

Young people ‘making it work’ in a changing climate

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Abstract: Globally, young people face weak labour market demand and have been particularly susceptible to recent livelihood stresses and shocks linked to climate change. In this article, we consider what happens when young people face intersecting challenges including climate change. While much of the literature focuses on barriers to work and how to break these, we consider young people’s struggles and successes in securing and maintaining work. The focus is on Uganda, demographically one of the world’s youngest countries and home to a largely ‘underemployed’ cohort of young people. Our findings identify some of the many ways in which climate change disrupts young people’s livelihoods. Young people are already proactively responding to climate change. This points to the need for other actors to learn from young people’s existing endeavours, to build in more support and opportunities, manage risk and insecurity, and construct a more climate change-resilient infrastructure.

Keywords: Uganda, climate change, interview, survey, shocks, stresses, work, livelihood

Note on the authors: see end of article.

Introduction

It is widely documented that young people, especially in lower-income countries, experience substantial structural obstacles to making a living. This is due to a combination of low labour market demand, low pay, high borrowing rates and young people's relative disadvantage within this compared with older adults due to them having weaker social networks, less collateral for loans and less work experience, at a time when youth populations are rising or peaking in many countries (Sumberg *et al.* 2021; O'Higgins 2017; Barford & Coombe 2019; Shankland *et al.* 2022; UBOS 2022). Added to this we see further stresses and strains – in recent years COVID-19 and worsening climate change are key examples – which often have a distinct and deeper impact on young people because of their age and life stage (Barford *et al.* 2021a, 2021b, 2021c, 2021d). While this particular predicament for young people is, to some extent, attended to in the Sustainable Development Goals, in the form of an indicator 8.6.1 for young people not in employment, education or training, this interim target has been missed and reset (Cieslik *et al.* 2021).

A lack of opportunities for young people has diverse impacts and risks associated with it and requires a stronger multi-sectoral response than we have seen to date. For instance, we know that a lack of opportunities can push people into work they might not otherwise choose or push them into migration which they may not want either. Some examples of this include sex work, betting, dangerous work and migrating (including forced migration) for work (Namuggala 2017; Birhanu *et al.* 2021; Bwambale *et al.* 2022). It is important to recognise that migration for work carries its own risks and sometimes illusory rewards. At the extreme, annually an estimated twenty to thirty young people travel from Uganda to the Middle East, expecting to work, but instead fall victim to organ harvesting (Muhindo & Mwanje 2022). In fact, the Federation of Ugandan Employers (2022) describes Uganda as 'a source and transit region for human trafficking' (p. 2). More commonly, however, economic migration is associated with informality, casual work, underpayment and work-related risks (Federation of Ugandan Employers 2022; Bwambale *et al.* 2022; Nakaweesi 2021).

Not only can the search for work itself be dangerous and usually does not lead to decent work outcomes, we also know that economic fragility and poverty can predispose young people to other stresses and shocks. This impacts young people as a cohort. However, when we disaggregate young people into subgroups, we see some groups are more exposed to and impacted by external shocks, including people living with a disability or in poverty, women and displaced persons (e.g. Birkmann *et al.* 2022; IPCC 2022; Scott *et al.* 2021; Mueller *et al.* 2022). These identities overlap and intersect, of course.

This article considers the wider structural challenges of underemployment for young people's lives, and how young people are actively problem solving to get by and make a life. Uganda, classified by the United Nations as one of least developed countries (UN DESA 2023), is also home to a large and growing youth population. By 2020, 80.8 per cent of the Ugandan population were projected to be under the age of 35 years, with the youth population expected to double in just twenty-five years (UBOS 2022; UNICEF n.d.). People living in Uganda are now facing the disruptive and sometimes devastating early stages of anthropogenic climate change (Nakate 2021; Mugeere *et al.* 2021). The article sets young people's livelihoods in a changing climate in the wider context in which they live. We find that young people are actively adapting and problem solving, but they are also experiencing climate change-induced losses. We argue that interventions are required to boost support to young people given the magnitude of this challenge and its worsening future trajectory.

In the next sections, we share our theoretical framework and approach to climate change, followed by detailing young people's working lives in Uganda and the research locations. We then detail our methods before turning to our findings, which first offer an overview before going into detailed learnings from three young people. We end, of course, with a discussion and conclusion.

Theorising youth responses to structural disadvantage

The theoretical framework for this article combines sustainable livelihoods approaches with structural understandings of youth disadvantage (Chambers & Conway 1992; O'Higgins 2017). Thus, the empirical patterns of widespread youth underemployment, low pay and low labour market demand are considered alongside the agency, resourcefulness and strategies young people bring to this challenge. This framing influences the methods and research focus, shaping subsequent findings and policy recommendations (Natarajan *et al.* 2022). Considering either structures or agency alone risks overlooking the ongoing inventiveness of young people (Jeffrey & Dyson 2022) or unreasonably responsabilising them despite their constrained access to levers of economic and political power.

The livelihoods approach emerged following the 1992 publication of 'Sustainable rural livelihoods' (Chambers & Conway 1992; see also Natarajan *et al.* 2022). The approach responded to how development thinking, at the time, focused on measuring productivity, employment and poverty, which Chambers and Conway argued did not capture the complexity and diversity of rural livelihoods, including the 'plural priorities of the rural poor and their many and varied strategies to obtain a living' (1992: 3). In response, they proposed sustainable livelihoods as a framework for development thinking, consisting of capabilities (coping with shock and stress, finding opportunities

and making use of these), equity (the enhancement of the most deprived and ending discrimination) and sustainability (environmentally, protecting the assets upon which livelihoods rely; and socially, resilience and building foundations for future generations) (Chambers & Conway 1992). This new thinking was subsequently built into the technical development work of governments, non-governmental organisations (NGOs) and multilateral organisations (Natarajan *et al.* 2022).

A livelihood is a broader set of activities, assets and capabilities than narrowly defined employment (Serrat 2017; Conway 2022). Livelihoods can include the direct production of food and other goods alongside regular wages and other income-generating activities (Conway 2022: 88). While originally developed in rural settings, livelihoods are also relevant to urban settings as urban dwellers navigate, or hustle, various livelihood opportunities (see, e.g., Thieme 2018). Livelihoods are understood as strategies to get by, especially when times are tough. For Serrat (2017), *sustainable* livelihoods support coping and recovery in the present and future. Conway also sees resilience as central to livelihoods, with diverse activities being a strategic response: ‘Diversity is a strategy for making a living, enabling people all over the world to cope with challenging and risk-prone environments and social circumstances’ (2022: 88). While helpful to understand how people are coping, it is also crucial that we understand how these livelihoods have come about – foregrounding the role of economics and politics alongside gender, race, age and other factors (Natarajan *et al.* 2022).

