



SPARC
Supporting Pastoralism
and Agriculture in Recurrent
and Protracted Crises



GENDER &
ADOLESCENCE:
GLOBAL
EVIDENCE

September 2021

REPORT

RESILIENT GENERATION

Supporting young people's prospects for decent work in the
drylands of east and west Africa

Mairi Dupar, Emma Lovell, Olivia Walmsley, Vidya Diwakar, Camille Balcou, Beza Tesfaye and
Vaidehi Krishnan



Acknowledgements

The authors would like to thank the following people for their review and inputs into the report: Mary Allen, Elizabeth Carabine, Nicola Jones and Andrew Shepherd, as well as Colette Benoudji, Jon Kurtz, Mark Redwood, Mauricio Vazquez, Katharine Vincent and Steve Wiggins, from the Supporting Pastoralism and Agriculture in Recurrent and Protracted Crisis (SPARC) programme. The authors would also like to thank Sanjana Bahadur and Inès Moualil for their valuable contributions to this report, and accompanying issue brief.

We would like to thank all of the individuals we spoke to during key informant interviews, from development partners, pastoralist networks and youth networks, for their time and useful contributions. Many thanks to SPARC and Gender and Adolescence: Global Evidence (GAGE) for funding this piece of work. They are, in turn, supported by the United Kingdom's Foreign, Commonwealth and Development Office (FCDO). We would also like to thank Rajeshree Sisodia for all her help with communications aspects of this report and Julie Grady Thomas (for copyediting and laying out the text), Lucy Peers (for designing the infographics and figures) and Nina Behrman (for proof-reading the report).

TABLE OF CONTENTS

Acknowledgements	2
Tables, figures and boxes	4
Acronyms	5
Executive summary	6
1. Introduction	12
1.1. Scope and methodology	16
1.2. Defining 'youth'	21
1.3. Defining decent work in the east and west African drylands	21
1.4. An 'opportunity spaces' approach	25
2. Context	26
2.1. Decent work for Africa's young people is a regional policy priority	27
2.2. The reality: youth (un)employment in east and west African drylands	29
2.3. Barriers and opportunities for young people's employment in rural areas	31
2.4. How climate change and other hazards shape the present and future of work	41
2.5. The need for climate-responsive education, training and support to families	45
3. Young people in rural areas: narratives, aspirations and influence in decision-making	48
3.1. Dominant narratives about young people in rural areas	49
3.2. What are young people's aspirations and preferences for work?	50
3.3. Young people in decision-making and leadership	53
4. Lessons from policies and programmes to educate and prepare young people for decent work	56
4.1. Tailored education for rural children and young people must be scaled up	57
4.2. Vocational training and job schemes for young people in rural areas focus on agriculture and entrepreneurship	62
4.3. Climate resilience and national development are starting to become integrated objectives	64
4.4. Investment at the nexus of youth, pastoral livelihoods and climate resilience is still under-developed	68
4.5. Social protection schemes are not fulfilling their potential to support young people's transitions into secure employment	78
5. Conclusion and recommendations	82
5.1. Summary of key findings	83
5.2. Critical knowledge and research gaps	85
5.3. Recommendations	86
Annex: National policies and plans	92
A1. Ethiopia	93
A2. Nigeria	95
A3. South Sudan	96
A4. Somalia	97
A5. Sudan	98
A6. Mali	99
References	100

TABLES, FIGURES AND BOXES

Tables

Table 1	Key definitions	20
Table 2	Opportunity spaces for a spectrum of work options	25
Table 3	Regional policies that frame decent work and commit to investment in jobs	28

Figures

Figure 1	The nexus of youth, employment, climate change, agriculture and pastoralism	10
Figure 2	Dryland regions of east and west Africa	13
Figure 3	Population under 20 years old (2019)	17
Figure 4	Population employed in the climate-vulnerable agriculture, forestry and fishing sectors (2019)	18
Figure 5	Opportunities for intervention to support young people's pathways into decent, climate-resilient work in the drylands	22
Figure 6	Goal 8 of the SDGs and relevant youth targets	27
Figure 7	Employment to population ratio (ages 15-24) (2019)	30
Figure 8	Proportion of young people who are literate (ages 15-24) (2018)	40
Figure 9	Impacts of climate change in Africa	42
Figure 10	How adaptation actions can reduce major climate risks in Africa	44
Figure 11	Main modes of participation for young people	54
Figure 12	The BOMA Project's REAP model	77

Boxes

Box 1	Research questions	15
Box 2	What are the boundaries? Youth employment vs child labour vs indentured labour	24
Box 3	Why do young people migrate from the rural to urban areas – and what are the consequences?	34
Box 4	Legal rights – a missing 'enabler' to open new opportunities for young people from pastoral communities?	37
Box 5	Investing in credit for women in dryland economies creates wider benefits for communities	38
Box 6	Rural and pastoralist issues on the curriculum – country initiatives at a glance	58
Box 7	Localised engagement	58
Box 8	Changing the educational offer to match pastoralists' needs – country initiatives at a glance	59
Box 9	A climate-smart education? Country policies at a glance	62
Box 10	Youth policies and employment policies featuring youth – countries at a glance	64
Box 11	Climate mainstreaming in national growth plans – countries at a glance	66
Box 12	Targeting drylands – the Drylands Development Programme (DryDev), 2013-2019	70
Box 13	ENGINE – a girl-focused approach to developing skills training and expanding individuals' choices for decent work in Nigeria	73
Box 14	The BOMA Project's Rural Entrepreneur Access Project (REAP)	76
Box 15	From foundational education to entrepreneurial skills – Youth in Action	80

ACRONYMS

DryDev	Drylands Development Programme
EAC	East African Community
ECOWAS	Economic Community of West African States
ENGINE	Educating Nigerian Girls in New Enterprises
FAO	Food and Agriculture Organization
FARM	Food, Agribusiness, and Rural Markets
FCDO	Foreign, Commonwealth and Development Office
GAGE	Gender and Adolescence Global Evidence programme
GGWI	Great Green Wall Initiative
GLFA	Global Landscapes Forum Africa
ICRAF	World Agroforestry Centre
ICT	Information and Communication Technology
ILO	International Labour Organization
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution (also known as national climate plan)
NGO	Non-Governmental Organisation
PAREJ	Support Project for the Resilience of Youth Enterprises
PRAPS	Regional Sahel Pastoralism Support Project
Pro-ARIDES	Programme Agroalimentaire pour la Résilience Intégrée et le Développement Économique du Sahel
PRODEC 2	Programme décennal de développement de l'éducation et de la formation professionnelle deuxième génération
REAP	Rural Entrepreneur Access Project
SDGs	Sustainable Development Goals
SPARC	Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises
TVET	Technical and Vocational Education and Training
UNCCD	United Nations Convention to Combat Desertification
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund

EXECUTIVE SUMMARY

Context

The eastern and western regions of Africa have a youthful population, with people under the age of 18 comprising around one half of the population for most countries. This promises to be a boon for labour markets, but also challenges governments and development agencies to provide decent, meaningful income-generating opportunities for young people. The rural, predominantly arid and semi-arid areas of these regions – the drylands – certainly face these issues.

The drylands have been defined as areas with high climate variability; low soil fertility; sparse and mobile populations; geographies that are remote from and poorly served by development infrastructure; weak institutions and weak human capital; rich traditional and local knowledge; and ethnic and cultural diversity. These interrelated factors can lead to challenges in delivering services; poor access to markets; lower productivity; and a lag in human development. Climate change and other shocks, including conflict, continue to create new and emerging risks for rural livelihoods and young people's opportunities to secure decent, climate-resilient work. Nevertheless, dryland regions offer economic opportunities that build upon the strengths of agriculture and pastoralism, including livelihood diversification. This includes diversification into tourism, processing and service industries, renewable energy production (including solar, geothermal and wind power) and new and green technologies to drive income growth and sustainable development.

Until recently, there have been very few policies and programmes that have targeted education, skills development and employment support to young people in the drylands – let alone in a climate-smart way.

Policy debates and programme design have also paid meagre attention to gender, age and poverty dynamics, and other intersecting social identities (such as ethnicity, religion, (dis)ability, geography, etc.) that influence young people's experiences, ideas and aspirations. Traditional gender and social norms, roles, and responsibilities continue to influence the livelihood options and income-generating activities available to young girls and disadvantaged groups, including their access to and control over assets and resources.

Scope and methodology

The purpose of this study is to:

- **Review the factors that currently shape young people's livelihoods and work prospects in the drylands** and their trajectories as young adults. Not only does this review cover young people's access to education, skills training and vocational guidance, it also includes the market environment; government policies and investment priorities; and context for multi-hazard risks (including climate variability and climate change, Covid-19, etc.) that shape young people's options, or what Sumberg and Okali (2013) call 'opportunity spaces' for decent work.

- **Examine the opportunities and provide recommendations for external actors to work with young people in dryland communities to broaden their ‘opportunity spaces’ for decent work**, and to do this in a way that is fully gender-responsive and socially inclusive of young people in all their diversity. This includes capturing lessons from existing project experience to inform dryland development initiatives.

The report focuses on young people from pastoralist backgrounds in this context: those who are still active in pastoralism, as well as those who have dropped out. The report takes a broadly regional approach, whilst also focusing on the opportunities for young people in the countries of Ethiopia, Mali, Nigeria, Somalia, South Sudan and Sudan.

We take an expansive view of ‘decent work’ that is appropriate to the regions studied. To further define the parameters of what decent work could look like in the east and west African drylands:

- We use the concept of ‘opportunity spaces’, used by Sumberg and Okali to describe the range of “more or less viable work options that a young person may exploit as she/he attempts to establish an independent life” (2013). Many work options merely enable young people to survive from day to day (as with casual labour or low-productivity, smallholder agriculture). However, other options allow real incomes and capabilities to be enhanced and capital accumulated, and may even rebalance social injustices (such as gender inequalities); these opportunities are what we characterise as ‘decent’ work (for a detailed definition, see Section 1.4).
- We look at young people’s options for work, now and in the medium to longer term, in the context of climate variability and change. Most young people’s opportunity spaces for decent work are in the climate-vulnerable sector of agriculture (including pastoralism), which is at least partly shaped by the condition of land, water and natural resources, as average and extreme temperatures increase and rainfall patterns change. Opportunity spaces are also shaped by society’s responses to climate change, including climate policies and climate finance projects. Therefore, we suggest that ‘decent work’ in the context of the east and west African drylands should also increase young people’s resilience to climate change and other shocks. The knowledge and skills that young people develop in formal schooling and job training and apprenticeship need to be appropriate for this future climate. They should also be suited to the policies and investments in low-carbon, climate-adaptive development, both underway now and on the near horizon.
- We look at how social and gender norms shape opportunity spaces, and the role of programmes in expanding community acceptance of what livelihood options and income-generating activities are available to women and men.

This report predominantly focuses on the agricultural sector, particularly pastoralism, as this is where most dryland residents work, at present. It also considers the broadening sense of economic opportunity in the drylands, tracking the considerable political focus and upswing in investment in land restoration agendas (e.g. through sustainable land management, forestry and agroforestry, and other forms of low-carbon, climate-resilient jobs). These include opportunities outside subsistence agriculture for creating more jobs in agriculture value chains, including in processing and trade; in the services sector (e.g. financial and information services); in sustainable tourism; in expanding utility services (e.g. renewable energy and climate-resilient water infrastructure); and through the creation of more urban-based jobs for rural-urban migrants to secure, including in some countries through a growing low-carbon

(or 'green') industrial sector. While some of these options may not currently be viable in some conflict-affected contexts (e.g. sustainable tourism), they could form part of long-term, post-conflict development plans.

The research involved a review of: i) grey and academic literature; ii) existing policy documents; iii) programme interventions; iv) statements by young people in regional/international fora; and v) 18 key informant interviews with development partners, pastoralist and youth networks in the region.

Key findings

Youth employment is a stated policy priority for the African Union as a whole. There are substantial numbers of policies for the provision of youth employment in the six countries studied.

There are varying degrees of integration between employment policies and the climate resilience and/or low-carbon development agendas, across the countries studied. The region's most populous countries, Nigeria and Ethiopia, have coherent green growth and/or green employment policies. Nigeria's updated national climate plan, the Nationally Determined Contribution, has a major new section on the importance of investing in 'green job' creation and highlights the needs and potential of young people. Ethiopia established its all-of-government Climate Resilience Green Economy Strategy in 2011 and has been systematically strengthening the governance mechanisms to integrate climate resilience in sectoral policies and programmes. In the other focal countries, employment generation (including youth skills training) is less well-integrated with climate and environmental sustainability goals, at present.

That said, **integration of the climate adaptation and land restoration agendas with economic development imperatives is an emergent trend in regional and national policies and programming.** There are growing numbers of initiatives to promote employment in these areas, including the Great Green Wall Initiative (GGWI), which is a flagship, regional, pan-African programme.

Exceptionally **few policies and programmes in or targeting the drylands have worked at the intersection of decent work, youth, climate resilience and pastoralism.** In the growing number of job creation and training schemes focused on settled agriculture, agroforestry and forestry (and related land restoration and integrated water management), **there is a tendency to have either a strong climate/environmental sustainability focus or a youth focus. It is less common for them to incorporate both aspects fully.**

Young people from rural, dryland backgrounds, especially those from pastoralist backgrounds are under-represented in policy processes, which means their needs, priorities, vulnerabilities and capacities are not taken into account in decision-making. National youth policies, where they exist, seldom promote climate-resilient livelihoods and rarely acknowledge pastoralists.

Furthermore, the general absence of disaggregated and intersectional data also leads to young people from pastoralist backgrounds being under-represented in policies and programmes. Young women and men with disabilities in pastoralist communities remain almost 'invisible'. **This makes it impossible to determine whether the needs of young people from pastoralist communities are being met regarding pathways into secure livelihoods and decent work.**

Among young people from pastoralist and agropastoralist backgrounds, **educational attainment is likely to be stymied by lack of reliable or quality schooling**. Some of the countries studied have made provisions for teaching modalities that better suit pastoralist livelihoods (e.g. mobile schools and tailoring of school sessions to the seasonal cycles of the pastoralist calendar), but these initiatives are not yet widely implemented. There is a pressing need to better document and share learning about pilot solutions. Educational curricula are generally criticised in the literature, and by key informants, as being urban-biased and out of touch with rural priorities (and pastoralism, where relevant). Curricula do not yet sufficiently integrate content on climate change, nor what it means for the rural places where young people grow up.

Capital constraints, including land (tenure and access) and finance, are cited by key informants and in the literature as insurmountable constraints for young people who wish to make a living from agriculture or pastoralism, including conventional production or through value chain addition. Young people encounter age- and gender-related barriers to accessing and owning land and credit. Village savings and loans schemes can support access to microcredit, but often provide insufficient sums to support young people's requirements.

In any youth cohort from the dryland areas, including pastoralist/agropastoralist backgrounds, there will be a diversity of preferences for work. Young people from pastoralist backgrounds tell us they see their conventional choices as: i) staying in traditional livelihoods; ii) expanding economic opportunity within livestock and agropastoralist value chains (e.g. through microenterprise); iii) what interviewees call 'dropping out of pastoralism' to seek alternative rural work; or iv) migrating to towns, cities and further afield for entirely different employment.

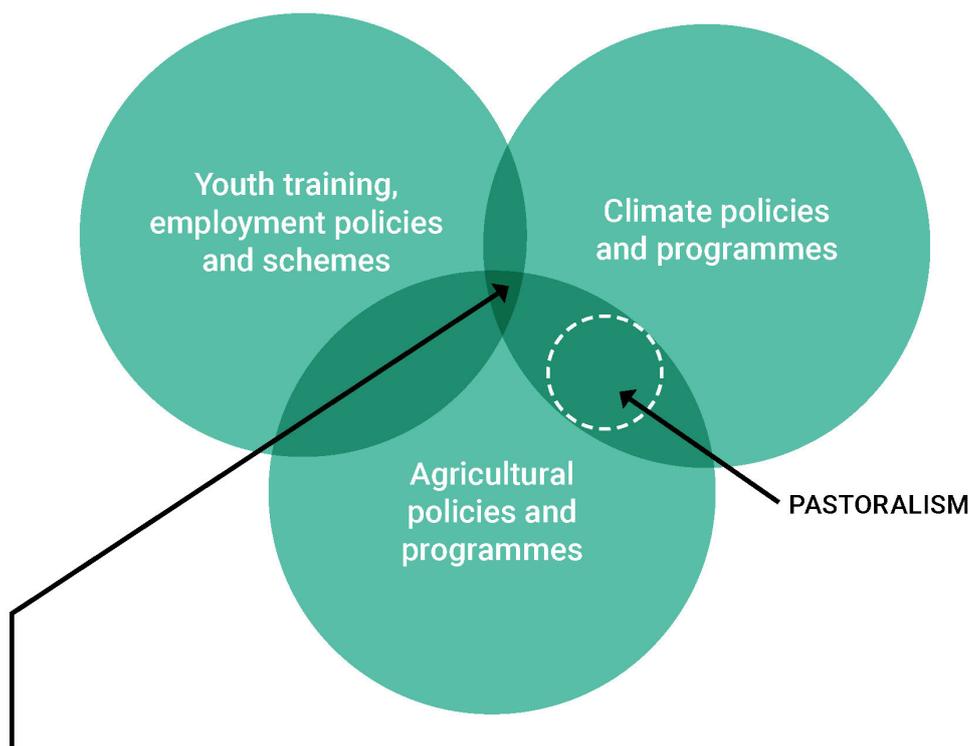
In addition to their own preferences, each young person will have to face different barriers and opportunities for work pathways including: their positions in family hierarchies and inheritance systems; age, gender and cultural expectations; and the extent to which they can afford to migrate; and so on. It is the task of support programmes for young people's education, skills and employment to navigate these issues sensitively. Rather than being prescriptive about young people's futures, such policies and programmes can open the 'opportunity spaces' for young people, giving them a broader range of informed choices.

Recommendations

The overarching recommendation of this study is to establish more programmes that include an integrated approach to youth, climate, agriculture and pastoralism. This study highlights (see Figure 1) the large gap in programme interventions that address this particular nexus of issues and the huge potential for investment in this area. It is also important to expand the narrative around young people's livelihood options in dryland regions. This has two elements: young people themselves can be encouraged to think more broadly, within and far beyond agriculture and pastoralism, about work choices to pursue; and – this is critical – policy-makers and development practitioners can recognise the opportunities that are/could be available to support economic growth in the drylands and build upon them.¹

¹ This includes tourism, processing and service industries, renewable energy production (including solar, geothermal and wind power) and the use of new and green technologies and new livelihood opportunities in urban centres.

FIGURE 1: THE NEXUS OF YOUTH, EMPLOYMENT, CLIMATE CHANGE, AGRICULTURE AND PASTORALISM



The area where employment generation and support schemes (e.g. skills training, access to capital) overlaps with climate resilience/green economy overlaps with target youth (late teens to 25-year-olds) is very small. Most programmes occupying this area, as evidenced by this study, are targeted at youth in urban areas and/or have settled agriculture and its related agricultural value chains as their focus. The presence of rural and dryland youth, including those from pastoralist and agro-pastoralist communities, in this already small landscape is so minute and under-represented that they barely figure.

Source: Authors.

More specific recommendations for action, which apply to different interventions along young people's life stages from education through vocational training and work transitions, follow below. Recommendations are also provided for addressing the enabling environment to support young people's access to secure, decent work in the drylands.

1. Strengthening the educational foundations for decent work by:

- teaching basic literacy and numeracy in the context of applied learning that is relevant to the drylands;
- providing young people with a strong understanding of the basics of climate change and its implications;
- addressing the socioeconomic and culturally specific drivers for school absenteeism and drop-out, and helping young people to catch up;
- bridging gaps in access to information and communications that could help young people access continual learning;
- adapting teaching regimes to meet the realities of pastoralist communities.

2. Enhancing vocational training and guidance for young people in the drylands by:

- asking young people what they think;
- consulting with young people in all their diversity about work and livelihood priorities (not just limited to differences between young women and men but also disaggregated by ethnicity, (dis)ability, age cohorts, etc. and other intersectional aspects), in order to respond to the distinct needs and priorities of different groups of young people;
- tackling gender discrimination and targeting the specific needs of girls and young women;
- supporting youth leadership and the integration of young people (across genders, age, abilities and economic status) in the design of projects and programmes;
- broadening young people's sense of choice and strengthening their vocational skills;
- ensuring young people's vocational skill training is climate-smart;
- providing services to young people (e.g. mentoring, work experience/apprenticeships, role-modelling) that expand young people's aspirations, their ideas about work and livelihood choices, their capabilities, incomes and ability to accumulate assets, and their transition into decent work;
- supporting those who have dropped out of formal education, and ensuring all interventions are facilitated in a gender-responsive and socially inclusive way to support girls' and boys' choices around decent work.

3. Broadening young people's sense of choice and access to wider economic opportunities available in the dryland areas, including climate-resilient, low-carbon vocations by:

- raising awareness about the wide range of economic opportunities that are available to support economic growth in the drylands, beyond agriculture and pastoralism;
- enhancing young people's 'opportunity spaces' for finding and sustaining decent work by strengthening labour market conditions (supply/viability of jobs) and individuals' skills and qualifications for pursuing different work choices;
- matching the climate-resilient, low-carbon ambitions of governments with vocations that young people can aspire to and access.

4. Addressing the enabling environment to support young people to access and secure decent work in the drylands by:

- ensuring markets are viable to support young people to develop micro- and small enterprises, as well as generate income and accumulate assets;
- developing the infrastructure, including information systems and market intelligence, to understand and support resilient market systems in the drylands;
- examining how legal frameworks can support communities' access to land, including through collective ownership, and how this could benefit young people;
- providing young people with access to capital/finance and financial services, and ensuring access is inclusive of women and other marginalised groups, which may involve adapting the collateral and paperwork requirements for small loans to make them more accessible.

1. INTRODUCTION

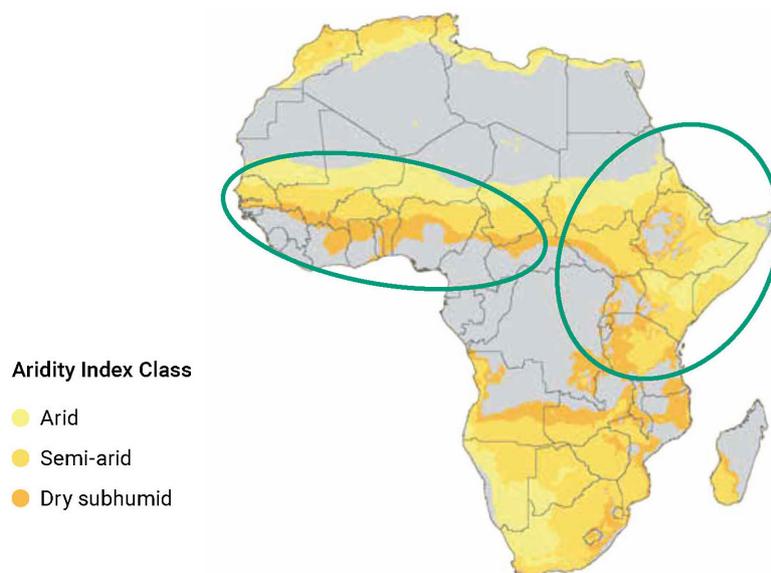


Africa is the world's 'youngest continent' – 60% of the continent's population is under the age of 25 (Dews, 2019). This trend looks set to continue. Fertility rates in sub-Saharan Africa are the highest in the world, at 4.6 children per woman in 2019 – although this has decreased from 6.77 in 1980 (World Bank, 2019a). As these young people reach working age, this youth surge promises to be a boon for African labour markets, but it also challenges governments, development agencies and 'investors in people' to stimulate the economies and provide decent, meaningful, income-generating opportunities for young people (UNFPA, 2018: 4; Amsler et al., 2017; Canning et al., 2015). According to the United Nations Convention to Combat Desertification (UNCCD) (n.d.):

"In Africa, the young population is rapidly growing and expected to double to over 830 million by 2050. Of Africa's nearly 420 million youth aged 15-35, one-third are unemployed and discouraged, another third are vulnerably employed, and only one in six is in wage employment. And the young women that make up over half of the youth unemployed, are finding it harder than ever to close the gender gap".

The drylands of east and west Africa are "arid, semi-arid, and dry subhumid zones" (Cervigni and Morris, 2016: 1; see also Figure 2) that are home to approximately 300 million people who rely on pastoralism and depend on natural resources for their livelihoods (ibid.: 1). African pastoralism has a "high reliance on livestock as a source of economic and social wellbeing, and various types of strategic mobility to access water and grazing resources in areas of high rainfall variability" (African Union, 2013: 6). Pastoralism has evolved over millennia to play an essential role in Africa's national and regional economies, as well as a source of livelihood, food security, income and wellbeing (FAO, 2018a; Cervigni and Morris, 2016). The rangelands where pastoralists graze their animals are also recognised as vital stores of carbon and biodiversity (Ericksen and Dupar, 2021).

FIGURE 2: DRYLAND REGIONS OF EAST AND WEST AFRICA



Source: IFPRI, 2015 in: Cervigni and Morris, 2016. Reproduced, with permission from Zhe Guo; further permission required for reuse.

In dryland regions, ecological and social issues are “fundamentally interwoven, and so are the options for livelihood support and ecological management” (Reynolds et al., 2007: 847). ‘Top-down’ development policies often “contradict local practices and undermine sustainable development”; there is a need for “proper engagement of local people (and local environmental knowledge) with scientists (and scientific knowledge)” to contribute to sustainable local management and “win-win (environment-development) outcomes” (ibid.: 848).

In the east and west African drylands, research predicts that populations will increase by 65-80% by 2030 (Cervigni and Morris, 2016). Competition for and mismanagement of land and natural resources – and their subsequent degradation – have reduced the productivity of rangelands and put pressure on the livelihoods of farmers, agropastoralists and pastoralists in the drylands (IPCC, 2019; ILRI et al., 2021).

The following interacting factors have been used to define dryland areas: high climate variability (in space and time); low soil fertility (and high sensitivity to degradation); sparse, mobile human populations; weak institutions; shortfalls in infrastructure and human capital; use of traditional and local knowledge; and cultural differences among people and institutions (Reynolds et al., 2007; Stafford Smith, 2008; Jobbins et al., 2016). These factors can lead to challenges in delivering services; poor access to markets and trade, and also to policy-makers; externally imposed dysfunctional institutional arrangements that are not suited to drylands regions; low economic productivity; and low socioeconomic development levels, including higher infant mortality, severe fresh water shortages and much lower per capita income (Reynolds et al., 2007; Jobbins et al., 2016). Until now, many of these interrelated factors have provided challenges for development investments (whether by national governments or external actors). There is a need for policy and investment decisions to support inclusive, climate-resilient growth in dryland regions and to boost critical facets of human development, such as education, health and income.

Climate variability and change and other shocks – including Covid-19 and conflict – continue to create new and emerging risks for rural livelihoods (Wiggins et al., 2021; Levine et al., 2021; Gony et al., 2021). Climate change manifests itself in intense, frequent, rapid-onset events (such as storms); changes in the timing of the seasons (such as monsoon rains arriving at different times); and slow-onset events (such as average temperature rise) (Fitzpatrick et al., 2020). These hazards have repercussions for young people’s opportunities to secure decent work.

Nevertheless, while dryland regions have suffered relatively low levels of socioeconomic development and climate change continues to pose a major threat, people have continued to adapt and build ‘routes to resilience’ in dryland regions (PRISE, n.d.). Local environmental knowledge, community-driven management and informal institutions have supported land and resource management over time, and local engagement in policy and investment decisions are essential to support inclusive, climate-resilient growth in dryland regions (IPCC, 2019; Reynolds et al., 2007; Jobbins et al., 2016). Land restoration, climate-smart pastoralism, and agriculture and agroforestry initiatives (IPCC, 2019; ILRI, n.d.), together with development and investment in value chains (Jobbins et al., 2018), all have a role to play in supporting income generation and decent work, as well as critical food and water security. It is also important to recognise

the range of economic opportunities available in the dryland regions which are “capable of diversifying and building on strengths in agriculture and pastoralism” and supporting economic growth in the drylands (Jobbins et al., 2016: 20). This includes tourism, processing and service industries, renewable energy production (including solar, wind and geothermal power), the use of new and green technologies and new urban livelihood opportunities (Jobbins et al., 2016; PRISE, n.d.).

BOX 1: RESEARCH QUESTIONS

Research questions for this work include:

- **Evidence:** What do we know about the climate impacts on youth livelihood opportunities; and what are the ways that climate change solutions shape young people’s opportunities? What do we know about changing youth preferences/aspirations for work in rural, dryland areas and the degree to which these are aligned with climate resilience? What are the main barriers and opportunities for young people in the drylands to secure decent work? How do girls’ and boys’ and young women’s and men’s priorities and prospects for work differ? And, what about young people who have special needs due to disability or specific forms of discrimination or marginalisation?
- **Policy and programme mapping:** To what degree are climate adaptation and resilience policies and programmes shaping the ‘opportunity spaces’ (i.e. tangible job prospects) in the drylands? And to what degree are young people consulted in policy and programme design? What are the gaps in evidence and action? To what degree are youth education and training initiatives: i) incorporating relevant climate information (this includes the influence of climate shocks and stresses on livelihoods and pastoralism, as well as locating any gaps in knowledge); and ii) providing young people with the capacities, skills and social protection pathways that help them to graduate into sustained, secure work?
- **Recommendations:** What are some key recommendations for decision-makers, who are investing in climate change adaptation/climate-resilient development in these regions, to ensure their policies align more effectively with young people’s concerns and priorities – and also strengthen the capacity of young people to understand climate and environmental change and its implications for their working lives? How should these agencies find out more about youth priorities? And how could they better support the wellbeing of young people in the drylands?

1.1. Scope and methodology

Purpose of the study

This project is part of the Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC) programme. The purpose of this study is to:

- Review the factors that shape livelihood and work prospects for young people in the drylands and their livelihood trajectories as young adults. This review considers young people's access to education, skills training and vocational guidance. It also covers the market environment, governments' policy and investment priorities, and the context of multi-hazard risks that shape young people's options, or what Sumberg and Okali (2013) call 'opportunity spaces' for decent work. Here, the study takes an expansive view of 'decent work' that is appropriate to the regions studied and define it as secure, paid work that is climate resilient. This includes looking across informal as well as formal sector jobs – in recognition that a majority of jobs in these countries are 'own account' and 'family-based' (according to the International Labour Organization definition, 2016a; and World Bank, n.d.) and only a small majority constitute formal, salaried employment.
- Examine the opportunities and provide recommendations for external actors to work with young people in dryland communities to broaden their 'opportunity spaces' for decent work, and to do this in a way that is fully gender-responsive and socially inclusive of young people in all their diversity. This includes researching project experience to derive lessons for external actors such as governmental and non-governmental organisations, donors and development partners.

Geographic scope

The report takes a regional approach to reviewing young people's pathways and aspirations for routes out of poverty, and their access to decent, climate-resilient work in the drylands of east and west Africa. It also foregrounds six countries – Ethiopia, Mali, Nigeria, Somalia, South Sudan and Sudan – that were selected because they are SPARC focal countries with extensive dryland areas and varying geo-political contexts. In all six countries, the population of 0-19-year-olds comprises more than half of the total population (see Figure 3).

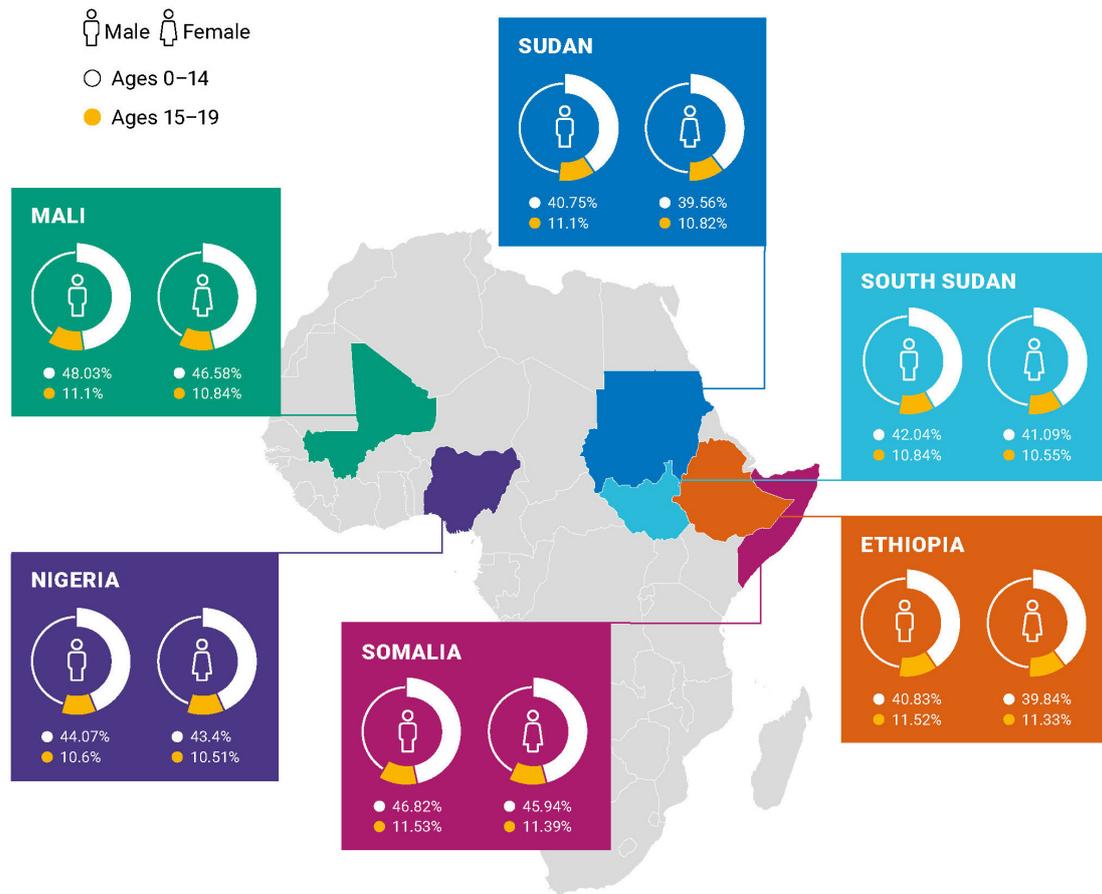
Sectoral focus

Agriculture, pastoralism and agropastoralism are the dominant form of livelihood in the drylands – both regionally and in these six countries – as a subsistence activity and for income generation (see Figure 4). Due to the importance of pastoralism to dryland economies, societies and ecosystem management (African Union, 2013), the study particularly focuses on pathways to decent work for young people from pastoralist communities. Pastoralist livelihood systems have tended to be marginalised in political decision-making and economic development processes (Reynolds et al., 2007; Stafford Smith, 2008). Thus, this study seeks to review what is known and what the critical gaps for research and action could be.

