly half the rate of adults. According to the World Bank’s Global Findex database, youth are 40% less likely to save and 60% less likely to borrow at financial institutions.¹⁰⁶ These exclusions make it difficult for young people to acquire, manage and invest in restoration initiatives. As an innovative solution, youth-led or youth focus institutions such as Reserva: The Youth Land Trust are turning to social media to crowd-fund restoration initiatives.¹⁰⁷

4.7 Weak links between policy and implementation

Many policies advocate for youth engagement in land and ecosystem restoration, but only a handful of countries actually implement policies that mainstream youth participation. Even though IFAD has produced an excellent publication on how rural youth are central to achieving land and ecosystem restoration,¹⁰⁸ there are few toolkits to guide and support member states in mainstreaming youth in land and ecosystem restoration or for the proactive actions of young people in restoration to inform policy.

Even though young people face these and other barriers to their engagement in the restoration agenda, the barriers also present opportunities for innovations that can enhance their participation.

5. CASE STUDIES

All over the world, diverse groups of young people are taking action to improve environmental conditions by avoiding, minimizing and reversing land and ecosystem degradation. This chapter showcases five such initiatives from Africa, Europe, Asia and Latin America to demonstrate how young people engage within their geographical, biophysical and socio-economical setting. The cases also demonstrate the financial arrangements, implementation style, monitoring and impacts of these initiatives. Two methods were used to collect these case studies: a Google survey and internet research.

The Google survey was developed following guidelines for case studies for the working paper authors for Global Land Outlook 2. The survey was shared on multiple social-media platforms and through the mailing lists of a dozen youth-led or -focused organizations. The survey lasted from 24 July 2020 to 15 September 2020. A total of 13 responses were received, but only three, from Uganda, India and the United Kingdom, satisfied most of the criteria in the guidelines. The survey information was triangulated with online sources and followed up with interviews with the respondents. The other two case studies (from the Philippines and Ecuador) were identified by searching the internet using the guideline criteria.

In all five initiatives, a strong enthusiasm to restore, protect and reclaim land and ecosystems is evident.

5.1 Rakai Environmental Conservation Programme, Uganda

The Rakai Environmental Conservation Programme (RECO) is a rural, community-based, non-profit organization. Registered in 2011, RECO works in the Rakai region of Uganda. As a youth-led and -focused organization, RECO currently has a team of eight: five directly employed young people, and three 3 adults who provide strategic guidance.¹⁰⁹ RECO's goal is to improve the quality of life of communities

in the Rakai region through empowering them in sustainable environmental conservation and agricultural improvement programs.¹¹⁰

The Rakai region is located in southwestern Uganda, west of Lake Victoria. It has a population of above half a million people residing on 388,900 hectares. Around 25% of the area is wetland and only 9% has forest cover: low compared to the national forest cover of 15.2%.¹¹¹

The hills in the Rakai region used to be covered largely with natural forests, with other areas being savannah grassland and abandoned rocky areas. Due to increasing population, the trees were cleared for firewood, agricultural and livestock production. Ninety percent of the inhabitants are engaged in rainfed, extractive, subsistence agriculture. In addition, 95% of people use firewood and charcoal for cooking. As a result, the forest vegetation in the region has significantly declined, and climate change is exacerbating this negative impact.¹¹² RECO, in collaboration with the community leaders, recognized the significant degradation of the land as an impediment to the area's sustainable development. Unemployment in the region was as high as 45%, pushing a significant number of the inhabitants below the poverty line. Led by RECO, the community decided to adopt a forest landscape restoration approach to re-generate the vegetation in Rakai.

RECO partnered with landlords under no contractual agreement to access land to plant trees. However, there are ongoing discussions to have contractual agreements with the landlords in the future. Reforestation had been attempted by the community in the past through commercial planting with exotic tree species. But this did not have the intended effect because the trees did not thrive. RECO plant only indigenous tree species. These species have medicinal benefits and are associated with traditional beliefs, value and culture to local people, especially the descendants of the Buganda kingdom.¹¹³ Over 20 indigenous tree species have been incorporated in the restoration project. Acacia

FIGURE 4

Children and young people in Rakai and Kyotera Districts posing with a RECO banner after a tree-planting exercise¹¹⁵



have medicinal benefits such as promoting oral health, healing wounds, and soothing coughs and sore throats. Mango (*Mangifera* spp.) and jackfruit (*Artocarpus heterophyllus*) are fruit trees which are important for food security in the communities. RECO employs part-time workers from the communities to manage its tree nursery. However, the real benefit from the tree-planting exercise is the restoring of the ecosystem services and carbon sequestration.¹¹⁴

RECO is financed by Heinz Sielmann Foundation with about EUR 19,000 per year.¹¹⁶ Other sources of finance come from local fundraising efforts by the RECO team, as well as the community, local and national government sources.¹¹⁷ RECO collaborates with the local government for technical guidance, as well as the National Forestry Authority to obtain native tree seedlings.¹¹⁸

RECO trains members of the community in beekeeping to diversify their sources of income. This aspect of RECO's work is through a private entity called the HIVE Limited and generates some income to support RECO's work. Each hive yields an average of about 30 kg of honey a year, earning UGS 240,000 (about USD 60).¹¹⁹

RECO builds the capacity of farmers through its farmer school program. At least 50% of the farmers who take part in the farmer schools were women. The program teaches and facilitates the *taungya* system of cultivation, an indigenous way of cultivating agricultural crops during the early stages of forest landscape restoration, before the canopies close and prevent sunlight from reaching the base of the trees.¹²⁰

RECO also facilitates the adoption of locally adapted, energy-saving cooking stoves. These stoves require less firewood and produce little smoke, which is beneficial to health.

RECO has established environmental clubs in 10 schools, and aims to do so in 100 schools.¹²¹ Through the clubs, environmental awareness campaigns are conducted annually to influence the community mindset on sustainable environmental practices.

RECO has trained community members to conduct participatory monitoring of initiatives.

The RECO initiative is an example of young people being engaged in restoration with the support of adults. The impact is at the community level. Funding is limited and comes from a mix of local and international donors, including its business model of selling honey to generate some income to support its work. Despite its achievements, the rudimentary monitoring system makes it difficult to determine the extent of the impact and effectiveness. Nevertheless, RECO activities have improved the skills of young people in restoration, with the added advantages of reducing unemployment, strengthening food security and preserving indigenous knowledge.