Scholars observe that many young people are struggling to transition to adulthood. Difficulties in attaining traditional markers of adulthood – including marriage, moving out of the parental home and economic self-sufficiency – are now widespread. As such, concepts of *waithood*, *timepass* and ‘extended youth’ have arisen (Jeffrey & Dyson 2008; Jeffrey 2010; Honwana 2014). This must be understood in terms of a current numerical mismatch between young people seeking work and the available opportunities, a situation shaped by the colonial push towards increased wage labour, followed by IMF structural adjustment programmes which froze wages and squeezed public sector employment, which was then compounded by growth without sufficient job creation (Mamdani 1990; Pallaver 2018; Ahaibwe *et al.* 2013). These structural drivers require systemic responses. As such, our theoretical framework considers the broad situation, young people’s responses and the need for youth-informed interventions from other powerful stakeholders (including government).

Uganda’s changing climate

While Uganda is not alone in experiencing climatic change, it is worth offering some contextual detail. In recent years Uganda has experienced various types of disruption,

including rainfall leading to lake and river flooding, as well as landslides in volcanic areas of Bududa and Kisoro, with more frequent and severe droughts in the south-west (Nagasha *et al.* 2019; Barford *et al.* 2021c). Such climate anomalies are the main contributor to environmental migration within Uganda (Call & Gray 2020). One area of scientific interest is what can be attributed to anthropogenic climate change. For some time, experts have used the analogy of climate change 'loading the dice' to increase the likelihood of more frequent and intense weather events (Hickman 2012). More recently, climate change attribution studies can offer precise figures when sufficient background data is available (Met Office 2023).

Climate records for many African countries are limited; nevertheless, the IPCC has medium confidence that human-made causes are pushing up the number of hot extremes in the region (IPCC 2021; Toulmin 2009). Although the specific disruptions referred to in this article do not have attribution studies, the general increase in frequency and intensity is attributable to anthropogenic climate change. The young research participants, by virtue of their age, have not observed the past fifty years of change but do have first-hand experience of contemporary weather extremes and unpredictable seasonality. As many young people may not think of these changes in terms of climate change, for this research we referred to 'environmental changes', focusing on temperature, wind, rain and seasonality.

Youth livelihoods in Uganda: 'young people here are doing things, but not in line with what they want'

In Uganda roughly 700,000 young people reach working age each year, but just 75,000 new jobs are created annually (Federation of Uganda Employers 2022). It is well documented that in Uganda, young people take on diverse livelihood activities, which vary with context, season and gender (Carreras *et al.* 2021). While women in sub-Saharan Africa have higher labour force participation than in other world regions, they experience other disadvantages, specifically around the quality of work; young people also have lower levels of employment than older adults (Chakravarty *et al.* 2017). Thus, being young and female delivers double disadvantage when it comes to work.

The effects of education are also evidenced in national data, as unemployment rates among young people rise along with the level of educational attainment. This pattern of educated unemployment, whereby those with tertiary education were 11.8 per cent unemployed compared with those with no education at 3.6 per cent, is not unique to Uganda (UBOS 2016; Jeffrey 2010). In the absence of a strong welfare state and unemployment benefits, it is often only possible to not work when one has other sources of support. The School to Work Transition Survey showed that as

many as 68 per cent of young people in Uganda had only completed primary school, whereas 3.4 per cent had been educated to tertiary level (UBOS 2016). Various pressures lead to education being cut short – including the cost of school fees, short-term financial benefits of keeping children contributing to the household, the cost of sanitary products for girls, as well as pregnancy and marriage (Kikulwe *et al.* 2017; Montgomery *et al.* 2016).

In terms of wider trends, young people are decreasingly interested in agricultural work, while migration from rural to urban areas and even abroad is common. Few (12 per cent) young people aspire to agricultural work despite its contribution to 23 per cent of GDP (Awiti & Scott 2016). Young women were often less likely than young men to engage in commercial agriculture – in part due to their smaller resource bases and gender norms (Rietveld *et al.* 2020). A study of 1,537 young people in Uganda found that being an older youth boosted the likelihood of migration and improved the chances of employment (Nzabona *et al.* 2019). Yet migration can be temporary, as young women and men regularly move back and forth between rural and urban settings (Rietveld *et al.* 2020). On leaving rural areas, most young people confront the reality that the service and industrial sectors have not experienced the job-rich growth needed to employ the numbers of young people seeking work (Ahaibwe *et al.* 2013). Instead, many young people in Uganda start their own businesses (Awiti & Scott 2016), and this has become a partial solution to the lack of jobs in Uganda.

Other youth responses to the lack of job opportunities and widespread concerns about unemployment (Awiti & Scott 2016) include activities which might be socially unacceptable, or at times illegal. However, as Namuggala (2017) points out, for the formerly displaced young people she worked with in northern Uganda, activities such as sports betting or sex work, though widely pathologised, can also be economically empowering. Thus, we see young people pragmatically responding to the possibilities available to them. More broadly, young people often continue to make positive societal contributions despite these challenges (Barford *et al.* 2021a).

In addition to the challenges presented by low labour market demand, low levels of pay and minimal social protection, young people also have to navigate other shocks to their livelihoods. In recent years these have included worsening climate change, insecurity in some regions including Karamoja, the lockdowns associated with the COVID-19 pandemic, and a considerable population displacement caused by conflict and increasingly by extreme weather events.

Given the theoretical and empirical context set out above, the remainder of this article addresses the following research questions: what does it mean for young people to ‘make it work’ in the context of a changing climate? How can this be theorised? And what are the implications for policymakers?

Research focus: Karamoja and Busoga

This research article focuses on the livelihood options, opportunities and decisions of young people in Uganda aged 18–30 years old. This research focuses on two areas of Uganda (Figure 1). One is the Karamoja subregion, in the far north-east of the country, bordering Kenya. Karamoja is an arid, pastoralist region where livestock are an important livelihood asset, and the Karimojong pastoralists regard livestock as a 'moving bank', a source of nutrition (meat and milk) and quick cash income for households (Akwongo *et al.* 2022). Karamoja is especially poor within the Ugandan context, and as a result many move to the capital city of Kampala to work there and are especially visible as street hawkers. An estimated 95 per cent of street children in Kampala are from Napak, a district of Karamoja (Nabatanzi 2022), and the most recent Uganda National Household Survey (2019/20) found that 66.3 per cent of households were in the subsistence economy, with 65.7 per cent of people living in poverty (UBOS 2021).

Busoga subregion is close to the capital city and was the industrial economic centre of Uganda during colonial times. The British colonisers encouraged industry in the lakeside town of Jinja, which was connected to Mombasa on the Kenyan coast by the Uganda railway. The railway was both a political and an economic project. It enabled British political control of the source of the River Nile in Jinja (with downstream implications for Egypt and the Suez Canal) while also facilitating considerable resource extraction (Lubega 2021). Labour practices also shifted during this colonial period, as the demand for labour soared with the proliferation of railways, roads and cash crops (Fuller 1977). For example, the Uganda railway needed 22,500 workers, of whom 6,500 were incapacitated due to injuries and 2,500 died mainly from disease (Lubega 2021). While some labour demand was met through forced labour, for many this period was a time of transition from subsistence farming to waged work (Pallaver 2018). Jinja's agglomeration of industry has since been dispersed to regional centres across Uganda, and labour market demand in Busoga has subsided. Compared with Karamoja, Busoga has lower levels of subsistence households at 55.2 per cent, and fewer poor people at 29.4 per cent (UBOS 2021; Mwanika 2022).

