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Landscapes of rural youth opportunity

by
James Sumberg
Jordan Chamberlin
Justin Flynn
Dominic Glover
Vicky Johnson

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Abstract

This paper is motivated by the consistent portrayal, within current policy discourse, of agriculture and the broader rural economy in Africa as domains of opportunity for rural youth. It presents a new conceptualization of landscapes of rural youth opportunity, where these landscapes reflect an individual's reading of the complex interplay between economic geography; local history, agrarian relations, institutions and politics; social and cultural norms; family influences; education and experience; aspirations and preferences; and access to resources. The argument is that it is essential to acknowledge the importance of opportunity structures, and avoid anything that suggests that individual characteristics, such as agency, aspirations, skills, entrepreneurial behaviour and "good choices" should be the primary considerations in relation to an "investing in youth" strategy. The paper also presents new empirical analysis of young people's engagement with the rural economy using LSMS data from six African countries.

1. Introduction

What is "opportunity"? What does opportunity look like to young people in rural areas? Does rural opportunity differ from one agro-ecological zone to another, within an agro-ecological zone, or from one location to another? Does rural opportunity differ between and/or within social groups? What are the relationships between opportunity and identity, or opportunity and aspiration? What roles do structure, agency and power play in shaping rural opportunity? Finally, how important are differences in opportunity for young people's livelihoods; and what implications do these differences have for programming focused on rural youth?

This paper is motivated by the consistent portrayal, within current policy discourse, of agriculture and the broader rural economy in Africa as domains of opportunity for rural youth. This perception of rural youth opportunity also bundles together ideas about the propensity of young people to innovate (Sumberg and Hunt 2018), and about technology, mechanization, entrepreneurship, value chains and the importance of seeing "farming as a business". The current push to "invest in youth" for rural and national development rests squarely upon this set of intertwined ideas.

However, the picture of rural opportunity that emerges from policy documents and that underpins policy and investment decisions is generally very broad, abstract and poorly theorized (if at all). This hinders efforts by IFAD and other agencies to invest in youth effectively, whether directly (through youth-specific programmes) or indirectly (through good rural development).

The objective of this paper is to develop a conceptualization of landscapes of rural youth opportunity that (1) is grounded in social and economic science concepts and theory, (2) will generate new and policy relevant empirical analysis, and (3) can help to constructively re-frame policy debate, and inform programme design and implementation. The paper also presents new empirical analysis of young people's engagement with the rural economy of based on nationally representative household survey data from six African countries (Ethiopia, Uganda, Tanzania, Zambia, Nigeria and Niger).[1]We focus on sub-Saharan Africa, although we argue that the general framework is more broadly applicable.

Underpinning the paper is a view of youth "as generation", the essence of which:

is that young people are defined in society as youth, not (or not only) by biological age, but by their relationships with non-youth in society, economy and politics. In plain language: you are a youth as long as society considers and treats you as not yet having adult status (Bourdieu, 1993; White, 2018, also see; Wyn and White, 1997).

However, for the analysis of LSMS data we are particularly interested in the early stages of livelihood building, so focus primarily on that segment of rural youth that includes all young people aged 15-24 years living in rural areas, rural towns and peri-urban areas.

Following this introduction, the paper proceeds as follows. Part 2 sets out the argument and provides the background to it. Part 3 briefly reviews the use of different typologies, domains and spatially explicit frameworks in rural development, and assesses how these might inform the analysis of local rural economies as the locus of rural youth opportunity. Part 4 presents the conceptualization of landscapes of rural opportunity. Part 5 presents new empirical analysis using survey data from six African countries. Part 6 concludes and highlights a number of implications of the analysis.

[1] With the exception of Zambia, these countries are the focus of the IFAD-funded research project Youth Engagement with the Rural Economy, which is currently being undertaken by IDS, the University of Sussex, CIMMYT and ActionAid.