Age cohorts studied

There are many challenges in defining the notion of 'youth' (discussed further in Section 1.2). This report refers principally to older adolescents (15-19 years old) and young adults (up to the age of 25), while also recognising that some policies define youth as being up to the age of 35-40 years. Where possible, this study disaggregates by gender, age, poverty and regional geographies (discussed further in Section 1.3).

FIGURE 3: POPULATION UNDER 20 YEARS OLD (2019)



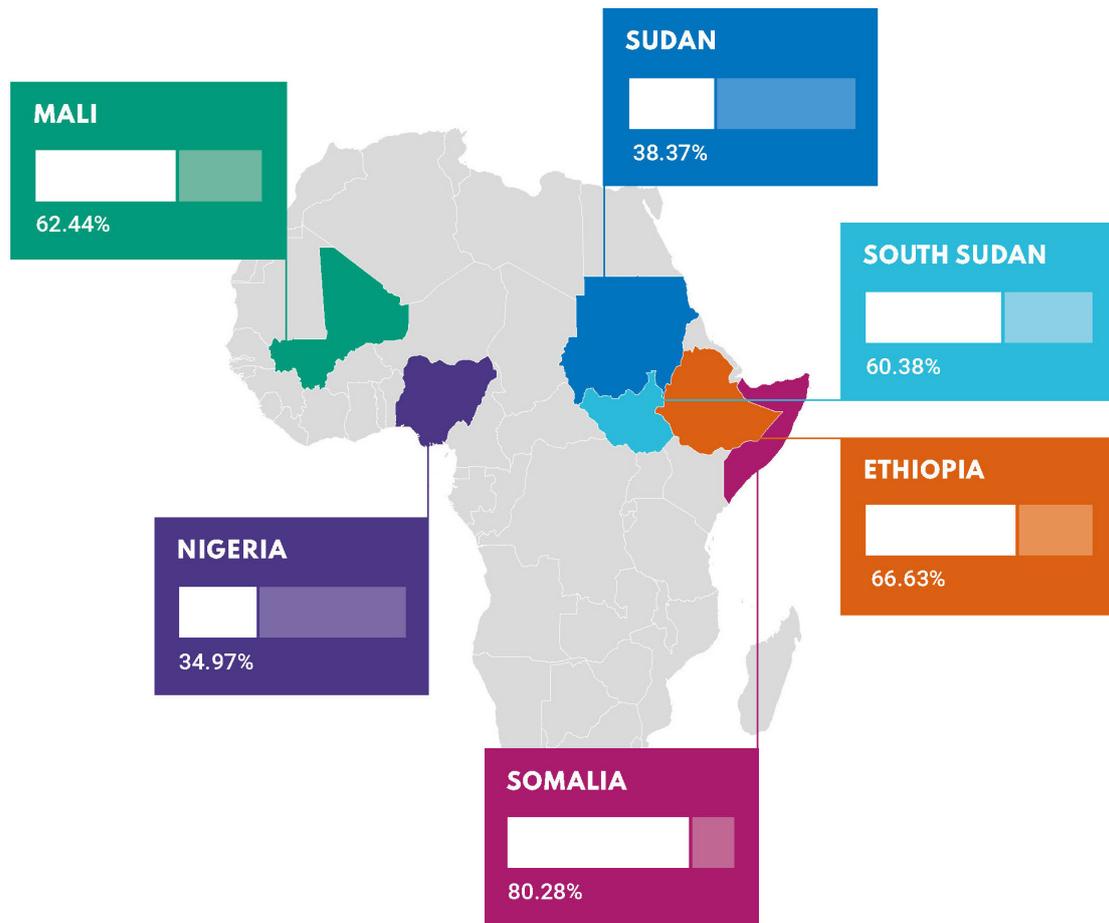
Source: World Bank (n.d.).

Methodology

This research included:

- 1. A review of grey and academic literature:** a review of the regional context for youth (un)employment in the drylands of east and west Africa, including for young people in pastoralist livelihoods or transitioning from pastoralism to other livelihoods. Relevant literature was identified via searches for key words such as youth, rural, pastoral, un/employment, climate; and the results were analysed both singly and comparatively, in the context of the larger discourse.
- 2. Existing policy documents:** a rapid review of the policies in the six focal countries with a focus on youth, youth employment, education, climate change, pastoralism, agriculture, rural development and growth policies. Considered within the review was the extent to which, and how meaningfully, the policies included references to diverse youth, gender, (dis)ability, other characteristics; agriculture/pastoralism, climate change and other shocks/stresses. (The results are outlined in the Annex.)
- 3. Programme interventions:** the review focused on regional programme interventions that are current or have finished within the past three to five years in east and west Africa, with

FIGURE 4: POPULATION EMPLOYED IN THE CLIMATE-VULNERABLE AGRICULTURE, FORESTRY AND FISHING SECTORS (2019)



Note: Agriculture includes all crop and livestock production, forestry, hunting and aquaculture.
 Source: World Bank (n.d.).

a focus on: i) adaptation and climate-resilient development programmes; and ii) livelihood/employment programmes. Particular attention was given to scoping regional programmes that included the focal countries and that demonstrated one or more of the following characteristics: pastoralism/dryland areas, youth and the intersections with (dis)ability, gender, poverty and geography, and youth employment/livelihoods.

4. Statements by young people in regional and international fora: this included statements focused on climate change adaptation, disaster risk reduction, resilience and agriculture² that highlight youth aspirations, priorities and demands about access to and prospects for decent work that is climate resilient.

² Including the Global Landscapes Forum (2019, 2021); the Seventh Session of Africa Regional Platform and the Sixth High-Level Meeting on Disaster Risk Reduction; The Global Youth Call to Action on Adaptation; C40 World Mayors Summit (2019); and interviews with prominent youth climate activists.

- 5. Key informant interviews:** 18 interviews were conducted with well-informed persons from development partners and regional organisations working on climate change, livelihoods, agriculture, decent work and youth in the region; pastoralist networks operating in the region; and with a number of youth pastoralists and youth groups to understand their aspirations and priorities about education, decent work and climate change.

A number of limitations have been identified through the research

- The review is focused on young people in the drylands, especially young people from pastoralist communities, and including those who are still active in pastoralism and those who had to drop out of pastoralism. However, there is a lack of research and disaggregated data available for these groups. A recent GAGE study (Presler-Marshall et al., 2021) that surveyed and compiled data on Ethiopian adolescents on a disaggregated basis by gender, region, displacement, child marriage and (dis)ability status is a notable exception. As a rule, such disaggregated data is not yet available for the countries studied. There is a need to fill the evidence gap on youth, (dis)ability and other intersecting social and socioeconomic characteristics, as relates to decent work. As a result, this review across east and west Africa is limited in its scope to assess young people's highly varying needs and priorities in respect of decent work.
- Our original intention was to engage more directly with young people (going beyond 'experts' in key informant interviews), however those plans were hindered by travel restrictions around Covid-19, among other factors. Key informants include some youth groups and pastoralist advocates and development researchers and practitioners from pastoral backgrounds.
- The literature focused on gender within agriculture is largely confined to a more binary lens, and is therefore more focused on sex than gender. This has limited our ability to provide a comprehensive gender analysis.
- The recommendations on youth-inclusive, climate change adaptive work are constrained by the fact that effective approaches must be highly locally specific – as articulated in the Locally-Led Adaptation Principles (GCA, 2021). In this regard, the recommendations in this report are necessarily focused on general principles rather than on detail.
- In this study, policies and programmes for youth employment in the drylands were mapped to understand how these political commitments and programme operations affect the 'opportunity spaces' for young people and youth aspirations, as well as material chances for education, training and work. However, it was beyond the scope of this study to map investment flows into education, training and job creation, or to provide comprehensive quantitative or qualitative estimates of the number and type of jobs created for young people (a SPARC report by Cao et al. (2021) provides financial flows analysis).

Outline of the paper

- The remainder of Section 1 outlines key challenges and definitions for defining 'youth' (1.2), defines decent work (1.3) and introduces the 'opportunity spaces' approach (1.4).
- Section 2 considers the international and regional policy frameworks that set the direction of travel for decent (secure, paid) and climate-resilient work for young people in the drylands (2.1). It outlines the present status of youth employment at country and regional scales (2.2). It considers employment barriers and opportunities, and the need for education and

TABLE 1: KEY DEFINITIONS

Employment	Definition
Agribusiness	'Agribusiness refers to economic activities derived from or connected to farm products. In other words, crop production, as well as crop processing, transportation and distribution' (BBVA, 2019).
Agricultural value chains	'An agricultural value chain is defined as the people and activities that bring a basic agricultural product like maize or vegetables or cotton from obtaining inputs and production in the field to the consumer, through stages such as processing, packaging, and distribution' (Farm Radio International, 2013: 2).
Agripreneurship	'Agripreneurship refers to entrepreneurship in agriculture' (GFRAS, 2021).
Agroforestry	'Agroforestry is the growing of both trees and agricultural / horticultural crops on the same piece of land. They are designed to provide tree and other crop products and at the same time protect, conserve, diversify and sustain vital economic, environmental, human and natural resources' (Agroforestry Research Trust, 2021).
Climate-smart agriculture	'Climate-smart agriculture is an integrated approach to managing landscapes—cropland, livestock, forests and fisheries—that address the interlinked challenges of food security and climate change' (World Bank, 2021b).
Farming	'The land-based, human-managed production of food and fibre by the transformation of seed into crops and/or the raising of livestock' (Gregory et al., 2011).
Green industry	'Green industry means economies striving for a more sustainable pathway of growth, by undertaking green public investments and implementing public policy initiatives that encourage environmentally responsible private investments' (UNIDO, 2021).
Green jobs	'Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency' (ILO, 2016).
Landscape restoration	'The improvement of degraded land on a large scale that rebuilds ecological integrity and enhances people's lives' (Future Terrains, 2014).
Pastoralism	'Social and economic systems of peoples who both practice and strongly identify with livestock husbandry (most commonly of camels, cattle, goats and sheep)' (Gregory et al., 2011).
Social Protection	'[T]he set of policies and programmes designed to reduce and prevent poverty, vulnerability and social exclusion throughout the life cycle. Social protection includes nine main areas: child and family benefits, maternity protection, unemployment support, employment injury benefits, sickness benefits, health protection (medical care), old age benefits, invalidity/disability benefits, and survivors' benefits. Social protection systems address all these policy areas by a mix of contributory schemes (social insurance) and non-contributory tax-financed benefits (including social assistance)' (ILO, 2017a: 194).

Source: Authors.

skills/training to support young people's ability to access and transition into decent work (2.3). Finally, it considers trends in climate change in east and west Africa (2.4), and the implications for current jobs and the future of work in the drylands (2.5).

- Section 3 considers the dominant narratives around young people in rural areas (3.1), what young people's aspirations and preferences are for work (3.2), and young people's influence in decision-making in the drylands and within regional programmes (3.3).
- Section 4 looks at how policies and programmes (by governments and other actors) are providing education (4.1) and jobs training and employment (4.2) for young people in agriculture and pastoralism and opportunities to strengthen the relevance of these interventions. Section 4.3 explores the degree to which these initiatives are, or could be, climate-smart. The section continues with an analysis of the nexus of youth, pastoralism and climate resilience programming (4.4) and the role of social protection schemes (4.5).
- Section 5 provides a summary of key findings (5.1), critical research and knowledge gaps (5.2), and recommendations (5.3) for decision-makers who are investing in drylands development.
- The Annex presents country summaries of policy documents focused on youth, education, climate change, growth, livelihoods and rural development. This includes an assessment of the extent to which policies: include certain groups (young people, women, people with disabilities, and other characteristics); engage with agropastoralist/pastoralist populations and their needs; address climate change; and promote decent work.

1.2. Defining 'youth'

The definition of 'youth' varies considerably by institution and context. The United Nations define it as "persons between the ages of 15 and 24 years" (UN, 2013: 1). Across Africa, the definition of 'youth' ranges from 14 or 15 to 30-35 years (Richter and Panday, 2007; African Youth Charter, 2006). This study adopts the latter definition. Wherever there are statistics or case studies of projects for young people, the age groups are specified as precisely as possible.

In politics and policies, the term youth is often associated with those who have left compulsory education and have entered or are looking for employment (UN, 2013). However, improvements in access to education mean that time frames for education and other forms of training can stretch well beyond adolescence (Richter and Panday, 2007) (see Figure 5).

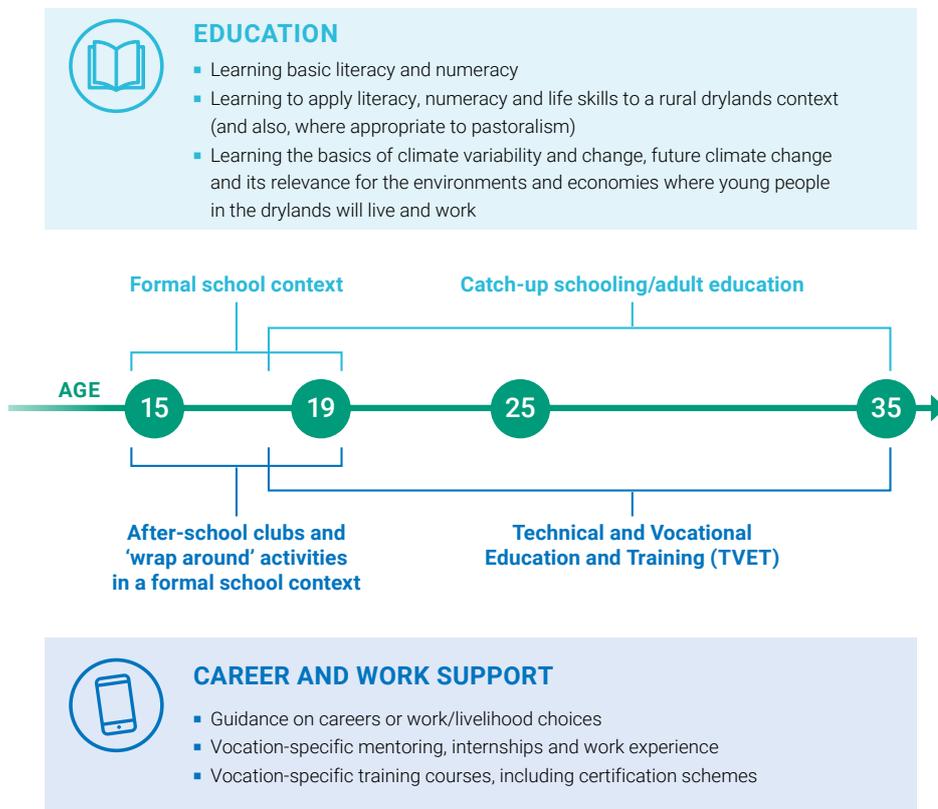
In this study, the reason for focusing on young people's opportunities and pathways into decent work is to illuminate how development actors can support people at these particularly formative stages of their lives: their adolescence and their twenties to early thirties.

1.3. Defining decent work in the east and west African drylands

The leading definition of decent work, in literature and policy, is the International Labour Organization (ILO) definition:

"Decent work involves opportunities for work that is productive and delivers a fair

FIGURE 5: OPPORTUNITIES FOR INTERVENTION TO SUPPORT YOUNG PEOPLE'S PATHWAYS INTO DECENT, CLIMATE-RESILIENT WORK IN THE DRYLANDS



Support interventions should be: non-discriminatory, avoiding gender stereotypes, tailored to (dis)abilities of individuals, sensitive to and supportive of the needs of young parents, and climate-informed.

Measures to address the enabling environment for the interventions can include: sensitisation and engagement with the broader community, including young people's parents, guardians and elders (and boys where gender discrimination must be tackled); engagement with public policy-makers, government and business people to support the implementation of enabling policies.

Source: Authors.

income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organise and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men" (ILO, 2016a).

The Food and Agriculture Organization (FAO) further includes self-employment explicitly in the definition of decent work:

"Work that provides a living income and reasonable working conditions. Work should be remunerative and dignified. It should enable people – whether through self-employment or wage labour – to provide for themselves and their families. Workers should be able to perform their work under safe and healthy conditions and have a voice in the work place" (FAO, 2017).

Both complementary definitions are incorporated in this study.

When considering rural youth employment in east and west Africa, it is important to consider both formal as well as informal jobs. According to GIZ (2020), around 90% of employment in rural sub-Saharan Africa is currently in the informal sector, and approximately 80% of young people are in vulnerable employment, where vulnerable employment is defined as 'own account' (i.e. self-employed) or 'family-based' work. However, in the context of pastoralist communities, vulnerable work can also be decent work. This is reiterated by the UNCCD (2017) who state that the "majority of rural youth are employed in the informal economy as contributing family workers, subsistence farmers, home-based micro-entrepreneurs or unskilled workers". Jobs such as these may not be salaried, however they can still be classified as 'decent' on the basis that they can provide secure, sustainable incomes. Informal sector jobs are included as 'decent work' in this study if they provide secure, paid income from one month to the next.

In the context of children and young people, it is also important to distinguish age-inappropriate work from age-appropriate work (see Box 2).

Incorporating a gender lens onto this analysis, it is essential to recognise the intersection of gender roles/responsibilities and informal work, which starts at a young age. Research in Kenya's drylands found "girls were exposed to more work at home compared to boys, limiting their time to attend to their homework" (Mukaya, 2018); and there is an overwhelming expectation for girls to provide more assistance than boys in household chores (GEC, n.d.), compounded by a reluctance to spend income on school fees and uniform for girls. The role of poverty as a driver for marrying girls off early to secure dowry payments (and consequent teenage pregnancy) is a further sociocultural-economic driver responsible for girls dropping out of school and assuming greater unpaid household labour (Plan International, 2012).

Njuki (2017) noted that there are millions of women who are engaged in unpaid agricultural work across Africa. Falk and Bessonova (2018) state:

"Progress for female farmers is still hindered by a number of factors, such as legal and cultural status, exclusion from alternative employment options and inheritance laws. Additionally, women often work as unpaid family labourers and have limited access to capital. This reduces their roles in decision-making regarding farm management. Certain trends and inequalities are undisputed: women tend to grow less lucrative crops, have on average less land and lower access to markets and fertilisers, while men dominate wage-employment sources of non-farm income; the list goes on".

Though not disaggregated by wage labour, data from Malawi, Tanzania, Uganda, Nigeria, Ethiopia and Niger suggests that women provide 40% of agricultural labour hours in crop production within households (Palacio-Lopez et al., 2017). In spite of this, they continue to have low access to various programme benefits, such as extension or credit (Doss, 2015; Presler-Marshall et al., 2021).

According to the definitions explained above, unpaid agricultural labour for commercial sale does not meet the standards outlined as 'decent work' due to the lack of or low wages, exploitive or unsafe working conditions, and lack of job security (UNCCD, 2017; Dekker and Hollander, 2017; ILO, 2016a; Elder, 2015).

Ripley and Hartrich highlight how millions of people work "in unsafe jobs or suffer from discrimination – and lack the necessary voice or agency to improve their situation" (2020: 3).

BOX 2: WHAT ARE THE BOUNDARIES? YOUTH EMPLOYMENT VS CHILD LABOUR VS INDENTURED LABOUR

A persistent theme of agricultural work in rural communities is the prevalence of child labour, slavery and indentured work. FAO (2020) identify that young people aged 15-17 are at greater risk of exploitation and child labour within the agricultural sector, and therefore have an increased risk of poverty. The United Nations Children's Fund (UNICEF) (2021) argues that economic hardship can often lead to the increased risk of child labour. This was evident in the statistics of child labour as a result of the Covid-19 pandemic; approximately 160 million children were subjected to labour at the beginning of 2020, with an additional 9 million children at risk due to the pandemic (ibid.). Child labour is defined by the ILO as:

'(i) all children between 5-11 years of age who are economically active, (ii) children between 12-14 years of age who work in an economic activity for 14 or more hours per week, and (iii) children between 12-17 years of age who work in an economic activity that is classified as belonging to the "worst forms of child labour"' (Carter and Roelen, 2017: 4).

According to ILO (2017a), agriculture accounts for 85% of child labour globally, the majority of which occurs in sub-Saharan Africa. Child labour in agriculture primarily consists of livestock production, fishing, forestry and work on smallholder family farms, and around 60% of 5- to 17-year-olds who are working in agriculture are involved in hazardous work (Carter and Roelen, 2017). In contexts affected by conflict and/or with weak governance, the risk of forced rural child and youth labour, child and youth slavery, and child and youth trafficking may increase (ibid.). Child labour is not child slavery. Child slavery is the 'enforced exploitation of a child for someone else's gain, meaning the child will have no way to leave the situation or the person exploiting them' (Anti-slavery, 2021). Likewise, indentured labour amongst rural youth is also a common, but often a hidden aspect of rural livelihoods. Unsurprisingly, there is a stark lack of literature on this.

They emphasise how:

"There is increasing recognition that not only the number, but also the quality, of jobs matters for sustainable and inclusive economic growth. This is because a job is a critical pathway out of poverty for most people. Indeed, focusing on job creation alone is not enough. Low quality new jobs are precisely what keeps people locked into cycles of poverty" (Ripley and Hartrich, 2020: 3).

ILO also stress how "progress in reducing informality is poor, and informal employment continues to be the reality" around the world (2019a: IX). They warn of the need to improve the number and quality of jobs available to men and women to help reduce underemployment and gender gaps at work.

This report brings all these definitions of decent work together, and also aligns them with the

'opportunity spaces' concept for decent work developed by Sumberg and Okali (2013) in the context of African youth in agriculture.

1.4. An 'opportunity spaces' approach

According to Sumberg and Okali (2013), work opportunities can be protective (providing relief from the immediate effects of deprivation, e.g. casual labour); preventative (forestalling deprivation, e.g. low productivity, small-scale agriculture); promotive (allowing real incomes and capabilities to be enhanced and capital accumulated); and transformative (as with promotive, but also addressing social exclusion). In this study, decent work is defined as being on the promotive and transformative end of the spectrum (see Table 2).

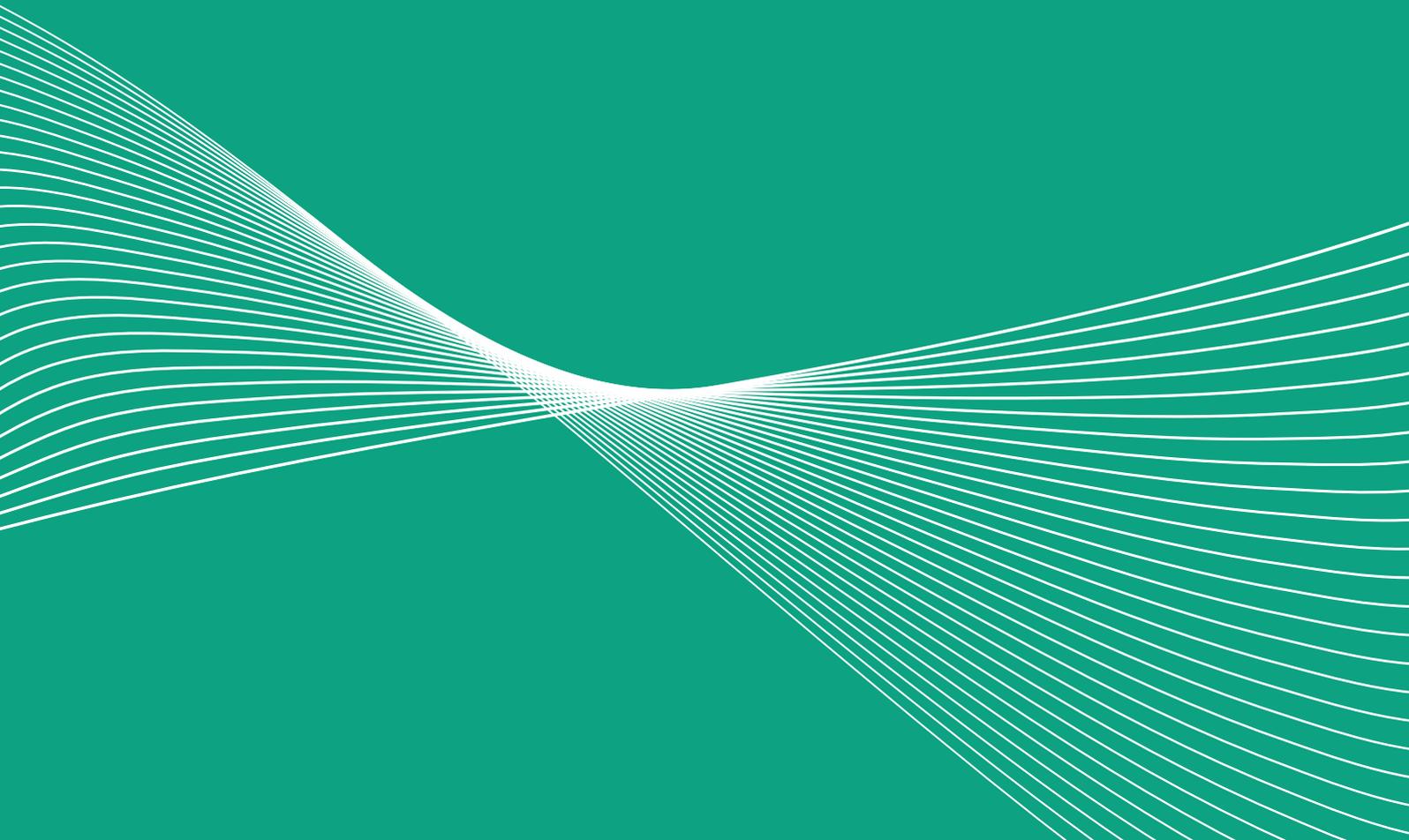
TABLE 2: OPPORTUNITY SPACES FOR A SPECTRUM OF WORK OPTIONS

Category	Description
Protective	Provides relief from the immediate effects of deprivation; are directly dependent on government or other relief programmes; and often form part of a broad system of benefits designed to act as a social safety net Examples: food for work, labour-intensive public works schemes
Preventative	Forestalls (rather than directly relieves) deprivation Examples: low-productivity, small-scale farming, low-paying, insecure, informal sector work, job guarantee schemes
Promotive	Allows real incomes and capabilities to be enhanced and capital to be accumulated
Transformative	As for promotive above; also addresses issues of social equity and exclusion

Source: Sumberg and Okali (2013).

The following section (2) provides the context for the study, by outlining the nature of employment available to young people in the drylands and the need for work to be climate resilient.

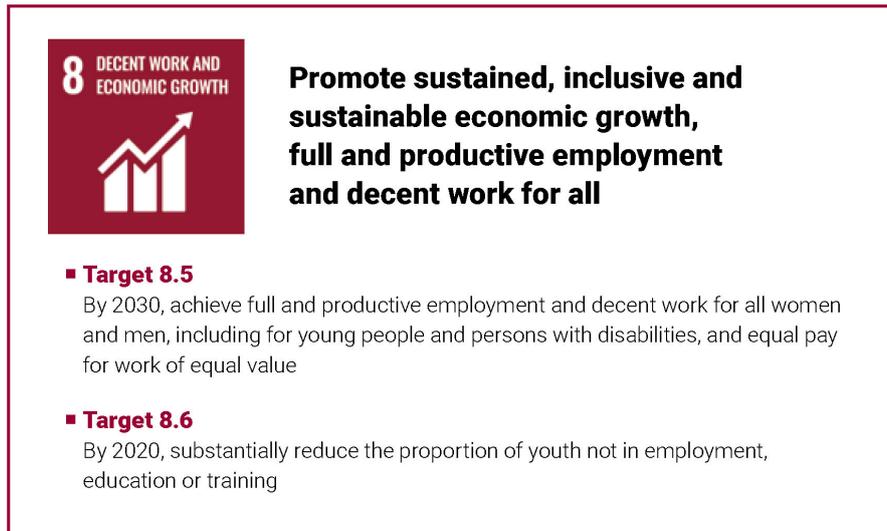
2. CONTEXT



2.1. Decent work for Africa’s young people is a regional policy priority

Decent work is a core component of the United Nations Sustainable Development Goals (SDGs). Goal 8, ‘Decent Work and Economic Growth’ aims to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (UN, 2020) (see Figure 6). Target 8.5 aims to achieve full and productive employment, decent work, and equal pay for all, including young people; 8.6 aims to “substantially reduce the proportion of youth not in employment, education or training by 2020” (UN, 2020).

FIGURE 6: GOAL 8 OF THE SDGS AND RELEVANT YOUTH TARGETS



Source: UN (2020).

There is no stand-alone goal on youth, but young people’s concerns are addressed within many of the goals and targets (UNFPA, 2018): either youth is included as part of a list of social groups (as per Target 8.5) or targets pertain to specific youth-related issues, such as child-marriage. However, the SDGs lack a purposeful, in-depth focus on young people’s access to decent work. Losch (2016) argues that the elusiveness of the 2030 Agenda for Sustainable Development, and its goals, will remain ineffective unless there is direct and coordinated action to address youth employment, specifically in Africa. The United Nations Department of Economic and Social Affairs (UNDESA) (2019) argues that young people are being referred to as the ‘torchbearers’ of the agenda, but the tendency to treat ‘youth’ as a single, homogeneous group undermines the agenda.

Regional policies tend to either focus on young people or address the development potential of the agriculture and pastoral sectors, or vice versa – with the exception of the G7 Framework,³ which targets these intersections (see Table 3). However, taken together in an integrative fashion, these policy frameworks certainly set the scene for improved, targeted investment into young people’s preparation for and access to decent work in the drylands, including enhanced

³ The G7 Framework is a commitment from the Group of Seven nations, an inter-governmental political forum of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States, to work with the G5 Sahel countries of Burkina Faso, Chad, Mali, Mauritania and Niger.

TABLE 3: REGIONAL POLICIES THAT FRAME DECENT WORK AND COMMIT TO INVESTMENT IN JOBS

Agenda 2063: The Africa We Want (African Union)	
What is it? 'Africa's blueprint and master plan for transforming Africa into the global powerhouse of the future' (African Union, 2015: 1)	
<p>What does it say about youth employment?</p> <ul style="list-style-type: none"> States "Youth unemployment will be eliminated, and Africa's youth guaranteed full access to education, training, skills and technology, health services, jobs and economic opportunities... as well as financial means and all necessary resources to allow them to realize their full potential" (ibid: 9). Commits to "concerted strategies to combat youth unemployment and underemployment" and to advance "admissions, curricula, standards, programmes and qualifications" for young people (ibid: 17). Commits to invest in and strengthen TVET, and to "foster greater ... alignment to labour markets, ... to improve the skills profile, employability and entrepreneurship" of young men and women (ibid: 14-15). 	<p>To what degree does it target young people in rural areas, including the drylands and pastoralist communities?</p> <ul style="list-style-type: none"> States "All forms of systemic inequalities, exploitation, marginalization and discrimination of young people will be eliminated and youth issues mainstreamed in all development agendas" (ibid: 9). Commits to modernise African agriculture and agribusiness for "increased production, productivity and value addition" (ibid: 3); including economically empowering young people to access financial resources for investment (ibid: 15). No explicit youth focus in rural, dryland or pastoralist communities, but does say "Rural women will have access to productive assets: land, credit, inputs and financial services" (ibid: 8).
African Youth Charter (African Union)	
What is it? Addresses youth, gender, poverty, resilience, livelihoods and climate change on the continent	
<p>What does it say about youth employment?</p> <ul style="list-style-type: none"> Focuses directly on youth employment and job creation (Article 15, African Union, 2009). Suggests supporting youth organisations to develop programmes that "encourage environmental preservation such as waste reduction, recycling and tree planting" (Article 19, African Union, 2009: 14). 	<p>To what degree does it target young people in rural areas, including the drylands and pastoralist communities?</p> <ul style="list-style-type: none"> Has text on poverty eradication and the socioeconomic integration of young people; emphasises needs for "agriculture and other sustainable livelihood projects" in rural areas (Article 14, African Union, 2009: 10).
Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihood (African Union)	
What is it? A 55-government commitment to halve poverty by 2025 through inclusive agricultural growth and transformation	
<p>What does it say about youth employment?</p> <ul style="list-style-type: none"> Does not specifically target young people, but recognises them as a disadvantaged social group, alongside women (AUDA-NEPAD, 2014). 	<p>To what degree does it target young people in rural areas, including the drylands and pastoralist communities?</p> <ul style="list-style-type: none"> Targets both pastoral and agropastoral livelihoods as a route to reducing poverty.
G7 Framework on Decent Job Creation for Rural Youth in the Sahel (G7)	
What is it? Promotes young people's access to decent work; aims to strengthen rural young people's capabilities by focusing on education and agricultural training strategies (G7, 2019)	
<p>What does it say about youth employment?</p> <ul style="list-style-type: none"> Takes an intersectional approach in addressing youth issues and promoting decent work and job creation in the agricultural and livestock professions. 	<p>To what degree does it target young people in rural areas, including the drylands and pastoralist communities?</p> <ul style="list-style-type: none"> Covers Mauritania, Mali, Burkina Faso, Niger and Chad, all of which have extensive drylands and pastoral communities.
East African Community Youth Policy (East African Community – EAC)	
<p>What does it say about youth employment?</p> <ul style="list-style-type: none"> Youth employment is the first strategic priority area. 	<p>To what degree does it target young people in rural areas, including the drylands and pastoralist communities?</p> <ul style="list-style-type: none"> Does not address youth and employment in the context of pastoralism or rural development (EAC, 2013: 13).

Source: Authors.

work prospects in agriculture and pastoralism. This is explored further in Section 4, where the degree to which these regional policy framings have driven national policies and actual programmatic investments at the intersection of youth, agriculture and pastoralism in the drylands – and climate resilience – are examined more closely.

2.2. The reality: youth (un)employment in east and west African drylands

Official employment levels among young people

There are currently high levels of unemployment among young people in east and west Africa. Even for those young people who meet the technical definition of ‘employed’, their work may be part-time to the extent that they are underemployed; and/or their employment may be so insecure and low-paying that it cannot be classified as decent work.

The official statistics only tell a partial story of youth employment in each country. Figure 7 presents the official employment/unemployment rates for young people from age 15 to 24 in the six focal countries. These vary considerably: from 18% in official employment in Sudan, to 68% in Ethiopia. Employment is defined here (based on the ILO definition⁴) as “persons of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period (i.e. who worked in a job for at least one hour) or not at work due to temporary absence from a job, or to working-time arrangements”.