5.2 Management Issues of Kaziranga Tiger Reserve, India

A youthful team working with the Wildlife Institute of India project "Management Issues of Kaziranga Tiger Reserve" addresses the conservation–development paradigm of local communities living on the fringes of the Kaziranga Tiger Reserve in Assam.¹²² The team comprises a group of young people under 30 years of age who are pursuing higher education while working on the project for a better conservation–development career. The Tiger Reserve covers 1,030 km²¹²³ and lies within the Indo-Burma biodiversity hotspot.¹²⁴ The reserve has a subtropical monsoon climate and

FIGURE 5
Kaziranga
community
members¹³²



encompasses a variety of habitat types, including alluvial grasslands divided into short and tall grasses interspersed with tropical moist deciduous to semi-evergreen forests.^{125, 126}

The aim of the team is to identify villages with high dependence on forest resources which is degrading the reserve. Upon identifying these marginalized villages, the team aims to educate the community on appropriate conservation practices and to develop the skills of the youth and women in the villages to enable them consider sustainable livelihood options. These interventions are aimed at minimizing their dependency on forest resources.¹²⁷

The team activities are being funded by the National Tiger Conservation Authority, with an aim to further restore the habitat quality of the area through a proactive local community. The government of India's Department of Science and Technology, the Assam government and other donors support the project financially.¹²⁸

The entire reserve is government-owned and is managed under the Indian Wildlife (Protection) Act, 1972, which prohibits resource extraction.¹²⁹ The Environmental (Protection) Act, 1986, also prohibits or restricts certain developmental activities. Conservation and restoration activities are primarily done in the reserve by the Assam Forest Department in association with local communities and the district administration, which is responsible for the overall development of the area. The reserve is managed by a senior forest officer from the Assam Forest Department along with a team of frontline staff, who assist in implementation of the management plan in association with other stakeholders, such as representatives of the local government. The youth team under the Wildlife Institute of India assist the park management in ecological restoration.¹³⁰

In 2015–16, the youth team carried out an ecological and socioeconomic survey in the villages on the fringes of the reserve. The aim was to determine the ecological status of the reserve and

its socio-economic structure. In addition, the survey collected information on the natural resource dependence, awareness and attitudes of local people towards sustainable use of environmental resources. Subsistence agriculture was the main livelihood, while small-scale private business, government services, livestock, tourism, government welfare services, firewood and home-gardening provided additional sources of income. Firewood, fodder, fishing and grazing within the reserve were major forms of seasonal resource use, which peaked during winters. Family type, family size, distance from the park, overall extraction of resources and caste significantly influenced resource dependency on the reserve.

People, mostly youth in 11 peripheral villages, have been sensitized about conservation practices, and scoping studies were conducted to identify alternative livelihood options they preferred. The results suggested that the youth and women preferred to be economically independent through small cottage industries: handlooms and artifact making, poultry and fish farming were their preferred livelihood options. Consequently, skill-enhancement activities were initiated to let people start their preferred options.¹³¹

The skill-enhancement activities are bringing positive attitudinal changes towards the reserve. Further capacity building and skill enhancement programs are being designed and are in various stages of implementation. The members of the village forest committee and ecodevelopment committees were trained in various aspects of tourism management, homestays, and additional sustainable livelihood opportunities, such as handlooms. The skill-development programs have been designed to rely on local resources, attract visitors and local inhabitants, while not harming the surrounding landscape, and being in sync with the local socio-cultural milieu. The focus on youth is to minimize outmigration and to enable young people to earn a decent living through activities such as handloom work, fish farming and catering to tourists through homestays.¹³³

The years of conservation restoration efforts by the team in and around the reserve has yielded positive results.¹³⁴ Signs of rejuvenation include the rising number of Indian rhinos and tigers¹³⁵ in the reserve, which now has the highest density of these species in the world.¹³⁶ In addition, the reserve now has a sizable population of large herbivores such as Asian elephants, Asiatic water buffaloes, northern swamp deer and hog deer. In view of its natural wealth and outstanding universal value, the reserve has been declared a World Heritage Site by UNESCO.¹³⁷ The work of the team has positively affected the lives of young and marginalized people in the area by building their capacity to consider other sources of livelihoods that are not dependent on forest resources.

The youth team's work is a good example of proactive public institutions working with and for young people in the restoration agenda. The team initiated various capacity-building programs on alternative livelihoods, increasing the income options of local youth. As the project is funded by public resources, it followed proper monitoring procedure. This allowed the youth group to focus explicitly on addressing the conservation–development paradigm of the local communities. Even though direct restorative activities were not carried out, increasing viable alternative livelihood options for the youth that are not dependent on forest resources for young people prevents the unsustainable exploitation of forest resources.

5.3 Action for Conservation, United Kingdom

Action for Conservation (AFC) is a non-governmental organization that engages, educates and empowers young people across England and Wales to take environmental action in their communities.¹³⁸ The UK is one of the most nature-depleted places on Earth, leading this race to the bottom with 41% of its species showing declines between 1970 and 2013. Some 71% of land surface in the UK is farmed, and in Wales it is closer to 90%. Access to nature is heavily weighted against young people, especially, those from more disadvantaged and minority backgrounds. Overall, just 21% of children in the UK have an adequate level of connection to nature and, alarmingly, three-quarters spend less time outside than prison inmates. This has detrimental effects on their physical and mental health and wellbeing and it is a situation that is only likely to worsen as urbanization continues, with 92.2% of the UK population predicted to be living in cities by 2030.¹³⁹

The Penpont Project is AFC's flagship youth-led nature restoration project. The Project aims to reverse catastrophic ecological crises by

meaningfully engaging the youth in environmental activism. It actively involves the youth in ecosystem restoration by organizing workshops, training seminars, volunteering opportunities, intergenerational learning dialogues and career mentoring programmes to create a global gold-standard for youth-led environmental action. The Penpont Project offers a rare, real-world example of how youth leadership can play a central role in shaping a vision to reverse ecological decline and create a greener and more prosperous land. Set in the heart of the Brecon Beacons National Park, south Wales, a diverse group of 20 young people from all over the UK are working in collaboration with the owners of the Penpont Estate, its tenant farmers and local stakeholders, to restore natural processes and biodiversity to a 160 ha site. These young people were approached in 2019 from a much wider pool of Action for Conservation ambassadors and invited to form a Youth Leadership Group. The Penpont Project site (Lat 51.95, Long -3.50) comprises a range of habitats typical to upland zones (200–400 m) in the British Isles. The site's complexity of habitats offers the opportunity to experiment with a range of emerging and integrated land use practices from regenerative agriculture to agroforestry and continuous cover forestry methods.¹⁴⁰

Four core stakeholders are responsible for developing and implementing the land restoration scheme and associated activities. These include AFC (the facilitation body), the YLG, the tenant farmers, and the landowners themselves. Roughly a third of the project area is tenanted to a local family who have grazed their livestock on Penpont land for several generations. In Wales, renting farmland is not uncommon; 48% of farms either rent some or all their farm from landowners. In order to address power imbalances between the project's core stakeholders, a memorandum of understanding was drafted from the outset and has been signed until 2022, which acknowledges the interconnected challenges of nature restoration, sustainable food production and resource use, livelihood security, education and connection to nature.¹⁴¹ There are four overarching aims within this vision:

1. Restore natural processes and trial farming practices that provide key ecological functions and underlie species richness and a healthy support system for people and agriculture.
2. Embed youth leadership and demonstrate the value of this participatory approach, as an embodiment of Wales' "Wellbeing of Future Generations Act".
3. Work with key stakeholders to forge a shared vision for the future that will create opportunities for financial diversification, habitat connectivity and other environmental benefits.