Methods

This research used a youth co-research approach, with the aim of equitably engaging young people in the research process (Proefke & Barford 2023; Barford *et al.* 2021c). This approach offers enhanced validity and insight, aligns the questions with local need, and in the process boosts young people's skills, knowledge and empowerment. The research process was designed to create heterotopic spaces in which young people



Figure 1. Map of Uganda. The red circles indicate the study areas in Busoga to the south and Karamoja to the north. Based on United Nations map.

are treated equally, to facilitate collaboration and strong intergenerational partnerships, based on the recognition of the need for two-way learning between professional and young researchers (Proefke & Barford 2023). Young people were systematically engaged throughout the research process – from setting the framework through to dissemination of results.

The research methods include a survey of 1,214, combined with 111 interviews. In addition, we ran eleven focus groups and twelve key informant interviews as part of the wider project (Table 1). This range of methods provided a variety of data types, supporting different sorts of analysis and a broader understanding. The thirty-two young researchers (aged 18–25 years, half women) were knowledgeable about the respective geographies and had mastery of the local languages. Of them, eight focused on qualitative methods and twenty-four on quantitative methods. All young researchers received a week-long foundation training, designed to support young people to inform the research process. Research participants were 18–30 years old, based upon the Ugandan Government definition of youth (Republic of Uganda 2016: 2). Pseudonyms are used for respondents to protect their identities.

Recruitment for the survey, focus groups and interviews was stratified to ensure that young people from diverse backgrounds were included, in an attempt to avoid some of the pitfalls of research which accesses those who are easiest to reach (Chambers 1983, 2017). The stratification includes people from Karamoja and Busoga, from urban/peri-urban/rural areas, with some working in agriculture and others not, and is gender balanced. This diversity helped us to identify how climate change impacts young people from different settings. One limitation is that Uganda's recent landslides, a spatially concentrated and locally devastating impact of anthropogenic climate change, are not captured here due to our geographical focus.

For this article, the data is analysed to understand the wider patterns of opportunities and stresses which young people face, and their responses. First, the survey data was consulted to document the diversity of work young people engage in. Then, the interview data was analysed to find out what it means for young people to 'make it work' in the context of a changing climate. Having reviewed the 111 young people interview transcripts, three are presented here, spanning locations, gender and diverse income sources. As none of these three young people were parents, the influence of

Table 1. Methods and numbers of young people (aged 18–30).

Method (number)	Busoga	Karamoja
Interviews (111)	60	51
Focus groups involving five respondents (11)	6	5
Key informant interviews (12)	6	6
Surveys (1,214)	608	606

parenthood is not captured despite 40 per cent of girls being married by the age of 18, and a quarter of 15–19-year-old girls having a child or being pregnant (UNFPA n.d.). The analysis focused upon the nature of the challenges and how young people respond, and it considered (actual or potential) structural responses alongside personal strategies. The interviews offer detailed insight as to how broader trends play out in the tangible, multifaceted contexts of individuals' lives – and what policy responses might help.

Findings: ‘young people don’t have a choice, they have to make it work’

Portfolio livelihoods

This section details some of the main ways in which young people make a living in the Karamoja and Busoga subregions of Uganda. Through our survey and interviews, we identified a wide variety of livelihood activities in which young people are engaged, including juggling paid work (including self-employment/entrepreneurship and employment/working for someone else) with education, volunteering and unpaid tasks (including domestic and care work) (Namuggala 2017; Baillie Smith *et al.* 2022; Shankland *et al.* 2022). Before we look in more detail at how these various roles overlap and intersect in individuals' lives, this section outlines the labour market possibilities that young people have (Table 2). A key observation is that most of these possibilities are characterised by instability and studded with experiences of failure, hence the term *possibility* rather than *opportunity*. We have found that for those in work, often it doesn't last, and even the few who are in formal employment may go unpaid for long periods of time. The livelihood activities presented below are often associated with low incomes and minimal economic security. One of the young researchers explained that ‘they just do what they are doing because they have nothing to do but it's the only option. So, I conclude that young people here are doing things but not in line with what they want.’

Our survey data reveals the following:

1. **Care and domestic work:** more young women reported domestic responsibilities than young men, 16 per cent and 12 per cent respectively. Bigger differences were seen between rural young people in Karamoja (22 per cent) and urban youth in Jinja (4 per cent). Respondents with little or no education take on more family responsibilities than those with secondary and post-secondary education.
2. **Self-employment:** 45 per cent of young men were self-employed, compared with 40 per cent of young women. Busoga has higher self-employment at 46 per cent compared with Karamoja at 40 per cent. Respondents with no

education had lower levels of self-employment (39 per cent) than those with primary (41 per cent), secondary (43 per cent) and post-secondary education (47 per cent). Thus, self-employment rises with education level.

3. **Formal employment:** Operationally, formal employment typically entails a written contract, social security coverage and entitlement to annual leave and sick leave (ILOSTAT 2023). Formal employment was low, with 12 per cent having jobs with contracts and an extra 5 per cent doing formal internships. Considering gender, 11 per cent of young women and 23 per cent of young men hold formal contracts. Young people with post-secondary education had higher levels of formal employment (44 per cent); respondents with no education had minimal formal employment (5 per cent).

Table 2. Variety of livelihood activities undertaken by young people in the Busoga and Karamoja subregions of Uganda. Based on survey data and interviews in 2021.

Domestic and care work: nursery attendants to care for young children, babysitting (female), housework (female), gathering water for home consumption.

Small-scale businesses: bakery, mobile money services, charcoal burning and selling, local brewing, hairdressing (female), barbering (male), traditional herbalist, liquid soap making, motorcycle repair, bicycle repair, selling music/films/computer accessories, tailoring, sanitiser making and vending, transport services as bodaboda (motorcycle taxi) riders and cyclists, drivers/conductors/luggage handlers in transport business, roadside kiosks, food selling on roadside, second-hand clothes/shoes/homewares shop, street hawking, cooks, clothes washing services, ironing and fetching water for money, arts and crafts (e.g. jewellery, thread bags, table cloths), carpentry, waste collection.

Construction activities: working as porters on construction sites, provision of welding services, brick laying, painting and decorating, brick making, gathering and heaping murrum (laterite gravel) for sale, breaking rocks to make concrete stones for construction.