Challenges of measuring employment

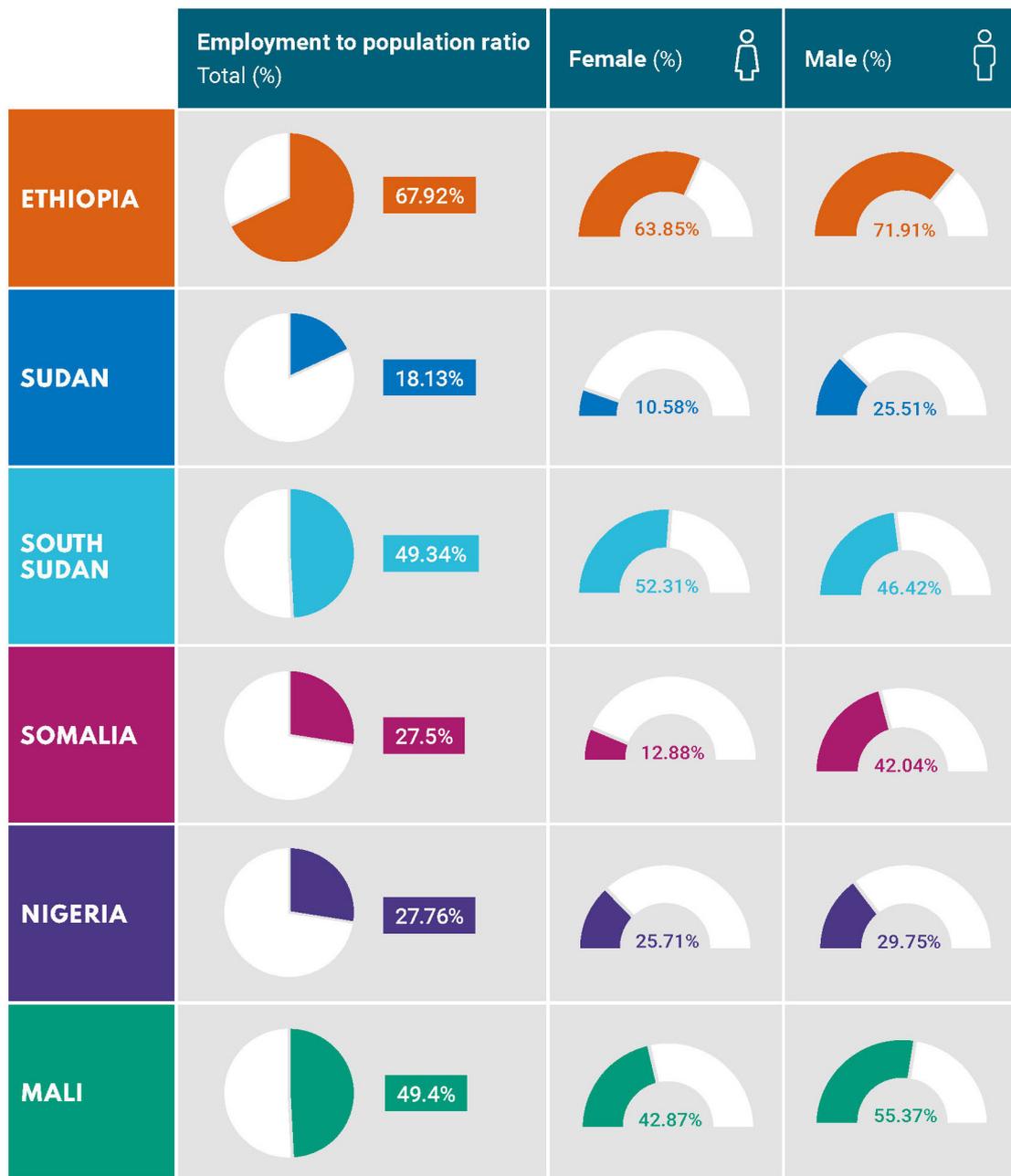
Most young people (particularly in rural areas) have a ‘mixed livelihood’ or ‘portfolio of work’, which is not captured well by international statistical methods (such as the type shown in Figure 7). A recent report by ODI and Mercy Corps highlights that:

“The binary construct of ‘employment’ versus ‘unemployment’ has long proved outdated for most of Africa; instead young people tend to develop and maintain ‘mixed livelihoods’ (Mastercard Foundation, 2015) by combining a ‘portfolio of work’ which juggles informal and formal wage labour, self-employment, agricultural and/or unpaid family work. Youth also tend to be underemployed and occupy more precarious jobs. This livelihood strategy has increasingly been seen as a ‘logical choice’ for most young Africans for the flexibility, risk mitigation and independence it affords (Mastercard Foundation, 2017)” (Ngene et al., 2021).

As a strategy, this portfolio approach affords young people flexibility over time, enabling “the mix of activities [to] change over time as youth attempt to work their way up the ladder of skills and income-generating opportunities” (Mastercard Foundation, 2015).

4 The ILO definition is contained in the World Bank data tables, data.worldbank.org, from which Figure 7 is derived.

FIGURE 7: EMPLOYMENT TO POPULATION RATIO (AGES 15-24) (2019)



Source: World Bank (n.d.).

Note: All figures are ILO modelled estimates (2019). The figures show the proportion of a country's youth population (ages 15 to 24) that is employed.

Estimates of labour market growth

According to FAO:

“In Sub-Saharan Africa alone, more than 10 million new jobs per year will have to be created in rural areas in the next two decades to absorb the new entrants in the labour force. There is a largely untapped reservoir of employment opportunities in agriculture. Yet, the drudgery and poor remuneration associated with low-productivity family farming turn young people away from agriculture and make them more prone to migrate from rural areas” (2016b: 1).

Sumberg et al. (2014) highlight how discussions surrounding youth unemployment across Africa have begun to receive ‘recognition’, academic attention and potential policy solutions. This is evident when reviewing the growing literature focusing on the issues and challenges surrounding youth unemployment within the agricultural sector, youth experiences, and the importance of young people at the centre of future development challenges (World Bank, 2006 and 2009; FAO, 2014; Yeboah et al., 2020; IFAD, 2019).

2.3. Barriers and opportunities for young people’s employment in rural areas

Young people’s challenges and opportunities for pursuing employment in rural areas (including in the east and west African drylands) are shaped by many factors, including: social norms including gender-related expectations; structural economic issues, including supply of jobs and viability and resilience of markets; access to land and/or finance; and skills and capacities (FAO, 2012, IFAD, 2019). This section considers each of these issues in turn.

Considering young people in all their diversity: gender and intersectional issues

Young people are not a homogenous group, nor are their experiences, ideas and aspirations (Elias et al., 2018). Historically, both the academic and policy literature have given little attention to gender and other intersecting social identities of young people – although this is improving. Our scan of employment, agriculture and climate change policies in east and west Africa found that young men and women are often placed in the same basket as under-served groups to be targeted. This blunt approach fails to capture how girls and young women experience very different social pressures and expectations compared to boys and young men. Gender dynamics and power relations can have a material effect on everything from household organisation to participation in agricultural and other types of work (Tavenner and Crane, 2019; Dancer and Hossain, 2018).

The term ‘intersectionality’, first coined by Crenshaw (1989) on the Black feminist critique of race and sex, is an essential analytical concept that recognises people’s complex layers of identity and experience. It provides a multispectral lens to help identify how two or more characteristics (such as gender, age, (dis)ability, ethnicity, religion, economic status, geography and so on) interact to shape people’s experiences (Samuels and Ross-Sherif, 2008).

Recent literature is beginning to capture the confluence of barriers to productive work at the intersection of age, gender and rural geography – i.e. young rural women (IFAD, 2019). Young rural women are less likely to have sole title to a plot of land and are twice as likely as young rural men to be out of education and work (Doss et al., 2018). This is mainly due to pre-

established gender norms and reproductive roles, including early marriages and child-rearing responsibilities (Doss et al., 2018; FAO, 2012). As a result, International Fund for Agricultural Development notes that although literacy rates for all young people in rural areas tends to be low, it is often lower for young rural women (IFAD, 2019). Young women and adolescent girls who participate in informal work in agriculture are also unlikely to benefit from any social safety nets, which usually depend upon “formal participation in the labour force” (FAO, 2020: 3). This has relevance to the dryland regions that are predominantly rural in character.

The Covid-19 pandemic has also had significant gendered impacts and has exacerbated pre-existing gender barriers. The increase in women’s reproductive and care-giving roles during disease outbreaks and pandemics has been noted by many (FAO, 2020; Conner et al., 2020; Fawole et al., 2016) and has impeded their ability to access decent paid work. Moreover, the pandemic has increased household economic stress, and has put adolescent girls and young women at greater risk of gender-based violence, as well as exploitation and child labour especially in the agricultural sector (FAO, 2020). While this literature does not specifically refer to the impacts of Covid-19 on young people in the drylands of east and west Africa, it has relevance to the study given the high reliance on pastoralism and agriculture in these regions.

Disability can have a significant effect on young people’s educational prospects and their ability to secure decent work (UNDESA, 2019; ILO, 2015a) – although there is a significant lack of research or programming focused on young people with disabilities in rural areas (IFAD, 2019). Inadequate provision for young people with disabilities in education systems means that they are not adequately prepared to enter the workforce and are often only able to secure low-paying informal jobs, if any at all (UNDESA, 2019). ILO (2015a) argues that strong links between disability and a lack of access to decent work continue to perpetuate poverty globally.

Individuals’ vulnerability to shocks and stresses – and chronic poverty traps

Young people may face a combination of challenges that mean they become trapped in poverty and it is harder for them to graduate into dignified work and secure income. Many households do manage to escape poverty, but others fall in, and there is also a large share of chronically poor households. For example, three waves of nationally representative panel survey data in Ethiopia in 2011/2012-2015/2016 found that 44% of households were poor in all survey years (Diwakar and Shepherd, 2018). Chronically poor households may face multiple, interlocking deprivations including poor health and limited access to education, which can exacerbate inequalities in human development and in turn access to gainful employment as children age into the workforce.

Deprivations are often even worse for children in chronically poor households facing intersecting inequalities (e.g. remoteness, ethnicity, wealth-based inequalities, exposure to shocks and threats, including those influenced by climate change and conflict) (Diwakar et al., 2018). At the same time, this relationship is complex. Chronic poverty itself, and negative poverty trajectories, may be attributed largely to a risk-prone environment marked by disasters like drought, but also other shocks including ill health (Diwakar and Shepherd, 2018). Without taking into account the multiple shocks and stressors that may be experienced by poor and vulnerable individuals over time, attempts to ensure decent work will be limited in their ability to contribute to sustained improvements in wellbeing (ibid.).

Structural economic issues that affect job creation

Agriculture is where many of the current jobs are; in east and west Africa specifically, agriculture is currently the largest source of employment. As laid out in Africa's Agenda 2063 (Table 3), there is considerable policy attention to the potential for adding jobs and economic value to the agricultural sector. This could involve development of agribusiness and value chain development (e.g. through processing and broader distribution and trade). There is also considerable political interest at the national level (see Section 4) on addressing the challenges of land degradation, climate change and development simultaneously via investments in land restoration in the drylands, including forestry, agroforestry, climate-smart agriculture and other green jobs (see Table 1 for definitions).

Government agencies and development actors in the drylands (including key informants in this study) take a range of views on whether young people should be supported to stay and pursue decent, productive work in rural areas, or whether the greater focus should be on creating urban-based jobs for spontaneous rural-urban migrants. For example, Ethiopia's green industrialisation strategy recognises the widespread phenomenon of spontaneous migration and seeks to create secure, well-paid jobs in a growing green industrial sector, which will underpin the country's aspirations for restructuring and graduating to the ranks of middle-income countries by mid-decade.

This study does not take a position on whether there are enough jobs for young people in the rural areas of the drylands – or whether it is desirable for large numbers of young people to migrate to urban areas for work, as is presently the case. This is a subject that merits considerably more analysis, modelling and policy debate. Box 3 briefly reviews some of the current literature on the topic, but this study and its recommendations focus, rather, on how policies and programmes can improve support for young people's education, skills training and vocational guidance in rural areas as part of a transition into decent work.

Access to land

As a result of continuous rapid population growth across sub-Saharan Africa, land is becoming less available and therefore increasingly difficult for young people to access (IFAD, 2019). Land rights issues loom large (see Box 4). Improvements in land security/tenure remain critical issues for many young people to access secure livelihoods (GLFA, 2019), and land tenure remains strongly male-biased (Vincent, 2021).

“For the most part, youth are involved in providing labour for agriculture or herding, such as taking animals to water. Youth who are drop-outs from school, most are involved in businesses, groceries, making chapatis. When it comes to women, either they remain at home and are married – carrying out household activities like gathering firewood and charcoal. Sometimes they take part in Village Savings and Loans Associations and then the resources become available to them at the end of the year.”

Key Informant Interview, Pastoralist Network, July 2021

BOX 3: WHY DO YOUNG PEOPLE MIGRATE FROM THE RURAL TO URBAN AREAS – AND WHAT ARE THE CONSEQUENCES?

Within dryland regions, socioeconomic systems 'tend to be highly mobile' (Jobbins et al., 2018: 4) and it is important to recognise that semi-nomadic or transhumant populations often move within and across borders seasonally or temporarily. That said, in addition to conventional forms of semi-nomadism associated with livestock-keeping and pastoralist lifestyles, young people are motivated to migrate from rural to urban areas by new job opportunities and access to other systems and services. Migrants may be drawn by the perception of a higher quality of life in urban areas, including higher wages, improved consumption opportunities, education, skills training and healthcare (for a review including highlights from Nigeria, Kenya and Tanzania, see Lagakos, 2020).

There is also burgeoning literature on migration in response to climate variability and change: where migration is seen as a form of coping or climate adaptation mechanism (as summarised in Peters et al., 2020). Migration can take the form of temporary cyclical or seasonal migration, or more permanent migration (Nadin et al., 2017).

These 'pull' factors that attract young people to towns and cities are not the only considerations. 'Push' factors play a role, too. According to FAO (2016a), the majority of migrants within Africa are aged 15 to 34 and motivated by the lack of decent employment and income-generating opportunities in pastoral and agricultural work. The poor productivity of agriculture and difficulty in accessing land are cited as particular 'push' factors that encourage young people to leave (Yeboah et al., 2019).

'Distress migration' is when 'migration is perceived as the only viable option for moving out of poverty' (FAO, 2016a: 1). Deotti and Estruch (2016) identify that rural poverty, food insecurity, environmental degradation, poor income-generating opportunities, and inequality all contribute to distress migration. Young people in rural areas in sub-Saharan Africa and North Africa may consider migration the only option for improving their employment and life prospects (Deotti and Estruch, 2016).

The migration of young people can have benefits for the agricultural sector and development in the rural areas that they leave; it can result in the more efficient allocation of labour and higher wages (Deotti and Estruch, 2016). Lucas (2015) argued that the departure of young job seekers eases pressure on local labour markets, which in turn allows for an increase in employment opportunities and higher wages for those who remain.

Financial remittances from migrants also provide significant benefits to rural areas. Furthermore, young migrants who return home may share technology and new knowledge, and transmit new norms and values, such as the importance of an education; this is what Levitt (2008) describes as 'social remittances'. This can be seen in the adoption of modern farming technologies in rural communities. According to Mendola (2006), migrant households are more likely to incorporate new farming technologies in order to improve agricultural productivity as opposed to non-migrant households.

Young people's migration from rural to urban areas can also have negative impacts on rural communities (Deotti and Estruch, 2016). As the majority of those migrating are young people, rural communities lose the most productive portion of their agricultural labour force. This affects productivity rates and, in turn, food security (Dugbazah, 2012).

A study carried out in Ghana identified that the temporary migration of rural young people alone reduced household production by 55.4% (Adaku, 2013). Sometimes called a 'brain drain', outflows of rural youth migrants means that the community suffers a loss of innovative and better-educated community members (Uma et al., 2013). This is evident in the Berhanu et al. (2004) study about young Ethiopians migrating to the Gulf countries, which consequently left a lack of skilled workers in rural Ethiopia. Furthermore, the migration of young rural males can contribute to the added burden placed on the young women left behind. In Dugbazah's (2012) study, the migration of young men out of African rural areas increased women's agricultural workload by 80%. Not only can this have a negative impact on the wellbeing of young women, but negative coping strategies may be introduced, such as increased rates of child labour to increase the household's income (Zontini, 2004; Van de Glind; 2010).

The historic trend of male bias in rural out-migration has been changing, though. Women account for an increasing proportion of migrants. In Africa, there are 101 female migrants under the age of 20 for every 100 male migrants (UNDESA, 2013)' (Deotti and Estruch, 2016: 4).

Migration away from rural areas can also have negative impacts on the young migrants themselves. They may face exploitative working conditions in their destination, and they may be unaware of their legal rights or lack the means to exercise them. They may also be lacking in protective social networks, that their home communities may have provided (Key Informant Interview, Researcher, July 2021). Deotti and Estruch (2016: 5) highlight how:

"Rural youth may lack important skills and resources to be competitive in formal labour markets, both in rural areas of origin and urban areas of destination. They have insufficient economic assets, savings and human capital, social capital (i.e. the ability to make use of networks) and cultural capital (i.e. language, customs) (World Bank, 2011). Out of their rural areas of origin, they usually end up living in informal settlements (McKay and Deshingkar, 2014) and are at risk of being trapped in low-income or informal employment, hazardous work, unemployment or underemployment (World Bank, 2011). In general, young migrants (especially those in irregular situations, who are under-age and travelling alone) are particularly vulnerable to discrimination, social exclusion, violence, abuse and exploitation (UNICEF, 2014)".

It is important to understand these shifting dynamics in a local context and design support interventions sensitively in response.

"Migration has been around for a long, long time – for generations and is seen almost as a rite of passage – you go away, have experiences, save money, come home, get married. The change is that more and more don't come back or come back with nothing, or come back with drug or alcohol dependency. This might affect the solutions [and approaches taken by policies and programmes. For instance if development partners]... accept that young girls work as maids in town for 2-3 years before marriage... [they could help support these girls by offering] them training opportunities one afternoon a week plus health and education support."

Key Informant Interview, Development Practitioner, July 2021

The dynamic is delicate, and culturally conditioned. Pastoralist networks that are working extensively already in east and west Africa are acutely aware of the concentration of productive assets among older community members, and the need for sensitivity in discussing changes to ownership, control and benefits-sharing. They also navigate diversity among pastoralist communities – which are by no means homogeneous, but stretch to dozens of ethnicities and cultures.

“Barriers [for youth] are around the cultural dynamics. Pastoralist land management is collective and land is owned communally: there is pastoral grazing, crop production, conservation, religious activities, and land available for settlement and for housing. Youth will not have access to certain pieces of land as they are only allocated to the elderly; while women lack control of land – they have to work through their husbands.”

Key Informant Interview, Pastoralist Network, July 2021

Government policies may sometimes be pro-youth and pro-women, the informant said, but this can bring policies into conflict with the desires of community elders. By the same token, government policies and actions may undermine pastoralist rangeland management systems and established land rights, by auctioning off prime lands to large-scale agribusinesses for commodity production (tea, coffee, sugar), he added.

“The debate over youth land rights is a debate in pastoralist communities now. Youth have to diversify their livelihoods and for this, they need the freedom to access finance. This needs to be done without many strings...to give inclusive market opportunities for women and young people.”

Key Informant Interview, Pastoralist Network, July 2021

Access to finance

Another great challenge faced by young people in rural areas is access to financial services and investment opportunities, which is often required for successful off-farm self-employment (Tschorley et al., 2017; FAO, 2012). Principal barriers to microfinance access for young people include their lack of assets to provide collateral for loans; and also the immaturity of the financial services sector in these regions (as documented in Ethiopia by Presler-Marshall et al., 2021). It has been suggested that, as well as governments and development partners’ investing in strengthening the capacity of formal and informal financial institutions and their social inclusivity (ibid.), agencies could:

“Offer asset-based loans to young people, with priority given to those from the poorest households, to reduce the need for external collateral and improve investments in productivity versus consumption. Provide young people, especially those from poorer households, with a grace period and increased flexibility regarding repayment schedules so that they have more time to operationalise their goals and repay loans. Ensure that loans are paired with financial and business training – and, ideally, mentoring – to build young borrowers’ skill sets” (Presler-Marshall et al., 2021: 39).

BOX 4: LEGAL RIGHTS – A MISSING ‘ENABLER’ TO OPEN NEW OPPORTUNITIES FOR YOUNG PEOPLE FROM PASTORAL COMMUNITIES?

Although many associate the precariousness of pastoralist communities with the effects of climate change and recurrent crises, pastoralist organisations argue that the perpetual denial of pastoralists citizens’ rights are at the crux of the issue (IWGIA, 2021; Behnke, 2013). The continual lack of recognition of pastoral land rights, in particular, is an issue which continues to affect pastoral communities across the Sahel (Key Informant Interview, Pastoralist Network, June 2021).

Presler-Marshall et al.’s research into prospects for decent work for Ethiopian adolescents (2021) found that pressures on land exacerbate the precariousness of work for the current generation:

“Young people doing unpaid family work (comprising almost half of all young workers) face challenges greater than those faced by their parents’ generation, due to growing land fragmentation and landlessness, exacerbated by climate change” (Presler-Marshall et al., 2021: 3).

Across Africa, land is a resource to which access is ensured not only by national citizenship, but also by local citizenship, status and belonging (Lund, 2011). The introduction of modern tenure systems resulting from colonialism remains evident in post-independence government policy and legislation, which in turn has made the rights of pastoralist communities insecure (Kameri-Mbote, 2013). According to the United States Agency for International Development, pastoral land rights traditionally consisted of access to key natural resources which are required to sustain livestock production i.e. pastures and watering points, and movement corridors which allow for seasonal grazing and pastoral settlements (USAID, 2013). Over time, boundaries defining different areas of land have cut off pastoralists’ access to vital natural resources; factors such as land conversion, privatisation, conflict and population pressure have contributed to the erosion of pastoral land rights (USAID, 2013; Kameri-Mbote, 2013).

As previously highlighted, young people face greater difficulties in accessing land. Mauto (2020: 1) argues that access to land is "both a critical component and fundamental barrier to productive youth engagement in agriculture". Young people in rural areas primarily access land through inheritance and customary land allocation; this system is dominated by community leaders which often favour adult men (Mauto, 2020). In turn, young people and women face great difficulties in gaining access to land. Although rural young men and women can supposedly access land through government-led land distribution programmes, young people’s access to financial resources and lack of awareness of legal protections for youth land rights means that young people remain excluded (ibid.).

Through a range of advocacy initiatives, non-governmental organisations (NGOs) such as Landesa continue to improve the land rights of young people by working with various stakeholders and youth-led groups in reviewing land laws and policies through a youth and gender lens (Mauto, 2020). The International Land Coalition Africa also work with other organisations to engage in advocacy efforts (ILC, 2021). For instance, the Kenya Land Alliance which has established a youth programme called Youth for Accountability, Transparency and Inclusion in Land and Natural Resource Governance (KLA, 2021). In Togo, Pour un Monde Meilleur, a member of a multi-stakeholder platform, advocates and promotes for land-based investment by sensitising landowners to contract land to landless young people (ILC, 2021).

In addition to microfinance, expanding other forms of financial services, such as crop and weather insurance, would have the potential to minimise the income-related risks from weather and climate shocks.

Access to financial services is even less for young women, than for young men (IFAD, 2019; Presler-Marshall et al., 2021). Even among young women, an intersectional analysis by Presler-Marshall et al. for GAGE in Ethiopia (2021) found that married women had more access to microfinance than unmarried women. However, investing in access to microfinance for women can leverage significant socioeconomic benefits, both for the women themselves, and for their families and communities (Box 5).

Market viability, growth and resilience

Youth-targeted support for livestock and crop production, and value-addition in the agriculture, pastoralism and forestry sectors, only leads to economically viable futures in the drylands if markets exist (Key Informant Interview, UN Agency, May 2021). Investors in the drylands must work intimately with communities to develop the infrastructure, including information systems and market intelligence, to understand and support resilient market systems.

Young people and their development partners can think expansively about market development opportunities, rather than limiting themselves purely to traditional markets for agriculture and livestock products. Propositions for driving rural economic expansion, which emerged from key informant interviews included:

BOX 5: INVESTING IN CREDIT FOR WOMEN IN DRYLAND ECONOMIES CREATES WIDER BENEFITS FOR COMMUNITIES

Rural women traditionally have less access to finance. The BRACED Market Approaches to Resilience project set specific targets for women's participation, to redress the balance. They reached out intentionally to women, some of whom also suffered the social disadvantage of widowhood.

The project found that extending microfinance services to women in these marginal communities created a powerful 'multiplier effect' – not only considerably improving the wellbeing of the women themselves but also of their families. To consolidate the project's short-term achievements, the team found it was essential to work simultaneously on strengthening the enabling environment. This ensured that project gains would be locked in, for the longer term. One of the enabling factors was financial institutions' willingness to serve poor women and work with pastoralists. The project helped financial institutions build trust in the community members, irrespective of the potential risks related to people's lack of permanent settlements. Women under the age of 35 benefitted from this project and the same positive 'ripple effect' was demonstrated; however, the project and resultant documentation did not provide disaggregation by age (Gebremichael et al., 2020).

- measuring, verifying and marketing the sale of carbon credits through climate-smart dryland development schemes;
- adding economic value to dryland resources, such as biomass, through circular economy product manufacturing;
- the productive use of conventional 'waste products', such as dung into methane for energy (Key Informant Interview, Youth Network, May 2021).

The failure to develop and renew rural areas and opportunities outside the agricultural sector has not only enhanced the dependency on agricultural work but has pushed those who do not aspire to pursue conventional agricultural work towards urban centres (LaRue et al., 2021). A rethink is needed.

As green jobs and climate-resilient work develops within rural communities, many young people are noticing different opportunities, and the first glimmer of reverse migration is beginning to show. Speaking at the Global Landscapes Forum Africa (GLFA), Halina Teklu, who is the co-founder of Climate Change Africa and Seed Bomb Ethiopia, expressed how she migrated from an urban centre to a rural community as she noticed an influx in opportunities for green jobs. Not only did migrating provide Halina with decent work, it also generated economic empowerment for the community whilst helping to restore the drylands (GLFA, 2021).

Education and skills training as a springboard to decent work

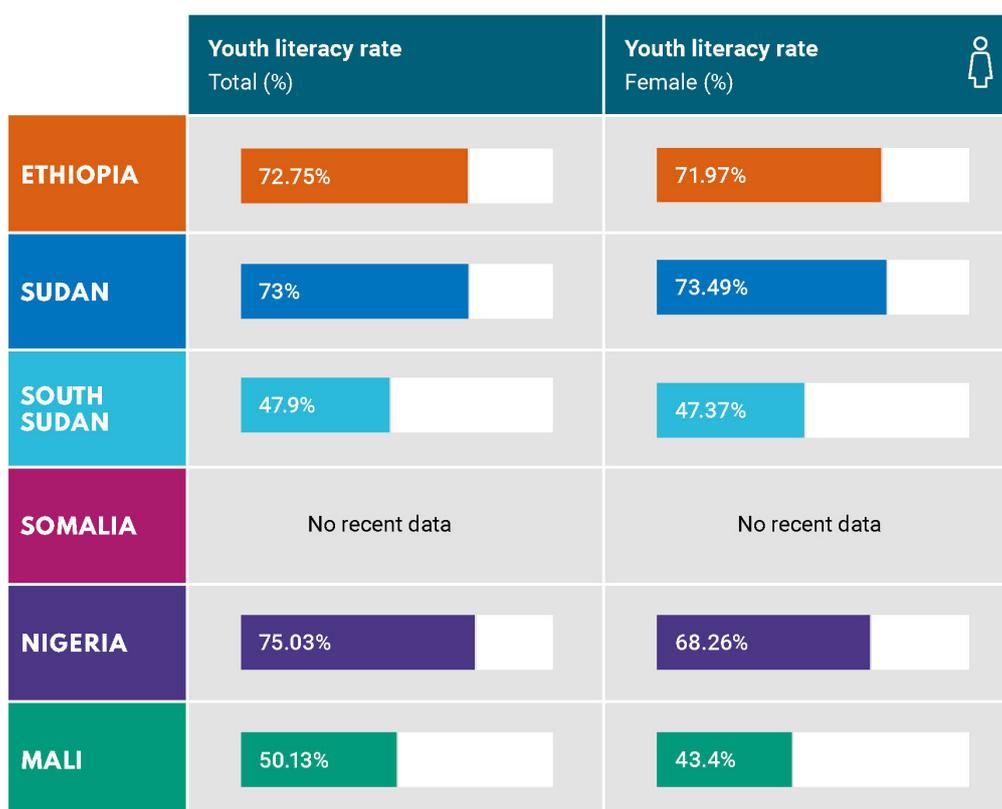
Access to adequate and quality education and vocational training are a necessary (but not sufficient) requirement for young people to access and secure decent work. Education and skills are not wholly sufficient, as the jobs and functioning markets need to be present as well – but they are a foundational part of equipping young people for decent work.

At present, the quality and content of education in many dryland areas does not equip young people with the hard and soft skills needed by employers. Vocational training and skills development is required in order to help support young people's capacity and readiness for decent work.

Figure 8 highlights how, in the six focal countries, significant proportions of young people still lack basic literacy skills, which can hinder them from entering more formal work – or simply, graduating into higher-income, added-value activities (e.g. in enterprise) that require literacy and numeracy skills. As shown, there is a significant gender gap in Nigeria and Mali, with youth literacy rates among females much lower than that of males, unlike the other focal countries.

Among the dryland areas in this study, primary and secondary school attendance and completion rates vary widely (e.g. province- or district-level differences that are not shown in the national statistics). Reasons for dropping out of school often include lack of money to pay for schooling, and the need to contribute to household labour or support parents if they are sick and need additional support (Munthali and Kok, 2016). Girls are often particularly disadvantaged, and gender roles and responsibilities often impede girls' and young women's access to an education. Moreover, early marriage and adolescent pregnancy are key obstacles to adolescent girls' educational attainment (Psaki, 2016). In FAO's (2012) report 'Exploring opportunities and constraints for young agro-entrepreneurs in Africa', cultural practices in northern Kenya were identified as perpetuating a lack of access to education for young rural

FIGURE 8: PROPORTION OF YOUNG PEOPLE WHO ARE LITERATE (AGES 15-24) (2018*)



* Apart from Ethiopia, which is based on data from 2017.

Note: Youth literacy rate is the percentage of people aged 15-24 who can both read and write with understanding a short simple statement about their everyday life.

Source: World Bank (n.d.).

women due to the prioritisation of work (caring for livestock). The local proverb “God first, then man, then camel and lastly the girl” reinforces issues of hierarchy within pastoralist communities, as pastoralists are often reluctant to sell livestock (which is often ranked higher than a girl) in order to pay for a girl’s education (FAO, 2012). In turn, lower literacy rates ultimately mean that young rural women have less opportunities in accessing decent work.

International Fund for Agricultural Development emphasises that the rural development and agriculture sectors are dynamic: the skills and capacities required in present day work are very different from previous generations (IFAD, 2019). Due to rural transformation and advances in technological progress, particularly within the agricultural sector, workers constantly require new sets of skills (ibid.). Fox (2019) and Filmer and Fox (2014) argue that educational institutions must teach basic technical skills as well as advanced cognitive skills for young people to be able to adapt to the growing complex demands of the industry.

Technical and Vocational Education and Training (TVET) is yet to be labelled as a ‘top priority’ for many African countries, with only 2% to 6% of educational budgets being allocated to developing technical and vocational skills (Hawkins, 2020). The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2015) defines TVET as “comprising education,

training and skills development relating to a wide range of occupational fields, production, services, and livelihoods”, which can take place at secondary, post-secondary and tertiary levels (Hawkins, 2020: 8). TVET provides young people with increased opportunities for employment. However, they are still overwhelmingly tailored to urban formal labour markets and not the informal or rural subsistence economies (McGrath et al., 2019) – as explored further, in Section 4.

2.4. How climate change and other hazards shape the present and future of work

The implications of climate variability and change

The present and future of work in the east and west African drylands are shaped by the climate and by climate change. This is because of the dependence of these dryland economies on natural resources, and the natural environment’s responsiveness to changes in temperature and rainfall, including the timing of monsoon rains (west Africa) and ‘long’ and ‘short’ rains (east Africa).

Weak investment in climate-resilient infrastructure and techniques in the agricultural sector, and continued dependence on rain-fed agriculture exacerbate the drylands’ climate vulnerabilities. That said, there is considerable indigenous and local knowledge on crop and livestock farming in hot, dry climates of the region that has sustained communities over centuries and is relevant to adapting and thriving in today’s conditions (IPCC, 2019). The potential for scaling up such approaches has not yet been reached (CDKN, 2021).

Variability in the weather, including the occurrence of extreme weather events such as heatwaves and storms are a natural part of the climate. However, the increased frequency and intensity of extreme weather events and the inexorable rise in average global temperatures, is now shown to be unequivocally due to human-driven climate change (IPCC, 2021).

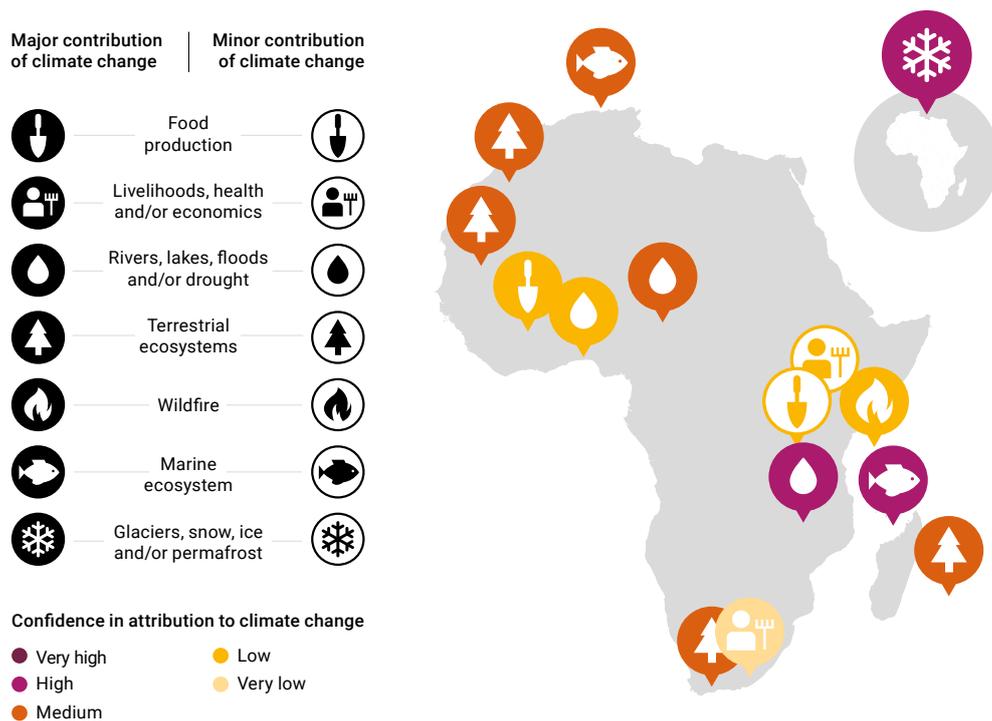
Average global warming has already reached 1.2°C above pre-industrial levels (WMO, 2021). However, the temperature increases have been even greater on the African land mass. The report of the Intergovernmental Panel on Climate Change (IPCC) on Climate Change 2021: The Physical Science Basis (IPCC, 2021; Gutierrez et al., 2021) finds:

- Mean temperatures and hot extremes have emerged above natural variability, relative to 1850–1900, in all land regions in Africa (high confidence⁵).
- The rate of surface temperature increase has generally been more rapid in Africa than the global average, with human-induced climate change being the dominant driver (high confidence).