2. Opportunity: background and argument

2.1 Background

There is a vast literature on the topic of opportunity from various disciplinary perspectives including business, strategy, entrepreneurship, innovation, education and philosophy. A detailed review is outside the scope of this paper. Suffice it to say that relatively little of this literature deals directly with young people in rural contexts in the South.

A particularly important body of literature for this paper is that related to the theory of occupational allocation, which is also referred to as opportunity structure theory. Developed in the United Kingdom in the late 1960s and 1970s, the central tenet is that the job opportunities available to school leavers became "cumulatively structured" (Bynner and Roberts, 1991; Lehmann et al,. 2015; K. Roberts, 1968, 1977; K. Roberts et al., 1994; K.Roberts, 1995).[2] Because of this structuring, K. Roberts (1977) argued that it was a mistake to over-emphasize the role of aspirations and choice in determining how young people enter the labour market. Indeed, he put it even more starkly: "neither school leavers nor adults typically choose their jobs in any meaningful sense: they simply take what is available" (p.3).

Roberts' warning was rooted in an analysis of what he called the "opportunity structures", which, he theorized, create distinct routes that govern both young people's entry into the labour force and subsequent career progress. These opportunity structures result from the inter-relationships within a web of determinants including place, family origins, gender, ethnicity and education, and labour market processes. It is not so much that opportunity structures leave the individual with no room for manoeuvre, but rather that for most young people who are poor, poorly educated and/or socially or geographically marginalized, it is likely to be very tightly constrained. As Roberts put it:

Choice is not irrelevant, but it fails to explain enough. It cannot account for the contexts, including the labour market contexts, in which young people make their choices, and it cannot identify the different limits within which different groups of young people choose (K. Roberts, 2009, 362).

The main implication of opportunity structure theory is that aspirations, choice and individual responsibility are simply not very useful or appropriate policy framings. Change in how young people enter and progress in the labour market will come about, not as a result of higher aspirations, better choices or some skills training. Rather it is the opportunity structures that need to change, which means nothing less than a long-term commitment to fundamental social change.

The perception of entrepreneurial opportunity literature (e.g. Maija et al., 2012) suggests that an individual's understanding of opportunity reflects both objective and subjective elements. In other words, opportunity should be understood as a hybrid construction that emerges through a socially-embedded individual's reading of, for example, an economic, technical or social milieu. There is a large quantitatively-oriented literature that seeks to model the search processes that entrepreneurs and firms use to identify opportunity (Felin et al., 2014).

Another body of literature that has not yet been brought into debates about international rural development originates from work in urban areas in the United States and focuses on the geography of opportunity and so-called opportunity communities[3] (Galster and Killen, 1995; Galster, 2017; Knaap,

[2] https://runninginaforest.wordpress.com/category/careers-theory-2/theories-every-careers-adviser-should-know/; https://warwick.ac.uk/fac/soc/ier/ngrf/effectiveguidance/improvingpractice/theory/traditional/

[3] http://kirwaninstitute.osu.edu/researchandstrategicinitiatives/#opportunitycommunities

2017; Reece and Gambhir, 2009). This literature suggests that neighbourhoods are the primary environments in which key opportunity structures are accessed: "neighbourhoods often determine access to critical opportunities needed to excel in our society, such as high‐performing schools, sustainable employment, stable housing, safe neighbourhoods, and health care" (Reece and Gambhir, 2009). The notion of opportunity communities recognizes the fact that the local context, and the degree to which it is enabling (or not), plays "a substantial role in life outcomes of inhabitants" (p.2). It should be noted, however that an enabling neighbourhood or local context may only go so far in addressing deep seated social, political or economic opportunity structures.

Finally, the literature on change-scapes (or youth centred landscapes of change) highlights the role that young people's developing identities, ideas and agency play in the structuring and re-structuring, reading and re-reading of landscapes of opportunity (Johnson, 2011, 2014, 2017). The notion of change-scape takes into account young people's lived experience, and how their developing identities and transitions to adulthood are influenced by the political, environmental, cultural and institutional contexts in which they live; but how, through their individual and collective agency, they can also, to some degree, change these contexts. Opportunity structures theory and the change-scape approach are to a certain degree in tension, with the former giving greater importance to structures and the latter to agency.