FIGURE 6

Participatory mapping with Penpont elders¹⁴⁷



4. Create a site that will act as a source of learning and connection to nature for decades to come, both for local young people and those living in urban areas with little experience in nature.

Beyond the core partners, the YLG is also working closely with the Gaia Foundation, a UK-based charity that seeks to revive biocultural diversity, regenerate healthy ecosystems and strengthen community self-governance for climate-change resilience across the globe.

To measure the project's success, the YLG and adult partners have engaged a range of local and national scientists to map the existing range of habitats, identify rare or endangered plants, and census key taxa which will serve as useful proxies for changes in biodiversity and overall. Alongside scientific surveys the team is undergoing a period of intensive research, led by the Youth Leadership Group, which will help build the internal expertise required to achieve consensus on a restoration scheme that can be monitored and adaptively managed.¹⁴²

The project site lies within the Penpont Estate: 800 ha of privately-owned land under the auspices of the Penpont Trust. The 74 ha pasture within the project site is tenanted to a farming family who have farmed on Penpont land for generations. In Wales, renting farmland is not uncommon; 48% of farms either rent some or all their farm from landowners. Through co-developing a restoration plan, the project partners are building relationships and a greater understanding of aspirations, power and vulnerabilities. A MOU, whilst not legally binding, serves as an initial written pledge to simulate the conditions of co-ownership. The project's approach to restoration is a blend of both process-orientated and target-orientated conservation and regenerative agricultural and silvicultural interventions.¹⁴³

Action for Conservation is funded by a mixture of donations from individuals, corporate partnerships and grants from trusts and foundations. The Penpont Project currently receives unrestricted or core multi-year grants from the Esmeée Fairbairn Foundation and Dulverton Trust, which gives AFC the stability to explore new projects such as this and innovative solutions to the ecological crisis.¹⁴⁴ The project is fully funded for the remainder of the 2020/21 financial year and is currently in the process of submitting additional funding bids to support the coming year. The project anticipates expenditure for 2020/21 to be GBP 47,360. With the aid of AFC staff, the Youth Leadership Group recently submitted its first funding application for GBP 150,000 to support the second phase of the project over the next two years and begin implementing restoration activities.¹⁴⁵

One of the Penpont Project priorities has been to fully understand the history of the site and to add value to "other ways" of knowing the land beyond the scientific. Oral histories, ancient maps and artistic interpretations of the land have been captured and time given to valuing and understanding them. Through this process, the Youth Leadership Group has had the opportunity to create exchanges with elders living in the local area and compile maps depicting the transformations of the land since the 1950s. These tools and processes have engendered a deep connection to the land and its community, setting the stage for more challenging topics of future change.¹⁴⁶

Beyond the site, the Youth Leadership Group has edited and produced a newsletter and other outreach materials, including press releases, which are disseminated to the wider community. The group plans to engage more young people from local schools and is currently devising an engagement strategy within the limitations of the Covid-19 pandemic. However, as the UK leaves the European Union and the Common Agricultural Policy, there are many uncertainties in how future

FIGURE 7

Young cacao pods that will be harvested to make chocolate¹⁵²



subsidies will be handled. There is an opportunity, however, for projects such as the Penpont Project, to shape an intergenerational and farmer-centric subsidy model that is forward-looking and encourages nature recovery to take center stage.¹⁴⁸

5.4 Cacao Project, Philippines

In 2016, when typhoon Nock-ten hit the Bicol region in the Philippines, it damaged almost all the agricultural land in the area. About 1,000 homes were destroyed and a further 4,000 were damaged. Many inhabitants were farmers who lost their livelihoods. The disaster exacerbated the food insecurity in the region. The need to survive pushed farmers towards unsustainable farming practices that further degraded the environment.¹⁴⁹

Louise Mabulo is a young chef who owns a restaurant and cooking studio, the Culinary Lounge, in the Philippines. Her success is directly linked to farmers' produce, so their struggles directly impact her. She established the Cacao Project as a social venture to help revive degraded agricultural land, promote more equitable trade, and raise the dignity of farmers. A youth-led and -focused initiative, the project aims to improve environmental conditions by avoiding, minimizing and reversing land and ecosystem degradation whilst empowering farmers.¹⁵⁰ The initiative provides farmers with seedlings of cacao, a crop that thrives in the Philippines and attracts a good price on the export market. Cacao is a long-term crop that remains productive for up to 20–25 years but starts being productive only after 3 years. The initiative therefore also provides farmers with short-term fruit and vegetables to intercrop with the cacao for early returns.¹⁵¹

The Cacao Project uses 3 hectares for its regenerative agriculture model farm and training center. Since its establishment, it has trained over 200 farmers in regenerative agriculture and planted over 70,000 trees across 70 hectares of land.¹⁵³ The initiative engages young people through educational tours, programs, events, and volunteering activities that are fun and educative, in the hopes of shifting the paradigm of young people towards regenerative agriculture for sustainable development. These initiatives aim to spark and maintain young people's interest in regenerative agriculture. It does this by showing young people that sustainable and environment-friendly farming practices protect the supply of a favorite confectionery; chocolate!¹⁵⁴

The Cacao Project is an example of youth entrepreneurship focused on regenerative agriculture in the restoration agenda.¹⁵⁵ It attempts to making farming more attractive to people, especially the young people, by equipping farmers with conservation farming skills, improving their bargaining power and resources for successful cacao production. Since the funding comes from the Culinary Lounge, a private company, this gives the project some financial security. The project proves that economically rewarding and dignified regenerative agriculture can galvanize young people to be engaged in the restorative agenda.

5.5 Reserva: The Youth Land Trust, Ecuador

Reserva: The Youth Land Trust is a youth-founded NGO based in the USA, which focuses on youth-funded conservation projects around the world. According to Callie Broadus, its founder and executive director, Reserva was founded in August 2019. Shortly afterwards, Reserva entered

FIGURE 8

Daniel Valencia Meneses, a 21-year-old Reserva Youth Council member and Fundación EcoMinga park guard, monitoring wildlife at Dracula Reserve in Ecuador's Chocó cloud forest¹⁵⁸



the UNCCD-sponsored UN Global Youth Video Competition, where it won in the category for land use for people and ecosystems, gaining international attention. Reserva's flagship conservation project in Ecuador is the focus of this case. This project is creating the world's first entirely youth-funded nature reserve in Ecuador's Chocó cloud forest.