The equatorial and southern parts of eastern Africa have experienced a significant increase in temperature since the early 1980s. Seasonal average temperatures have also risen in many parts of eastern Africa in the last 50 years (IPCC, 2014; Carabine et al., 2014). There

⁵ In IPCC context, ‘high confidence’ is a scientific judgement meaning that there is robust evidence, and high levels of scientific agreement about the evidence (IPCC, 2010).

FIGURE 9: IMPACTS OF CLIMATE CHANGE IN AFRICA



Source: Carabine et al. (2014), based on IPCC (2014).

have been frequent droughts, floods and storms in east and west Africa in the last 30 to 60 years. Intensive scientific efforts have been underway to align climate models with observed climate patterns across these regions.⁶ Researchers are still trying to understand and reconcile conflicting projections about the likely future of the West African monsoon; and what has been, until recently, considered a paradox of East African climate – whereby the region has experienced more droughts in recent decades and yet future climate projections do not show reductions in rainfall (IPCC, 2014; Carabine et al., 2014) (see Figure 9).

Carabine et al. (2016: 7) highlight how climate-sensitive rural livelihoods assets are. These assets include “pastures, water resources, coastal and inland fisheries and forests, and even physical infrastructure such as roads, bridges and irrigation systems” (ibid.: 7). The authors also highlight how climate change will continue to create new and emerging challenges for rural livelihoods, “which local institutions will be central to addressing” (ibid.: 7). Figure 9 depicts how climate change is thought to have contributed to the degradation of terrestrial ecosystems, freshwater scarcity and damage to food production systems. The colour code reflects the degree of scientific confidence (low/medium/high) about the role of climate change in historic trends of natural resource degradation (IPCC, 2010). Where there is low scientific confidence, it may be difficult for scientists to separate the effects of human-driven climate change from the effects of direct mismanagement of the natural environment (deforestation, unsustainable extraction of groundwater, etc.).

⁶ Improving climate modelling for Africa was one of the foremost objectives of the Future Climate for Africa programme. Papers and articles on the scientific findings may be accessed at www.futureclimateafrica.org.

Future climate trends and projected impacts

The IPCC's 2021 assessment finds that, for the African continent as a whole, "Observed increases in hot extremes (including heatwaves) and decreases in cold extremes (including cold waves) are projected to continue throughout the 21st century with additional global warming (high confidence)" (Gutierrez et al., 2021).⁷

Recent work by Osima et al. (2018), using an assemblage of climate models, shows that under both 1.5°C and 2°C of average global warming, the timing of seasonal rains over the Greater Horn of Africa will change (cited also in IPCC, 2021, chapter 11). The authors conclude:

"The combined effect of a reduction in rainfall and the changes in the wet and dry spells will likely impact negatively on the livelihoods of people within the coastal cities, lake regions, highlands as well as arid and semi-arid lands of Kenya, Tanzania, Somalia, Ethiopia and Sudan. The probable impacts of these changes on key sectors such as agriculture, water, energy and health sectors, will likely call for formulation of actionable policies geared towards adaptation and mitigation of the impacts of 1.5 °C and 2 °C warming" (Osima et al., 2018: 1).

Eastern Africa as a whole is projected to see increases in heavy rainfall and rainfall-related flooding over the course of the 21st century; western Africa is expected to see increases in mean wind speed, as well as heavy rainfall and related flooding (Gutierrez et al., 2021). Both sub-regions are projected to experience more droughts if average global warming reaches 4°C or more (ibid.).

In central Africa, which includes parts of the Sahelian region, intense rainfall is also projected to increase, but in the context of overall reductions in mean rainfall. This implies that there will be less rain overall, but in more intense bursts (ibid.). In this situation, there can be less effective infiltration of rainwater into dry, hard-packed soils and worsened erosion (Dupar, 2019).

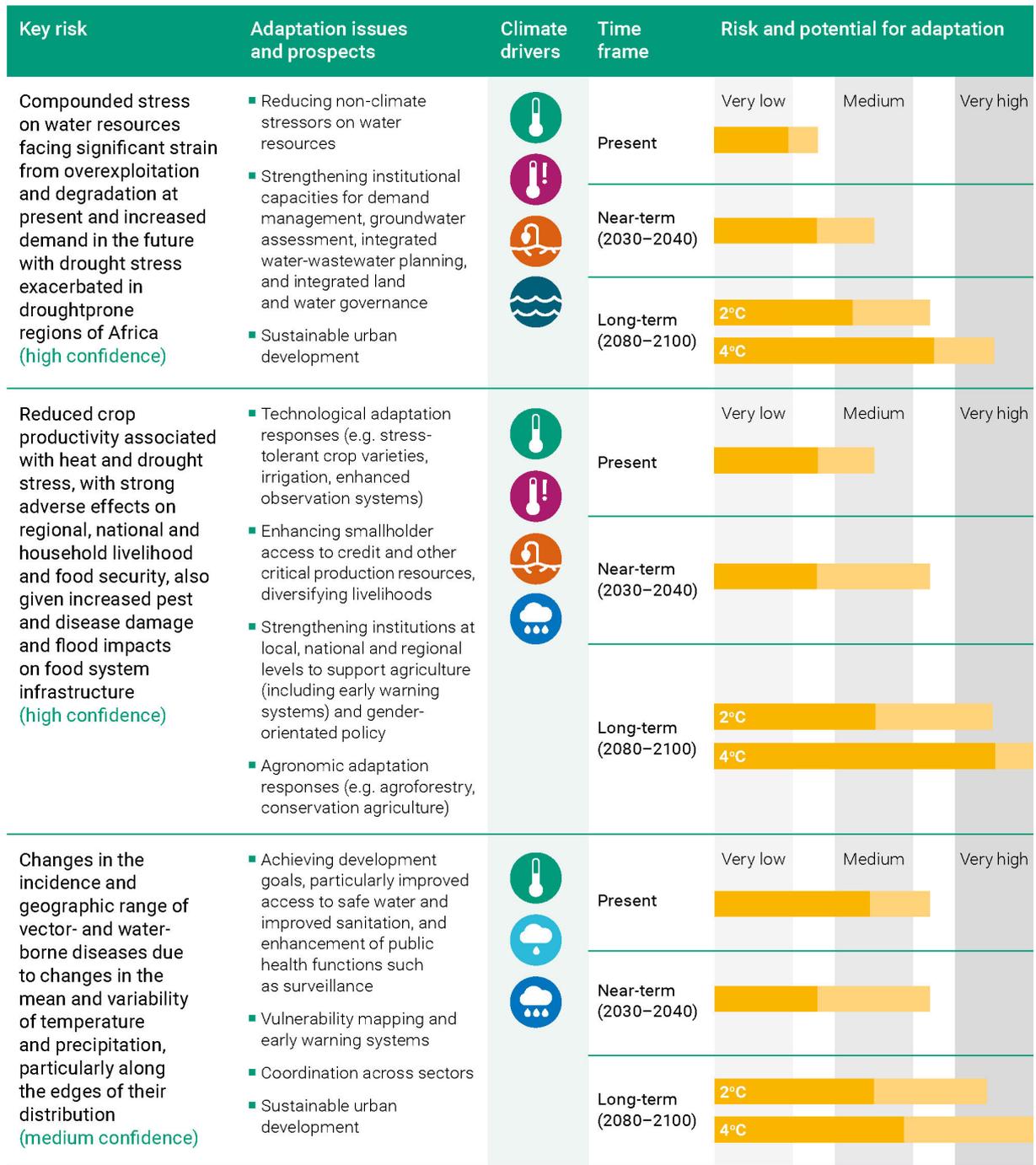
Adaptation reduces climate risk

Climate projections in all of the countries featured in this study are highly variable. It is not possible to generalise about the future climate on a country-by-country basis, as the projections are variable across sub-regions within countries (as indicated by the nationally determined contributions (NDCs), or national climate plans, of each country studied). However, despite this, the implications of the observed climate trends and the priority impact areas are broadly agreed; and these inform the regional policies and programmes discussed in Section 4.

The three greatest threats to future livelihoods and wellbeing of Africans are water availability, crop productivity and health (IPCC, 2014). Natural, resource-based livelihoods must be adaptive to climate change in order to maintain their viability (see Figure 10). Adaptation reduces risk to natural, resource-dependent livelihoods and jobs by an order of magnitude (from high to medium risk, and medium to low risk). The IPCC also highlights technology, institutions and governance measures to support climate-resilient livelihoods (IPCC, 2014).

⁷ In addition to the Interactive Regional Atlas of the IPCC's Working Group I Sixth Assessment Report (Gutierrez et al., 2021), readers are also directed to the Africa regional factsheet, which summarises the key messages, including for Africa's sub-regions: https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Africa.pdf.

FIGURE 10: HOW ADAPTATION ACTIONS CAN REDUCE MAJOR CLIMATE RISKS IN AFRICA



Climatic factors

- Average temperature
- Extreme temperature
- Drought
- Average rainfall
- Extreme rainfall
- Sea-level rise

Level of risk and potential for adaptation

Potential for additional adaptation to reduce risk

Risk level with **high** adaptation | Risk level with **current** adaptation

Source: based on IPCC (2014).

Poor water, poor soil and pasture management, and deforestation are implicated as drivers of watershed degradation, low agriculture and rangeland productivity and hence high levels of chronic vulnerability to climate-related shocks and stresses and food insecurity. There is a need to conserve and restore the natural resource base through a combination of integrated and sustainable water management, soil fertility enrichment, invasive species management, appropriate revegetation, reforestation/afforestation, and climate-smart agriculture practices.

Carabine et al. stress that much of what is required to support resilient local economies is already present in east and west African pastoralist management regimes, where pastoralists are used to managing risk through the optimisation of resources (2016: 7):

“Effective drought risk management should incorporate such customary, local-level institutions and other natural resource management authorities (Hesse and Macgregor, 2006), as well as informal institutions such as transhumance, herdsplitting, social and familial networks of livestock 'loaning' and customary property rights regimes (Flintan et al., 2013). However, [they also note that] the authority and efficacy of these customary institutions have been eroded considerably in recent decades, in part because of policy decisions and development interventions, as well as changing economic, climatic and security conditions (Vedeld, 1994; Helland, 2000)” (Carabine et al., 2016: 7).

2.5. The need for climate-responsive education, training and support to families

Persistent poverty, conflict, displacement and gender discrimination all disrupt education, training and employment opportunities for young people. Climate variability and change affect children and young people's education and early life development in several ways:

- climate shocks and stresses can disrupt family income, which in turn affects parents' and elders' ability to pay for school fees;
- extreme weather events also play a role in disrupting schooling, particularly in rural areas where access to infrastructure (including roads and bridges) may be blocked due to heavy rains, and environmental degradation may lead to landslides or inaccessible pathways (Save the Children, 2016);
- the mobile, transhumant lifestyles of pastoralist communities, compared to those in settled communities, require more flexible forms of schooling to reach children and young people – even without the added climate stress on natural resources. Drought, water stress and other climate- and natural resource management-related pressures on rangelands, and associated social conflicts, may create the need for further population movement and disruption to schooling and training (Key Informant Interview, Youth Network, May 2021);
- water for household use in washing, cooking and sanitation may be increasingly scarce due to a combination of climate- and water management-related reasons. The work of fetching water – from increasingly remote distances – typically falls to youngsters in the family, as well as women, which again takes young people out of school (Key Informant Interview, UN Agency, May 2021).

Education must be 'fit for purpose' to prepare the children and young people of this generation for more erratic weather and climates in future. Yet, climate information is little incorporated into formal educational curricula, if at all (Key Informant Interviews, Youth Networks, Jan 2021; May 2021). In the context of modest to severe natural resource degradation, reversing land degradation and restoring the natural environment are stated priorities of the governments in the countries studied. However, there is little in the curricula about the promise and potential of these opportunities to restore ecosystems for environmental and long-term economic benefit – this is a significant opportunity for curriculum development.

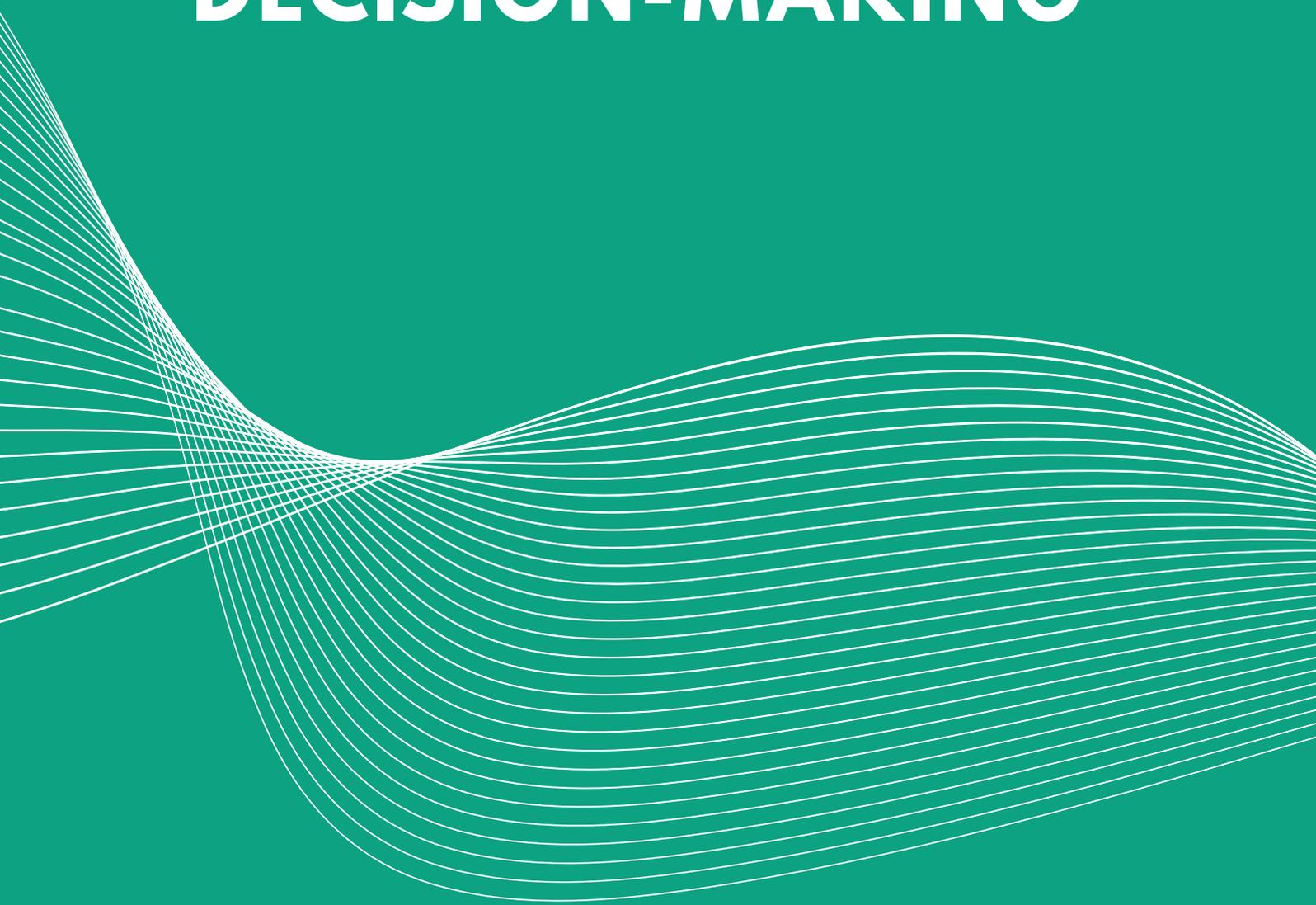
“Ten to fifteen years ago, education was a loss. Now, it’s getting better, but the big challenge is climate change is coming. Now we are having more than average rain, now natural disasters – and Covid. There are new hazards.”

Key Informant Interview, Pastoralist Network, June 2021



A young child looks on as older boys play football next to a camp for internally displaced persons in Mogadishu, Somalia. Photo: UN Photo/Tobin Jones, CC BY-NC-ND 2.0

3. YOUNG PEOPLE IN RURAL AREAS: NARRATIVES, ASPIRATIONS AND INFLUENCE IN DECISION-MAKING



3.1. Dominant narratives about young people in rural areas

Academic literature contains contrasting narratives of unemployed young people in rural areas, including unhelpful stereotypes. Richter and Panday articulate the contrasting narratives as “replete with antonyms – heroes and villains, makers and breakers, promise and peril, and vanguard and vandals” (2007: 292). Some have praised young people for their physical stamina and energetic nature, but some policy documents criticise them for lacking the working ethic demonstrated by previous generations (Mibso and Benfica, 2019; Tele, 2017). Ancey et al. (2020: V) and Resnick (2019) note that young people in the drylands are casually referenced in discourses surrounding radicalisation, jihadism, resource degradation and climate change without adequate evidence. Mibso and Benfica argue that youth engagement with conflict, crime or violence as a result of not being able to obtain decent employment or limited opportunities is a prevailing narrative that has “very limited empirical grounding” (2019: 16). Irrespective of this, the narrative continues to appear prominently throughout several national youth policies (Mibso and Benfica, 2019). Interestingly, Mibso and Benfica (2019) found that these incriminating narratives of young people were often based on assumptions, as opposed to truths spoken by the people themselves. Fox et al. reiterate this:

“The majority of young people remain peaceful when faced with economic adversity, even when living in a context where armed violence exists (Sommers, 2015). Although a lack of opportunities to work may make some young [people] more susceptible to recruitment into patronage networks, some of which, in turn, especially in fragile and conflict-affected settings, increase the risk of being mobilised for criminal or political violence, those who take part remain a minority compared to the overall number of underemployed youth (Enria, 2015; Izzi, 2020; Oosterom, 2019). Moreover, employment status does not appear to predict who gets recruited into militant groups, and work-related factors figure among common grievances but are not the sole explanation for violent mobilisation (Izzi, 2020: 12)” (Fox et al., 2020: 5).

A predominant narrative is that young people from farming and pastoralist communities are no longer interested in agricultural work (LaRue et al., 2021; Burnet et al., 2017; Bezu and Holden, 2014). According to Resnick, practical policy responses to this narrative have increased efforts to improve the attractiveness of agriculture, in an attempt to encourage young people to remain in rural areas rather than migrate to urban areas for work (2019: 76). Ascutti et al. critique this narrative of young people “turning their back on agriculture” and argue that it masks the complexity of young people’s experiences and realities in finding decent work (2016: 3). This study, with key informant interviews and citations from young people at public fora and findings about the lack of voice for young people in the rural areas, reinforces the call for a nuanced understanding of and open engagement with young people.

In literary and policy narratives, there is a significant disparity between the assumed realities of young people and their actual reality. For instance, the African Union’s Youth Charter refers to young people “abusing themselves” in various ways, including substance abuse, and calls for “self discipline” (African Union, 2006: 6). Although the Youth Charter is now considered outdated (having been published over 15 years ago), and while views and narratives about young people have evolved considerably since then, it framed many public debates after its publication.

Richter and Panday (2007) argue that empirical data may be lacking on young people’s needs and concerns, which makes it difficult to counter negative narratives about them –

a finding which is reinforced by this study's review of evidence in 2020-21. Continuing to critique young people in dryland areas through the lens of previous generations dismisses the rapidly transforming structural changes within rural areas that shape their realities today (ibid.). Meanwhile, Resnick (2019) argues that the contrasting narratives about young people have played an important role in placing youth unemployment on the agenda of African governments and in driving the development of regional youth policies. This, however, begs the question, "Is unemployment their main policy preoccupation or do other concerns take precedence?" (ibid.).

"Pastoralists are not coming to Addis or even their regional centres but into small towns. Most are still linked to their production system. They are aspiring to greater education. They see TV, internet, there is big energy!"

Key Informant Interview, Pastoralist Network, June 2021

"You come to the small town centres, you see the youth hanging around. Some of them are still making a living in pastoralism, some are trying to get education, some have already decided to drop out of pastoralism as they can't get animals, they can't get land or money, all the old people have it."

Key Informant Interview, Young man from pastoral background, June 2021

3.2. What are young people's aspirations and preferences for work?

Evidence on young people's preferences

Surveys on young people's job preferences tend to be focused on young people in urban or peri-urban areas. According to Giuliani et al. (2017), little empirical research on youth aspirations in rural Africa currently exists. The literature that does exist often uses a working definition of aspirations as forward-looking behaviour that:

"captures the personal desires of individuals (preferences and goals), their beliefs about the opportunities available to them in society (opportunities and pathways), and their expectations about what can be achieved through their own effort in an uncertain future (self-efficacy and agency)" (Gardiner and Goedhuys, 2020: 11).

Where evidence does exist on young people's aspirations for staying in or leaving the agriculture sector (including livestock-keeping/pastoralism), it shows that their preferences are seen to be diverse and wide-ranging, but tend to be conditioned by gender roles. In her study, Vincent (2021: 15) states:

"Limitations in asset access, ownership and control impede youth participation in both crop and livestock production in studies in Kenya (Mutua et al., 2020) and Nigeria (AlabiOluwakemi et al., 2019). Both studies note the implications for policy – with youth 'agripreneurs' in Nigeria particularly noting challenges of inadequate training, infrastructure and access to land (AlabiOluwakemi et al., 2019). Whilst among youth 'agripreneurs' agriculture was positively perceived, in Uganda neither young men

nor young women in the centre of the country aspired to farming, although most did engage in some way (Rietveld et al., 2020). They noted particular barriers to young women's engagement in commercial agriculture, highlighting that structural causes of gender inequality would need to be addressed to change this situation. However, youth disengagement from agriculture is challenged by evidence from Ethiopia, where youth are strongly engaged in agriculture – although there are gender differences (Sakketa and Gerber, 2020)".

Gender greatly shapes aspirations due to its "influence on the formation of self-concepts and on perceptions of occupational opportunity, space, and status" (Leavy and Smith, 2010: 9). Elias et al. (2018)'s report based on 25 case studies from the GENNOVATE: Enabling Gender Equality in Agricultural and Environmental Innovation research initiative found that agriculture was the third most popular work choice among young men from India, Mali, Malawi, Morocco, Mexico, Nigeria and the Philippines. While the young men did not aspire to work in agriculture using traditional, labour-intensive methods, they did consider "agriculture a desirable occupation when performed under 'modern' conditions" and with modern scientific knowledge and techniques (Elias et al., 2018: 90). However, many considered agriculture as:

"a fallback option and expressed dissatisfaction from having to carry out jobs, such as farming, for which a formal education is not perceived as necessary... a young Malian man believed that: '[young men] do agricultural work due to unemployment and poverty of parents. Otherwise, they should in principle be doctors, teachers, and administrators'" (ibid.: 90-91).

In contrast, "when young women were asked to free list their desired occupations, none cited agricultural-related occupations" (ibid.: 90). The authors claim this is linked to the gendered "opportunity spaces that restrict their access to agricultural innovations and opportunities... [and] values and norms that constrain women's capacities and opportunities in agriculture" (ibid.: 93).

The literature documents innovative methods used with young people to encourage them to share their work and life aspirations. Methods include essay-writing, drawing ideas and qualitative interviews (Archambault, 2014; Giuliani et al., 2017). These studies, in the Kenyan drylands and the Midelt Province of Morocco respectively, identified that young people involved in agriculture preferred to stay and develop their agricultural vocation by diversifying their livelihoods and entrepreneurial opportunities, which contradicts the prevailing narrative of young people's lack of interest in agriculture (Giuliani et al., 2017; Archambault, 2014). While consultative strategies such as these are essential in understanding and actively engaging with young people's true aspirations and realities, Giuliani et al. (2017) also argue for more disaggregated data by gender and age in order to ensure that the priorities of different groups of young people are effectively integrated within programmes and strategies. This theme is strongly reinforced by this study's research into recent drylands development programmes (see Section 4).

Where programmes have trained young women to increase agricultural and agroforestry productivity through climate-smart methods (such as more efficient water use, climate-resilient crop selection, and techniques such as mulching), the trainees have been persistent and successful in applying these methods and maintaining or raising yields (ILRI, n.d.). Similarly, initiatives to train women in climate-smart, post-harvest management and trade in east Africa (e.g. storing and transporting grains to reduce moulds, pests and diseases;

involving women of all ages, including under-30s) have shown women to be leaders in uptake and championing these techniques within their communities (Gichiru, 2021). The involvement of young women-led civil society organisations has proven instrumental in organising rural women to define their training needs around food processing and agri-food businesses, and to mobilise women to complete and apply the training (Apawu, 2020).

Youth involvement in the ‘new agricultural revolution’

Young people in rural areas are becoming increasingly concerned about the environment and the impacts that climate change may have on their livelihoods (IFAD, 2020). The recent 2021 GLFA, hosted multiple discussions on young people and their role in environmental restoration to drive improved development prospects and reverse land degradation in the drylands.

The session, ‘Youth in Landscapes – Agroforestry: An opportunity for youth and drylands’ discussed the innovations surrounding agroforestry, and the role young people have played in contributing to innovative strategies (GLFA, 2021). Described as the “new agricultural revolution”, agroforestry refers to the cultivation of trees in the agricultural landscape, to provide food and fibre and a host of other environmental benefits. Agroforestry systems can contribute to regulating the water cycle (this includes water retention), preventing soil erosion (GLFA, 2021), and carbon sequestration and storage (Tschora and Cherubini, 2020). In turn, farmers are able to increase production and diversify their products (Cameron, 2011; Tschora and Cherubini, 2020), which then improves household and community incomes and enhances social development. Nitrogen-fixing trees planted through agroforestry techniques have reduced farmers’ dependence on chemical fertilisers to improve crop yields (Cameron, 2011). The healthier and more organic crops have a much higher market value, meaning that young people can sell these in urban centres for a higher price (GLFA, 2021).



Cattle traders at the animal market in Forobaranga, West Darfur, Sudan.
Photo: Albert González Farran/UNAMID CC BY-NC-ND 2.0

Sevidzem Leikeki, a founding member of the Cameroon Gender and Environment Watch said, “Agroforestry is seen as hope for the young people” (GLFA, 2021). Drawing on her own experiences, Leikeki emphasised the role agroforestry has played in job creation for young people. As a result of this increase in job creation, they have been given a platform to demonstrate their innovation and potential within the agricultural sector (GLFA, 2021). Youth-led enterprise includes the development of value chains of food crops, establishing enterprises that attract tourists, and the integration of technology and mobile banking within agroforestry. In this context, young people have not only contributed to the local and wider community through crop production and productivity, but also in peacekeeping. According to the speakers and also the literature (Awazi and Avana-Tientcheu, 2020), farmer/grazer conflicts are one of the hardest conflicts to manage, particularly in Africa (GLFA, 2021). However, agroforestry has allowed for the increase in production of fodder that has benefitted both farmers and grazers, as well helped to enrich the soil of surrounding areas, which has greatly benefitted herders, particularly during the dry seasons (see Awazi and Avana-Tientcheu, 2020).

On job creation in pastoralism specifically, young leaders are innovating grass seed banks as a catalyst for rangeland restoration. Describing the Moilo Grass Seed Bank and Apiary project, GLFA spokesperson Charity Lanoi said, “I would want to restore the degraded areas of Kuku Group Ranch through grass seed banks, tree planting, and beekeeping projects. The use of grass seed banks is our primary method of restoration for the project. Grass seed banks will not only benefit the women's group economically, but also provide available pasture for livestock” (Lanoi, 2021). This is a notable example of the types of pastoral youth initiatives that are emerging, and there is interest by international agencies in supporting these more (Key Informant Interview, Development practitioner, May 2021).

3.3. Young people in decision-making and leadership

The *2030 Agenda for Sustainable Development* calls for everybody, including young people, to be involved in its implementation; but UNDESA (2019) says that member states have made little progress with youth engagement. In Kenya, Amsler et al. (2017) observed that while many policy-makers and stakeholders involve young people in their work, others are less committed. For example, some hold forums that are open to the public which young people are welcome to attend, instead of holding specific, youth-focused forums (Amsler et al, 2017).

Many strategies which aim to assess youth engagement in the decision-making process take the form of mass online consultations, which risk excluding those who are less confident to speak, as well as those with limited connectivity (UNDESA, 2019). This includes young people in areas with poor infrastructure, such as those in rural (and rangeland) areas, demonstrating a clear contradiction to the 2030 Agenda slogan, “leave no one behind”.

Young people’s voices and opinions may be little acknowledged in pastoralist communities due to traditional deference to elders (Amsler et al., 2017). For example, in delivering the Tanzanian government’s programmes for young people in agriculture, programme extension officers prefer to speak directly to the father (head of the household) rather than to young people (Amsler et al., 2017). This is what Inter-Agency Standing Committee refers to as “consultative participation” (see Figure 11) (IASC, 2020).

This approach disempowers young people and limits their agency over decisions, which are made on their behalf. Giuliani et al. (2017) argue that this has contributed to the declining interest in agricultural work by young people, which if unaddressed, could lead to an ageing cohort of producers in agriculture.

Young people have also been excluded from discussions and decision-making on matters of climate change adaptation and resilience (Amsler et al., 2017). In an attempt to empower young people, youth-centred organisations are working with young men and women to encourage innovation and ideas in the hope of influencing policy at a national level (Amsler et al., 2017; Key Informant Interview, Youth Network, June 2021).

As youth activists have pointed out, while young people are increasingly being consulted,⁸ “youth are not involved in decision-making. Decisions are made on their behalf and in their absence”.⁹ Meaningful participation goes beyond having a seat at the table to youth involvement in policy decisions and implementation of actions adopted. The ultimate goal for young people in climate discussions, and particularly around issues that concern them like employment, “is to be seen and felt as equal and strong stakeholders”.¹⁰

In the context of dryland development programmes, including those with a climate-resilience focus, this study’s scan found that young people tend to be marginally included and marginally consulted on programme design, if at all. Young people tend to be included as named ‘beneficiaries’ of programme interventions rather than the architects of them (as in the Support Project for the Resilience of Youth Enterprises (PAREJ) in the G5 Sahel Countries) (African Development Bank, 2021). However, there are stand-out examples of more democratic, youth-led approaches to dryland investment, examined in greater detail in Section 4, that provide a rich source of learning, with replicable lessons for other programmes.

FIGURE 11: MAIN MODES OF PARTICIPATION FOR YOUNG PEOPLE



Source: IASC (2020).

⁸ For example, young people have been engaged through the Global Youth Consultation on Climate Action organised by the United Nations Secretary-General’s Youth Advisory Group on Climate Change, and consulted discussions around national action plans through NDC partnerships and the UNDP’s NDC Support Program. <https://unfccc.int/news/young-people-are-boosting-global-climate-action>.

⁹ <https://www.youtube.com/watch?v=EW2xcRQFw28&feature=youtu.be>

¹⁰ https://www.preventionweb.net/files/57759_11.10.2018cystakeholderpositionlate.pdf



Young woman in Nigeria pounds grain for her family's evening meal.
Photo: ILRI/Dave Elsworth, CC BY-NC-ND 2.0

4. LESSONS FROM POLICIES AND PROGRAMMES TO EDUCATE AND PREPARE YOUNG PEOPLE FOR DECENT WORK



This study set out to review whether young people in the drylands of east and west Africa were being adequately supported in their formal education and pathways through training and skills-enhancement into decent work, and what the opportunities are for strengthening these support services.

In light of the great vulnerability of the drylands to climate change, this study also sets out to establish whether the education, skills training, and pathways to decent work take climate change into account, therefore preparing young people to be resilient in the future climate. Young people's opportunity spaces are shaped by society's responses to climate change, which include climate policies and climate finance projects and programmes, too. The knowledge and skills that young people develop in formal schooling, job training and apprenticeships should align well with policies and investments in low-carbon and climate-adaptive development, both underway now and on the horizon.

This section examines:

- Evidence on the strengths and weaknesses of education, skills training and employment support for young people in the drylands and especially in pastoralist communities: How adequate are these services? How can they be improved? What leading-edge initiatives exist, and do they offer transferable lessons for others, or do they simply demand further evaluation and study?
- Alignment between government and other development actor policies and programmes with the climate-resilience needs of the region: How climate-smart are education, skills training and employment support initiatives, and how could climate-change readiness be improved?

4.1. Tailored education for rural children and young people must be scaled up

One-size-fits-all curriculum is ill suited to rural and pastoralist communities

Formal education is essential in enhancing rural young people's employability and work opportunities (UNDESA, 2019; Pant, 2016) (e.g. through equipping them with basic numeracy and literacy skills). Schooling in east and west Africa has tended to take a 'one-size-fits-all' approach and be urban-biased (USAID, 2012; FAO, 2012; Woldehanna, 2018; Ochieng and Waiswa, 2019). Thus, curricula have been out of sync with the lives of rural children and young people. Both USAID and Woldehanna's studies noted that the education system does not provide young people in rural areas with the specific skills they require, such as saving money and earning an income. Sanginga echoes this, adding, "ironically, educational services have expanded considerably in Africa without due consideration of the quality of education offered, or the skills match with employment opportunities in rural areas" (2015: i).

Oxfam (2011) and Krätli (2009) find that conventional education does not incorporate or convey the cultural values of pastoralist communities, either. As a result, families are reluctant to send their children to school – fearing school will drive young people far away to the cities. Pastoral communities are particularly reluctant to send young girls into formal education, as they are expected to do domestic work at home (Oxfam, 2011; Krätli, 2009). A major effort to attune educational curricula to rural realities, including pastoralist livelihoods and culture, could be explored to address these inadequacies and create allies with parents and community elders.

Things are starting to shift towards greater sensitivity and context-appropriateness in education policy. Already governments are starting to recognise the specific needs of rural young people via education policies and trialling important innovations (see Box 6).