Agricultural activities: growing crops and raising livestock for home consumption, gathering firewood for home consumption, small-scale irrigation with easy to mature seedlings, poultry/piggery/beekeeping/goat/cattle farming, livestock trading in weekly markets, vegetable selling in markets e.g. greens, fruits, fresh foods such as matooke, cassava etc., plant nursery for trees and garden flowers, produce business with beans/sunflower/sim sim, subsistence agriculture for home consumption with maize/groundnuts/beans/sweet potatoes, sugar cane growing/cutting/weeding/loading for factories, collecting firewood to sell, fishing, digging people's gardens.

Small-scale mining: stone quarrying, mining sand from the rivers and lakes, and mining of marble stones, gold, and other precious stones in Rupa County during the rainy season.

Games and sports: joining football clubs to develop their talents, gambling, playing ludo, sports betting and playing pool for money, hunting for food provision and butchery operation.

Formal employment: factories employment e.g. BIDCO Uganda Ltd and Hot Loaf Uganda, pump attendants on fuel stations, work with NGOs as community workers, marketing officers via social media.

Other: financial services i.e. engage in Savings and Credit Cooperative Organisation/group opportunities such as savings especially bodaboda riders, street control parking, volunteer work at Uganda Red Cross Society, still in school especially tertiary institutions and post-secondary level and some are interns/apprentices.

Young people ‘making it work’

We now turn to the stories of three individuals to unpack macro-level patterns of opportunities and constraints, to see how young people are proactive in making their livelihoods work. In this section we meet Naigaga, who maintains several small businesses simultaneously; Kidodo, a poultry and arable farmer; and Lokut, who is a miner and cattle trader (pseudonyms used). The stories of Naigaga, Kidodo and Lokut illustrate how climate shocks and stresses do not occur in isolation and therefore should be understood within their wider context.

Naigaga: second-hand clothes sales, mobile money kiosk, and poultry farmer, aged 22. Jinja city.

Naigaga lives in the city of Jinja, located on the northern shore of Lake Victoria. Educated to diploma level, she has several simultaneous income sources, comprising a second-hand clothes business, a mobile money kiosk and poultry farming. Many other young people also work in the market where she sells clothes, so the market trading experiences she shares here resonate with wider experiences in the city. Naigaga manages her work throughout the week, with her second-hand clothes taking priority. For example, on Mondays and Thursdays there are many customers at her clothes stall, so she pays someone else to staff her mobile money kiosk. In addition, her poultry business also engages another worker, who feeds the birds while she is working at the market. Poultry is a good business for Naigaga, as she sells the eggs and earns well from it. She manages three small businesses as well as doing housework. Of these activities, Naigaga prefers and spends most time on her clothing business:

I can request for a bale [of second-hand clothes] from Kampala and if it's a good one with quite lots of first class pieces, then I can sell them all at a go, get my substantial margin, and re-order immediately since this all occurs in early hours of the day. But for the mobile money business I have to wait at the end of the month for the Telecom Company to calculate my profits. So, I like clothing very much compared to the rest.

Naigaga has noticed changes in seasonal weather patterns over the years. There used to be two distinct seasons in a year, but, she comments, now it seems there is only one season because the regular rains have reduced so much. There are disruptions caused by both excessive and insufficient rain, as well as the sun ‘over shining’; at other times the weather is calm. Yet when there is extreme weather, the market businesses suffer. Heavy rains, floods and winds present challenges whereby flooding spoils stallholders’ goods, especially if flooding occurs at night when no one is around to salvage things. This susceptibility to water damage is heightened because the roof of the market leaks,

so the market traders sought help to improve the roof and dig drainage channels to handle excessive rain.

Heavy morning rains can disrupt transportation. At times this prevents Naigaga and others from arriving at the market in time to do business with the early customers who cannot wait – so rain can directly impact income on that day. When rains fall onto unpaved roads they can quickly turn to mud, and deep mud may prevent transportation, meaning that goods, sellers and buyers do not arrive at the market. During rainy periods prices might rise due to transportation issues. When the opposite occurs and the weather is too dry, the market becomes dusty, meaning fewer people go to the market and stallholders' goods become dusty and spoil.

Naigaga's clothing business faces other challenges too, as she explains. 'In the clothing line are the thieves who pretend to be buyers or customers, but just come with intent to steal, so that is one of the biggest challenges I face in my business.' But she is resolute, explaining that 'nonetheless, I have managed to resolve these', because the stallholders look out for one another's businesses. This way, thieves may not realise they are being watched and a couple have been caught using this approach. There is also an unpredictability with the business, whereby Naigaga receives a different type of clothing from what she had ordered, meaning she cannot fulfil her own promises to her customers and thus makes a loss. Further, lack of capital limits the size of each order as she uses the income from one set of sales to order the next bale of clothing. While Naigaga would like to scale up her clothing and poultry businesses, her operating budgets prevent such growth.

With excessive rains, Naigaga explains how 'filthiness increases within the market and the community dwellings which lead to people getting sick'. Her chickens also suffer from extreme weather, whereby fever or bird flu affects the birds, especially young birds, and can be fatal. Naigaga's birds tend to die more when it is wet, while in hotter Karamoja, chickens suffer more from excessive heat. Naigaga is managing this risk, saying 'I personally have learnt to get all that is required for the birds, so I can respond quickly when they get flu or fever, I just treat them immediately without delay. Although this limits me on the number of birds that I can afford at a time because the medication for them is quite expensive for me, thus I keep a limited number of around 300 birds.'

Returning to the research question of how young people are 'making it work' and how to support them, Naigaga navigates several simultaneous challenges. These include a changing and unpredictable climate and the lack of robust infrastructure leading to increasing susceptibility to weather-related disruptions, alongside the uncertainties associated with petty theft and unreliable supply chains. Some of these issues intersect, such as infrastructure being impacted by heavy rainfall. Naigaga's solutions include working with other stallholders to tackle crime, stocking poultry medication

and limiting her flock size. Yet there are also losses which are hard for her to avoid. Infrastructural improvements for roads, drainage systems and market buildings would tackle some of these challenges. Other policy interventions could offer livestock insurance and access to capital, increase security for market stallholders, and improve the reliability of supply chains.

Lokut: miner and cattle trader, as well as finance trainer, aged 25. Rural Karamoja.

Lokut has diploma-level education and works as a miner, cattle trader, pig raiser and trainer with a Village Loaning and Saving Association in the town of Rupa. His biggest work priority is training people on savings and loans to support new start-ups, and of his work, this role is the least susceptible to climate disruption. In contrast, mining is sensitive to weather and occurs during the rainy season because it is dependent on water. Thus droughts prevent mining, yet small rains during mining can lead to flash floods which bury mining tunnels and result in loss of life. Lokut mines with his family, seeking gemstones and gold. However, payments for mining minerals are normally taken on credit, and there is often a delay of one to two months before payment, causing cash flow problems for the miners. Further, Lokut is unsure of the accuracy of the scales for weighing minerals, and not knowing the price of gold means miners are ‘always being underpaid’:

You find out that you may mine your gold worth 200,000/= (c. £42) and end up being given something like 50,000/= (c. £10.50). So there is a very big challenge ... Although we are the owners of the land, there is a monopoly here. These investors who have already constrained locals don't want other investors to come and buy minerals, so you find that they lower buying prices because they are the only ones.