Although Reserva focuses on youth-funded conservation projects, in reality it is funded by people of all ages. It is an organization empowering the global youth community to have a direct impact on the conservation of the Earth's most biodiverse places. Ecuador's Chocó cloud forest was selected because only about 2% of the lowland rainforest remains intact; 98% is experiencing intense rainforest desertification. Even though the project is ambitious and the first of its kind, Broaddus believes young people have the financial power to make it succeed.¹⁵⁶ Reserva relies on the young people's social media presence, sheer size and emotional influence in order to contribute to the restoration agenda, bridging the gap between proven conservation models and their novel, youth-led approach. Young people who will either benefit or suffer from today's decisions on land and ecosystems management can contribute to the decision process with more than their voice.¹⁵⁷

Reserva defines youth as people who are up to 26 years old.¹⁵⁹ The organization is supported by a youth council of more than 50 young leaders in conservation from diverse communities around the world who work with the executive director to carry out and help design Reserva's initiatives.¹⁶⁰ Their mission is to elevate young people as environmental change-makers by creating youth-funded nature reserves, educating youth around the world on the importance of habitat and biodiversity, and empowering young people to use Reserva as a platform for action.

Reserva has developed supplementary lessons for multiple school grades based on US national science standards, covering important conservation themes. These lessons contain virtual resources and activities to make the learning process fun and relatable, always including an action item related to biodiversity conservation.

The "1 Million Letters" campaign is an education and storytelling initiative that asks youth to write letters directed to world leaders in support of nature. For each letter, Reserva invests USD 3 in one of its reserve projects.¹⁶¹

The size of the premier entirely youth-funded nature reserve will begin at 100 ha, expandable to 493 ha, adjoining Dracula Reserve of Ecuador's Chocó cloud forest. The Chocó contains the world's most unique biodiversity zones, and iconic species like the spectacled bear, puma, ocelot, and Hoffman's two-toed sloth are found there. The higher-elevation cloud forest is experiencing alarming rates of deforestation. The proposed reserve land is under threat of activities such as unsustainable agricultural development and mining.¹⁶² All funds to create this reserve are being generated by young people, either from their own personal finances or raised through youth-led fundraising initiatives that Reserva supports.

Reserva is a nonprofit 501(c)3 organisation in the United States. People of all ages can support Reserva work by donating on their website www.reservaylt.org. To contribute to the youth-funded reserve project, donors can indicate that they are 26 or younger or donating on behalf of someone from that age group.

TABLE 3
Typology of youth engagement in the case studies

	Country				
	Uganda	India	United Kingdom	Philippines	Ecuador
Geography	Rural	Rural	Rural to peri-urban	Rural	Rural
Socio-economic setting	Low income	Middle income	High income	Middle income	Middle income
Finances	Donations and business models	Public funds and trusts	Trust funds, donations and social media	Public-private partnership	Trust funds, donations and social media
Implementation scale and style	Community level, forest landscape restoration and green entrepreneurship	Community level and alternate livelihood options	Community level and intergenerational approach	Community level and green entrepreneurship	International, National, community level and entirely youth funded
Monitoring	Rudimentary, subjective	Robust, objective	Robust, objective	Robust, objective	Robust, objective
Impact	Food security, source of income, reduce burden on forest resources, afforestation	Species conservation and capacity building for alternative livelihood	Education and awareness, species conservation	Food security, stable and diversified source of income, making farming attractive, better incomes for farmers	Education and awareness, species conservation

In Ecuador, Fundación EcoMinga (EcoMinga Foundation) is Reserva's country partner to enable implementation of the project on the ground. This is the group that will own and manage the reserve land, and Reserva works with this partner on storytelling, education, and community wellbeing initiatives. In addition, the Rainforest Trust has committed to matching donations dollar-for-dollar, so funds contributed will have double the impact. Reserva was able to raise USD 178,296 to purchase 100 ha of land to expand the reserve.¹⁶³

Reserva is an ambitious example of a fully youth-led initiative in the restoration agenda. Its success depends on virtual resources to mobilize funds and empower young people. Its clear partnership structures and novel ideas will contribute to its success. However, Reserva was only established in August 2019, and will require capacity building support and funding for sustainable replication and growth.

5.6 Identified patterns from the five cases

Table 3 summarizes and compares key aspects of the five cases: the geographical and socio-economical setting, finances, implementation, monitoring and impact.

Setting. The cases studies tended to be targeted or focused on rural settings. This may be because the impacts of land degradation are more evident, or are felt more directly, in rural areas. It may also be because youth initiatives in rural areas are more common or better documented. However, this does not mean that youth in urban areas are not engaged in restoration. Evidence in other parts of this working paper shows how other categories of youth are engaging in restoration.

Funding. The cases in middle-income countries (Ecuador) had no government funding or support to either strengthen or upscale the youth initiatives. The funding for the initiative was mostly from other sources. However, case studies from middle income and developed countries had more defined arrangements or support from stakeholders such as the government and the private sector, contributing in various ways to strengthening the youth initiatives. Though most of the identified financial support are not long-term, such proactive kinds of support contribute positively to the engagement of young people.

Implementation level. In terms of the implementation scale and style, most of the cases were innovative and at community level. In addition, all the cases involved education and/or knowledge acquisition, as well as capacity building in one way or the other. However, restoration activities in

low- and middle-income countries were designed to solve multiple societal issues apart from just restoration. The direct engagement of the youth at the grassroots promotes a sense of ownership of the project while enhancing self-reliance, knowledge sharing and indigenous innovation.

Monitoring. With regard to monitoring, all the cases did some form of monitoring, but it was cases with a more formal organizational structure that had

proper monitoring in place. Nevertheless, in all the case studies a pattern emerged of successful land restoration and ecosystem conservation activities with positive impacts. The activities translated to the social, economic and environmental wellbeing of the regions where they were executed. They serve as important lessons for youth-led and -focused organizations in land and ecosystem restoration.



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6. RECOMMENDATIONS

All over the world, a myriad of youth-led and -focused entities at multiple levels are engaged in land and ecosystem restoration. These entities include state and non-state actors. They play different but reinforcing roles in education, capacity building, creating livelihood opportunities, improved land governance and tenure, and improving socio-political contexts for policy formulation and implementation in restoration. There are many success stories of how youth action or youth-focused initiatives have significantly contributed to restoration.