BOX 6: RURAL AND PASTORALIST ISSUES ON THE CURRICULUM – COUNTRY INITIATIVES AT A GLANCE

Mali: the 10-year education programme – Programme décennal de développement de l'éducation et de la formation professionnelle deuxième génération (PRODEC) 2, (2019-2028 – targets certain groups including children from sparsely populated rural areas and from nomadic and semi-nomadic communities (République du Mali, 2019).

Nigeria: the National Policy on Education (2013) aims to provide six years of basic education to children in 'disadvantaged groups', including nomadic pastoralists, to improve functional, basic education and survival skills (FroN, 2013: 20).

Somalia: the Education Sector Strategic Plan (2018) promotes equity for girls, especially from marginalised groups including pastoralist children. It acknowledges that environmental hazards can interrupt education, especially for the large proportion of agriculture- and pastoralism-dependent families, but that the government has a weak capacity to respond to these hazards (FGoS, 2017).

South Sudan: the Pastoralist Education Plan exists, but lacks funding to scale up beyond the pilot stage. Even so, it incorporates a livelihoods curriculum for child, youth and adult pastoralists. Children and out-of-school youth learn in their mother tongue from the initial years through P4, then they transition to formal schools. Adults in pastoralist communities are offered a two-year livelihoods basic literacy and numeracy programme. The use of mother-tongue education is particularly relevant in helping reduce inequalities in access to schooling (Republic of South Sudan, 2017).

BOX 7: LOCALISED ENGAGEMENT

The Department for International Development-funded Girls' Education South Sudan, and EU-funded IMPACT programmes "support education to break the intergenerational transmission of poverty. Their success in improving the level and breadth of education in conflict was attributed to their localised and flexible design. 'State Anchors' were recruited – a network of organisations, charities and agencies with longstanding presence in South Sudan, who 'employ staff from local communities who know the language, understand the context and are trusted' (Shotton and Schwerzel, 2018: 8). As part of their work, they help set up temporary learning centres as alternatives to schools. Staff moves with displaced communities. They also inform, monitor and evaluate progress. This has led to sustainable involvement and an increase in the number of girls in school (Shotton and Schwerzel, 2018)".

Source: Diwakar et al., 2020: 46.

As reported above (see Figure 8), literacy rates are still low in the countries studied, and are below-average in the rural areas, so there is catching up to do. This suggests a huge opportunity for more research/evaluation and knowledge-sharing on lessons learned in implementing rural and pastoralist-focused school curricula, (see Box 6). While educational achievement is closely linked to local tailoring (see Box 7), there may be some common support instruments and approaches that could be transferable and adaptable across dryland contexts. In this respect, there is a role for peer-to-peer learning among different governments in the region, to accelerate understanding about what works and how to improve education in the drylands and among pastoralist communities even more.

Schooling needs to be in sync with mobility of pastoralist lifestyles

Governments can take steps to make education more accessible to children and young people from rural – and especially pastoralist – backgrounds. One aspect is financial: they can offer uniforms, materials or cash support to make schooling more affordable, where school fees may otherwise prove prohibitive.

Another concern is the format of education: governments can change the schedule and the way that schooling is being delivered in order to align better with mobile, pastoralist lifestyles. This could include offering mobile schooling that moves with the pupils; boarding school for pupils whose families are on the move; and/or adjusting the school calendar to offer lessons when seasonal mobility and/or labour requirements are low (see Box 8).

BOX 8: CHANGING THE EDUCATIONAL OFFER TO MATCH PASTORALISTS' NEEDS – COUNTRY INITIATIVES AT A GLANCE

Ethiopia: the Education Sector Development Programme (2015/2016-2019/2020) establishes mobile, multi-grade schools in pastoralist areas, and establishes and strengthens boarding in these areas. The programme also provides solar-powered tablets and mobiles, pre-loaded with educational materials, to pastoral and rural secondary schools (FDRE, 2015).

Mali: the education plan aims to support nomadic children to access basic, quality education by strengthening mobile schools (République du Mali, 2019).

Nigeria: the education policy aims to establish, manage and maintain nomadic education model centres in grazing reserves, and organise activities that promote peaceful co-existence between nomads and their sedentary neighbours (FRoN, 2013).

Somalia: the education policy sets out a role for radio programmes to support distance learning for pastoralist communities, and is backed by awareness campaigns to get more pastoralist children educated (FGoS, 2017).

South Sudan: the General Education Strategic Plan (2017-2022) provides children from pastoralist communities with school uniforms and free scholastic materials, and offers low-cost boarding schools (Republic of South Sudan, 2017).

Sudan: the General Education Sector Strategic Plan (2018/2019-2022/2023) provides for boarding for children in middle and upper grades of basic education (Republic of Sudan, 2019).

Teacher training needs are acute

There is a deficit of teacher training in dryland areas. Improved teacher training would strengthen educational quality, with the potential to have a positive impact on students' learning and their pathways to decent work. An educational policy review in Sudan found that there were more untrained teachers in nomadic and internally displaced person schools than in other schools (UNESCO, 2018). Increased government attention to teacher training – perhaps in partnership with non-state actors – is a strategic investment area that could yield significant development gains in the drylands.

Offering increased financial rewards for teachers to work in under-served geographic areas would address low teacher numbers and could also improve teaching quality. Ethiopia has begun scoping this possibility (FDRE, 2015). Somalia is looking into how educated adults could be paid to “support learners from the most vulnerable households during periods of emergency or stress” (FGoS, 2017: 37).

However, shortfalls in government revenue for the countries in the study can create insuperable constraints to achieving educational goals. South Sudan's education plan notes that the government has insufficient funds to pay all of its teachers and school staff, nor make its planned cash transfers to girls, incentivising them to enter secondary education (Republic of South Sudan, 2017). “Unless additional government funding is secured, donor support will be needed” (ibid.: 6).

Low educational attainment of rural young people contributes to their under-representation

Young people's relative lack of access to solid education and, consequently, their poor literacy marginalises them further, excluding them and limiting their opportunities to be involved in the policy process. A vicious cycle emerges of low literacy rates and poor participation in sub-national and national policy-making. As a result, young people continue to be excluded from decisions about policies that directly affect their welfare. There is little evidence in countries' youth policies of the participation of young people themselves in designing the policy (Barnaba, 2018). However, there are exceptions where, for example, the Ethiopian youth policy was produced based on a 'comprehensive study' involving consultation with a range of stakeholders including young women and men (Gebremariam, 2017).

Education must be climate-smart

In Africa, Mungai et al. (2018) argue that climate-smart agriculture should be included in the curriculum at all levels of education in order to increase youth awareness and action on climate change in agriculture. Their research identified that the majority of young people in Africa lack access to training and education that integrates information on climate change and climate resilience in relation to rural livelihoods (Mungai et al., 2018). Dzhugudzha (2020), and Gokool-Ramdoos and Rumjaun (2017) all find that a climate change adaptation and resilience focus is notably lacking from African training and education programmes – and call for significant attention to nurturing young people's skills for sustainable development and agricultural livelihood opportunities.

Scanning government education policies and investments in the six study countries only reinforced these conclusions, with the exception of Nigeria, whose NDC has a bold statement of intent for integrating climate content throughout the educational curriculum. The other countries lack this focus almost completely (see Box 9). The redevelopment of Ethiopia's education sector, however, merits further research, as it pays greater attention to indigenous knowledge and the impact of climate shocks in vulnerable areas (FDRE, 2015).



A market in Addis Ababa, Ethiopia, Photo: Erik Hathaway on Unsplash

BOX 9: A CLIMATE-SMART EDUCATION? COUNTRY POLICIES AT A GLANCE

Ethiopia: Ethiopia is due to redevelop its education systems, including revising its pastoral education strategy and establishing a National Council for Pastoralist Education (FDRE, 2015). Local education manuals will be developed to better serve 'emerging regional states' that face "greater challenges due to [the] absence of water, frequent drought and natural disaster[s]" and other stressors (FDRE, 2015: 84). Accordingly, the programme advocates that "all teachers assigned to emergency-prone areas (typically flood or drought, but also areas of recurrent conflict) will receive this additional integrated training on school disaster management, disaster risk reduction, psychosocial support, peace education and gender based violence" (FDRE, 2015: 60). Unfortunately, it has not been possible to find any revisions to the pastoral education strategy in recent years.

Nigeria: The country's NDC has a relatively ambitious commitment to climate- and environment-related education, pledging to "1. Provide evidence-based information to raise awareness and trigger climate change adaptation actions that will protect present and future generations in Nigeria. 2. Develop skills-based curriculum in subjects like science, geography, social studies, language arts, environmental education and technology that will empower children to better respond to the threats of climate change. 3. Train teachers on climate change adaptation teaching strategies and techniques at pre-primary, primary, secondary and tertiary levels of education in Nigeria" (Government of Nigeria, 2017, updated 2021).

South Sudan: In the General Education Strategic Plan, the 'resilience' of individuals and education provision is seen in the light of personal security and conflict prevention, rather than climate shocks and stresses (Republic of South Sudan, 2017).

4.2. Vocational training and job schemes for young people in rural areas focus on agriculture and entrepreneurship

Job programmes are increasingly integrating climate resilience and sustainability – but with little evidence yet of the results for young people

There are several regional programmes that target young people's involvement in climate-resilient and/or low-carbon employment, but they are highly urban-focused, such as the Boosting Decent Employment for Africa's Youth initiative (Decent Jobs for Youth, 2017). It aims to produce research and generate evidence on soft skills, digital jobs, and work-based learning to boost jobs for young people across nine countries.

In rural areas, government initiatives are increasingly integrating land restoration, environmental sustainability and climate resilience with agricultural development – recognising climate and environmental vulnerability in the sector. Regionally, increased focus on the sustainability of agricultural practices has led to the creation of decent green jobs for young people, which could generate up to 60 million new agricultural jobs (IFAD, 2020; Brooks, 2018).

Across east and west Africa, a high proportion of climate change focused projects incorporate livelihoods, climate-smart agriculture and climate-smart agroforestry. However, there is still a relative lack of published evidence that young people have been materially involved in these projects' implementation or have benefited from them.

Governments involved in the GGWI¹¹ explicitly describe the initiative as a “compelling solution to the many urgent threats not only facing the African Continent, but the community as a whole – notably climate change, drought, famine, conflict and migration” (GGWI, n.d.). The initiative's livelihood-centred land restoration activities are intended to give “a reason to stay for the millions who live along its path” (GGWI, n.d.). Restoration involves creating mosaics of landscapes and a mixing them with multiple productive uses, which include health, agricultural lands, forestry and agroforestry systems, and rangelands (Mumba, 2021).

Explicitly designed to both environmentally restore the drylands belt and make it a more attractive place for young people to grow up, raise families and thrive, GGWI has only – in small part – been achieved despite being some years in the making. As of early 2021, it has reached 16% of its goal to regreen 150 million hectares. The GGWI's implementation is projectised, insofar as its activities require project or programme structures and financing to be realised. Many of the programmes mapped in this study are meant to be contributing to its overall aims (Key Informant Interview, International Agency, May 2021).

However, a burning research question is whether, in fact, different land restoration initiatives along the GGWI's span are helping to achieve those stated goals of enriching communities' lives, discouraging migration, and generating better local job prospects for young people. Further, it is critical to understand which aspects of land tenure and access, and benefit-sharing arrangements involved in each programme will ultimately determine localised success or failure.

One thing is certain: the effective and sustainable implementation of GGWI will require the locally-appropriate strengthening of young people's capabilities, and securing incomes and assets through agriculture, forestry, agroforestry and pastoral work. Providing only a continuation of climate-exposed subsistence livelihoods – what Sumberg and Okali (2013) refer to as protective and preventative – along the wall's span will not be enough.

Agriculture and entrepreneurship rise up the job training agenda – but with gaps for young pastoralists

There is growing interest in 'agripreneurship' as an approach. As noted in Table 1, “Agripreneurship refers to entrepreneurship in agriculture” (GFRAS, 2021). Supporting groups of young people and individuals through fostering entrepreneurship and value chain addition in agricultural value chains can involve government, the private sector and NGOs. For instance, Nestlé's Global Youth Initiative, established in 2017, focuses directly on employment and employability for rural young people across the globe – including Ethiopia, Mali, Nigeria and South Sudan – through vocational training, agripreneurship, and entrepreneurship (UN, 2021). Evaluating the benefits, and any unintended consequences, of these initiatives as they progress will be important to inform youth-focused efforts in the future.

11 The Great Green Wall is south of the Sahara and spans from Senegal in the west to Djibouti in the east.

BOX 10: YOUTH POLICIES AND EMPLOYMENT POLICIES FEATURING YOUTH – COUNTRIES AT A GLANCE

Ethiopia and Nigeria have contrasting youth and employment policies – which frame investments in job training and job creation. Somalia's framework for job creation is found in its growth plan.

Ethiopia: The Youth Policy (2004) introduces entrepreneurialism in a context where the government, on its own, would be unable to "resolve the problem of unemployment", thus there is a need to create favourable conditions for young people to "create new jobs for themselves" (Gebremariam, 2017). Ethiopia's Employment Policy proposes "allowing farmers' rights to use land, encouraging farmers to become shareholders in commercial farms, and optimising land use for youth and women in rural areas while encouraging the establishment of commercial farms", and includes measures to raise the productivity of pasturelands (FDRE, 2009). Its Plan of Action for Job Creation (2020-2025) recognises pastoralists' vulnerability due to shrinking land, disrupted migration routes, reduced livestock herd sizes, and limited basic infrastructure (FDRE, 2019b).

Nigeria: The National Youth Policy seeks to enhance access to agricultural extension services and credit delivery to young farmers, and create a Nigerian Youth Development Fund for young entrepreneurs (FRoN, 2019). However, its framework does not consider climate resilience, nor pastoralists, explicitly. Nigeria's Employment Policy promotes youth-focused agricultural programmes to help diversify the economy (e.g. supporting priority agricultural value chains and training unemployed youth and women in sustainable agribusinesses); nevertheless, activities for young people in pastoralism are absent in these initiatives (FRoN, 2017b).

Somalia: Countries' employment policies are typically linked to country strategies for economic growth, as in the case of Somalia. Its National Development Plan (2020-2024) treats youth, alongside women and rural residents, internally displaced persons, and people with disabilities, as vulnerable groups (MoPIED, 2019).

In Nigeria, strategies have been introduced to promote young people's participation in agripreneurships in rural areas (Babu and Zhou, 2020). However, there are still critical gaps for young people in pastoralist communities. Pastoralists are commonly mentioned in relation to security (e.g. farmer-pastoralist conflicts) or in situational analyses (see Box 10).

4.3. Climate resilience and national development are starting to become integrated objectives

Climate resilience is beginning to bed into countries' growth strategies and plans

There is a progressive integration of national growth and development plans with national climate policies. Over time, the policies have begun to align as the impacts of climate variability and change, intertwined with unsustainable management of the environment and degraded ecosystems, push environmental restoration up national agendas.

The slow, steady convergence of economic and environmental agendas is visible via the climate content of growth policies (Box 11) and the economic and livelihood foci of NDCs.

National climate policies recognise the vulnerability of agriculture but are a mixed picture on youth

At the national level, countries have a variety of strategies, laws and climate plans that are cast as climate-smart or climate-resilient development. These documents have a strong tendency to be integrated with land restoration, agriculture, pastoralism and natural resource management, given the natural resource dependence of the economies and of people's livelihoods.

NDCs and National Adaptation Plans (NAPs) in the countries studied prioritise land-based sectors and climate-resilient water management. NDCs were first prepared and submitted to the United Nations Framework Convention on Climate Change (UNFCCC) circa 2015 and are intended to be updated every five years, with increasingly greater ambition and clarity about countries' commitments on both climate change adaptation and mitigation. NAPs are longer term plans which should tie in with NDCs and, likewise, form a basis for domestic revenue allocation and mapping donor investments. In the countries studied, the following notable trends have appeared across NDCs and NAPs (where complete):

- **Climate-smart agriculture** (all countries studied) – techniques to retain soil, soil fertility, moisture and soil biota, as well as the adoption of different crop varieties that may withstand more variable conditions.
- **Reforestation/afforestation/forest restoration and agroforestry** (all countries studied) – to increase water and soil retention, generate more ecosystem services and related livelihoods and sustainable jobs.



Nasiba Alhassan, 12, is in Grade 5 at Miga Central Primary School, Miga, Jigawa State, Nigeria.
Photo: GPE/Kelley Lynch, CC BY-NC-ND 2.0

BOX 11: CLIMATE MAINSTREAMING IN NATIONAL GROWTH PLANS – COUNTRIES AT A GLANCE

Ethiopia's Climate Resilient Green Economic Strategy and its Homegrown Economic Reform both include interventions for the livestock sector to enhance pastoralist productivity. The former is based on pillars of: 1) agriculture (crop and livestock), 2) forestry, 3) power (renewable electricity generation) and 4) transport, industrial sectors and buildings (FDRE, 2019a).

South Sudan Development Plan (2011-2013¹) treats the environment as a cross-cutting issue. It mentions climate in relation to disaster-preparedness, and proposes promoting environmental sustainability through reforestation; ecotourism; laws and practices for sustainable natural resource management (including enhancing access to veterinary services); environmental impact assessments for all development projects; and an enabling environment (e.g. on property rights and land ownership) (Republic of South Sudan, 2011).

Nigeria's Economic Recovery and Growth Plan (2017-2020) specifies actions to address environmental priorities, such as implementing projects under the GGWI to address land degradation and desertification; supporting communities to adapt to climate change; raising a green bond to finance environmental projects; and promoting development of green growth initiatives (FRoN, 2017a).

Somalia's "economic development strategy leads with the strengthening of traditional livestock and agricultural livelihood systems by increasing their resilience to the effects of climate change. In doing so, government will mobilise resources for large-scale investments in watershed management and infrastructure to mitigate the impact on these livelihood systems of recurrent drought and floods" (MoPIED, 2019: 181).

Sudan's National Programme (2015-2019) has restoration of sustainable economic growth as one of its goals, but does not mention environmental sustainability (Republic of Sudan, 2015).

Mali aspires for a healthy environment through decentralised participative management of renewable resources, favouring use of innovative technologies that respect the environment. It also advocates for resilience to climate change through improving prevention and adaptation capacities (République du Mali, 2012).

¹ This document, subsequently updated, makes reference to a more recent period, after 2013.

- **Green industry** (Nigeria, Ethiopia) – since 2014, Nigeria has been Africa’s largest economy. Alongside Nigeria, Ethiopia has one of the greatest population sizes on the continent and has industrial growth ambitions. NDCs in both countries embody ambitions for green industrial growth as a route to resilience and to avoiding greenhouse gas emissions from industry. Nigeria’s NDC talks specifically about job creation in the context of industrial growth that is harnessed to major energy efficiency gains and emissions avoidance. Ethiopia has an explicit green industrial strategy in the context of its net zero emission and climate-resilience target for 2025 (FDRE, 2011).
- **Green energy development and switching out of biomass** (all countries studied) – behaviour change campaigns, material training, support for both consumers and producers of unsustainable charcoal as a fuel source, and help for switching into clean and renewable fuels; on the producer side (or employment side), these have significant implications for the future of green jobs.

The majority of NDCs studied barely mention youth, with the notable exceptions of Nigeria and Ethiopia. Youth are mentioned in passing in the Paris Agreement itself (UNFCCC, 2015) as one of the key constituencies that is pivotal to effective climate action, alongside traditionally marginalised groups such as ethnic minorities and indigenous groups, women and people living with disabilities. NDCs and NAPs in Sudan, South Sudan and Mali contained only cursory mentions of youth as a target constituency to engage in climate action. Sudan and South Sudan mentioned youth once in each of their NDCs within a cluster of marginalised groups, like the language of the Paris Agreement itself; Mali only mentions youth in respect to adaptation programme descriptions, appended to the NDCs. Since the publication of its first NDC in 2015, Somalia’s updated NDC in 2021 has strengthened its mentions of youth and gender, with the latest version stating: “women and youth can act as agents of change and play a key role in supporting the transition towards low emissions and climate resilient development in Somalia” (FRoS, 2021: 12).

In Nigeria’s NDC, youth are profiled very prominently, taking almost centre stage in the plan. The entire NDC is framed in terms of the country’s poverty and economic status, in the context of which youth unemployment is considered a grave policy and social challenge. Nigeria’s updated NDC has dedicated sections on youth (FRoN, 2021: 30) and green jobs (ibid.: 31), noting that the government has launched its largest ever youth job creation programme, in response to the Covid-19-related economic slowdown. Although Ethiopia’s NDC and NAP do not discuss youth (and the documents are relatively short), they refer to the foundational Climate Resilient Green Economy Strategy, which has ‘youth empowerment’ as one of its foremost goals (FDRE, 2011).

Possibly the inclusion of youth in the other countries’ plans is implicit rather than explicit, however, it is recommended to foreground the specific needs of young people to be educated and trained for a climate-resilient future so that they receive schooling and vocational support that is fit for purpose.

The climate vulnerability of pastoralist systems features prominently in NDCs

By contrast, the climate vulnerability of rangeland ecosystems, pastoralist and agropastoralist livelihoods and livestock-keeping features prominently in the NDCs: 17 times for Somalia, nine times for South Sudan, seven times for Mali, and six times for Ethiopia. Nigeria’s NDC (2017, updated 2021) lays out the country’s commitment to focus climate-adaptive agriculture strategies on the arid ‘savannahs’ where climate impacts are expected to be most severe.



Boys collecting grass to sell in Nigeria. Photo: GPE/Kelley Lynch CC BY-NC-ND 2.0

"With existing pastoralist and farming systems and methods already under threat from poor land management, it was universally felt that existing climatic variability combined with longer term impacts of climate change would inevitably undermine the entire sector", states Somalia's initial NDC (FGoS, 2015). This official recognition of the perilous exposure of rangeland ecosystems and pastoralists to climate hazards is further underlined by the heavy mention of climate vulnerability and resilience in regional policies on pastoralism (e.g. the Nouakchott Declaration on Pastoralism, 2013: 1; IOM et al., 2019) and equivalent national pastoralism policies (see Annex).

4.4. Investment at the nexus of youth, pastoral livelihoods and climate resilience is still under-developed

Climate resilience is slowly appearing in national policies for youth training and employment

National youth, employment and sectoral policies sometimes recognise the role of education and training in contributing to climate-resilient decent work. Somalia's National Youth Policy (2017-2021) recognises climate change and environment destruction as a challenge, and policy goals under its protection and safety pillar respond by articulating the need to enhance environmental knowledge and awareness (FRoS, 2017). The policy also encourages the active involvement and leadership of young people in environmental initiatives, calling for: "appropriate training for pastoralists, fishermen, farmers and all the people of Somalia to increase their productivity while protecting our environment to achieve sustainable development" (FRoS, 2017: 17). The policy recognises that:

"[a] large proportion of the youth population in Somalia comes from rural areas (pastoralists and agropastoralists) and are moving to the urban areas (cities) when the quality of their livelihoods degraded due to famine and droughts which also affected the national economy since their production was vital. These youth have limited education and marketable skills for entering the work force within the country and overseas" (FRoS, 2017: 4).

Until now, training programmes have not assessed their climate change content well (Hawkins, 2020; McGrath et al., 2019). This study's scan of government job training and employment programmes for young people found a general lack of climate mainstreaming – and this correlates with the fact that 'youth' or 'young people' are mentioned in relatively few of the NDCs and adaptation plans.

Mapping training programmes, by both governments and non-state actors, in the drylands of east and west Africa – with a particular focus on our focal countries – has shown that there is a relatively small intersection of job training/employment schemes for young people in agriculture, which are also climate-resilient in nature (as illustrated in Figure 1).

The number of rural job training initiatives focused on young pastoralists is very small but can offer learning

In mapping development programmes in the drylands of east and west Africa, this study found even fewer interventions that focus on training for young people, in pastoralist livelihoods, which are also simultaneously climate resilient/climate smart.

Two notable initiatives, underway or just completed, at the nexus of youth, pastoralism and climate resilience are:

- the Regional Sahel Pastoralism Support Project, which aims to support the resilience of pastoral livelihoods and improve access to essential productive assets and services to strengthen countries' capacities when responding to pastoral crises or emergencies (World Bank, 2021a). Its target groups specifically include youth and women;
- the Drylands Development Programme (2013-2019), which was known colloquially as DryDev. DryDev aimed to create interventions for farmers that ensured and enhanced food and water security (SNV, 2021a). While the programme was not centred exclusively on young people, it did engage and establish interventions with youth and women.

In addition, the Support Strategy for the Employability of Young People in the Agro-Sylvo-Pastoral and Halieutic Sector (2019-2030), proposed by ECOWAS, focuses explicitly on decent work by young people in pastoralism (ARAA, 2021), however, it is not yet clear the degree to which this cross-cutting strategy has been funded or implemented.

However, there is an evaluation deficit when it comes to documented benefits from the target groups of youth and women, and indeed, of their intersection – young women – as well as diversity within the youth group. The DryDev programme was designed by mainly male agriculture, forest and water specialists rather than by gender, youth and social inclusion specialists. Many of its more innovative and inclusive activities for young people were devised and run adaptively, as seen in Niger (see Box 12); this shows that modifications to be more inclusive and responsive to young people can be made during the course of programming. However, DryDev's history suggests that specialists with experience and skill for social inclusion should be more involved from the outset (Key Informant Interview, Development Practitioner, July 2021).

BOX 12: TARGETING DRYLANDS – THE DRYLANDS DEVELOPMENT PROGRAMME (DRYDEV), 2013-2019

Funded by the Ministry of Foreign Affairs of the Netherlands and World Vision Australia, and implemented mainly by the World Agroforestry Centre (ICRAF), DryDev ran in selected dryland areas of Burkina Faso, Ethiopia, Kenya, Mali and Niger. It aimed to reach farmers with interventions for ensuring food and water security, enhancing productivity at both watershed and farm levels. Pastoralists were not a main target. According to the External Programme Review: "Pastoralism and livestock keeping are of secondary importance in DryDev, while in most other dryland development programs (agro-) pastoralism has a central place" (Van Gerwen, 2018a: 31). Activities mainly targeted agriculture, agroforestry and natural resources management, such as tree planting, rehabilitation of degraded lands, or forage rehabilitation and management (ICRAF, 2018). Some activities aimed to promote climate-smart agriculture through climate information dissemination, climate-smart agriculture technologies, and access to inputs (ICRAF, 2018). In six years, DryDev reached about 150,000 farmers, of which about half were women (Bohissou, 2019a).

While the project tended to focus on youth vulnerability, the programme website states that "DryDev has also engaged a lot of women and youth by designing interventions specifically for them" (Bohissou, 2019b). The 2018 DryDev External Programme Review itself points out that women and youth "participated" yet the effects of these groups remain unclear as they were not assessed during the monitoring and evaluation (Van Gerwen et al., 2018a). However, among the DryDev countries, it appears that young people were targeted in Ethiopia (Van Gerwen et al., 2018b: 39). Women, youth and disabled people were integrated through their participation in community sub-watershed teams. Some activities were tailored particularly for women and youth, such as the management of area closure and farmer-managed natural regeneration, to reforest lands (Van Gerwen et al., 2018b; Bohissou, 2019a). As a result of these interventions, migration and intra-household conflicts have reduced, particularly in the Tigray region (Van Gerwen et al., 2018b).

In Niger, the implementation of the project led to the integration of young people in the monitoring and evaluation process, and in the decision-making process. There, young people gathered in 'innovation platforms', as places where they could exchange ideas (DryDev, 2019), and they expressed their wish to be able to gain financial and social autonomy. In response, the DryDev project and its partners (CARE and Mercy Corps) offered these youth groups materials such as smartphones or GPSs (DryDev, 2019). Moreover, faced with a geographical expansion of the project from 2015 onwards, but without the means to fund more staff, DryDev Niger collaborated with members of these innovation platforms, which were largely made up of young people aged between 17 and 35 (CARE, 2018). These young men and women were then trained by the project in map data analysis, which both enabled their communities to make evidence-based decisions and provided stable employment for them within those communities. These young people have been empowered in the decision-making process and included as 'knowledge brokers' (CARE, 2018).

Overall, however, this project did not include youth enough, or in a meaningful way, particularly in terms of the design of the project and in its monitoring and evaluation. While the external programme review (Van Gerwen et al., 2018b) notes that there is real potential for including young people in agriculture through new technologies, it does not make clear if this avenue was explored. Yet in spite of the limited inclusion of youth and lack of deep focus on pastoralism, the DryDev programme remains an important source of learning – it aimed to offer relevant and contextually appropriate support to smallholder farmers in selected dryland areas (Van Gerwen et al., 2018a).

Programme Agroalimentaire pour la Résilience Intégrée et le Développement Economique du Sahel (Pro-ARIDES) is the successor to DryDev. The programme started in 2021 and will last for 10 years, in two five-year phases. It aims to "contribute to increased resilience, food security and incomes of farmer and (agro)pastoralist households in the Sudano-Sahel zone of Burkina Faso, Mali and Niger through effective, decentralised institutions and organisations for improved service provision, natural resource and land management and local economic development" (SNV, 2021b). It will be interesting to see what lessons have been learnt from DryDev, and how young people in pastoralist communities are incorporated within this new programme.

Learning and adaptive management in programmes helps to more effectively target young women and men in pastoralist communities

Of the projects and programmes studied, very few adopted a reflective approach, which would usually inform the second phase of project implementation. After phase one, some projects and programmes have recognised a lack of integration of young women and men, and subsequently included more targeted activities. This is the case for PRAPS (Regional Sahel Pastoralism Support Project), which is now in its second phase.

PRAPS is arguably unique because of its conflict-sensitive and climate-sensitive approach to young people's livelihoods in pastoralist areas, and also in its embrace of learning and adaptive management (Alliance Sahel, 2021). The project description of Phase II recognises that Phase I (2015-2021) gave little acknowledgement to the inclusion of women and youth in income-generating activities. Phase II (2021-2027) therefore aims at a better integration of women and youth, through TVET and micro-project financing, targeting both vulnerable groups. Unlike the other projects mentioned, Phase II of PRAPS has also integrated a specific focus on young pastoralist women, therefore recognising the intersection of gender and age and the impact this may have on young women's experiences in rural employment.

Likewise, the Food, Agribusiness, and Rural Markets (FARM) project led to a better integration of young people in its second phase. FARM II (2015-2016), through an assessment of young people in agriculture, used a participatory method based on key informant interviews and youth-only focus groups to understand youth participation and aspirations (Abt Associates, 2016). Interesting guidelines for both approaches can be found in Barbour and Bell (2015); these include voting tools, tailored questions on young people, and icebreaker resources.

Training programmes do better when they support young people over time and are youth-led

Strategies are needed to support graduates from TVET programmes to find and stay in work. The USAID (2012) study of Ethiopian TVET centres found that they had no systems or strategies in place to engage with the graduates once they had completed the programme, as well as no structured apprenticeships or internships to link young people with work opportunities.

The Educating Nigerian Girls in New Enterprises (ENGINE) programme in Nigeria is one of the best examples of mentorship and ongoing support to girls/young women and boys/young men in preparing them for, and starting work in secure jobs. It provided support to young people over time – and used a gender-differentiated and youth-led approach. ENGINE and ENGINE II (the second phase) took place in both the Nigerian capital Lagos and also in the north and north-west dryland states between 2013 and 2020. Box 13 concentrates on cross-programmatic and dryland-specific insights, and draws on Mercy Corps programme documentation and discussions with programme implementers.

According to ENGINE programme managers, there are some lessons of note: in reality, ‘safe and decent’ employment has to be understood in a context where economic opportunities are scarce; youth aspirations do not match their reality; policy-makers and programme managers cannot tackle youth employment in isolation, but must endeavour to address the systemic barriers that impede youth wellbeing (this includes supply-side interventions in the labour market and ensuring that there are resources to ‘implement’ policies); in this context, too, gender budgeting can ensure that adequate resources are allocated towards the implementation of specific policies to meet young people’s needs in all their diversity (Key Informant Interviews, Development Practitioners, May-June 2021).

Key points from the ENGINE programme for future programme implementers are:

- Meaningful participation of young people means programmes have to be prepared to pivot as often as is necessary – “young people have strong opinions and are not afraid to voice them”;
- Bespoke interventions are needed when it comes to girls’ employment, but improved outcomes for girls and young women requires working with boys, young men, parents, community gatekeepers and policies. Programmes will need to understand and be intentional about how to address all the different barriers that impede girls’ wellbeing;
- Inclusion is costly. Be prepared for it if you want to be truly ‘inclusive’ (Key Informant Interviews, Development Practitioners, May-June 2021).

Another multi-faceted youth employment initiative that key informants highly regarded and considered to be an effective approach for skilling-up young people is the BOMA Project (see Box 14). Although not explicitly focused on climate resilience, environmental conservation or restoration, the BOMA project incorporates transferable lessons for excellence in engaging and supporting young people in pathways to decent work, including its gendered dimensions, and thus is included in this report.

BOX 13: ENGINE – A GIRL-FOCUSED APPROACH TO DEVELOPING SKILLS TRAINING AND EXPANDING INDIVIDUALS' CHOICES FOR DECENT WORK IN NIGERIA

Written by Beza Tesfaye and Vaidehi Krishnan, Mercy Corps

ENGINE's core theory of change was built around one key finding: for every year of schooling that a girl completes, a girl's income has the potential to increase by 10% (Fustos, 2010). But, Nigerian girls face complex life decisions that force them to drop out of school – girls work menial jobs from early on to alleviate their family's economic hardships; risk teen pregnancy; or parents choose to marry the girls at a young age so "they have one less mouth to feed" (Key Informant Interview, Mercy Corps programme implementer, May 2021). Girls lack role models or mentors in their community whose success they can emulate. Female teachers who may be able to fill that role in their lives are scarce, particularly in rural communities. And there are systemic barriers.

The Government of Nigeria has no 'return to school' policy, which would facilitate re-entry into the education system for girls who drop out of school. Gender and social norms mean that parents and male community gatekeepers restrict girls to gender-permissible jobs, which may not meet the girls' aspirations. Mobility restrictions when girls reach adolescence also mean they don't have a supportive peer network with whom they can express their aspirations, fears and frustrations.

The ENGINE programme designed a range of interventions that aim to open opportunity spaces for Nigerian girls to prepare for secure, well-paying employment. While girls were targeted for life skills, alternative education, vocational skills and informal and formal financial services, the programme also intervened in the entire ecosystem surrounding girls. For example, ENGINE advocated with families and communities to shift stubborn gender norms on non-traditional gender jobs for girls; worked with the communities to help identify local business owners who could provide ongoing mentorship for girls; and partnered with state and local governments to ratify the government's national policies for women and girls.