Floods, drought and wind present a challenge for pastoralists, as when land is disrupted by weather, animals end up poorly nourished, making them more susceptible to disease. Low body weight brings down animals' market prices, thus animal health and earnings are both impacted. Lokut noticed that ‘animals are dying because of those strange diseases which have never been in existence. Surely it's the climate changes which have brought these.’ Droughts in the grassy areas of Kobebe and Naitai mean people bring their animals closer to the village, resulting in livestock overcrowding and the spread of disease. Lokut has been impacted by this too. ‘We had a long drought, diseases invaded my pigs and it was alleged to have been due to too much drought. It killed all my 42 pigs.’ Meanwhile, people bring their animals closer to their homes to avoid cattle theft, also causing overcrowding and disease.

In Karamoja as in Busoga, changed seasonality has resulted in people struggling to germinate seeds, resulting in low yields. Previously February was the month

for cultivation in Karamoja, but changing seasonality means seeds dry out and are wasted before the rains arrive. Lokut suggests that 'the youth of Karamoja should be sensitised to open up firms, trained at workshops on climatic changes for awareness such that they open up the food market', and he recommends a particular focus on irrigation. At other times, flash floods often claim people's and animals' lives, especially near the mountains where the Apule and Moroto Komatheniko rivers flow fast. When floods run into homesteads and kraals, goats, sheep and young calves can be pulled into the flow. Lokut explains:

We are worried as a community, due to these climate changes, because they are too crucial in our livelihood. How are we going to curb these floods? How are we going to tackle the issue of insecurity which is a result of these impacts ... as we are looking for pasture and water for our animals and livelihood opportunities, more worry comes in as how we can co-exist with our neighbours despite these impacts.

One response has been talks between district leaders, seeking peace between the Jie, Turkana and other clans. Other responses include teaching children in school not to depend entirely on the cattle, diversifying to include crops that take a few months to yield and provide food, and identifying drought-resistant crops. This has involved working with NGOs, locals and local government to, for example, curb soil erosion. At a higher level, there is also a religious response to these challenges. 'We feel so much troubled because the life of a human being like the Karamajongs who depend on cattle and on the natural texture, we feel so much nervous that we pray to God to be amidst us so that he blesses us with no such dangerous floods and droughts.'

Lokut, like Naigaga, is 'making it work' by adopting several sources of income, which spreads the risk. For him, his training work is the most climate-resilient income source. His interview detailed his own activities and those of other young people in Karamoja. Lokut highlights how work is disrupted by extreme weather events, leading to loss of livestock due to disease and flooding, while struggles over land and water aggravate insecurities between different groups. Further difficulties include exploitative relationships with minerals companies and the prevalence of cattle rustling. When considering solutions, Lokut points to town- or subregion-level responses, including talks between clans, as well as education and training. Additional interventions might include flood warning systems, enforcement of safer mining conditions, transparent information on mineral pricing, a neutral weighing process, and improving access to livestock medication and insurance.

Kidodo: poultry and arable farmer, aged 25. Nakanyonyi town, Jinja District.

Kidodo has studied to university level and is the head of his household. His main income is from poultry farming, which he does with his friends. He recounts, 'we sat and decided to do this, because we tried to look for jobs but in vain. We are qualified but there's nothing in the professional jobs we studied to get. So, we raised some small capital and we started this thing and right now I do have a thing I do for a living.' In addition, Kidodo farms half an acre of maize and volunteers with 'facilitation' (money for participation or transport). He reinvests his income into poultry farming. Other young people in his community also collaborate to get work; he explains that they 'indulge mostly in activities pertaining to groups as we save money so that we can start our own job, for example the youths who are in the bodaboda riders have their own association which leads them as youths into organisations, so they start these groups locally (referred to as circles) as they save their money to start some projects.'

As a livestock and arable farmer, Kidodo's livelihood is especially susceptible to environmental extremes. The farming they do is described as 'village mode', meaning that it is rainfed, so without irrigation systems. This makes planting and growing especially dependent upon the timing and quantity of the rains. Meanwhile, floods and drought can rot or desiccate maize, respectively. Further, disrupted seasonality means 'we may plan to plant maize say in March but due to intensive sunshine we end up planting in May yet by March the gardens were ready, thus we end up doing double work of preparing the garden twice before we plant'.

Like Naigaga, Kidodo finds that poultry farming is also affected by climatic changes. The rain can lead to disease outbreaks, while coldness also affects the birds' health. In the dry season it is hard to get water for his birds as the tap water usually dries out and the lake is far away. As such, Kidodo buys jerry cans of water at sh1000/= (c. £0.21), which is 'quite high on our side'. However, 'when you delay to give them water, especially in the night, by morning you see them panting and feeling thirst'. As Kidodo sums up the impacts, 'we incur extra costs which we did not anticipate, then we lose some of the birds due to delayed response in feeding and treatment thus end up not making any profits which is very discouraging and makes us leave with no hope for the future'.

While not Kidodo's own activities, he also speaks of how other income-generating activities are susceptible to climate change impacts. One example is the popular activity of bodaboda riding (motorcycle taxi). Bodaboda riders are affected by rain and unpaved roads becoming muddy, which can lead to more accidents. As Kidodo explains, 'in such cases if a passenger gets an accident then instead of paying the agreed fare, he/she pays half, this affects the riders in that at the end of it they fail to fulfil their obligations at their homes', as they bring less money home. Overall, rains

make it difficult for people to move, delaying the transportation of people and goods. At the same time, Kidodo and his friends also respond to the new opportunities of the rains. 'When it rains we go and do some vegetable growing which we do sell after a short while, other people get jobs selling jackets and umbrellas ... Then if it shines people sell cold water, they make cold passion juices thus creating those job opportunities.'

Alongside the challenges noted above, Kidodo explains how limited money blocks the completion of projects, and that being in a town means a lack of space for group livelihood activities. In the hope of resolving these challenges, the group has contacted local leaders for support, either to bail them out or to engage with youth livelihood projects. This is not always easy given that protocols and bureaucracy can be heavy and slow, and in addition, local leaders may avoid the issue by not responding, saying the person concerned is not available or that others are also waiting for help. As Kidodo explains, 'they play or drag you around till you fail at the end of it'. Thus some potential sources of support do not pan out, and time and energy are lost when such attempts do not succeed.

Kidodo emphasises various challenges. The lack of labour market demand for university-level qualifications meant he turned to arable and pastoral farming. Both are disrupted by climate change, with heat, drought, cold and wet having different detrimental impacts, often with direct financial implications. Yet he also emphasises non-agricultural impacts of climate change. Kidodo shares various ways he and others are responding to these challenges, including requesting support from local politicians, diversifying livelihoods and working with other young people. Other possible interventions include stronger support for young people from politicians, plus climate-resilient infrastructure so that roads are passable during rains and irrigation is easier during drought. Further, policies focused on job creation could enable more young people to find work commensurate to their level of education.