This chapter highlights lessons based on available evidence of successful youth engagement in restoration. It offers insights into how best to create and support the enabling environment for youth engagement.

At the **policy** level, prime focus is given to how youth constituencies such as the Youth Caucus for Desertification and Land (associated with UNCCD) can be inspired to take proactive steps that encourage meaningful youth engagement in restoration policy processes. In addition, possible structural changes are outlined that national governments, UN and non-UN agencies could take to meaningfully involve young people in land issues and restoration work. Further, lessons are drawn from how other UN agencies engage with their youth constituencies and how youth-led and -focused entities can better engage with governments to influence policy.

Similarly, at the **implementation** level, the focus is on the extent to which young people, youth-focused NGOs and civil society organizations, public-private partnerships, women and girls, and educational institutions could positively impact the restoration agenda, either by being inspired or by motivating or inspiring other youth-led initiatives.

6.1 Policy level

Policy advocacy

Both YOUNGO and the Global Youth Biodiversity Network operate a flat hierarchical structure. Other youth constituencies such as the Youth Caucus on Desertification and Lands can be inspired to have a similar structure. Flat organizational hierarchies are more productive and are known to increase a sense of ownership and productivity because members are directly involved in the decision-making process of the organization, rather than being supervised by “managers.”¹⁶⁴ When young people feel ownership in a process, their sense of responsibility is stronger.

Like YOUNGO and the Global Network, the Youth Caucus could consider establishing thematic working groups relevant to land and ecosystem restoration. YOUNGO, for instance, has 28 working groups to address specific themes.¹⁶⁵ The Youth Caucus could similarly set up working groups on building capacity, education, awareness raising, media relations and advocacy, as well as on gender, land administration, indigenous knowledge, finance, eco-conservation, land security and loss and damage, among other themes. Such working groups are likely to go a long way to strengthen the knowledge and build the capacity of young people to contribute to policy processes, including those facilitated by the UNCCD secretariat.

The experience of the Global Youth Biodiversity Network and Youth in Landscapes shows the importance of having an alumni network to ensure continuity in youth engagement. Alumni networks inspire, motivate and educate current members on how to build on progress made in policy processes, based on the experience of previous members. The Youth Caucus might consider establishing an alumni network as part of its structure.¹⁶⁶

The Youth Caucus could also be inspired by the Youth #ForNature Manifesto initiative¹⁶⁷ of the Major Group for Children and Youth (associated with UN Environment). The #ForNature initiative is a manifesto and open letter to improve formal

communication and collaboration between youth constituencies in environmental governance. The Youth Caucus could develop a similar #ForRestoration manifesto initiative to encourage collaborative action from youth leaders and groups of different causes, geographies, genders and ethnicities for active youth engagement in restoration.

The experience of YOUNGO and the Global Youth Biodiversity Network in engaging with their respective UN Secretariats shows it is crucial that the UNCCD secretariat have dedicated personnel for youth engagement. These personnel should either be from the Youth Caucus or its alumni. Such positions – facilitators, leaders and others working full-time on the Caucus's projects – need to be remunerated. The individuals hired should be able to draw on their experience and give that exclusive attention to facilitating the representation of young people at all levels, consultation, implementation, and linking youth efforts with and for young people in the restoration agenda. The candidates for this position should be selected in conjunction with the Youth Caucus.

Another crucial aspect of facilitating young people's participation in policy processes is funding their participation in relevant forums.¹⁶⁸ The UNCCD Secretariat set a good example by providing financial support to young people from all over the world to take part in the Desertification Youth Forum in September 2019 during its 14th Conference of Parties.¹⁶⁹ From the many blog posts and audiovisual materials developed by young people who attended that the forum, it was clear that they found the experience relevant to their aspirations in restoration.

Even though no youth constituency has been successful with this call, many of the young people consulted in writing this working paper advocated for the UNCCD Secretariat to encourage member states to have a quota system for young people to be part of their delegation to the Conference of Parties. The youth representatives thought this approach to funding young people to attend the Conferences would be more sustainable and have multiple benefits such as linkages between youth activists and youth within government mechanisms.

Policy coherence

Attaining meaningful participation of youth in land and ecosystem restoration will require the joint implementation of multiple actions and policies. Policy coherence is needed across sectors and institutions to promote synergy. A policy toolkit developed by the UN Programme on Youth, in association with the World Association of Girl Guides and Girl Scouts and the World Organization of the Scout Movement sets a good example of how youth can be engaged in evaluating and

implementing specific themes in environmental protection.¹⁷⁰ In the same vein, the UNCCD Secretariat and other development partners can team up with youth constituencies to co-create policy toolkits that show how youth can be engaged in evaluating and implementing specific themes in restoration. Such toolkits would provide information on methodologies that young people can adopt to sustainably implement or effectively evaluate national environmental policies, land degradation neutrality targets and national biodiversity plans, among others.

Social media

About 89% of social media users are between the ages of 16 and 27 years old.¹⁷¹ These are the age groups of members of the youth organizations associated with UN units. Youth constituencies use popular social media platforms such as WhatsApp, Twitter, Instagram and Facebook to connect and share information before, during and after forums. Using social media effectively requires skills. The Global Youth Biodiversity Network and Youth in Landscapes have developed toolkits to equip young people with the skills to maximize their effectiveness with social media.^{172, 173} Some of the activities suggested in the toolkits are creating official hashtags for events, produce a collection of web cards, audiovisual materials, and suggested posts to engage interested people and groups on social media in promoting the agendas of the youth constituencies. The Youth Caucus could partner with the Global Youth Biodiversity Network and Youth in Landscapes to adapt their toolkits and to capitalize on their members' social media profiles and their public reach in the restoration agenda.¹⁷⁴

Policy reforms

Action plans contain a set of intended activities aimed at achieving an objective. They highlight resources, stakeholders and sometimes time-bound activities. For specialized UN agencies such as IFAD, young people are seen as valuable stakeholders in land management. IFAD has an action plan to galvanize rural youth to action in land management.¹⁷⁵ UNCCD could co-develop a rural youth policy action plan with its youth constituency to initiate reforms in policies that guide rural youth participation in restoration. Unlike IFAD, UNCCD's mandate leans towards policy reforms. Such action plans could cover urban youth since most young people are expected to live in cities in the next 20 years.