Key lessons learned:

1. Addressing the gap between girls' aspirations and their reality. For many girls, employment aspirations are simply "a job to make ends meet" (Key Informant Interview, Development Practitioner, May 2021). Girls' aspirations and perceptions of gender-permissible jobs are also influenced by what they see other women in their community engage in. However, over the course of the programme, some girls in rural Kano and Kaduna aspired to be media professionals or journalists; others noted wanting to become a doctor or an engineer. While ENGINE's overall goal is to nurture girls' hopes and dreams, the market reality and economic opportunities for girls (i.e. the enabling environment) in the rural areas of Kano and Kaduna states in north/north-western Nigeria are considerably mismatched with their aspirations. ENGINE teams and life skills coaches engaged in ongoing discussions with girls, in the community safe spaces, to present alternate employment opportunities and the cost/benefits of taking these on. The programme's Matching Interest to Work component identified local businesses where girls could become apprentices and gain on-the-job skills.

“[In rural areas g]irls did not have many opportunities for exposure to skills like journalism. Whenever we had community events, we created opportunities for girls to serve as Master of Ceremonies to gain exposure to these skills.”

Mercy Corps programme implementer, May 2021

2. Hear and heed youth voices – what does meaningful youth participation mean for programme implementation?

Girls’ clubs, within safe spaces, regularly met and were a key source of information and feedback for ENGINE. Girls were instrumental in choosing and validating where ENGINE’s safe spaces should be located – considering their mobility restrictions, time and cost of travel, and parents’ safety concerns. When the programme identified apprenticeships with local businesses that were farther away from home, girls’ clubs identified this as a challenge. In response, the programme identified closer local businesses, where girls could continue their apprenticeships. The timing of the life skills classes and safe spaces were also modified to suit the needs of girls, who were in some cases out-of-school young mothers, or in-school girls who had to schedule around classes accordingly. Meaningful girls’ participation meant that ENGINE had to be prepared to pivot programme implementation as often as was necessary.

3. Inclusion is not an afterthought – plan for it. ENGINE did not plan for how it would work with girls with special abilities. As a result, fewer than 2% of the girls enrolled on ENGINE were those with any type of impairment. In some cases, ENGINE was able to procure wheelchairs or hire a sign language interpreter for special events so girls with hearing impairments could feel included. But ENGINE wasn’t able to support girls with learning disabilities. This was a particular challenge.

“Learning disabilities prevent girls from building functional literacy and numeracy skills at the same rate as their peers even with a specially designed teaching methodology. The programme’s lack of resources affected our ability to diagnose and support these girls.”

Mercy Corps programme implementer, May 2021

4. Girls’ employment is not only about girls; it means intervening in the larger community context where barriers exist to girls’ wellbeing. ENGINE intervened at every level of the ecosystem around girls to create an enabling and supportive environment for girls:

Peers – With younger and older adolescent boys, ENGINE provided awareness and created space in schools to discuss girls’ menstruation and normalise a discussion of this otherwise ‘taboo’ topic. For girls, their monthly period or being teased if they stained their clothes was an acute source of embarrassment, and eventually one reason why girls missed school or eventually dropped out. ENGINE also worked with

young men¹ – in some cases, husbands of young women participants – to provide life skills and vocational skills. These types of peer engagement also provided an opportunity to shift gender attitudes and provide a supportive environment for girls.

Parents – ENGINE hired an Inclusion Advisor who continuously advocated with parents and community gatekeepers to shift their attitudes towards non-traditional gender roles for girls.

“This required continuous dialogue with parents and the community. We used stories and examples of successful women business owners or worked through influential community members to advocate with parents. As a result, we were able to enrol some girls into skills like plumbing, electricity technician (rural areas) and computer coding (Lagos).”

Mercy Corps programme implementer, May 2021

Policies –The Government of Nigeria has a number of national policies including National Policy for Education and the National Policy on Women for gender equality in education and work. But many of these policies have not been ratified by individual states. ENGINE mobilised and worked with a state advisory group – which included influential community members and many government officials from various education boards – to help navigate local-/state-level bureaucracies to ratify and allocate resources to implement these policies. ENGINE’s Code of Conduct, co-developed with school governance structures to provide a safe learning environment for girls, was adopted by the Government of Nigeria’s National Commission for Mass Literacy, Adult and Non-Formal Education for use in learning centres across all the 36 states in Nigeria.

What worked well and why:

Programme approach – ENGINE’s **safe space** methodology provided adolescent girls and young women with an opportunity to find peers who shared their hopes, dreams and fears. ENGINE also mobilised **‘girls I’**, platforms where girls shared learning, transferred skills, and strengthened their peer connections. During Covid-19, many of these interactions moved online via WhatsApp groups. Life skills coaches moderated these discussions to facilitate learning, and girls used these to share their achievements with their peers. Some WhatsApp groups continue to remain active today, but network connectivity, data usage and costs, and girls’ phone ownership are all challenges.

Specific interventions – At the safe spaces, the programme trained girls on child protection issues. As a result, **girls encouraged each other to speak up about incidences of abuse** within their community and challenges in reporting these.

¹ ENGINE worked with young men up to the age of 30.

Process – ENGINE engaged with **community mentors**: reputable men and women business owners, of the same community, who could be a role model 'worthy of emulation' and who would continue to support girls with work-readiness skills. This **process was entirely community-owned and driven**. This not only alleviated safeguarding concerns, but also meant that girls continued to have mentorship support after the programme ended.

But the programme was not without its challenges:

Among many older girls (ages 17-23, out of school), there was a lack of interest in attending classes at the safe spaces. Economic hardship and time poverty, especially for young mothers, meant that they were primarily interested in starting up a small business with ENGINE-provided apprenticeships, with local business owners and cash/in-kind business equipment, and capital.

In some cases, where the programme provided grants for support with business start-up costs, parents or family members of the young women diverted these funds for personal/household emergencies. This diversion of funds from their intended purpose is common in other contexts as well, especially where poverty and economic hardships are prevalent. But in the case of ENGINE, this is also likely to be reflective of an overall lack of women's and girls' voices over household financial decision-making.

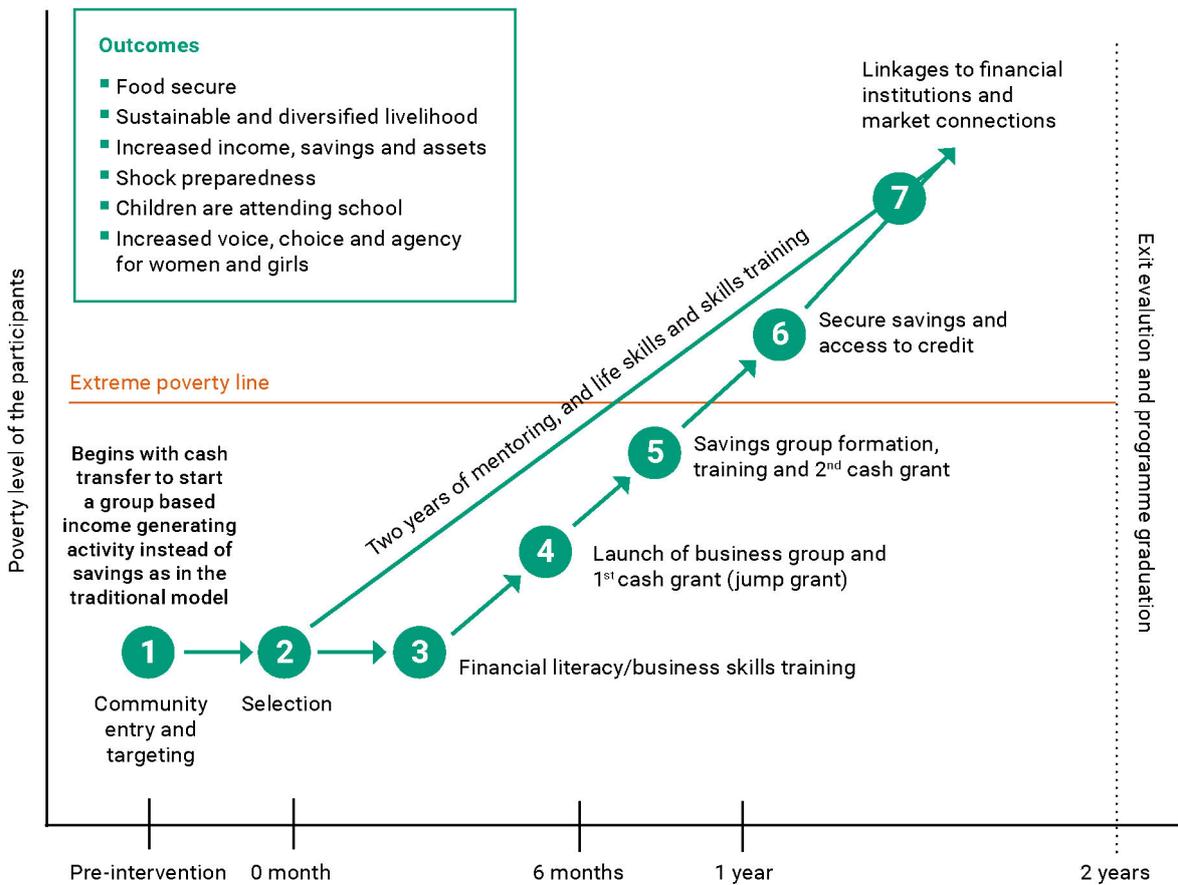
BOX 14: THE BOMA PROJECT'S RURAL ENTREPRENEUR ACCESS PROJECT (REAP)

Key informant interviews highlighted the BOMA project as a good example of a programme that functions on both the wider community level and the smaller group training/mentoring/coaching level in order to help target the different needs and priorities of those living in the area (Young men from pastoralist backgrounds (two), June 2021) (see Figure 12). REAP is a gender-focused model that aims to help pastoral families by "mapping the barriers to overcoming extreme poverty and then implementing a series of sequenced interventions with a defined exit strategy" (BOMA project, n.d.). The project runs in the drylands of east Africa, including rural Ethiopia, Kenya, Somalia, Uganda and Tanzania. It targets "ultra-poor women [to] build a pathway out of extreme poverty by providing them with seed capital, business and life-skills training, a savings program and two years of mentoring" (BOMA Project, 2018).

Life-skills sessions are a key design feature that is fundamental to the project's success. They include "household decision-making, the importance of educating children (especially girls), family planning, and the rights of women under the Kenyan constitution". One of the criteria to measure participants' graduation from extreme poverty is that, "All eligible girl children are attending primary school" (BOMA Project, 2018).¹

¹ <https://bomaproject.org/our-work/our-model/>

FIGURE 12: THE BOMA PROJECT'S REAP MODEL^{12, 13}



Three major factors are highlighted as the key reasons for the project's success: 1) grants are provided that help "small enterprises acquire the start-up capital they need while avoiding the risks that can accompany microloans instead of loans"; 2) the project "trains and supports Village Mentors" who then work closely with REAP businesses for two years and savings groups for one year; 3) the village mentors also deliver a range of training to REAP participants, including "marketing, record-keeping, group dynamics, and savings".¹⁴

Source: adapted from BOMA Project (n.d.) and BOMA Project (2018).

¹² <https://bomaproject.org/our-work/our-model/>

¹³ <https://bomaproject.org/wp-content/uploads/2018/10/Longevity-Study-Exec-Summary.pdf>

¹⁴ <https://bomaproject.org/our-work/the-boma-difference/>

Covid-19 pandemic has ‘doubly disadvantaged’ young people in rural areas

Finally, it is important to note that the Covid-19 pandemic has undoubtedly had a major impact on the delivery of TVET programmes, which have seen a transition into online learning as opposed to the traditional face-to-face learning (FAO, 2020).

Observed in previous health emergencies such as the recent Ebola outbreak, interruptions to education and vocational training can have detrimental long-term impacts on young people and can lead to high drop-out rates (FAO, 2020). In the case of west Africa, ILO (2021a) argues that the lack of ICT infrastructure (particularly in rural areas) and funding to provide students with personal computers or online services meant that those who did not have access to this infrastructure had to stop their education or training. There is evidence that the Covid-19 pandemic has doubly disadvantaged rural young people in east and west Africa, as they lack internet access and relevant equipment to access online schooling and training (Key Informant Interviews, International Agencies (2), May 2021; Jones et al., 2021; Baird et al., 2021a).

As a consequence of the pandemic’s impact on education and training, many young people will continue to face prolonged periods of time without access to decent work due to a lack of qualifications or skills required for secure employment.

4.5. Social protection schemes are not fulfilling their potential to support young people's transitions into secure employment

There is a significant lack of social protection efforts that specifically focus on young people and their transition from education and training to decent rural work. Bird and Silva (2020) note that in the context of developing countries, there is currently no single combination of policies that exists that focuses on improving social protection systems and better transitions into work.

According to UNICEF’s Global Social Protection Programme Framework, the role of social protection is to “address economic and social vulnerability and provide support to all that need it across the life course” (2019: 4). Osabohien et al. (2018) add to this, noting that social protection is a compound word that addresses the strategies and policy frameworks that aim to reduce vulnerability and poverty by promoting decent work and reducing the risk of financial exclusion due to unemployment, sickness and old age. Holmes and Lwanga-Ntale (2012) explain that there are four key types of social protection: 1) social assistance (in the form of cash or food transfers), 2) social insurance (contributory programmes that aim to reduce risk in the event of a shock), 3) labour market interventions (active training and skills development programmes), and lastly 4) community-based protection (informal protection that occurs within households to help those excluded from formal protection). When delivered successfully, social protection programmes are a key component in integrating resilience by providing crucial safety nets (Cervigni and Morris, 2016). However, evidence from the literature suggests that this is not successfully being delivered in rural areas.

For example, the Zanker and Holmes (2012) study that focused on social protection and child protection in Nigeria identified that social protection represented approximately 1.4% of government expenditure, with two thirds of this being allocated to civil servant pension schemes. Their research found that political commitment to social protection is concerningly low, as was evident in the lack of priority given to it by the federal government (Zanker and Holmes, 2012). In a similar vein, NISER (2013) notes that while social protection intervention



A woman ploughs her fields, Mali.
Photo: Ray Witlin/World Bank, CC BY-NC-ND 2.0

programmes do provide critical needs, the critical needs of young people as a specific group are often neglected. Moreover, Jones and Presler-Marshall (2019) highlight how, to date, adolescents are under-represented in social protection programmes as compared to those in early childhood. Particularly in the context of rural young people, Osabohien and Osuagwu (2017) state that social protection, rural and agricultural work, and the poverty alleviation nexus have not yet been addressed, despite others observing that agricultural work may become more of an attractive and viable option if supported by social protection programmes (Osabohien, 2018). As a means to alleviate poverty, social protection is explicitly outlined in the 2030 Agenda, Goal 1 and Target 1.3. The target aims to “implement nationally appropriate social protection systems and measures for all and by 2030, achieve substantial coverage of the poor and vulnerable” (UN, 2020). The lack of contextual focus of the goal suggests that there is a lack of acknowledgement that a one-size-fits-all approach will not be successful. This is demonstrated in the lack of outreach to rural areas, where social protection is essential for a minimum level of wellbeing and social security (Osabohien, 2018). See Jones and Presler-Marshall (2019) and Jones et al. (2019) for more on how gender and age-responsive social protection can help advance adolescent rights and capabilities.

The Covid-19 pandemic has also disrupted social protection services. FAO (2020) notes that any social protection schemes offered to young people through schools, for instance the provision of school meals, came to a halt due to school closures. While UNDESA praises the critical role social protection has played in “curbing the devastating impacts” of Covid-19 (2021: 1), FAO (2020) argues that the mechanisms put in place were inaccessible for young people in rural areas and failed to consider the specific vulnerabilities they faced.

The Youth in Action project (see Box 15) describes how cash transfers can be used productively in combination with mentorship and skills training after young people have dropped out of school, to prepare and support them for work. Learning from the project is transferable, even if the project did not have climate- or environment-specific goals.

BOX 15: FROM FOUNDATIONAL EDUCATION TO ENTREPRENEURIAL SKILLS – YOUTH IN ACTION

Youth in Action was implemented by Save the Children, in partnership with the Mastercard Foundation, between 2012 and 2018. Youth in Action targeted vulnerable and uneducated young people aged 12 to 18, with the objective to 'improve the status of 40,000 out-of-school and marginalised male and young women in rural Burkina Faso, Egypt, Ethiopia, Malawi, and Uganda' (D'Sa, 2018: 5). Youth in Action also meaningfully addressed the gender issue, by conducting a gender assessment, having a mixed-gender team, including gender equality in its curriculum, and taking into account the specific norms and obstacles girls face (Maina and Asencios, 2018).

The Youth in Action project is based on the scientific literature that has shown the lack of preparation of young people in the target countries for the labour market, both formal and informal, and the need to enhance their skills to have access to decent work (D'Sa, 2018). Therefore, it aimed to fill in the skills gap for uneducated youth, by strengthening foundational work 'readiness skills', like literacy and numeracy, financial literacy, and transferable life skills. The evaluation reports show the considerable progress that young people were able to make in these different skills, which in turn enabled them to develop business and management capabilities, and to apply these learned skills. A conditional cash transfer was provided to all the beneficiaries after the foundational skills training, and a choice of pathways (see below), as well as mentorship and access to financial services (Moorcroft, 2018). During the project, the enabling environment was taken into consideration and included; for instance, the family and the community were engaged in the activities, and young peoples' new skills were shown to their families to gain support.

After the project interventions, the young beneficiaries were able to identify and explore livelihood opportunities, and had several possible pathways: start a microenterprise, take up an apprenticeship, attend a technical training programme, find decent employment, or return to school. However, the project team soon realised that young people overwhelmingly considered self-employment as more rewarding, and the majority of youth – 86% (89% of young women and 84% of young men) – set up their own microenterprises, often in agricultural value chains or agribusiness (D'Sa, 2018; Moorcroft, 2018).



IPMS-Mieso – Crop residue for fuel wood and fattening in Mieso, Mirab Hararghe Zone of the Oromia Region, Ethiopia.
Photo: ILRI Apollo Habtamu, CC BY-NC-ND 2.0

5. CONCLUSION AND RECOMMENDATIONS



This final section provides a summary of key findings (5.1), critical research and knowledge gaps (5.2), and recommendations (5.3).

5.1. Summary of key findings

Youth employment is a stated policy priority for the governments of east and west Africa and the continent as a whole. As both an economic and social issue it is well and widely recognised by government leaders and ministries, international agencies, development partners, NGOs and community-based organisations in the region. In the six countries studied, there is a substantial number of policies for the provision of youth employment.

There are varying degrees of integration between employment policies and the climate-resilience and/or low-carbon development agendas, across the countries studied. Ethiopia is a front runner in coherence, having established its all-of-government Climate Resilience Green Economy Strategy and related governance mechanisms in 2011. More generally, in the other countries studied, employment generation and youth skills training initiatives are not integrated as well with climate and environmental sustainability goals, at present.

That said, **integration of climate adaptation and land restoration agendas with economic development imperatives is an emergent trend in regional policy and programming.** There are growing numbers of initiatives to 'green' employment for the workforce, which include GGWI, the flagship 21-country, pan-African vision for land restoration and reinvigoration of economic and environmental security along the Great Green Wall of the Sahel.

It is found that, in the growing number of job creation and training schemes focused on settled agriculture, agroforestry and forestry (and related land restoration and integrated water management), **there is a tendency to have either a strong climate and environmental sustainability focus or a youth focus. It is less common for them to incorporate both aspects fully.** Emergent regional initiatives for climate-smart agribusiness targeted at youth and a current FAO consultation on youth jobs in climate-smart agriculture are welcome measures.

Exceptionally few interventions in the drylands have worked at the intersection of decent work (as defined by supporting capability and income enhancement, asset accumulation), youth, climate resilience and pastoralism. Those identified lacked detailed evaluation and impact assessment in the public domain.

Are the few interventions at the nexus of youth, decent rural livelihoods and climate resilience that have been mapped sufficient to meet the labour market needs and environmental imperatives? Almost certainly not: lessons from early pilots need to be better captured and applied to much larger efforts in order to deliver climate-resilient jobs, which enhance young people's capabilities and economic security, at scale.

Young people from rural, dryland backgrounds, especially those from pastoralist backgrounds are under-represented in the policy process, which means their needs, priorities, vulnerabilities and capacities are not taken into account within the decision-making process. National youth policies, where they exist, seldom promote climate-resilient livelihoods and rarely acknowledge pastoralists.

Young people are caught in a vicious cycle: young people from pastoralist backgrounds, and more generally in the drylands, are growing up in the context of environmental degradation, frequent food insecurity and low levels of education. This marginalises them on a national scale, which perpetuates poverty and also their lack of participation in national policy-making, which ultimately has a direct effect on their livelihoods and welfare.

Furthermore, the general absence of disaggregated and intersectional data also leads to young people in pastoral areas being under-represented in policies, programmes and research. This makes it impossible to determine whether rural young people's needs are being sufficiently addressed in their pathways into decent work. Young women in pastoralist communities and also young people living with disabilities are almost 'invisible' in programming. Where notable exceptions and good practices have been found, they have been documented. Case studies on what is working provide illustrative activities and approaches, and useful learning that could inform programmes elsewhere (such as the ENGINE project in Nigeria). There is a towering need for more, better quality (more extensive, and more disaggregated and intersectional) consultation and documentation of young people's work and livelihood priorities in drylands, and the direct involvement of young people in decision-making for development interventions that affect them.

Among young people from pastoralist and agropastoralist backgrounds, **educational attainment is likely to be stymied by a lack of reliable or quality schooling. The Covid-19 pandemic has exacerbated this situation** and whilst there is no empirical evidence, key informants suggest that it may have created a wider gap between young people in rural areas and their urban counterparts. Some of the countries studied have made provisions for teaching modalities that better suit pastoralist livelihoods (e.g. mobile schools and increasingly tailoring school sessions to the seasonal cycles of the pastoralist calendar), but these initiatives are not yet widely implemented in relevant areas, and there is much that government and provinces could learn from one another. Educational curricula are generally criticised by key informants and in the literature as being neither attuned to rural priorities – but rather urban-biased – nor sufficiently integrative of climate change impacts and resilience content.

Capital constraints, including land (tenure and access) and finance, are cited as insurmountable constraints for young people who wish to make a living from agriculture or pastoralism, including conventional production or through value chain addition. Young people encounter age- and gender-related barriers to accessing and owning land and credit. Village savings and loans schemes can support access to microcredit, but often provide insufficient sums to support youth requirements.

In any youth cohort from the dryland areas, including pastoralist/agropastoralist backgrounds, there will be a diversity of preferences for work: i) staying in traditional livelihoods; ii) expanding economic opportunity within livestock and agropastoralist value chains (e.g. through microenterprise); iii) 'dropping out of pastoralism' and seeking alternative rural work; and iv) migrating to towns, cities and further afield for entirely different employment.

5.2. Critical knowledge and research gaps

- **There is a need for longitudinal research using a life course approach in the drylands of east and west Africa**, recognising that young people's needs, priorities, aspirations and wellbeing outcomes will vary at different stages of their lives and will shift and change over time (Diwakar et al., 2019). There is little to no research on how young people's aspirations change from early adolescence to early adulthood. Lessons can be learned from the Gender and Adolescence: Global Evidence (GAGE) programme and Young Lives on how this can be done well (Baird et al., 2021b; Young Lives, n.d.). Longitudinal research must be conducted in order to understand both the changing aspirations and priorities of young people for climate-resilient work and its implications for policies and programmes. Specifically, research could be undertaken on **'What things give people satisfaction in the transition from youth to adult?'**, which understands aspiration (i.e. future looking) in terms of young people's lived realities (i.e. their satisfaction with present circumstances).
- **There is a general lack of an intersectional approach taken in the literature on youth, decent work and pastoralism in the drylands of east and west Africa.** Gender (mostly through a binary lens) attracts more focus than youth, in the majority of the research. There is an opportunity for researchers to investigate the challenges and policy implications of young people with other social identities e.g. living with disabilities, in the context of pathways to decent work.
- **Moreover, TVET and education literature should be enriched with further research on how different groups of young people can access these services in the drylands.** Previous research has successfully highlighted the inequities in accessibility to TVET centres and educational sites experienced by young people in rural areas; however, it is critical that the intersection of gender and (dis)ability are also added to this analysis. Questions such as, 'What is in place for young people with disabilities to access this learning or to enter and travel to TVET colleges?', must be asked.
- **There are significant knowledge gaps on the capabilities of young people, particularly young women, in the drylands**, and the implications for climate-resilient education and employment policy and planning. Discussions that do involve young people in agriculture are often male-centred, and therefore do not accurately capture the adaptive capabilities that women continuously demonstrate. The ongoing narrative appears to have distorted the focus of the literature and angled it towards the explanation of youth unemployment, as opposed to understanding why young people lack a sustainable livelihood and what is required for them to achieve secure decent work.
- **Pandemics and their impact on access to work and vocational training for young people need to be better understood, particularly within rural and dryland areas.** Researchers have called for governments to invest and enhance access to ICT infrastructure and tools. However, little exists about contingency plans for young people in rural areas to remain engaged with these services during disasters and other major disruptions, such as Covid-19 or the desert locust plagues. There is a need for the evaluation and discussion of the few toolkits that have been developed and applied (see Guglielmi et al., 2021).

- **The importance and impact of ‘hubs’ on the self-esteem and aspirations of young people in rural areas can be investigated to inform future practice in the drylands.** Young people who have engaged in ‘hubs’, a safe place that provides them with a sense of affiliation and belonging, have highlighted their importance. These findings emerged from Nigeria’s ENGINE programme. Research is required to understand how the availability and functioning of these hubs help to improve young people’s prospects of securing decent work.
- **More research is needed to understand the enabling environment and long-term interventions that are required to support young people into secure, decent livelihoods in the dryland regions of east and west Africa,** as opposed to shorter-term projects that may not consult with young people or address their changing needs and priorities over time.
- **Research is needed to establish whether land restoration initiatives, such as GGWI, are helping to achieve their stated goals** of enriching communities’ lives, discouraging migration and giving better prospects to young people in the drylands.
- **Variations in institutional strength and capacities have a direct impact on the delivery of equitable and inclusive services in dryland regions.** While this research has identified that some institutions across east and west Africa are weak in their approach to supporting and providing opportunities for young people from pastoralist backgrounds, others are taking more proactive approaches. These variations of institutional strength must be researched and contrasted in order to understand how to best improve policy formulation and practical implementation in the future.

5.3. Recommendations

The overarching recommendation of this study is to establish more programmes that include an integrated approach to youth, climate, agriculture and pastoralism. This study highlights the large gap in programme interventions (see Figure 1) that address this nexus of issues and the huge potential for investment in this area.

More specific recommendations for action, which apply to different interventions along young people’s life stages, from education through vocational training and work transitions, follow below.

Recommendations for strengthening young people’s educational foundations for decent work, in the drylands

These principally concern the provision of formal education for adolescents, but intervention can stretch beyond adolescence.

Teach basic literacy and numeracy in the context of applied learning that is relevant to the drylands

- Invest significantly in primary education to ensure that young people secure basic numeracy and literacy skills. Provide guidance to young people on the benefits of transitioning to secondary and higher education, including complementary vocational training and guidance.
- Teach basic numeracy and literacy as applied to geographically relevant livelihoods and economic systems.



Traders in Somalia wait to sell their fish inside Mogadishu's fish market. Photo: AU-UN IST/Stuart Price, CC0 1.0

- Improve the content of formal education in dryland areas to be better suited to dryland realities, including pastoralist livelihoods where appropriate.

Provide young people with a strong understanding of the basics of climate change and its implications

- Ensure young people have a solid understanding of climate variability and change; ecological systems that are relevant to where they live and will work; how climate change and ecosystems interact, and the implications for agricultural and livestock systems; freshwater availability; and management. This should include learning objectives around land restoration and ecosystem conservation as the foundations for climate adaptation in the drylands.

Address the socioeconomic and culturally specific drivers for school absenteeism and dropping out, and help young people to catch up

- Analyse and address the factors that can reduce children's – especially girls' – school attendance. This includes identifying: i) climate impacts and resource scarcity in the context of household wellbeing and daily survival; and ii) cultural mores that undermine girls' health, wellbeing and choice (e.g. early marriage, adolescent pregnancy, gender-based violence) that can constrain educational and skills attainment, making it more difficult to catch up later.
- Provide support for catch-up learning for those young adults who previously dropped out of formal education. Programming may be needed for young people from the poorest households or mobile households who would otherwise face financial barriers to access (e.g. small grants/cash support for transport to, lodging at, or participation in training).

Bridge gaps in access to information and communications that could help young people access continual learning

- Offer further support and subsidies to enable young people in the drylands to access ICTs and the renewable electricity to power devices that enhance young people's ongoing access to education. In the current context, that includes closing educational gaps caused by the Covid-19 pandemic.

Adapt teaching regimes to meet the realities of pastoralist communities

- Assess how previous efforts to provide mobile schools, which cater to children and young people in mobile, pastoralist communities, could inform new initiatives to strengthen how they attain an education. There have been various initiatives to train and retain capable teachers to serve dryland communities; however a better understanding through evaluation and discussion is required to build on successful initiatives.

Recommendations for vocational training and guidance for young people in the drylands

It is appropriate to start these interventions in adolescence and extend their provision well into young adulthood.

Ask young people what they think

- Carry out far more extensive, disaggregated and intersectional consultation and documentation of young people's work and livelihood priorities in drylands as the basis for future policy and programming. This would compensate for the existing lack of data and ground current and future programmes in more solid evidence.



A Somali girl stands watch over a herd of goats at Bakara Animal Market in Mogadishu, Somalia.
Photo: AU UN IST PHOTO/Tobin Jones CC0 1.0

- Consider employing dedicated youth workers to engage with young people using ‘their language’, so they express what they want, rather than what they think is expected.

Support youth leadership

- Integrate young people (across genders, age, abilities and economic status) into the design of projects and programmes from the beginning, including leadership roles. Involve existing youth groups in co-creating sensitive and appropriate interventions, but recognise that many youth NGO members are urban and better educated. Extra time and care are needed to reach out to young women and men in rural, and especially pastoralist, communities that have traditionally been marginalised.
- To be truly youth-led requires being flexible and being willing to pivot activities in response to young people’s experiences and preferences, as a programme unfolds.

Respond to the distinct needs and priorities of different groups of young people

- Identify groups of young people that have distinct needs at the feasibility and design stage (or course-correction stage in existing programmes). Ensure that they are consulted on programme design and appoint representatives of these distinct groups to advisory and decision-making roles in the programme. This may include (but should not be limited to): adolescent girls and boys (i.e. ages 15-19), as well as young people in older cohorts; young people living with different physical (dis)abilities, of different literacy and education levels, different ethnic groups, marital and parental status.
- Ensure that consequent programme objectives, targets (e.g. monitoring and evaluation framework), and activities reflect differentiated approaches for these different groups of young people.
- Budget with a gender- and socially-inclusive lens to ensure that specific interventions, tailored to support each of these groups, are adequately resourced.

Tackle gender discrimination and target girls’ and young women’s specific needs

- Avoid assumptions about youth employment preferences – challenge gender stereotypes and support young people to make choices that may see them breaking out of ‘traditional’ gendered roles.
- Use differentiated approaches to skills training. Some that have worked well in past programmes include:
 - ◊ creating safe spaces, such as girls’ and young women’s clubs, and networks to provide psychological comfort for peers to discuss gender-specific challenges and opportunities to overcome them;
 - ◊ working with boys, young men, parents, community gatekeepers and policies to intentionally address the range of barriers that impede girls’ wellbeing.
- Recognise young women who are already mothers as ‘youth’ also, and deserving of child- and family-friendly, women-targeted support for more secure, sustainable livelihoods.

Ensure young people's vocational skill training is climate-smart

- Integrate climate information (e.g. current variability and future trends) as well as climate-resilient and adaptive knowledge and practice into vocational training programmes for young people. This includes integrating climate-smart techniques and investing in inclusive skills training programmes and interventions that support productivity and economic returns from agriculture and pastoralism without reinforcing existing gender roles (e.g. training in the technical and financial dynamics of agribusiness and value chain addition).

Organisations can support young people's pathways into decent work

- Provide services to young people (e.g. mentoring, work experience, role-modelling) that expand young people's aspirations and their ideas about work and livelihood choices).
- Give young people the opportunity to learn on the job and gain a foothold in decent work that enhances their capabilities, incomes and ability to accumulate assets (e.g. apprenticeship schemes or small business start-up support).
- Combine mentoring, skills training and cash transfers to support young people's transition into work, especially for those who have dropped out of formal education; ensure these are facilitated in a gender-responsive and socially inclusive way to support girls' and boys' choices around decent, climate-resilient work.

Recommendations for broadening young people's sense of choice and access to wider economic opportunities in the dryland regions, including through climate-resilient, low-carbon vocations

- This has two elements: young people themselves can be encouraged to think more broadly about what work choices to pursue, within and far beyond agriculture and pastoralism, i.e. their perception of the 'opportunity spaces' available. Critically, policy-makers and development practitioners can recognise and build upon the wide range of opportunities that are available to support economic growth in the drylands. This includes tourism, processing and service industries, new livelihood opportunities in urban centres (Jobbins et al., 2016; PRISE, n.d.), and mobilising investment for some of the priorities in countries' NDCs, such as renewable energy production (including solar, geothermal and wind power) and new and green technologies, all of which would expand the actual 'opportunity spaces' or job prospects for young people.
- Broaden young people's 'opportunity spaces' for decent work. Young people's 'opportunity spaces' for finding and sustaining decent work are created by their sense of what is possible (information that young people hold), the labour market conditions (supply and viability of jobs) and individuals' skill and qualification to pursue different work choices.
- Match the climate-resilient, low-carbon ambitions of governments with vocations that young people can aspire to and access.

Recommendations for addressing the enabling environment to support young people to access and secure decent work in the drylands

Address the barriers that specific groups of young people face in entering their chosen livelihood or profession, for example:

- **Market access** – Work closely with communities to develop the infrastructure, including information systems and market intelligence, to understand and support resilient market systems in the drylands.
 - ◇ Young people’s ability to develop micro- and small enterprises, generate income and accumulate assets (as self-employed workers) is only possible if viable markets exist. In reality, the markets for many goods and services are still weak or immature in the drylands and may not yet match young people’s aspirations. Work closely with communities to develop the infrastructure, including information systems and market intelligence, to understand and support resilient market systems in the drylands.

- **Land access** – Examine how legal frameworks can support communities to access land, including through collective ownership, and how this could benefit young people.
 - ◇ Pastoralist organisations question the lack of official, legal recognition of and respect for their communities’ traditional use rights over large tracts of land and related natural resources. Competition over and claims to land arise from many external sources including gazetting for commercial activity. These challenges affect pastoralist communities and livelihoods overall, and none more so than young people in the communities. Further, concerted efforts are needed to resolve and move forward these complex issues.