Making it work?

Young people endeavour to make their livelihoods work despite a series of interlocking challenges. Livelihoods scholars show how multiple simultaneous activities can offer a level of resilience (Conway 2022). For Naigaga, Lokut and Kidodo, having several income streams can boost and smooth their income, especially when some work is highly seasonal, such as mining. Further, risk is spread between livelihood activities such that if one fails or is highly seasonal, another may provide some resilience at that time. This was evident for the three young people featured here, all of whom did several types of work with differing time scales, reliability and demands. Ideally, these

complement and compensate for one another. However, diverse livelihoods pre-date the current challenges of climate change (Chambers & Conway 1992), and diversification away from agriculture does not shield young people from climate vulnerability. Extractive and service work are also susceptible to climate disruption, such as mining, shopkeeping and bodaboda driving struggling during heavy rains.

For young people in Uganda, climate change is one of several challenges to which they must respond. Young people also face exploitation, late payment, weak support from local leaders, unreliable supply chains, theft of goods and low pay. This translates into having fewer economic and political resources to invest into solutions which could prevent, buffer or support recovery from climate change disruptions. When young people experience rain, heat and dust destroying their goods; forgo earnings due to rain-soaked muddy roads; or lose livestock, at that moment they may fall into debt or poverty or lose their means to make a living. This situation requires a wider

Table 3. Climate change impacts, youth responses and policy options.

Challenges	Youth responses	Policy options
<i>Heavy rains and cold weather</i>		
<ul style="list-style-type: none"> • Floods: loss of human lives and livestock • Roads turned to mud: disrupts supplies, customers and bodaboda work • Leaking market roof: goods damaged • Livestock disease 	<ul style="list-style-type: none"> • Use of medication for animals • Reduce flock size • Diversify • Make losses 	<ul style="list-style-type: none"> • Instal flood warning systems and educate on flood risk • Invest in roads and drainage systems • Fix public infrastructure such as market buildings to avoid leaky roofs • Veterinary support
<i>Unpredictable seasonality</i>		
<ul style="list-style-type: none"> • Time and seeds are wasted preparing to plant at the wrong time • Low yields • No mining due to lack of rain 	<ul style="list-style-type: none"> • Replant later • Diversify • Make losses 	<ul style="list-style-type: none"> • Invest in weather prediction and communication systems • Encourage seed saving
<i>Drought and hot weather</i>		
<ul style="list-style-type: none"> • Animal illness from disease and heat stress, hard to get water for animals • Desiccation of crops • Dust and heat damages goods 	<ul style="list-style-type: none"> • Buy water and medication for chickens • Diversify • Make losses 	<ul style="list-style-type: none"> • Instal water harvesting and irrigation systems • Advise on drought-resistant crops, learning from indigenous knowledge • Support low-energy cold storage options

Overarching interventions: build climate change-resilient infrastructure, instal weather warning systems, invest in substantial job creation for young people, ensure affordable insurance, promote universal social protection, educate the public on climate change, promote good working conditions and fair pay

lens than livelihoods to understand the broader causes and a fuller range of solutions. Many interventions could create a more predictable, fair and secure economy and society, thus reducing young people's exposure to climate change risks (see [Table 3](#)).

The concept of loss and damage from climate change embodies a recognition that climate adaptation is rarely smooth or complete, with loss being permanent and damage being reversible ([Huq et al. 2013](#)). While we have not focused on mental health in this article, it is relevant to note that sometimes repeated failure due to the magnitude of challenges means young people give up, feeling that they have 'tried everything and failed'. Kidodo shares that 'in Wanyama where I go shopping for my stuff, they [environmental changes] affect these businesses, therefore I feel very bad. ... So me, I feel worried and concerned.' Nevertheless, the three young people above persevere despite multiple simultaneous challenges, by spreading risk, asking for help, working together and problem solving. To support young people, policymakers could learn from young people's experiences and intervene accordingly ([Table 3](#)).

Conclusion

Young people's responses to climate change range from protests to livelihood adaptations to no response at all ([Nakabuye et al. 2020](#); [Nakate 2021](#); [Barford et al. 2021c](#)). Right now, young people must respond to unpredictable and destructive climate change, both in moments of extreme weather but also in terms of many smaller but persistent disruptions, cost increases, risk increases and losses. There is an urgency to understanding how young people can be best supported, given that climate change is on track to worsen, while the widespread lack of good opportunities for young people remains unresolved ([Barford et al. 2021d](#)).

This article shows how some young people in Uganda are proactively navigating uncertainties and losses, balancing multiple income opportunities and problem solving issues that arise. In several cases this problem solving involved working together with others in the same situation, to start growing maize, to reduce market thefts or to request the support of politicians. Often young people are problem solving in the absence of wider support mechanisms. Structural, policy-level interventions are needed to complement and reinforce youth responses. In particular, weaving a stronger social and economic safety net from social protection, decent jobs and affordable insurance could limit the losses and shocks wrought by climate change, while improved infrastructure could even avert losses and damage.

Further research is needed to learn what is working and what can be done, and to build upon young people's local and indigenous knowledge to strengthen climate change responses. Theoretically, it is important to hold in mind the ingenuity and

resourcefulness of young people, while also not burdening them with the expectation of solving the substantial social, environmental and economic challenges that governments, the international community and businesses are responsible for addressing. On this note, if researchers can offer clear, evidence-based guidance for policymakers, they may tangibly contribute to supporting young people in the face of climate change.

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References

- Ahaibwe, G., Mbowa, S. & Lwanga, M. M. (2013), ‘Youth engagement in agriculture in Uganda: challenges and prospects’. Economic Policy Research Centre (EPRC). Research series no. 106. <https://www.africaportal.org/publications/youth-engagement-in-agriculture-in-uganda-challenges-and-prospects/> (accessed 2 August 2022).
- Akwongo, C. J., Quan, M. & Byaruhanga, C. (2022), ‘Prevalence, risk factors for exposure, and socio-economic impact of peste des petits ruminants in Karenga District, Karamoja Region, Uganda’, *Pathogens*, 11(1): 54. <https://doi.org/10.3390/pathogens11010054>
- Awiti, A. & Scott, B. (2016), ‘The Uganda Youth Survey report’. Aga Khan University. http://ecommons.aku.edu/eastafrica_eai/18
- Baillie Smith, M., Mills, S., Okech, M. & Fadel, B. (2022), ‘Uneven geographies of youth volunteering in Uganda: multi-scalar discourses and practices’, *Geoforum*, 134: 30–9. <https://doi.org/10.1016/j.geoforum.2022.05.006>
- Barford, A. & Coombe, R. (2019), ‘Getting by: young people’s working lives’. Murray-Edwards College, University of Cambridge. <https://doi.org/10.17863/CAM.39460>
- Barford, A., Coombe, R. & Proefke, R. (2021a), ‘Against the odds: young people’s high aspirations and societal contributions amid a decent work shortage’, *Geoforum*, 121: 162–72. <https://doi.org/10.1016/j.geoforum.2021.02.011>
- Barford, A., Coutts, A. & Sahai, G. (2021b), ‘Youth employment in times of COVID: a global review of COVID-19 policy responses to tackle (un) employment and disadvantage among young people’. Geneva, International Labour Organization. https://www.ilo.org/emppolicy/pubs/WCMS_823751/lang--en/index.htm