Political landscape

The engagement of young people in restoration at the national level is heavily reliant on political will. This means political actors must demonstrate a certain level of commitment by developing policies and dedication towards achieving a critical mass

and engagement of young people.¹⁷⁶ Malawi has set a good example in demonstrating such political will. The initiative of President Mutharika to address both youth unemployment and land degradation through the Malawi Youth Forest Restoration Programme is remarkable.¹⁷⁷ Malawi's actions resonate with the words of Tim Christophersen, the coordinator of the UN Decade on Ecosystem Restoration for UNEP, that "always bring in youth – bring them in (into the political agenda) – and get out of your meetings and go to theirs."¹⁷⁸ Based on the evidence from Malawi, when national governments proactively mandate public institutions to engage young people in the restoration agenda, the results have multiple and far-reaching impacts.¹⁷⁹

Further evidence from Nigeria, Bangladesh and Jordan show that UN agencies can support the strengthening of political will to include youth in development agendas.¹⁸⁰

- **Nigeria:** UNDP supported a youth-led civil-society coalition to participate in the review of the country's constitution. This action brought reforms in how young people could participate in the political landscape through the Inter-party youth forum.
- **Bangladesh:** UNDP supported the creation of a National Youth Parliament to bring youth voices into national policy creation and review, as well as to facilitate direct dialogue with parliamentarians.
- **Jordan:** UNDP supported political participation by young people in the Ministry of Political Development by training youth groups to critique and evaluate policy-inspired programs.¹⁸¹ UNDP assisted the ministry to create an online database of youth groups to systematically lobby for inputs on how youth engagement in the country's political climate can be spurred.

These examples show that UN agencies can contribute to the enabling environment for young people to engage in development agendas by empowering and building their capacity in the political landscape of their country.¹⁸²

UN agencies can also leverage their youth constituencies through innovative initiatives to facilitate the engagement of more young people in the land and ecosystem agenda. UNCCD has several initiatives, including:

- Become #UNCCDLandHeroes¹⁸³
- Land for Life Youth Social Media Activists Challenge¹⁸⁴
- Decent Jobs for Youth¹⁸⁵
- Become a Dryland Champion.¹⁸⁶

UNCCD sets a good example of sustaining a far-reaching impact of the #UNCCDLandHeroes competition by facilitating communication between competitors. This is done by introducing Land Heroes to each other while advertising their projects through a series of webinars. The Heroes are encouraged to follow and interact with each other on social media. This approach builds a community and keeps the youth connected in a sustainable network; ultimately, your "net worth" is your "network."

6.2 Implementation (action level)

Capacity building

To build capacity generally means to develop and strengthen skills, instincts, abilities, processes and resources needed to survive, adapt, and thrive. For young people to take action in the land and restoration agenda, their capacities would need to be developed and strengthened. Evidence from the Rakai Environmental Conservation Programme (Uganda), Penpont (UK) and Kaziranga Tiger Reserve (India) cases, interviews with IFAD representatives and literature on capacity-building for ecosystem restoration confirm that youth can only be engaged in land and ecosystem restoration when their capacities are developed and strengthened.^{187, 188, 189} Through education and sensitization, mentorship, the provision of ample logistics or effective partnerships, young people become empowered to take action in restoration.

Based on evidence from the Rakai case, youth-focused NGOs could be inspired to consider more contextual nature-based solutions to land management problems through initiatives like the farmer school program.¹⁹⁰ Like the Rakai program, NGOs could be inspired to go a step further and introduce eco-friendly business models like beekeeping to fund their initiatives.

Emma Federica, a consultant on the IFAD Youth Team, points out that cultural functions are inventive and effective entry points into local communities since they appeal to indigenous youth.¹⁹¹ Local assemblies and youth-centered organizations are encouraged to identify context-specific entry points that would best appeal to the youth – who would be the focus of the capacity-building initiative.

Education and capacity development institutions

This working paper has explicitly detailed the importance of capacity building and education to empowering youth action in land and ecosystem restoration. UNCCD's capacity-building marketplace and its forthcoming mentoring program that targets

individual and collective capacity development sets an example for other international organizations that aim to build the capacity of young individuals or youth-focused groups. Although the mentoring program is in preparation, it offers a good lesson on how a focus of international capacity building efforts in least developed countries and small island developing states can go a long way to address land restoration and associated Sustainable Development Goal targets.

UNFCCC's Action for Climate Empowerment that denotes work under Article 12 of the Paris agreement and Article 6 of the 1992 Convention could inspire UNCCD's capacity development initiatives. Like UNFCCC, UNCCD could develop an "Action for Youth Empowerment in Lands" initiative to denote efforts to educate and empower youth under Article 19 of the 1994 Paris Convention. Since this Article mandates UNCCD to train and develop local and national capacities, global partnerships with basic and tertiary institutions could be established and sustained. UNCCD could learn from UNFCCC's partnership with the Nairobi Work Programme (a knowledge-to-action hub for climate adaptation and resilience) to allow graduate students to undertake research projects closely with registered local, national and regional partner organizations.

National and local authorities can institute innovative programs that integrate basic education curricula with the restoration agenda. An exceptional example is how the Wabanaki Centre at the University of Maine in the [USA](#) engages Native American students (specifically Wabanaki tribal students in grades 6–12) in the protection of their cultural heritage and environmental legacy through the Wabanaki Youth in Science (WaYS) program.¹⁹² The success of this program in using a multifaceted approach to promote youth interest in environmental science and culture can inspire education and capacity-development institutions centered on indigenous youth development. Like the WaYS program, educational institutions could develop programs that promote week-long Earth camps in the summer, as well as internships for young students to work with natural and cultural resource professionals.¹⁹³

The Swedish Anglers Association in [Sweden](#) engaged schoolchildren in the ecosystem restoration agenda through its Ecological Restoration Education project.¹⁹⁴ This aimed to invigorate the concern of Swedish youth for the environment, drawing conceptual roots from "outdoor education" and "ecological restoration". Educational institutions and other capacity-building agencies could be encouraged by this example to incorporate practical approaches to teaching the young about the restoration agenda.

NGOs could also play a significant role in promoting capacity building and empowerment initiatives for the youth. Similar to Reserva's initiatives, NGOs could partner with educational institutions to provide supplementary lessons that cover important themes of conservation. NGOs could make these lessons effective, fun and relatable through the use of virtual resources and activities centered on biodiversity conservation. Reserva's 1 Million Letters campaign is an example of an innovative and sustainable platform through which students can convey eco-anxieties to leaders, and further lobby for youth-inspired or -focused land-management initiatives.¹⁹⁵

Digital options

In this digital age, engagement of youth through digital media is the norm. UNCCD's Conference App is seen as its major digital platform that disseminates information about UNCCD's engagement in the Conference of Parties. Nevertheless, it is limited to Conference-related activities and participants of official UNCCD events. Like UNFCCC, UNCCD could update its Conference app to perform additional features that appeal to youthful cohorts while promoting and encouraging youth action in restoration.