- **Finance access** – Consider providing loan guarantees to fill the gap created by the lack of collateral that acts as a barrier for young people to attain conventional finance from formal banking institutions.
 - ◇ Governments and donors may consider this. Development projects that are willing to risk lending to little/no collateral households for starting small businesses may find the investments help the direct recipient and generate positive ripple effects in communities; this is especially true when women are the microfinance recipients.

ANNEX

NATIONAL POLICIES
AND PLANS



This section presents country summaries of policy documents focused on young people, education, climate change, growth, livelihoods and rural development. Assessed is the extent to which policies engage with: inclusion of certain groups (youth, women, people with disabilities, and other characteristics); agropastoralist/pastoralist populations and their needs; climate risks; and decent work.

KEY FOR THE TABLES IN THIS ANNEX:

Policies that do not make any mention of these issues (except perhaps for brief mention as a contextual challenge) are left blank

- Commitment to act on these issues, but limited
- ● Strong commitment to act and good integration of this issue in the policy documents

This overview analysis is intended to offer a first step in presenting countries' level of integration of these issues in policy. The full names of the relevant policies and hyperlinks to the online documents (as of September 2021) are included in the References list, under each government's or ministry's name.

A1. Ethiopia

YOUTH-FOCUSED POLICIES

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Climate risks
Youth policies	National Youth Policy 2004	●	●	●
Employment policies	National Employment Policy 2009			
	Plan of Action for Job Creation 2020-2025	● ●	●	●
	National Entrepreneurship Strategy			
Education	Education Sector Development Programme V 2008-2012, 2015/2016-2019/2020	● ●	● ●	●
	TVET policy and strategy			

CLIMATE-SMART RURAL DEVELOPMENT

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Decent work/employment	Climate risks
Climate change plans	National Adaptation Plan 2019				
	Updated Nationally Determined Contribution 2021	• •	• •	•	• •
Pastoralism/livestock	Livestock master plan				
	Pastoral Development Policy and Strategy (2019 news)	•	• •	• •	• •
Agriculture/rural development policies	Rural Job Opportunity Creation Strategy 2017				
	Agricultural Development-Led Industrialisation	• •	•	•	•
Growth policies	Agriculture Sector Policy and Investment Framework 2010-2020				
	Homegrown Economic Reform		• •	•	• •
	Climate-resilient green economic strategy				

A2. Nigeria

YOUTH-FOCUSED POLICIES

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Climate risks
Youth policies	National Youth Policy 2019 edition	• •	• •	• •
Employment policies	National Employment Policy 2017	• •	•	•
Education	National Policy on Education 2013		• •	

CLIMATE-SMART RURAL DEVELOPMENT

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Decent work/employment	Climate risks
Climate change plans	Updated Nationally Determined Contribution 2021	• •	•	• •	• •
Pastoralism/livestock	National Livestock Transformation Plan 2019-2028 (reflections here)	• •	• •	•	•
Agriculture/rural development policies	Agricultural Promotion Policy 2016-2020	• •	• •	• •	• •
Growth policies	Nigeria Economic Recovery and Growth Plan 2017-2020	• •	•	•	• •

A3. South Sudan

YOUTH-FOCUSED POLICIES

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Climate risks
Youth policies	South Sudan Youth Development Policy 2013*			
Employment policies	None found			
Education	General Education Strategic Plan 2017-2022	●	● ●	

* Although extensively referenced online in other documents, this policy document itself was not available online; the World Bank publication, Youth Education in Sudan, which covers primary education, secondary education and TVET, provides a sound overview (World Bank, 2019b).

CLIMATE-SMART RURAL DEVELOPMENT

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Decent work/employment	Climate risks
Climate change plans	First intended Nationally Determined Contribution 2021	●	● ●		● ●
Pastoralism/livestock	National Agriculture and Livestock Extension Policy 2011	●	● ●	●	●
Agriculture/rural development policies	Comprehensive Agricultural Development Master Plan 2015	● ●	● ●	●	● ●
Growth policies	South Sudan Development Plan	● ●	●	● ●	● ●

A4. Somalia

YOUTH-FOCUSED POLICIES

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Climate risks
Youth policies	National Youth Policy 2017-2021	• •	•	•
Employment policies	Employment Policy (finalised draft in 2019)	• •		•
Education	Education Sector Strategic Plan 2018	• •	• •	• •

CLIMATE-SMART RURAL DEVELOPMENT

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Decent work/employment	Climate risks
Climate change plans	Updated Nationally Determined Contribution 2021	•	• •	• •	• •
Pastoralism/livestock	Federal Ministry of Livestock, Forestry, and Rangeland; draft Livestock Policy (2015-2020)	•	• •	•	•
Agriculture/rural development policies	None found				
Growth policies	Somalia National Development Plan 2020-2024	• •	• •	•	•

A5. Sudan

YOUTH-FOCUSED POLICIES

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Climate risks
Youth policies	No current national youth policy			
Employment policies	Roadmap towards National Employment Policy*	●	●	
Education	General Education Strategic Plan 2017-2022 TVET Policy (2013)	● ●	● ●	

*Not actual National Economic Policy

CLIMATE-SMART RURAL DEVELOPMENT

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Decent work/employment	Climate risks
Climate change plans	Interim Updated NDC (2021) National Adaptation Plan (2016)		● ●	●	● ●
Pastoralism/livestock	Section in National 5 year programme for Economic Reform 2015-2019		●		
Agriculture/rural development policies	None found				
Growth policies	National 5 year programme for Economic Reform 2015-2019	●			

A6. Mali

YOUTH-FOCUSED POLICIES

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Climate risks
Youth policies	None found			
Employment policies	The National Employment Policy is not available online*			
Education	Programme décennal de développement de l'éducation et de la formation professionnelle deuxième génération (PRODEC 2) 2019-2028	• •	• •	

*Although extensively referenced online in other documents, this policy document itself was not available online.

CLIMATE-SMART RURAL DEVELOPMENT

	Policies reviewed	Diverse youth, gender, (dis)ability, other traits	Agropastoralism/pastoralism	Decent work/employment	Climate risks
Climate change plans	Contribution Déterminée au niveau National 2016	•	•		• •
Pastoralism/livestock	Section of Cadre strategique pour la relance economique et le développement durable Section of Agricultural Development Policy (Politique de Développement Agricole)		•		
Agriculture/rural development policies	Agricultural Development Policy 2011-2020	• •	•	•	• •
Growth policies	Cadre strategique pour la relance economique et le développement durable 2019-2023	• •	• •	• •	• •

REFERENCES



REFERENCES

- Abt Associates (2016) *Feed the Future Food, Agribusiness and Rural Markets II Project Final Report*. Bethesda: Abt Associates. Available at https://www.abtassociates.com/sites/default/files/migrated_files/53147efd-ce5b-4798-aff4-f00998784051.pdf.
- Adaku, A.A. (2013) 'The effect of rural-urban migration on agricultural production in the northern region of Ghana', *Journal of Agricultural Science and Applications* 2(4): 193-201.
- African Development Bank (2021) *Multinational G5 Sahel (Burkina Faso, Chad, Mali, Mauritania, and Niger): Support Project for Resilience of Youth Enterprises (PAREJ)*. Project Appraisal Report. Abidjan: African Development Bank. Available at <https://www.afdb.org/en/documents/multinational-g5-sahel-burkina-faso-chad-mali-mauritania-and-niger-support-project-resilience-youth-enterprises-parej-project-appraisal-report>.
- African Union (2006) *African Youth Charter*. Banjul: African Union. Available at https://au.int/sites/default/files/treaties/7789-treaty-0033_-_african_youth_charter_e.pdf.
- African Union (2013) *Policy framework for pastoralism in Africa: Securing, protecting, and improving the lives, livelihoods and rights of pastoralist communities*. Addis Ababa: African Union
- African Union (2015) *Agenda 2063: The Africa We Want*. Available at <https://au.int/agenda2063/overview>.
- Agroforestry Research Trust (2021) *About Agroforestry*. Available at <https://www.agroforestry.co.uk/about-agroforestry/>.
- Alliance Sahel (2021) *Regional Support Project for Sahel Pastoralism (PRAPS)*. Available at <https://www.alliance-sahel.org/en/projects/regional-sahel-pastoralism-support-project-praps/>.
- Amsler, K., Hein, C., Klasek, G. (2017) *Youth Decision Making in Agricultural Climate Change Adaptations: Research findings from East Africa*. CCAFS Info Note. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CAAFS).
- Ancey, V., Rangé, C., Magnani, S.D. and Patat, C. (2020) *Pastoralist youth in towns and cities – Supporting the economic and social integration of pastoralist youth*. Summary Report. Rome: FAO.
- Anti-Slavery (2021) *Child Slavery*. Available at <https://www.antislavery.org/slavery-today/child-slavery/>.
- Apawu, M. (2020) 'Keta, Ghana – Agribusiness offers women and youth great food security during pandemic', *Voices from the frontline of the covid-19 crisis*, 21 December 2020. Available at <https://cdkn.org/2020/12/feature-keta-ghana-agribusiness-offers-women-and-youth-greater-food-security-during-pandemic>.
- ARAA (Agence régionale pour l'agriculture et l'alimentation/Regional Agency for Agriculture and Food) (2021) *Promoting Youth Employability in the Agro-sylvo-pastoral and halieutic Sector*. Available at <http://araa.org/en/news/promoting-youth-employability-agro-sylvo-pastoral-and-halieutic-sector>.
- Archambault, C. (2014) 'Young perspectives on pastoral rangeland privatization: Intimate exclusions at the intersection of youth identities', *The European Journal of Development Research* 26(2): 204-218.
- Asciutti, E., Pont, A. and Sumberg, J. (2016) *Young people and agriculture in Africa: A review of research evidence and EU documentation*. Brighton: Institute of Development Studies.
- Astatike, D. (2019) 'Ethiopia reveals first National Entrepreneurship Strategy', *Capital Local News*, 12 August 2019. Available at <https://www.capitalethiopia.com/capital/ethiopia-reveals-first-national-entrepreneurship-strategy/>.
- AUDA-NEPAD (African Union Development Agency – New Partnership for Africa's Development) (2014) *Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods 2014-2025*. Addis Ababa: African Union Commission, and Midrand: NEPAD Agency. Available at <https://www.nepad.org/caadp/publication/malabo-declaration-accelerated-agricultural-growth>.
- Awazi, N.P. and Avana-Tientcheu, M.L. (2020) 'Agroforestry as a sustainable means to farmer–grazier conflict mitigation in Cameroon', *Agroforestry Systems* 94(6): 2147-2165.
- Babu, S.C. and Zhou, Y. (2020) *Youth entrepreneurship in agriculture and rural development: Nigeria*. IFPRI (International Food Policy Research Institute) Project Note. Washington, D.C.: IFPRI.

- Baird, S., Jones, N., Goel, N., Dutton, R., Oakley, E., Presler-Marshall, E., Seager, J., Abu Hamad, B., Afrose, S., Alheiwidi, S., Guglielmi, S., Hamory, J., Ismail, A., Malachowska, A., Mitu, K., Patton, G., Faiz Rashid, S., Sultan, M., Woldehanna, T. and Yadete, W. (2021a) *Adolescent Well-Being in the Time of COVID-19. Adolescent Well-being: Background Papers for Multi-stakeholder Consultations*. Geneva: Partnership for Maternal Newborn and Child Health UHL. Available at <https://pmnch.who.int/resources/publications/m/item/adolescent-well-being-in-the-time-of-covid-19>.
- Baird, S., Jones, N., Abu Hamad, B., Sultan, M. and Yadete, W. (2021b) 'Capturing the Complexities of Adolescent Transitions Through a Mixed Methods Longitudinal Research Design' in Banati, P. (eds.) *Sustainable Human Development Across the Life Course. Evidence from Longitudinal Research*. Bristol: Bristol University Press.
- Barbour, J. and Bell, P. (2015) *Engaging Youth in Agriculture in South Sudan*. Bethesda: Feed the Future South Sudan Food, Agribusiness and Rural Markets (FARM) II Project by Making Cents International in collaboration with Abt Associates.
- Barnaba, B. (2018) *Analyzing the South Sudan National Youth Development Policy 2013 and developing concrete strategies for its effective endorsement by the South Sudan National Transitional Assembly*. Juba: Okay Foundation Africa.
- BBVA (Banco Bilbao Vizcaya Argentaria) (2019) 'What is agribusiness and why is it important?', *Circular Economy: Responsible production and consumption*, 12 September 2019. Available at <https://www.bbva.com/en/sustainability/what-is-agribusiness-and-why-is-it-important/>.
- Behnke, R. (2013) *Pastoral Land Rights and Resource Governance. Overview and Recommendations For Managing Conflicts and Strengthening Pastoralist' Rights*. Washington D.C.: United States Agency for International Development. Available at <https://land-links.org/issue-brief/pastoral-land-rights-and-resource-governance/>.
- Berhanu, N., Kassahun, T., Seid, N. and Zekarias, M. (2004) *Using resources from migration for development in Ethiopia*, Ethiopian Economic Association, Ethiopian Economic Policy Research Institute Paper. Presented at the IOM Workshop on Mobilization and Utilization of Diaspora Resources for Development in Ethiopia, March 2004, Addis Ababa.
- Bezu, S. and Holden, S. (2014) 'Are rural youth in Ethiopia abandoning agriculture?', *World Development* 64: 259-272
- Bird, N. and Silva, W. (2020) *The role of social protection in young people's transition to work in the Middle East and North Africa (MENA)*. Research Report 41. Brasilia and Amman: International Policy Centre for Inclusive Growth and UNICEF Middle East and North Africa Regional Office.
- Bohissou F. (2019a) 'Drylands Development Programme: changed lives in the Sahel', *The World Agroforestry Centre (ICRAF) blog*, 15 July 2019. Available at <https://www.worldagroforestry.org/blog/2019/07/15/drylands-development-programme-changed-lives-sahel>.
- Bohissou F. (2019b) 'Restoring drylands and empowering farmers: lessons from the Drylands Development Programme', *The World Agroforestry Centre (ICRAF) blog*, 20 March 2019. Available at <https://worldagroforestry.org/blog/2019/03/20/restoring-drylands-and-empowering-farmers-lessons-drylands-development-programme>.
- BOMA Project (2018) *A longitudinal assessment of REAP. A follow-up on program participants 3-5 years after graduation*. Washington, D.C.: BOMA project. Available at <https://bomaproject.org/wp-content/uploads/2018/10/Longevity-Study-Exec-Summary.pdf>.
- BOMA Project (n.d.) *Our model*. Available at <https://bomaproject.org/our-work/our-model/>.
- Burnet, R., Deacon, B. and Mirzoyants, A. (2017). *#Shujaaz360: It's All About The Money 2017*. Nairobi: Shujaaz Inc. Available at <http://www.shujaazinc.com/wp-content/uploads/2020/01/SHujaaz-360-Report-KEN-pages-5-2017.pdf>.
- Brooks, K. (2018) 'Rising absolutely, declining relatively: agriculture, climate change, and job creation in Africa', *Agrekon* 57(3-4): 181-197.
- Cameron, E. (2011) *From vulnerability to resilience: Farmer Managed Natural Regeneration (FMNR) in Niger*. London: Climate and Development Knowledge Network.
- Canning, D., Raja, S. and Yazbeck, A.S. (2015) *Africa's demographic transition: Dividend or disaster?* Washington D.C.: The World Bank.
- Cao, Y., Alcayna, T., Quevedo, A. and Jarvie, J. (2021) *Exploring the conflict blind spots in climate adaptation finance: synthesis report*. London: SPARC.

- Carabine, E., Lemma, A., Dupar, M., Jones, L. and Mulugetta, Y. (2014) *The IPCC's Fifth Assessment Report: What's in it for Africa?* London: Climate and Development Knowledge Network.
- Carabine, E., Chesterman, S. and Wilkinson, E. (2016) *Resilient risk governance: Experience from the Sahel and Horn of Africa*. London: BRACED and ODI.
- CARE (2018). *Community Influence, and approach based on young women and men. Case Study*. Abidjan: CARE. Available at <https://fr.fsnnetwork.org/sites/default/files/Dry%20Dev%20Youth%20Case%20Study%20-%20CARE%20Niger.pdf>.
- Carter, B. and Roelen, K. (2017) *Prevalence and impacts of child labour in agriculture*. Brighton: Institute of Development Studies. Available at https://assets.publishing.service.gov.uk/media/5ba50ae140f0b6053af73b71/95_96_child_labour_in_agri_revised_20.10.17.pdf
Available at https://assets.publishing.service.gov.uk/media/5ba50ae140f0b6053af73b71/95_96_child_labour_in_agri_revised_20.10.17.pdf.
- CDKN (Climate and Development Knowledge Network) (2021) Dupar, M., McNamara, L. and Carter, S. with numerous contributors. *Accelerating adaptation action in Africa: Insights from African experts*. Cape Town: CDKN. Available at <https://cdkn.org/resource/working-paper-accelerating-adaptation-action-in-africa-insights-from-african-experts/>.
- Cervigni, R. and Morris, M. (eds.) (2016) *Confronting drought in Africa's drylands: Opportunities for enhancing resilience. Africa Development Forum series*. Washington, D.C.: World Bank.
- Chebbi, A. (2020) 'Jobs and food security are top priorities of young people in Africa', *Africa Renewal*, 12 August 2020. Available at <https://www.un.org/africarenewal/magazine/august-2020/jobs-and-food-security-are-top-priorities-young-people-africa>.
- Connor, J., Madhavan, S., Mokashi, M., Amanuel, H., Johnson, N.R., Pace, L.E. and Bartz, D., (2020). Health risks and outcomes that disproportionately affect women during the Covid-19 pandemic: A review. *Social Science & Medicine* 226: 113364.
- Crenshaw, K. (1989) 'Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics.' *University of Chicago Legal forum*, 1: 139-167.
- D'Sa, N. (2018) *Supporting rural youth to leverage decent work: Evidence from the cross-sectoral Youth in Action program*. Toronto, Canada: Save the Children.
- Dancer, H. and Hossain, N. (2018) *Social difference and women's empowerment in the context of the commercialisation of African agriculture*. Working Paper 8. Agricultural Policy Research in Africa. Brighton: Institute of Development Studies.
- Decent Jobs for Youth (2017) *Boosting Decent Employment for Africa's Youth*. Available at <https://www.decentjobsforyouth.org/commitment/258>.
- Dekker, M. and Hollander, S.,(2017). 'Boosting youth employment in Africa: what works and why?'. Synthesis report. The Hague: Include.
- Deotti, L. and Estruch, E. (2016) *Addressing rural youth migration at its root causes: A conceptual framework*, Knowledge materials. Rome: FAO.
- Dews, F. (2019) 'Charts of the Week: Africa's changing demographics', *Brookings Now*, 18 January 2019. Available at <https://www.brookings.edu/blog/brookings-now/2019/01/18/charts-of-the-week-africas-changing-demographics/>.
- Diwakar, V. and Shepherd, A. (2018) *Sustaining escapes from poverty*. ODI Working Paper 539. London: ODI.
- Diwakar, V., Lovell, E., Opitz-Stapleton, S., Shepherd, A. and Twigg, J. (2019) *Child poverty, disasters and climate change: investigating relationships and implications over the life course of children*. London: ODI.
- Diwakar, V., Solomon, H. and Shepherd, A. (2020) *Good practices and strategies for poverty reduction in conflict-affected contexts of sub-Saharan Africa*. Bonn: GIZ. Available at <http://www.chronicpoverty.org/resources/2020/11/6/publication-manual-good-practices-and-strategies-to-reduce-poverty-in-conflict-affected-contexts-in-sub-saharan-africa>.
- Dosio, A. (2017) 'Projection of temperature and heat waves for Africa with an ensemble of CORDEX Regional Climate Models', *Climate Dynamics* 49: 493-519. doi:10.1007/s00382-016-3355-5.
- Doss, C., Heckert, J., Myers, E., Pereira, A. and Quisumbing, A. (2018) *Gender, Rural Youth, and Structural Transformation*. Background paper. Rural Development Report 2019. Rome: IFAD.

- Doss, C. (2015) 'Debunking the myth of female labor in African agriculture', CGIAR Research Program on Policies, Institutions, and Markets (PIM) EnGenderingData blog, 25 June 2015. Available at <https://pim.cgiar.org/2015/06/25/debunking-the-myth-of-female-labor-in-african-agriculture/>.
- DRYDEV (2019). *Young people serving their community*. Capitalisation des activités du programme. Nairobi: ICRAF. Available at <https://wash-alliance.org/wp-content/uploads/sites/50/2019/03/Jeunes-au-services-jeunes.pdf>.
- Dugbahaz, J. (2012) *Gender, livelihoods and migration in Africa*. UK: Xlibris Corporation.
- Dupar, M. (2019). *IPCC's Special Report on Climate Change and Land: What's in it for Africa?* Cape Town: Climate and Development Knowledge Network, Overseas Development Institute and SouthSouthNorth.
- Dzhugudzha, P.L. (2020) *An investigation of the integration of environmental and sustainability content into the National Certificate Vocational (NCV) Primary Agriculture Level 3-4 curriculum in the South African TVET system*. Doctoral dissertation, University of Witwatersrand, Johannesburg.
- EAC (East African Community) (2013) *EAC Youth Policy*. Available at <http://meac.go.ke/wp-content/uploads/2017/03/EAC-Youth-Policy.pdf>.
- ECOWAS (Economic Community of West African States) (2019) *Stratégie d'appui à l'employabilité des jeunes dans le secteur agro-sylvo-pastoral et halieutique dans une perspective de lutte contre l'exode rural et contre l'émigration incontrôlée dans l'espace CEDEAO*. Abuja: ECOWAS. Available at <http://araa.org/sites/default/files/events/pdf/Stratégie%20employabilité%20des%20jeunes%20dans%20le%20secteur%20ASPH.pdf>.
- Elder, S., de Haas, H., Principi, M. and Schewel, K. (2015) *Youth and rural development: Evidence from 25 school-to-work transition surveys*. Geneva: ILO.
- Elias, M., Mudege, N., Lopez, D.E., Najjar, D., Kandiwa, V., Luis, J., Yila, J., Tegbaru, A., Ibrahim, G., Badstube, L., Njuguna-Mungai, E. and Bentaibi, A. (2018) 'Gendered aspirations and occupations among rural youth, in agriculture and beyond: A cross-regional perspective', *Journal of Gender, Agriculture and Food Security* 3(1): 82-107.
- Ericksen, P. and Dupar, M. (2021) *What does pastoralism have to do with climate change?* London: Climate Home News. Available at <https://www.climatechangenews.com/2021/07/19/pastoralism-climate-change/>.
- Falk, D. and Bessonova, E. (2018). 'Leaving women behind: gender in agriculture in sub-saharan Africa', *SIANI Blog*, 21 June 2018. Available at <https://www.siani.se/blog/leaving-women-behind-gender-in-agriculture-in-sub-saharan-africa/>.
- FAO (Food and Agriculture Organization) (2012) *Exploring opportunities and constraints for young agro entrepreneurs in Africa*. Accra: FAO Available at <http://www.fao.org/3/av095e/av095e.pdf>.
- FAO (2014) *Youth and Livestock in Africa*. Accra: FAO. Available at <http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1260522/>.
- FAO (2015) *Understanding Decent Rural Employment*. Accra: FAO. Available at <http://www.fao.org/3/bc270e/BC270E.pdf>.
- FAO (2016a) *Addressing Rural Youth Distress Migration*. Accra: FAO. Available at <http://www.fao.org/3/c0136e/c0136e.pdf>.
- FAO (2016b) *Youth: Present and Future of Agriculture*. Accra: FAO. Available at <http://www.fao.org/3/c0390e/c0390e.pdf>.
- FAO (2017) *Decent Rural Employment*. Accra: FAO. Available at <http://www.fao.org/rural-employment/background/en/>.
- FAO (2018a) *Pastoralism in Africa's drylands*. Rome: FAO. 52 pp. Licence: CC BY-NC-SA 3.0 IGO.
- FAO (2018b) *Promoting youth employment in the Agricultural sector in East Africa*. [video] FAO-EAC. Available at <http://www.fao.org/family-farming/detail/en/c/1189059/>.
- FAO (2019) *The future of livestock in Ethiopia. Opportunities and challenges in the face of uncertainty*. Rome. 48 pp. Licence: CC BY-NC-SA 3.0 IGO
- FAO (2020) *Rural Youth and the COVID-19 Pandemic*. Rome: FAO. Available at <http://www.fao.org/3/ca9531en/ca9531en.pdf>.
- Farm Radio International (2013) *An introduction to agricultural value chains*. Ottawa: Farm Radio International. Available at <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/52685/IDL-52685.pdf>.

- Fawole, O.I., Bamiselu, O.F., Adewuyi, P.A. and Nguku, P.M. (2016) 'Gender dimensions to the Ebola outbreak in Nigeria', *Annals of African medicine* 15(1): 7. FDRE (Federal Democratic Republic of Ethiopia) (2004) *National Youth Policy*. Addis Ababa: Ministry of Youth, Sports Culture. Available at https://www.youthpolicy.org/national/Ethiopia_2004_National_Youth_Policy.pdf.
- FDRE (2009) *National Employment Policy and Strategy of Ethiopia, 2009*. Addis Ababa: Abbasyinalaw. Available at <https://www.abysynialaw.com/online-resources/policies-and-strategies/national-employment-policy-and-strategy-of-ethiopia-english/download>.
- FDRE (2010) *Ethiopia's Agricultural Sector Policy and Investment Framework*. Addis Ababa: Ministry of Agriculture and Rural Development. Available at <http://extwprlegs1.fao.org/docs/pdf/eth149550.pdf>.
- FDRE (2011) *Ethiopia's Climate Resilient Green Economy Strategy*. Addis Ababa: FDRE. Available at <https://www.greengrowthknowledge.org/national-documents/ethiopia%E2%80%99s-climate-resilient-green-economy-green-economy-strategy>.
- FDRE (2015) *Education Sector Development Programme V (ESDP V). 2008-2012 E.C, 2015/16-2019/20 G.C. Programme Action Plan*. Addis Abba: Federal Ministry of Education. Available at https://www.globalpartnership.org/sites/default/files/2016-06-ethiopia-education-sector-plan-vi_0.pdf.
- FDRE (2019a) *Initiatives: A Homegrown Economic Reform Agenda: A Pathway to Prosperity*. Addis Abba: FDRE. Available at <https://www.pmo.gov.et/initiatives/>.
- FDRE (2019b) *Plan of Action for Job Creation 2020-2025*. Addis Abba: FDRE. Available at <https://jobscommission.gov.et/wp-content/uploads/2019/11/National-Plan-for-Job-Creation-Brief.pdf>.
- FDRE (2019c) *Ethiopia's National Adaptation Plan*. Addis Ababa: FDRE. Available at <https://www4.unfccc.int/sites/NAPC/Documents/Parties/NAP-ETH%20FINAL%20VERSION%20%20Mar%202019.pdf>.
- FDRE (2019d) *Livestock Master Plan*. Addis Ababa: FDRE.
- FDRE (2020) *Ethiopian technical and vocational training policy and strategy*. Addis Ababa: Ministry of Science and Higher Education. Available at <https://www.moshe.gov.et/files/1611127107873.pdf>.
- FDRE (2021) *Updated nationally determined contribution*. Addis Ababa: Federal Democratic Republic of Ethiopia. Available at https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ethiopia%20First/Ethiopia%27s%20updated%20NDC%20JULY%202021%20Submission_.pdf.
- FGoS (Federal Government of Somalia) (2015). *Somalia's Intended Nationally Determined Contributions*. Mogadishu: FGoS. Available at <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Somalia%20First/Somalia%27s%20INDCs.pdf>.
- FGoS (2017) *Education Sector Strategic Plan 2018-2020*. Dusmareb: Ministry of Education, Culture and Higher Education (MOECHE). Available at https://www.globalpartnership.org/sites/default/files/federal_government_of_somalia_essp.pdf.
- FGoS (2020) *Somalia National Development Plan 2020 – 2024*. Mogadishu: Ministry of Planning, Investment and Economic Development. Available at <https://mop.gov.so/wp-content/uploads/2019/12/NDP-9-2020-2024.pdf>.
- Filmer, D. and Fox, L. (2014) *Youth Employment in Sub-Saharan Africa*. Washington, D.C.: The World Bank.
- Fitzpatrick, R.G.J., Parker, D.J., Marsham, J.H., et al. (2020) 'How a typical West African day in the future-climate compares with current-climate conditions in a convection-permitting and parameterised convection climate model', *Climatic Change* 163: 267-296.
- Fox, L. (2019) *Economic Participation of Rural Youth: What Matters?* Background paper, Rural Development Report 2019. Rome: IFAD.
- Fox, L., Mader, P., Sumberg, J., Flynn, J. and Oosterom, M. (2020) 'Africa's 'youth employment' crisis is actually a 'missing jobs' crisis'. Brooke Shearer Series No. 9. Washington D.C.: Brookings.
- FRoN (Federal Republic of Nigeria) (2013) *National Policy on Education, 6th Edition*. Lagos: NERDC. Available at <https://educatetolead.files.wordpress.com/2016/02/national-education-policy-2013.pdf>.
- FRoN (2016) *The Agriculture promotion policy 2016 – 2020*. Abuja: Federal ministry of Agriculture and Rural Development. Available at https://nssp.ifpri.info/files/2017/12/2016-Nigeria-Agric-Sector-Policy-Roadmap_June-15-2016_Final.pdf.
- FRoN (2017a) *Economic Recovery and Growth Plan 2017-2020*. Abuja: Ministry of Budget and National Planning. Available at https://nigeriaembassygermany.org/mosaic/_M_userfiles/Economic-Recovery-Growth-Plan-2017-2020.pdf.
- FRoN (2017b) *National employment policy*. Geneva: ILO. Available at <https://drive.google.com/file/d/1j2uLX0Pq-iVxKHZTXli6dvYnPXcJPB3h/view>.

- FRoN (2019) *National Youth Policy: Enhancing Youth Development and Participation in the context of Sustainable Development, 2019 Edition*. Abuja: Federal Ministry of Youth and Sports Development. Available at <https://www.prb.org/wp-content/uploads/2020/06/Nigeria-National-Youth-Policy-2019-2023.pdf>.
- FroN (2021) *Nigeria's Intended Nationally Determined Contribution*. Bonn: UNFCCC. Available at https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf.
- FRoS (2017) *The National Youth Policy of The Federal Government of Somalia, 2017-2021*. Mogadishu: Federal Government of Somalia. Available at http://www.africanchildforum.org/cfr/policy%20per%20country/2018%20Update/Somalia/somalia_nationalyouthpolicy_en.pdf.
- FRoS (2021) *The Federal Government of Somalia: Updated Nationally Determined Contribution*. Mogadishu: Federal Republic of Somalia. Available at <https://www4.unfccc.int/sites/ndcstaging/Pages/All.aspx>.
- Fustos, K. (2010) 'Despite Wide-Ranging Benefits, Girls' Education and Empowerment Overlooked in Developing Countries', *Population Reference Bureau* <http://www.prb.org/Publications/Articles/2010/girlseducation.aspx>.
- Future Terrains (2014) *What is Landscape Restoration?* Available at <https://futureterrains.org/what-is-landscape-restoration/>.
- G7 (2019) *G7 Framework on decent job creation for rural youth in the Sahel*. Paris: G7 food security working group. Available at <https://www.elysee.fr/admin/upload/default/0001/05/bf1236d2300e713e77063198c0197567ab4e0c3a.pdf>.
- Gardiner, D. and Goedhuys, M. (2020) *Youth Aspirations and the Future of Work: A Review of the Literature and Evidence*. ILO Working Paper 8. Geneva: ILO.
- GCA (Global Center on Adaptation) (2021) *The Global Youth Call to Action on Adaptation*. Rotterdam, the Netherlands: Global Center on Adaptation. Available at <https://gca.org/wp-content/uploads/2021/01/GCA-Global-Youth-Call-to-Action1-2.pdf>.
- Gebremariam, E. (2017) 'The politics of youth employment and policy processes in Ethiopia', *IDS Bulletin* 48(3): 33-50.
- Gebremichael, M., Ayele, B., Andargatchew, A. and Dupar, M. (2020) *Rural Ethiopian women diversify livelihoods and boost entire communities' climate resilience*. Cape Town: CDKN.
- GEC (Girls' Education Challenge) (n.d.) *Country profiles for Ethiopia, Kenya and Somalia*. Available at <https://girlseducationchallenge.org/countries/country/ethiopia>, <https://girlseducationchallenge.org/countries/country/kenya>, <https://girlseducationchallenge.org/countries/country/somalia>.
- GFRAS (Global Forum for Rural Advisory Services) (2021) *The Role of RAS for inclusive agripreneurship: Background and Rationale*. Available at <https://www.g-fras.org/en/agripreneurship.html#:~:text=Agripreneurship%20refers%20to%20entrepreneurship%20in%20agriculture.&text=But%20entrepreneurship%2C%20as%20opposed%20to,to%20adapt%20to%20changing%20environments>.
- GGWI (Great Green Wall Initiative) (n.d.) *The Great Green Wall*. Available at www.greatgreenwall.org.
- Gichiru, P., Dupar, M. and East African Grain Council (2021) 'Climate change adaptation in east African farming, testimonials from women champions', *CDKN Feature*, 12 March 2021. Available at <https://cdkn.org/2021/03/feature-climate-change-adaptation-in-east-african-farming-testimonials-from-women-champions>.
- Giuliani, A., Mengel, S., Paisley, C., Perkins, N., Flink, I., Oliveros, O. and Wongtschowski, M. (2017) 'Realities, perceptions, challenges and aspirations of rural youth in dryland agriculture in the Midelt Province, Morocco', *Sustainability* 9(6): 871.
- GIZ (2020) *What works in rural youth employment promotion? Good practices and lessons from GIZ Programmes on rural youth employment*. Bonn and Eschborn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Available at https://www.giz.de/en/downloads/giz2020_eng_employment_promotion.pdf.
- GLFA (Global Landscapes Forum Africa) (2019) *Restoring Africa's Landscapes: Uniting Action from Above and Below*, 29-30 October, 2019, Accra, Ghana.
- GLFA (2021) *Agroforestry: An opportunity for youth and drylands*. Available at <https://www.globallandscapesforum.org/>.