- Barford, A., Olwell, R. H., Mugeere, A., Nyiraneza, M., Magimbi, P., Mankhwazi, C. & Isiko, B. (2021c), 'Living in the climate crisis: young people in Uganda'. University of Cambridge. <https://doi.org/10.17863/CAM.75235>
- Barford, A., Proefke, R., Mugeere, A. & Stocking, B. (2021d), 'Young people and climate change'. COP 26 Briefing Series of The British Academy, 1–17. <https://doi.org/10.5871/bacop26/9780856726606.001>
- Birhanu, K., Pankhurst, A., Heissler, K. & Cho, J. (2021), "'A stranger in all places": patterns and experiences of children and young people moving from their home communities in Ethiopia'. Young Lives Working Paper 194. <https://www.younglives.org.uk/sites/default/files/migrated/YL-WP194-Proof04.pdf> (accessed 8 August 2022).
- Birkmann, J., Liwenga, E., Pandey, R., Boyd, E., Djalante, R., Gemenne, F., Leal Filho, W., Pinho, P. F., Stringer, L. & Wrathall, D. (2022), 'Poverty, livelihoods and sustainable development', in Pörtner, H.-O., Roberts, D. C. Tignor, M., Poloczanska, E. S., Mintenbeck, K., Alegría, A., Craig, M., Langsdorf, S., Löschke, S., Möller, V., Okem, A. & Rama, B. (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, Cambridge University Press), 1171–274. <https://doi.org/10.1017/9781009325844.010>
- Bwambale, M. F., Birungi, D., Moyer, C. A., Bukuluki, P. & van den Borne, B. (2022), 'Migration, personal physical safety and economic survival: drivers of risky sexual behaviour among rural–urban migrant street youth in Kampala, Uganda', *BMC Public Health*, 22(1): 1–8. <https://doi.org/10.1186/s12889-022-13516-y>
- Call, M. & Gray, C. (2020), 'Climate anomalies, land degradation, and rural out-migration in Uganda', *Population and Environment*, 41: 507–28. <https://doi.org/10.1007/s11111-020-00349-3>
- Carreras, M., Sumberg, J. & Saha, A. (2021), 'Work and rural livelihoods: the micro dynamics of Africa's "youth employment crisis"', *The European Journal of Development Research*, 33(6): 1666–94. <https://doi.org/10.1057/s41287-020-00310-y>
- Chakravarty, S., Das, S. & Vaillant, J. (2017), 'Gender and youth employment in sub-Saharan Africa: a review of constraints and effective interventions', *World Bank Policy Research Working Paper* no. 8245. <https://doi.org/10.1596/1813-9450-8245>
- Chambers, R. (1983), *Rural Development: Putting the Last First* (London, Longman).
- Chambers, R. (2017), *Can We Know Better? Reflections for Development* (Rugby, Practical Action). <https://doi.org/10.3362/9781780449449.000>
- Chambers, R. & Conway, C. (1992), 'Sustainable rural livelihoods: practical concepts for the 21st century'. IDS Discussion Paper 296 (Brighton, IDS). <https://www.ids.ac.uk/publications/sustainable-rural-livelihoods-practical-concepts-for-the-21st-century/>
- Cieslik, K., Barford, A. & Vira, B. (2021), 'Young people not in employment, education or training (NEET) in sub-Saharan Africa: Sustainable Development Target 8.6 missed and reset', *Journal of Youth Studies* 25(8): 1126–1147. <https://doi.org/10.1080/13676261.2021.1939287>
- Conway, G. (2022), 'Exploring sustainable livelihoods', in Cornwall, A. & Scoones, I. (eds). *Revolutionizing Development* (London, Routledge), 85–92. <https://doi.org/10.4324/9781003298632-10>
- Federation of Ugandan Employers (2022), 'Member briefing: sustainable migration'. https://www.ilo.org/actemp/publications/WCMS_849258/lang--en/index.htm
- Fuller, T. (1977), 'African labor and training in the Uganda colonial economy', *The International Journal of African Historical Studies*, 10(1): 77–95. <https://doi.org/10.2307/216892>
- Hickman, L. (2012), 'Is it now possible to blame extreme weather on global warming?', *World Meteorological Organization Bulletin*, 61(2): 40–43.

- Honwana, A. (2014), 'Youth, waithood, and protest movements in Africa', in *African Dynamics in a Multipolar World: 5th European Conference on African Studies—Conference Proceedings* (Lisbon, Centro de Estudos Internacionais do Instituto Universitário de Lisboa), 2428–47.
- Huq, S., Roberts, E. & Fenton, A. (2013), 'Loss and damage', *Nature Climate Change*, 3(11): 947–9. <https://doi.org/10.1038/nclimate2026>
- ILOSTAT (2023), 'Labour force statistics (LFS, STLFS, RURBAN)'. ILOSTAT database description. <https://ilostat.ilo.org/resources/concepts-and-definitions/description-labour-force-statistics/>
- IPCC (2021), 'Summary for policymakers', in 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. & Zhou, B. (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, Cambridge University Press), 3–32. <https://doi.org/10.1017/9781009157896.001>
- IPCC (2022), *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge, Cambridge University Press).
- Jeffrey, C. (2010), *Timepass: Youth, Class, and the Politics of Waiting in India* (Stanford, CA, Stanford University Press). <https://doi.org/10.1515/9780804775137>
- Jeffrey, C. & Dyson, J. (2022), 'Viable geographies', *Progress in Human Geography*, 46(6): 1331–48. <https://doi.org/10.1177/03091325221122321>
- Jeffrey, C. & Dyson, J. (2008), *Telling Young Lives: Portraits in Global Youth* (Philadelphia, Temple University Press).
- Kikulwe, D., Walakira, E. J., Ssebikindu, L., Ssebikindu, J., Muhangi, D. & Matovu, F. (2017), 'Education for all: reflections on the schooling status for the girl child in Uganda', in Kaawa-Mafigiri, D. & Walakira, E.J. (eds.) *Child Abuse and Neglect in Uganda* (Cham, Springer), 297–310. https://doi.org/10.1007/978-3-319-48535-5_15
- Lubega, H. (2021), 'History of Uganda railway', *Monitor*, 9 January. <https://www.monitor.co.ug/uganda/magazines/people-power/history-of-uganda-railway-1607800>
- Mamdani, M. (1990), 'Uganda: contradictions of the IMF programme and perspective', *Development and Change*, 21(3): 389–576. <https://doi.org/10.1111/j.1467-7660.1990.tb00383.x>
- Met Office (2023), 'Attributing extreme weather to climate change'. <https://www.metoffice.gov.uk/research/climate/understanding-climate/attributing-extreme-weather-to-climate-change>
- Montgomery, P., Hennegan, J., Dolan, C., Wu, M., Steinfield, L. & Scott, L. (2016), 'Menstruation and the cycle of poverty: a cluster quasi-randomised control trial of sanitary pad and puberty education provision in Uganda', *PLOS ONE*, 11(12): e0166122. <https://doi.org/10.1371/journal.pone.0166122>
- Mueller, G., Shrestha, S., Pradhan, K. Barford, A., Misbahul Pratiwi, A., Pradhan, K. & Hughson, G. (2022), 'Youth in a time of crisis'. Restless Development and the University of Cambridge. <https://doi.org/10.17863/CAM.84462>
- Mugeere, A., Barford, A. & Magimbi, P. (2021), 'Climate change and young people in Uganda: a literature review', *The Journal of Environment & Development*, 30(4): 344–68. <https://doi.org/10.1177/10704965211047159>
- Muhindo, S. & Mwanje, D. (2022), 'Inside the multi-billion liver, kidney trade', *The Observer*, 2 March. <https://observer.ug/news/headlines/72922-inside-the-multi-billion-liver-kidney-trade>
- Mwanika, K. (2022), 'Commercial sugarcane farming and rural youth livelihoods in Eastern Uganda', Doctoral dissertation, University of Gothenburg. <https://gupea.ub.gu.se/handle/2077/72306>
- Nabatanzi, V. (2022), '95 percent of street children in Kampala are from Napak – study'. New Vision.