UNFCCC's Climate Change App could inspire a reconfiguration of the UNCCD Conference App to amass and display global Twitter and Facebook conversations on lands and ecosystem restoration in real-time, so as to bring live updates to users. This would make the app useful not only for participants at UNCCD events but to all interested parties, including the youth, all year round. During the COVID-19 crisis, the importance of virtual meetings has been accentuated. UNCCD could update features on the Conference app to provide a secure digital venue for youth groups to schedule meetings, connect to other stakeholders securely or conduct Webinars.

[Plant for the Planet](#), an international NGO, allows anyone in the world to plant a tree for about EUR 3 using an app.¹⁹⁶ NGOs with similar interests could be inspired to develop similar apps that would solicit funds to support young tree planters in all parts of the world.

The Penpont case in the [UK](#) shows that the Youth Leadership Group has been successful at using newsletters and other outreach materials to disseminate information about environmental conservation, land and ecosystem restoration with the wider community.¹⁹⁷ These tools have been revealed to provide the community with a deeper understanding of the land and associated challenges. Youth leaders, youth groups or NGOs in collaboration with local agencies or private bodies can be inspired by the case to use traditional communication platforms like community meetings, and mainstream virtual media outlets to disseminate relevant information on land sustainability.

Funding and livelihoods

The Land Accelerator initiative created by the World Resource Institute connects youth entrepreneurs to mentors, investors, capital and networks to scale up their action in land and ecosystem restoration.¹⁹⁸ Other organizations could create similar platforms where young entrepreneurs sell their products or pitch their sustainable innovations to investors. This would encourage the use of inventive and innovative indigenous technologies for land use and ecosystem restoration in both urban and rural regions.

The high incidence of environmental degradation and desertification is a result of the over-reliance on the environment to sustain urban and rural livelihoods. The Rakai case in Uganda could inspire NGOs to partner with private entities to provide young farmers with alternative sources of income through beekeeping and the sale of honey, or other green enterprises that can be picked up by rural and urban youth.¹⁹⁹ The Kaziranga reserve case in India could motivate financial aid by governmental agencies and private donors.²⁰⁰

Partnerships

Strategic partnerships go a long way to pool the strengths of multiple youth-focused agencies while establishing a unified authority for youth in land and ecosystem restoration. The importance of partnerships for sustainable development is emphasized in Sustainable Development Goal 17: partnerships for the goals. It is also necessitated by the numerous organizations and authorities in land restoration. The Global Partnership on Forest Land Restoration unites governments, research institutes, organizations, communities and individuals.²⁰¹ UNEP and FAO collaborate on the implementation of the UN Decade on Ecosystem Restoration.²⁰² Both these partnerships set good examples for the collaboration of global entities and youth groups in the restoration agenda.

UNCCD could use similar approaches to champion collaborative efforts with UNFCCC and CBD towards the collective goal of preserving the Earth. Just as the Global Partnership responds directly to the Bonn Challenge,²⁰³ a UNCCD-led collaboration could directly respond to the United Nations Sustainable Development Goals. Youth constituencies and youth agencies could be inspired by strategies used by the Global Partnership to pool knowledge and resources to devise an integrated framework for joint action. This framework could feed off the shared strengths of each agency to overcome their weaknesses and ensure a collective sustainable outcome.

Strategic partnerships for youth in lands and ecosystem restoration are not always solely created by global or national initiatives but also by the efforts of local youth. Local youth or youth groups

could establish partnerships that transcend their geographical confines and amplify the considerations of youth globally or nationwide.²⁰⁴ Consequently, youth-led groups, especially NGOs or civil society organizations, can learn from the Reserva: The Youth Land Trust case to establish a youth-funded land-restoration projects that would not only host and protect unique biodiversity and forest lands that are at risk of being encroached on but also give the youth a platform to actively liaise with donors and professionals.²⁰⁵ Youth groups could also be inspired by the case to establish partnerships with other youth-led organizations that advocate for similar causes while contributing financially to their sustainable implementation.

Social and green entrepreneurship

One of the priorities of young people is to find a decent job. Through the advocacy of green entrepreneurship, such jobs could be green jobs. Green entrepreneurship uses entrepreneurial intentions to identify social, economic and environmental needs while providing sustainable environmental solutions that have positive economic outcomes.²⁰⁶ Through governmental action, the youth could be provided with opportunities to start green entrepreneurship within or outside their communities.

The Clean and Green community outreach program, run by the Genesee County Land Bank in Michigan, USA,²⁰⁷ offers an example of how local governments can promote sustainable land management while creating green jobs and suitable livelihoods for the youth. Clean and Green presented urban communities with an opportunity to capitalize on the vast youth population to incite sustainable environmental change. It stands to inspire local governments to engage the youth in paid community-led development; evidence shows that the program's success was mainly based on its ability to supply the youth with employment – through mowing, landscaping or planting – and a sense of ownership in community property.²⁰⁸ It significantly reduced the incidence of vandalism and burglary while promoting the growth of green entrepreneurship in Genesee County.

Similar programs could be developed to suit specific contexts; Clean and Green could teach local governments who do not have the financial capacity to sustain youth payment to seek aid through grants, crowd-funding, churches, community groups and non-profit organizations.²⁰⁹ The Clean and Green case could also inspire local governments that have the technical know-how to train the youth in environmental beautification, urban agriculture and urban landscaping.

NGOs could play a significant role in promoting green entrepreneurship amongst the youth. Like the Raika beekeeping initiative in [Uganda](#), NGOs could

teach indigenous youth innovative and sustainable ways to efficiently utilize the environment around them to diversify their sources of income. Similarly, the Cacao Project in the [Philippines](#) offers an example of how degrading environmental conditions can be improved while empowering local farmers in the process.²¹⁰ Inspiration could be drawn from the Cacao Project to reimagine local farming and improve green technologies to support sustainable land use, particularly in regions struggling to reinstate their livelihoods after an ecological crisis.

Land tenure

Land tenure systems that are mostly governed by cultural norms and intergenerational power dynamics sometimes result in a cycle of unsustainable land use that is difficult to overcome. Since cultural norms cannot be overlooked or disbanded, local governments should devise alternative sustainable methodologies through which the youth could gain access to land. A good example can be found in [Ethiopia](#), where youth are awarded public lands for development by local governments based on their innovativeness and commitment to conservation and restoration activities.²¹¹ Such initiatives could inspire local authorities to formulate action plans to provide land tenure for youth who implement sustainable land and ecosystem restoration activities. Also, as in

Penpont in the [UK](#), local governments could act as brokers between youth leadership and the national government in the early stages of policy implementation to align government goals with the interests and capacities of local youth.²¹² Through local government support, local youth could broker a land tenure deal with the relevant ministries in charge of lands and natural resources. This deal could stipulate the requirements to be met by youth who apply for the lands.