- Gokool-Ramdoos, S. and Rumjaun, A. (2017), *Journal of Learning for Development* 4(1): 72-89.
- Gony, R.H., Gai, T.J. and Humphrey, A. (2021) *The impacts of Covid-19 on farmers and herders in South Sudan: one cannot farm alone*. London: SPARC.
- Gregory, D., Johnston, R., Pratt, G., Watts, M. and Whatmore, S. (eds.) (2011) *The dictionary of human geography*. London: John Wiley and Sons.
- Guglielmi, S., Jones, N., Nicolai, S., Perezniato, P., Plank, G., Vu, N., Sanchez-Tapia, S. and Mackinto, A. (2021) *Reimagining Girls' Education Solutions to Keep Girls Learning in Emergencies*. New York: UNICEF.
- Gutiérrez, J.M., Jones, R.G., Narisma, G.T., Alves, L.M., Amjad, M., Gorodetskaya, I.V., Grose, M., Klutse, N.A.B., Krakovska, S., Li, J., Martínez-Castro, D., Mearns, L.O., Mernild, S.H., Ngo-Duc, T., van den Hurk B. and Yoon, J.H. (2021) Atlas. In *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., Zhai, P., Pirani, A., Connors, S.L., Péan, C., Berger, S., Caud, N., Chen, Y., Goldfarb, L., Gomis, M.I., Huang, M., Leitzell, K., Lonnoy, E., Matthews, J.B.R., Maycock, T.K., Waterfield, T., Yelekçi, O., Yu, R. and Zhou, B. (eds.)]. Available at <http://interactive-atlas.ipcc.ch/>.
- Hawkins, R. (2020) *Agricultural Tertiary and Vocational Education and Training (ATVET) in Africa: Overview and integration within broader agricultural knowledge and innovation systems*. Montpellier: ICRA
- Holmes, R. and Lwanga-Ntale, C. (2012) *Social Protection in Africa: A Review of Social Protection Issues in Research: Policy and Programming Trends and Key Governance Issues in Social Protection*. Nairobi: Partnership for African Social Governance Research.
- IASC (Inter-Agency Standing Committee) (2020) *With us & for us: Working with and for Young People in Humanitarian and Protracted Crises*, New York: UNICEF and NRC for the Compact for Young People in Humanitarian Action. Available at <https://interagencystandingcommittee.org/events/iasc-guidelines-working-and-young-people-humanitarian-and-protracted-crises>.
- ICRAF (World Agroforestry Centre) (2018). *The Drylands Development Programme (DryDev): 2017 Narrative Report, prepared for the Ministry of Foreign Affairs*. Nairobi: ICRAF. Available at <https://www.worldagroforestry.org/sites/agroforestry/files/2020-02/DRYDEV%20Narrative%20Report%20for%202017.pdf>.
- IFAD (International Fund for Agricultural Development) (2019) *Creating opportunities for rural youth, 2019 Rural Development Report*. Rome: IFAD. Available at https://www.ifad.org/documents/38714170/41190221/RDR2019_Overview_e_W.pdf/699560f2-d02e-16b8-4281-596d4c9be25a.
- IFAD (2020) *South Sudan 2000002869: SSLRP Project Design Report March 2021*. Washington D.C.: IFAD. Available at <https://www.ifad.org/en/-/south-sudan-2000002869-sslrp-project-design-report-march-2021>.
- ILC (International Land Coalition). (2021). International Land Coalition: Africa. Available at <https://africa.landcoalition.org/en/>.
- ILO (International Labour Organization)(2015). Decent work for persons with disabilities: promoting rights in the global development agenda. Available at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_430935.pdf.
- ILO (2016a) Decent Work. Available at <https://www.ilo.org/global/topics/decent-work/lang--en/index.htm>.
- ILO (2016b) *What is a green job?* Available at https://www.ilo.org/global/topics/green-jobs/news/WCMS_220248/lang--en/index.htm.
- ILO (2017a) *World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals*. Geneva: ILO. Available at <https://www.social-protection.org/gimi/gess/RessourcePDF.action?id=54887>.
- ILO (2017b) *Regional brief for Africa: 2017 Global Estimates of Modern Slavery and Child Labour*. Geneva: Alliance 8.7. Available at https://www.ilo.org/wcmsp5/groups/public/@ed_norm/@ipecc/documents/publication/wcms_597869.pdf.
- ILO (2019a) *Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity*. Geneva: ILO.
- ILO (2019) *State of Skills: Mali. 2019-2029*. Geneva: Employment Policy Department. Available at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/genericdocument/wcms_743049.pdf.

- ILO (2021a) *Impact of COVID-19 on TVET in West Africa*. Geneva: ILO. Available at https://www.ilo.org/global/docs/WCMS_750247/lang-en/index.htm.
- ILRI (International Livestock Research Institute) (n.d.) *Programme for climate-smart livestock systems*. Available at <https://www.ilri.org/programme-for-climate-smart-livestock-systems>.
- ILRI, FAO, IUCN (International Union for Conservation of Nature), WWF (World Wide Fund for Nature), UNEP (United Nations Environment Programme) and ILC (2021) *Rangelands Atlas*. Nairobi, Kenya: ILRI. Available at <https://www.rangelandsdata.org/atlas/>.
- IOM, ICMPD (International Centre for Migration Policy Development) and ECOWAS (2019). *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region*. Addis Ababa: IOM.
- IPCC (Intergovernmental Panel on Climate Change) (2010) *Guidance Note for Lead Authors of the IPCC Fifth Assessment Report on Consistent Treatment of Uncertainties*. Available at https://www.ipcc.ch/site/assets/uploads/2017/08/AR5_Uncertainty_Guidance_Note.pdf.
- IPCC (2014) *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R. and White L.L. (eds.)]. Cambridge, U.K. and New York, N.Y.: Cambridge University Press.
- IPCC (2019) *Climate Change and Land: An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*. [Shukla, P.R., Skea, J., Calvo Buendia, E., Masson-Delmotte, V., Pörtner, H.-O., Roberts, D.C., Zhai, P., Slade, R., Connors, S., van Diemen, R., Ferrat, M., Haughey, E., Luz, S., Neogi, S., Pathak, M., Petzold, J., Portugal Pereira, J., Vyas, P., Huntley, E., Kissick, K., Belkacemi, M., Malley, J. (eds.)].
- IPCC (2021) *Climate Change 2021: The Physical Science Basis*. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., Zhai, P., Pirani, A., Connors, S. L., Péan, C., Berger, S., Caud, N., Chen, Y., Goldfarb, L., Gomis, M. I., Huang, M., Leitzell, K., Lonnoy, E., Matthews, J.B.R., Maycock, T.K., Waterfield, T., Yelekçi, O., Yu, R. and Zhou, B. (eds.)]. Cambridge University Press.
- IWGIA (International Work Group for Indigenous Affairs) (n.d.) *Pastoralist Development Network of Kenya*. Nairobi: IWGIA. Available at <https://www.iwgia.org/en/iwgia-partners/40-pastoralist-development-network-of-kenya>.
- Izzi, V. (2020) *Promoting Decent Employment for African Youth as a Peacebuilding Strategy*, Global Initiative on Decent Work for Youth. Leiden: INCLUDE Knowledge Platform.
- Jobbins, G., Conway, D., Frankhauser, S., Gueye, B., Liwenga, E., Ludi, E., Mitchell, T., Mountfort, H., Suleri, A. (2016) *Resilience, equity and growth in semi-arid economies: a research agenda*. PRISE Working Paper. London: PRISE.
- Jobbins, G., Ludi, E., Calderone, M., Sisodia, R., Sarwar, M.B. (2018) *'Leaving no one behind' through enabling climate-resilient economic development in dryland regions*. PRISE Briefing Paper. London: PRISE.
- Jones, N. and Presler-Marshall, E. (2019) *Achieving social protection for all adolescents: how can a gender norms lens support more effective programming?* London: ODI and GAGE.
- Jones, N., Presler-Marshall, E. and Kahane, M. (2019) *Gender and age-responsive social protection: The potential of cash transfers to advance adolescent rights and capabilities*. Policy Brief Number 12. New York: United Nations Entity for Gender Equality and the Empowerment of Women (UN Women).
- Jones, N., Guglielmi, G., Małachowska, A., Abu Hamad, B., Yadete, W. with Abu Hamad, S., Abu Hamra, E., Alam, F., Alheiwidi, S., Alabbadi, T., Al-Redaisy, N., Amaireh, W., Amdeselassie, T., Banioweda, K., Diab, R., Gebeyehu, Y., Gezahegne, K., Iyasu, A., Qandeel, A., Sultan, M., Tilahun, K. and Workneh, F. (2021) *'Some got married, others don't want to attend school as they are involved in income-generation': Adolescent experiences following covid-19 lockdowns in low- and middle-income countries*. Report. London: Gender and Adolescence: Global Evidence.
- Kameri-Mbote, P., (2013). Preface: Securing the land and resource rights of pastoral peoples in East Africa. *Nomadic Peoples* 17:1-4.
- KLA (Kenya Land Alliance). (2021). Kenya Land Alliance. Available at <https://www.kenyalandalliance.or.ke/>.
- Krätli, S. (2009) *Mobile pastoralists and education: Strategic options (Vol. 1)*. London: IIED (International Institute for Environment and Development).

- Lagakos, D. (2020) 'Urban-Rural Gaps in the Developing World: Does Internal Migration Offer Opportunities?', *Journal of Economic Perspectives* 34(3): 174-192. Available at <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.34.3.174>.
- Lanoi, C. (2021) *Global Landscapes Forum Africa 2021: steward profile*. Available at <https://stewards.globallandscapesforum.org/author/charity/>.
- LaRue, K., Daum, T., Mausch, K. and Harris, D. (2021) 'Who Wants to Farm? Answers Depend on How You Ask: A Case Study on Youth Aspirations in Kenya.' *The European Journal of Development Research* 33: 885-909.
- Lawal, A. (2019) 'My takeaways from working on the Nigeria National Livestock transformation plan and implementation framework, *ITAD blog*, 16th September 2019. Available at <https://www.itad.com/article/my-takeaways-from-working-on-the-nigeria-national-livestock-transformation-plan-and-implementation-framework/>.
- Leavy, J. and Smith, S. (2010) *Future Farmers: Youth Aspirations, Expectations and Life Choices*. FAC Discussion Paper 013. Brighton: Future Agricultures Consortium.
- Levine, S., Humphrey, A., Abdilatif, M., Rashid, S., Said, A., Adan, A. and Warsame, H. (2021) *One more of life's difficulties: the impacts of Covid-19 on livelihoods in Somalia*. London: SPARC.
- Levitt, P. (2008) 'Taking culture seriously: Unexplored aspects of the Migration-Development Nexus' in *Migration and development: Future directions for research and policy*. Migration and Development Conference, 28 Feb.-1 Mar. 2008, New York City, N.Y.
- Losch, B. (2016) *Structural transformation to boost youth labour demand in sub-Saharan Africa: The role of agriculture, rural areas and territorial development*. Working Paper No. 204. Geneva: ILO Employment Policy Department.
- Lovell, E. (2021) *Gender Equality, Social Inclusion and Resilience in Malawi*. London: BRACC (Building Resilience and Adaptation to Climate Change) and ODI.
- Lucas, R.E.B. (2015) *Internal migration in developing economies: An overview*. KNOMAD Working Paper No. 6. Washington D.C.: Global Knowledge Partnership on Migration and Development.
- Lund, C., (2011). Property and citizenship: conceptually connecting land rights and belonging in Africa. *Africa Spectrum*, 46(3): 71-75.
- Mabiso, A. and Benfica, R. (2019) The narrative on rural youth and economic opportunities in Africa: facts, myths and gaps. International Fund for Agricultural Development (IFAD). Available at https://www.ifad.org/documents/38714170/41187395/21_Mabiso+and+Benfica_2019+RDR+BACKGROUND+PAPER.pdf/f741a15a-49c1-93ae-5155-5b0ef7bdf733?t=1579098865000.
- Maina N. and Asencios, R. (2018) *Learning narrative: Gender mainstreaming in Youth livelihood programs*. Toronto: Save the Children, Youth in Action. Available at https://resourcecentre.savethechildren.net/node/13470/pdf/yia_gender_mainstreaming_learning_narrative_april_2018.pdf.
- Mastercard Foundation (2015) *Youth at work: building economic opportunities for young people in Africa*. Toronto: Mastercard Foundation. Available at <https://mastercardfdn.org/research/youth-at-work/>.
- Mastercard Foundation (2017) *Invisible lives: understanding youth livelihoods in Ghana and Uganda*. Toronto: Mastercard Foundation.
- Mausch, K. and Harris, D. (2020) 'Why measuring youths' aspirations is key to sustainable and inclusive rural development', *ICRAF (World Agroforestry Centre)*, 23 March 2020.
- Mauto, T. (2020). 'Why securing youth land rights matter for agriculture-led growth in Africa', *Field Focus Blog*, 5 November 2020. Available at <https://www.landesa.org/why-securing-youth-land-rights-matter-for-agriculture-led-growth-in-africa/>.
- McGrath, S., Ramsarup, P., Zeelen, J., Wedekind, V., Allais, S., Heila Lotz-Sisitka, H., Monk, D., Openjuru, G. and Russon, J. (2019) 'Vocational education and training for African development: a literature review', *Journal of Vocational Education and Training* 4: 465-487.
- Mendola, M. (2006) 'Migration and technological change in rural households: Complements or substitutes?', *Journal of Development Economics* 85(1): 150-175.
- Moorcroft, S. (2018) *Learning Narrative: Youth self-employment capabilities*. Toronto: Save the Children, Youth in Action. Available at <https://resourcecentre.savethechildren.net/library/learning-narrative-youth-self-employment-capabilities>.

- MoPIED (Ministry of Planning, Investment and Economic Development) (2019) *Somalia National Development Plan 2020-2024*. Mogadishu: Ministry of Planning, Investment and Economic Development. Available at <https://mop.gov.so/wp-content/uploads/2019/12/NDP-9-2020-2024.pdf>.
- Mukaya, J. (2018) 'Community Environment and Education of Girls: The Case of Communities in Marsabit County, Kenya', *Universal Journal of Educational Research* 6(3): 430-439. doi: 10.13189/ujer.2018.06031.
- Mumba, M. (2021) *Adaptation Voices – Dr Musonda Mumba, Rome Centre for Sustainable Development*, [film]. 19 April 2021. Available at https://cdkn.org/resource/film-adaptation-voices-dr-musonda-mumba-rome-centre-for-sustainable-development/?loclang=en_gb.
- Mungai, C., Muchaba, T., Szilagyi, L., Radeny, M.A., Atakos, V. and Ntiokam, D. (2018) *Youth Engagement in Climate-Smart Agriculture in Africa: Opportunities and Challenges*. Wageningen: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
- Munthali A, Kok A. (2016) *Yes I Do – Gaining insight into the Magnitude of and Factors Influencing Child Marriage and Teenage Pregnancy in Malawi: A Baseline Report*. Amsterdam: Royal Tropical Institute.
- Nadin, R., Watson, C. and Opitz-Stapleton, S. (2017) *Climate change, migration and displacement: the need for a risk-informed and coherent approach*. London: ODI.
- NISER (Nigerian Institute of Social and Economic Research) (2013) *Analysis and design of safety nets and capacity empowerment program for unemployed Youth in Nigeria*. Occasion Paper No. 2. Oyo: NISER.
- Ngene, G., Pinet, M. and Maclay, C. with Phiona, S. and Tant, E. (2021) *Strengthening youth livelihoods and enterprise innovation in Africa's digital era*. London: ODI.
- Njuki, J. (2017) 'Opinion: Addressing the double burden of work for rural women', *Global Views*, 24 March 2017. Available at <https://www.devex.com/news/opinion-addressing-the-double-burden-of-work-for-rural-women-89901>.
- Ochieng, S.A. and Waiswa, D.C. (2019) 'Pastoral education: The missing link in Uganda education system'. *Educational Research and Reviews* 14(7): 240-253.
- Osabohien, R. (2018) 'Social protection programmes, agricultural production and youth employment nexus in Nigeria: A qualitative discus from LSMS-ISA', *International Journal of Business* 5(2): 45-55.
- Osabohien, R. and Osuagwu, E. (2017) *Social protection policies and agricultural output in Nigeria: Empirical investigation using household survey data*. Presented at the 4th Covenant University International Conference on E-Governance in Nigeria (CUCEN), 7-9 May 2017, Covenant University, Ota, Nigeria.
- Osabohien, R., Osuma, G., Ndigwe, C. and Ozordi, E. (2018) 'Social protection and agricultural production in ECOWAS: The youth unemployment question', *Journal of Social Economics Research* 5(2): 51-62.
- Osima, S., Indasi, V., Zaroug, M., Endris, H., Gudoshava, M., Misiani, H., Nimusiima, A., Anyah, R., Otieno, G., Ogwang, B., Jain, S., Kondowe, A., Mwangi, E., Lennard, C., Nikulin, G. and Dosio, A. (2018) 'Projected Climate over the Greater Horn of Africa under 1.5 °C and 2°C global warming', *Environmental Research Letters*. ISSN 1748-9326, 13, p. 065004, JRC111076. Available at <https://iopscience.iop.org/article/10.1088/1748-9326/aaba1b#erlaaba1bs5>.
- Oxfam (2011) *Beyond the mainstream: education for nomadic and pastoralist girl and boys*. Oxford: Oxfam GB. Available at <https://oxfamilibrary.openrepository.com/bitstream/handle/10546/120589/pi-beyond-mainstream-education-nomadic-pastoralist-191205-en.pdf?sequence=1&isAllowed=y>.
- Palacios-Lopez, A., Christiaensen, L. and Kilic, T. (2017) How much of the labor in African agriculture is provided by women? *Food Policy*, 67 (52-63).
- Pant, A.R. (2016) 'Beyond the Classroom: From Education for Rural Transformation to Learning Within Rural Transformation?', *Journal of Education and Research* 5: 9-30.
- Peters, K., Dupar, M., Opitz-Stapleton, S., Lovell, E., Budimir, M., Brown, S. and Cao, Y. (2020) *Climate Change, Conflict and Fragility: An Evidence Review and Recommendations for Research and Action*. London: ODI.
- Plan International (2012) *Because I am a girl: African report 2012. Progress and obstacles to girls' education in Africa*. Nairobi: Plan International Kenya. Available at <https://resourcecentre.savethechildren.net/node/6923/pdf/6923.pdf?embed=1>.

- Presler-Marshall, E., Dutton, R., Jones, N., Baird, S., Woldehanna, T., Yadete, W. with Amdeselassie, T., Emirie, G., Gebreyehu, Y., Gezahegne, K., Iyasu, A. and Workneh, F. (August 2021) *'We suffer to survive': Exploring adolescent opportunities and challenges in securing decent work and the foundations for economic empowerment in Ethiopia*. London: GAGE.
- PRISE (Pathways to Resilience in Semi-Arid Economies) (n.d.) *The PRISE vision: Pathways to impact, routes to resilience*. London: PRISE. Available at <https://www.webarchive.org.uk/wayback/archive/20180926114333/http://prise.odi.org/the-prise-vision-pathways-to-impact-routes-to-resilience/>.
- Psaki, S. (2016) 'Addressing child marriage and adolescent pregnancy as barriers to gender parity and equality in education', *Prospects* 46(1): 109-129.
- Republic of Sudan (2011) *National Agriculture and Livestock Extension Policy (NALEP)*. Juba: Agriculture and Livestock Extension Task Force.
- Republic of Sudan (2015) *The Five-Year Programme for Economic Reform 2015-2019*. Volume One. The Ministry of Finance and National Economy. Khartoum: The Ministry of Finance and National Economy. Available at <https://www.cabri-sbo.org/en/documents/the-five-year-programme-for-economic-reform-2015-2019>.
- Republic of Sudan (2016) *National Adaptation Plan*. Khartoum: Ministry of Environment, Natural Resources and Physical Development. Available at <https://www4.unfccc.int/sites/NAPC/Documents%20NAP/National%20Reports/Sudan%20NAP.pdf>.
- Republic of Sudan (2019) *General Education Sector Strategic Plan 2018/19-2022/23*. Federal Ministry of Education. Khartoum: Federal Ministry of Education. Available at <https://www.globalpartnership.org/sites/default/files/document/file/2019-01-sudan-general-education-sector-strategic-plan-2018-2023.pdf>.
- Republic of Sudan (2021) *Updated First Nationally Determined Contribution*. Khartoum: High Council for Environment and Natural Resources. Available at <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Sudan%20First/Sudan%20Updated%20First%20NDC-Interim%20Submission.pdf>.
- Republic of South Sudan (2011) *South Sudan Development Plan 2011-2013*. Juba: Government of the Republic of South Sudan. Available at http://mofep-grss.org/wp-content/uploads/2013/08/RSS_SSDP.pdf.
- Republic of South Sudan (2015) *Comprehensive Agricultural Development Master Plan*. Juba: Ministry of Agriculture, Forestry, Cooperatives and Rural Development. Available at <https://openjicareport.jica.go.jp/pdf/12233607.pdf>.
- Republic of South Sudan (2017) *The General Education Strategic Plan 2017-2022*. Juba: Ministry of General Education and Instruction. Available at https://www.globalpartnership.org/sites/default/files/general_education_strategic_plan_south_sudan_2017-2022.pdf.
- Republic of South Sudan (2021) *Intended Nationally Determined Contribution*. Juba: Republic of South Sudan.
- République du Mali (2012) *Projet de document-cadre de la politique nationale de l'emploi*. Bamako: Ministère de l'emploi République du Mali et de la Formation Professionnelle. Available at https://edmsp1.ilo.org/edmsp1/groups/public/documents/6008/cdff/mtc4/~edisp/edmsp1_178204.pdf.
- République du Mali. (2013) *Politique de Développement Agricole du Mali*. Bamako: République du Mali. Available at mli145852.pdf (fao.org).
- République du Mali (2016) *Convention Cadre des Nations Unies sur les Changements Climatiques: Contribution Déterminée au Niveau National*. Bamako: Mali. Available at https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Mali%20First/Mali_revised%20NDC.pdf.
- République du Mali (2019) *Programme décennal de développement de l'éducation et de la formation professionnelle deuxième génération (PRODEC 2), 2019-2028* Bamako: Ministère De l'Éducation Nationale. Available at https://planipolis.iiep.unesco.org/sites/default/files/ressources/mali-prodec2_2019-2028.pdf.
- République du Mali (2019) *Cadre Stratégique pour la relance économique et le développement durable*. Bamako: Ministère de l'économie et des finances. Available at <http://extwprlegs1.fao.org/docs/pdf/Mli192038.pdf>.

- Resnick, D. (2019) 'Trouble Makers, Bystanders, and Pathbreakers: The Political Participation of African Youth' in Mueller, V. and Thurlow, J. (eds.) *Youth and jobs in rural Africa: Beyond stylized facts*. Oxford: Oxford University Press, p.75-105.
- Reynolds, J.F., Stafford Smith, D.M., Lambin, E.F., Turner, B.L., Mortimore, M., Batterbury, S.P.J., Downing, T.E., Dowlatabadi, H., Fernandez, R.J., Herrick, J.E., Huber-Sannwald, E., Jiang, H., Leemans, R., Lynam, T., Maestre, F.T., Ayarza, M. and Walker, B. (2007) 'Global desertification: building a science for dryland development', *Science* 316: 847-851.
- Richter, L. and Panday, S. (2007) 'Youth in Africa: participation and protection', *Africa Insight* 37(3): 291-307.
- Rietveld, A.M., van der Burg, M. and Groot, J.C. (2020) 'Bridging youth and gender studies to analyse rural young women and men's livelihood pathways in Central Uganda', *Journal of Rural Studies* 75: 152-163.
- Ripley, M. and Hartrich, S. (2020) 'Should we create decent work or make work more decent? Demystifying what decent work means for Market System Development projects', *BEAM Exchange Blogs*, 7 April 2020. Available at https://beamexchange.org/to_pdf?url=/community/blogs/2020/4/7/demystifying-what-decent-work-means-market-system-development-projects/.
- Samuels, G.M. and Ross-Sheriff, F. (2008) 'Identity, oppression, and power: Feminisms and intersectionality theory', *Sage* 23(01): 5-8.
- Sanginga, N. (2015) *Youth in Agribusiness within an African Agricultural Transformation Agenda* Background paper. Ibadan: IITA.
- Save the Children (2016) *Education Disrupted: Disaster impacts on education in the Asia Pacific region in 2015*. Singapore: Save the Children. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/education_disrupted_save_the_children_full_report.pdf.
- SNV (Netherlands Development Organization) (2021a) *The Drylands Development (DRYDEV) Project*. Available at <https://snv.org/project/drylands-development-drydev-project>.
- SNV (2021b) *Ten-year Drylands Sahel Programme to pave the way for a more resilient and sustainable Sahel*. Available at <https://snv.org/update/ten-year-drylands-sahel-programme-pave-way-more-resilient-and-sustainable-sahel>.
- Srinivasarao, C. (2021) 'Climate resilient agricultural systems: The way ahead', *Down to earth: Agriculture*, 4 February 2021. Available at <https://www.downtoearth.org.in/blog/agriculture/climate-resilient-agriculture-systems-the-way-ahead-75385>.
- Stafford Smith, M. (2008) 'The "desert syndrome" – causally-linked factors that characterise outback Australia', *The Rangeland Journal* 30(1): 3-14.
- Sumberg, J. and Okali, C. (2013) 'Young People, Agriculture, and Transformation in Rural Africa: An 'Opportunity Space' Approach'. *innovations, 2013 Global Youth Economic Opportunities Conference*, 267-277.
- Sumberg, J., Anyidoho, N.A., Chasukwa, M., Chinsinga, B., Leavy, J., Tadele, G., Whitfield, S. and Yaro, J. (2014) *Young People, Agriculture, and Employment in Rural Africa*. WIDER Working Paper 2014/080. Helsinki: UNU-WIDER. Available at <https://www.wider.unu.edu/sites/default/files/wp2014-080.pdf>.
- Tavener, K. and Crane, T.A. (2019) 'Beyond "women and youth": Applying intersectionality in agricultural research for development', *Outlook on Agriculture* 48(4): 316-325.
- Tele, A. (2017) *Exploring the perceptions of rural youth not in education, employment or training (NEET) on factors that influence their employability*. Master's thesis, University of Cape Town, Cape Town.
- Togola, I., Togola, J. and Mahmadou, D. (2010). *Skills for green jobs in Mali*. Geneva: ILO skills and Employability Department. Available at <https://www.cbd.int/financial/monterreytradetech/mali-greenjobs.pdf>.
- Tschirley, D., Reardon, T., Haggblade, S., Jayne, T., Liverpool-Tasie, S., Awokuse, T., Muyanga, M., Wangalachi, A. and Makani, A. (2017) 'Engaging the Agribusiness Sector in Inclusive Value Chain Development: Opportunities and challenges'. In *Africa Agriculture Status Report 2017: The business of smallholder agriculture in Sub-Saharan Africa*. Nairobi: Alliance for a Green Revolution in Africa (AGRA).
- Tschora, H. and Cherubini, F. (2020) 'Co-benefits and trade-offs of agroforestry for climate change mitigation and other sustainability goals in West Africa', *Global Ecology and Conservation* 22: e00919.

- Uma, K., Eboh, F.E. and Obidike, P. (2013) 'Managing Rural-Urban Migration and Brain Drain for Sustainable Economic Recovery in Nigeria: Constraints and Options', *Journal of Economics and International Business Management* 1(1): 1-7.
- UN (United Nations) (2013) *Definition of Youth*. New York: United Nations Department of Economic and Social Affairs (UNDESA). Available at <https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>.
- UN (2020) *The 17 Goals*. Available at <https://sdgs.un.org/goals>.
- UN (2021). Nestlé's Global Youth Initiative. Available at <https://sustainabledevelopment.un.org/partnership/?p=23559> <https://sustainabledevelopment.un.org/partnership/?p=23559>.
- UNCCD (United Nations Convention to Combat Desertification) (n.d.) *Land and Youth*. Available at <https://www.unccd.int/issues/land-and-youth>.
- UNCCD (2017) 'Youth employment', *UNCCD knowledge hub*, 3 February 2017. Available at <https://knowledge.unccd.int/publications/youth-employment>.
- UNDESA (United Nations Department of Economic and Social Affairs) (2019) *Youth and the 2030 Agenda for Sustainable Development*. New York: United Nations Department for Economic and Social Affairs (UNDESA). Available at <https://www.un.org/development/desa/youth/world-youth-report/wyr2018.html>.
- UNDESA (2021) *Social policy and social protection measures to build Africa better post COVID-19*. Policy Brief #93. New York: UN/DESA. Available at <https://www.un.org/development/desa/dpad/publication/un-des-a-policy-brief-93-social-policy-and-social-protection-measures-to-build-africa-better-post-covid-19/>.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2015) *Proposal for the revision of the 2001 revised recommendation concerning technical and vocational education*. New York: UNESCO.
- UNESCO (2018) *Sudan Education Policy Review: Paving the road to 2030*. Paris: UNESCO. Available at <https://sudan.un.org/sites/default/files/2019-10/Sudan%20Education%20Policy%20Review%20UNESCO.pdf>.
- UNFCCC (United Nations Framework Convention on Climate Change). (2015) *Paris Agreement*. Paris: UNFCCC. Available at https://unfccc.int/sites/default/files/english_paris_agreement.pdf.
- UNFPA (United Nations Population Fund) (2018) *Adolescents and Youth Report: West and Central Africa*. Dakar: United Nations Population Fund. Available at <https://wcaro.unfpa.org/sites/default/files/pub-pdf/UNFPA-WCARO-YOUTH-EN-WEB.pdf>.
- UNICEF (United Nations Children's Fund) (2014) *Migration and youth: Challenges and opportunities*. Cortina, J., Taran, P. and Raphael, A. (eds.) New York: UNICEF. Available at <http://jeronimocortina.com/wp-content/uploads/2017/07/Migration-and-Youth-Challenges-and-Opportunities-Full.pdf>.
- UNICEF (2019) *UNICEF's Global Social Protection Programme Framework*. New York: UNICEF. Available at <https://www.unicef.org/media/61011/file/Global-social-protection-programme-framework-2019.pdf>.
- UNICEF (2021) *Child Labour*. Available at <https://www.unicef.org/protection/child-labour>.
- UNIDO (United Nations Industrial Development Organization) (2021) *Green Industry Initiative*. Available at <https://www.unido.org/our-focus-cross-cutting-services-green-industry/green-industry-initiative>.
- USAID (United States Agency for International Development) (2013). *Land Administration to Nurture Development (Land)*. Pasadena: Tetra Tech. Available at https://www.usaid.gov/sites/default/files/documents/1860/LAND_Pastoralist_Land_Rights_12-18-13.pdf.
- USAID (2012). *Technical and Vocational Training*. Waltham: Education Development Center, Inc. Available at <https://www.edc.org/sites/default/files/uploads/Technical-Vocational-Education-Training-Report.pdf>.
- Van de Glind, H. (2010) *Migration and child labour – Exploring child migrant vulnerabilities and those of children left behind*. Geneva: ILO-IPEC.
- Van Gerwen F., Nelen, J., Hopkins, M., Adimo, O., Souley, A. and Bergmann, N. (2018a). *Drylands Development. External Programme Review*. Ede: MDF Training & Consultancy. Available at <https://www.government.nl/binaries/government/documents/reports/2018/07/01/drylands-development-external-programme-review/BHOS+2.1+25548+Drylands+Development+External+Programme+Review+20180701.pdf>.

- Van Gerwen F., Nelen, J., Hopkins, M., Adimo, O., Souley, A. and Bergmann, N. (2018b). *Drylands Development. External Programme Review, Volume II*. Ede: MDF Training & Consultancy. Available at <https://www.government.nl/binaries/government/documents/reports/2018/07/01/drylands-development-external-programme-review/BHOS+2.1+25548+Drylands+Development+External+Programme+Review+20180701.pdf>.
- Vincent, K. (2021 forthcoming) 'What do we know about gender in agricultural and pastoral livelihoods in selected countries in sub-Saharan Africa and the Middle East? A review of literature over the past 5 years'. London: SPARC.
- Vizy, E.K. and K.H. Cook (2012) 'Mid-twenty-first-century changes in extreme events over northern and tropical Africa', *Journal of Climate* 25: 5748-5767. doi:10.1175/JCLI-D-11-00693.1.
- Wiggins, S., Levine, S., Allen, M., Elsamahi, M., Krishnan, V., Mosel, I. and Patel, N. (2021) *Livelihoods and markets in protracted conflict: a review of evidence and practice*. London: SPARC.
- WMO (World Meteorological Organization) (2021). State of the Global Climate 2020. WMO No. 1264. Geneva: WMO.
- Woldehanna, T., Gebreegziabher, T. and Endale, K. (2018) *A Review of Rural Employment Creation Programs in Ethiopia with Emphasis on Self-Employment program*. Report submitted to The World Bank and the Irish Aid, 31 March 2018.
- World Bank (2006) *World Development Report 2007: Development and the Next Generation*. Washington, D.C.: The World Bank.
- World Bank (2019a) *Fertility rate, total (births per woman) – Sub-Saharan Africa*. Available at https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=ZG&name_desc=false.
- World Bank (2019b) *Youth education in South Sudan: Current Challenges and Opportunities*. Washington, D.C.: World Bank. Available at <https://documents1.worldbank.org/curated/es/967251562604823894/pdf/Youth-Education-in-South-Sudan-Current-Opportunities-and-Challenges.pdf>
- World Bank (2021a) *Regional Sahel Pastoralism Support Project*. Available at <https://projects.worldbank.org/en/projects-operations/project-detail/P147674?lang=en>.
- World Bank (2021b) *Climate-Smart Agriculture*. Available at <https://www.worldbank.org/en/topic/climate-smart-agriculture>.
- World Bank (n.d.) World Bank Open Data. Available at data.worldbank.org
- Yeboah, F.K., Jayne, T.S., Muyanga, M. and Chamberlin, J. (2019) *Youth access to land, migration and employment opportunities: Evidence from sub-Saharan Africa*. Research Series 53. Rome: IFAD.
- Yeboah, T., Chigumira, E., John, I., Anyidoho, N.A., Manyong, V., Flynn, J. and Sumberg, J. (2020) 'Hard work and hazard: Young people and agricultural commercialisation in Africa', *Journal of Rural Studies* 76: 142-151.
- Young Lives (n.d.) *Young Lives*. Oxford: Oxford Department of International Development (ODID). Available at <https://www.younglives.org.uk/>.
- Youth Policy (n.d.) *Factsheet: Sudan*. Available at <https://www.youthpolicy.org/pdfs/factsheets/sudan.pdf>.
- Zanker, J. and Holmes, R. (2012) *Social protection in Nigeria: Synthesis report*. London: ODI (Overseas Development Institute).
- Zontini, E. (2004) Immigrant women in Barcelona: Coping with the consequences of transnational lives. *Journal of Ethic and migration studies* 30(6): 1113-1144.

 @SPARC_Ideas

sparc-knowledge.org

Cover: A young Borana woman with her goats in Borana, Ethiopia. Photo: ILRI/
Zerihun Sewunet, CC BY-NC-ND 2.0



Fund manager



Funded by



This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.