- <https://www.newvision.co.ug/category/news/95-percent-of-street-children-in-kampala-are-137249> (accessed 17 August 2022).
- Nagasha, J., Mugisha, L. & Kaase-Bwanga, E. (2019), 'Effect of climate change on gender roles among communities surrounding Lake Mburo National Park, Uganda'. Emerald Open Research. <https://doi.org/10.12688/emeraldopenres.12953.2>
- Nakabuye, H. F., Nirere, S. & Oladosu, A. T. (2020), 'The Fridays for Future movement in Uganda and Nigeria', in Henry, C., Rockström, J. & Stern, N. (eds.) *Standing Up for a Sustainable World* (Cheltenham, Edward Elgar), 212–18. <https://doi.org/10.4337/9781800371781.00036>
- Nakate, V. (2021), *A Bigger Picture: My Fight to Bring a New African Voice to the Climate Crisis* (London, Pan Macmillan).
- Nakaweesi, D. (2021), 'Uganda: 12,000 Ugandans leave for Middle East every year in search of jobs', *All Africa*, 7 June. <https://allafrica.com/stories/202106080092.html>
- Namuggala, V. F. (2017), 'Gambling, dancing, sex work: notions of youth employment in Uganda', *IDS Bulletin*, 48(3): 67–78. <https://doi.org/10.19088/1968-2017.127>
- Natarajan, N., Newsham, A., Rigg, J. & Suhardiman, D. (2022), 'A sustainable livelihoods framework for the 21st century', *World Development*, 155: 105898. <https://doi.org/10.1016/j.worlddev.2022.105898>
- Nzabona, A., Asimwe, J. B., Kakuba, C., Tuyiragize, R. & Mushomi, J. (2019), 'Correlates of youth internal migration and employment in Uganda', *African Population Studies*, 33(1): 4621–4630 <https://doi.org/10.11564/33-1-1347>
- O'Higgins, N. (2017), *Rising to the Youth Employment Challenge: New Evidence on Key Policy Issues* (Geneva: International Labour Organization).
- Pallaver, K. (2018), 'Paying in cents, paying in rupees', in Hofmeester, K. & de Zwart, P. (eds), *Colonialism, Institutional Change, and Shifts in Global Labour Relations* (Amsterdam, Amsterdam University Press), 295–326. <https://doi.org/10.1515/9789048535026-011>
- Proefke, R. & Barford, A. (2023), 'Creating spaces for youth co-research', *Journal of the British Academy*, 11(3): 19–42.
- Republic of Uganda (2016), 'Uganda National Youth Action Plan'. Ministry of Gender, Labour and Social Development. <https://mglsd.go.ug/wp-content/uploads/2019/05/National-Youth-Action-Plans-2016.pdf>
- Rietveld, A. M., van der Burg, M. & 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: 152–63. <https://doi.org/10.1016/j.jrurstud.2020.01.020>
- Scott, D., Freund, R., Favara, M., Porter, C. & Sánchez, A. (2021), 'Unpacking the post-lockdown employment recovery of young women in the Global South'. IZA Discussion Paper No. 14829. <https://doi.org/10.2139/ssrn.4114368>
- Serrat, O. (2017), *Knowledge Solutions* (Singapore, Springer), 21–6. https://doi.org/10.1007/978-981-10-0983-9_5
- Shankland, S., Hyson, K. & Barford, A. (2022), 'Lifting youth participation through financial inclusion'. Business Fights Poverty and Murray Edwards College. <https://doi.org/10.17863/CAM.85272>
- Sumberg, J., Fox, L., Flynn, J., Mader, P. & Oosterom, M. (2021), 'Africa's "youth employment" crisis is actually a "missing jobs" crisis', *Development Policy Review*, 39(4): 621–43. <https://doi.org/10.1111/dpr.12528>
- Thieme, T. A. (2018), 'The hustle economy: informality, uncertainty and the geographies of getting by', *Progress in Human Geography*, 42(4): 529–48. <https://doi.org/10.1177/0309132517690039>
- Toulmin, C. (2009), *Climate Change in Africa* (London, Zed Books). <https://doi.org/10.5040/9781350219229>

- UBOS (Uganda Bureau of Statistics) (2016), 'Labour market transition of young people in Uganda: highlights of the School-to-Work Transition Survey 2015' (Geneva, International Labour Organization). https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_493731.pdf
- UBOS (Uganda Bureau of Statistics) (2021), *Uganda National Household Survey 2019/2020* (Kampala, UBOS).
- UBOS (Uganda Bureau of Statistics) (2022), 'Projected mid-year five year age groups, 2018–2020' (Kampala, UBOS). <https://www.ubos.org/explore-statistics/20/> (accessed 3 August 2022).
- UN DESA (United Nations Department of Economic and Social Affairs) (2023), 'Least developed countries (LDCs)'. <https://www.un.org/development/desa/dpad/least-developed-country-category.html>
- UNFPA (United Nations Population Fund). (no date), 'Uganda's youthful population: quick facts'. https://uganda.unfpa.org/sites/default/files/pub-pdf/YoungPeople_FactSheet%20%2811%29_0.pdf
- UNICEF (no date), 'U-Report'. <https://www.unicef.org/uganda/what-we-do/u-report>

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