When youth are sufficiently educated on land tenure, their capacity to access land, secure tenure and influence decision-making on issues related to land access significantly improves.²¹³ Youth-led organizations like the Youth without Borders Organisation for Development in [Yemen](#) have led an action research that targets various thematic areas under youth's access to lands, including access to decision-making platforms, tenure security and public spaces.²¹⁴ The research aided in the promotion of land-awareness training and youth land-management opportunities. Education and capacity building organizations, as well as youth-led NGOs, could learn from this case to develop action research that would provide context-specific insights into sustainable land access and land management. The research could also educate the older generation on the importance of involving youth in sustainable land use and management.



7. CONCLUSIONS

The working paper captures the intricate elements surrounding global, national, regional and local youth engagement in land and restoration.

The significance of restoring degraded lands, accentuated by the declaration of 2021 to 2030 as the Decade on Ecosystem Restoration, has inspired the engagement of non-traditional actors like youth in land and ecosystem restoration. Youth are vulnerable groups and the bearers of a brunt of the impacts of land degradation. But they are also an underutilized resource which can be deployed.

7.1 Youth constituencies

Building youth constituencies. International agencies like UNCCD, UNFCCC and CBD have established youth constituencies so as to harness the relevant knowledge, innovation, energy and capacities of youth for sustainable development. The designation of global North and South focal points permits youth constituencies to determine, examine and relay grievances of youth within these regions to the international platform.

Other international agencies like the Global Landscapes Forum, IFAD and WRI play important roles in developing strategic partnerships, executing capacity-building programs and training youth to develop environmentally sustainable livelihoods. Likewise, state agents like environment and national youth ministries directly influence national policy for the active involvement of youth in lands and ecosystem restoration.

Despite the presence of global, national and local environmental policies and structures, the role of the youth in the restoration agenda is often still relegated to the background. The absence of political will, incoherent policy and the current political landscape have negatively impacted youth participation in environmental policy formulation. A lack of funding, inadequate capacity-building efforts and fragmented institutional collaboration have further accentuated the need global and national institutions to take the initiative and further the agenda. Despite these gaps, a number of successes described in this paper can inspire state

and non-state actors to effectively engage youth for land and ecosystem restoration.

7.2 Policy

From a policy perspective, both international organizations and national governments could play a better role in reordering the political climate towards receiving youth participants and inputs for a more inclusive policy-formulation process. Structured engagement and representation for policy advocacy are essential in bringing the youth on board as key influencers and instigators of environmental policy; the voice of the youth can thus be integrated in international debate and national proceedings.

Alumni and working groups. Structured youth representation for policy advocacy at the global level could further be accentuated by the Youth Caucus on Desertification and Land (associated with UNCCD) taking inspiration from youth initiatives associated with CBD, UNFCCC and UN Environment. The Youth Caucus could develop an expansive alumni network and establish thematic working groups with a bearing on youth in land and ecosystem restoration. It could create a #ForRestoration Manifesto that would encourage unprecedented collaborative action from youth leaders and youth groups. This could align national and local youth focus with global political targets towards land and ecosystem restoration.

Toolkits. Coherent policy is necessary to promote synergy in restoration. Lessons from the UN Programme on Youth could inform the UNCCD Secretariat to co-create policy toolkits with its partners. Such toolkits could facilitate youth involvement in national environmental policy and promote youth participation to achieve land degradation targets. The Youth Caucus could develop social media toolkits to achieve synergy in virtual communication for the restoration agenda. This would introduce a sustainable communication structure that could transcend international platforms to grassroots levels.

Influencing national policy. The engagement of young people in restoration at the national level is heavily reliant on political will. The success of Malawi sets a good example of demonstrating how governments can demonstrate political will in meaningfully engaging young people in restoration for the good of the whole of society. Such an example could inspire national authorities to develop the political will to integrate concerns of the youth in national political agenda. UNCCD could also be inspired by the UNDP's efforts in Nigeria, Bangladesh and Jordan to motivate national policy reforms to meaningfully engage youth in parliamentary affairs. In the same vein, access to, and facilitation of the training of young people, should be encouraged so that they can make more meaningful contributions to the political landscape of their country.

UNCCD should sustain initiatives like its Become #UNCCDLandHeroes, Land for Life Youth Social Media Activists Challenge, and Become a Dryland Champion campaigns by forming alumni groups that would keep participants actively connected and engaged. This would develop a community of activists who could network with other youth to incite sustainable land restoration initiatives.

7.3 Implementation

Building capacity. In terms of implementation, the roles of national governments, local authorities, NGOs, private sector and educational institutions cannot be understated. The Rakai, Penpont, Reserva: The Youth Land Trust and Kaziranga Tiger Reserve cases set good examples of how the capacities of the youth can be developed through education, sensitization and the use of strategic entry points that appeal to youth. These entry points will attract the interest of young people in the training programs while conveying the essence of the restoration agenda. Agencies engaged in capacity building could learn from the examples of the Wabanaki Centre in the USA to develop supplementary educational programs that facilitate youth environmental science literacy and community development and create internship opportunities for young students. Reserva's 1 Million Letters campaign could also serve as an inventive mechanism young people can use to convey eco-anxieties to political leaders.

Digital communication. The COVID-19 pandemic has accentuated the necessity for virtual communication. The efforts of Plant for the Planet could inspire the development of digital options that can be leveraged on by actors in lands and ecosystem restoration. The Plant for the Planet application could introduce NGOs to digital means of soliciting for funds to support young tree planters.

Partnerships. The leveraging on strategic partnerships to support successful and emerging youth-led projects is another recommendation. Partnerships developed by youth groups and private-sector agencies like the Martha Tilaar Group could inspire environmental change that is directly focused on vulnerable groups like young female farmers. Global partnerships like the Global Partnership on Forest Land Restoration could motivate a UNCCD-led collaboration for environmental sustainability. The Restoration Opportunities Assessment Methodology (ROAM), published by IUCN and WRI, could be used by national governments to partner with authorities charged with environmental protection to assess opportunities with youth as key stakeholders.

Youth-led initiatives. Initiatives geared towards youth in lands and ecosystem restoration are not created only by global or national authorities but also through the efforts of local youth. Youth-led groups, especially NGOs or civil society organizations, could learn from the Reserva: The Youth Land Trust case to establish youth-funded land-restoration projects that give youth ownership in these activities. The sense of ownership actively translates to a greater sense of involvement and commitment.

Youth are a prime resource for halting land degradation and desertification. Environmental sustainability, through land and ecosystem restoration cannot be achieved if the voices of the youth and the efforts of state and non-state youth-led agencies are ignored and unsupported. The onus lies on international, national and local authorities to acknowledge their valuable input and utilize their platforms to promote sustainable considerations for youth in lands and ecosystem restoration.

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