2.2 The argument

We are interested in understanding how and why rural young people in Africa get started along particular livelihood trajectories,[4] especially in the context of processes of rural transformation. We argue that the individual's reading of the local landscape of opportunity plays a significant role in this process.

The image of a landscape of opportunity is particularly useful in furthering the understanding of rural youth opportunity. The language of "opportunity landscape" is well established in the entrepreneurship and strategy literatures, although its value is contested (Felin et al., 2014). A physical landscape is a complex, multi-dimensional, relational space made up of different elements. Landscapes change over time and are read differently depending on the background and experience of the observer: the same landscape may be perceived as threatening by one individual and welcoming by another. Thus, landscapes are constructed from a combination of the objective and the subjective. Landscapes are navigated, and the process of navigation generates both new experiences and knowledge, and may reveal aspects of the landscape that were previously hidden from view. Over time, an individual's understanding of, and relationship to, the landscape develops and evolves, and indeed, his/her actions may also change the landscape. We argue that the image of a landscape of opportunity as complex, relational and dynamic – and likely to be read differently by different actors – is more useful than, for example, the idea of a rural "opportunity set" (often understood as the overall objective set of opportunities available to individuals within a community).

[4] We purposely use the term livelihood instead of work, employment or job, because young people's aspirations and their imagined futures encompass a broad range of concerns including family, marriage, children, religion, community, health, location and well-being, in addition to work, employment or career K. Hoskins, 'The Changing Landscape of Opportunity for Young People', Youth Identities, Education and Employment: Exploring Post-16 and Post-18 Opportunities, Access and Policy (London: Palgrave Macmillan UK, 2017), 1-21, K. Hoskins and B. Barker, 'Aspirations and Young People's Constructions of Their Futures: Investigating Social Mobility and Social Reproduction', British Journal of Educational Studies, 65/1 (2017/01/02 2017), 45-67, T. Yeboah et al., 'Perspectives on Desirable Work: Findings from a Q Study with Students and Parents in Rural Ghana', European Journal of Development Research, 29/2 (2017), 423-40.

The landscape of opportunity is neither objective, fixed, nor exogenous to the individual. Rather it represents an individual's reading of the complex interplay between economic geography; local history, agrarian relations, institutions and politics; social and cultural norms; family influences; education and experience; aspirations and preferences; and access to resources. These factors structure the landscape of opportunity, but it is the young person's reading of the landscape, through the lens of developing and shifting identities, that gives it meaning.

Thus, an individual's reading of and engagement with the landscape of opportunity reflect the interplay of structure and agency (Giddens, 1984; Sarason et al., 2006). Both understanding and engagement evolve over time, reflecting changes in agency (the capacity and freedom to act) that stem from the accumulation of knowledge, skill and experience, changing social position, evolving identities, etc. The implication of this is that the landscape of opportunity may be read very differently by young people within the same rural setting, and across different rural settings.

The more that is known about (1) how landscapes of opportunity are structured, (2) the relative importance of young people's reading of the landscape of opportunity in explaining the early stages of livelihood trajectories, and (3) the relative importance of the different influences on young people's reading of a landscape of opportunity, the more potentially effective policy and investment will be.

Thus, we seek to develop a systematic way to think about landscapes of opportunity and how they are structured, read, navigated and changed. We are not proposing a model of how young people make decisions, or how they sort through the various possibilities that might be open to them. The latter would be a different programme of research and conceptual development.

Finally, we take it for granted that opportunities reflect and are shaped by higher-level, non-local conditions, factors and forces, such as trends in the global political economy, trade regimes, policy processes and politics at various levels, history, etc. However, while clearly important, these key conditions and interactions are not the immediate focus of this paper.

3. Diversity, local economy and spatial analysis

3.1 The local rural economy

Rural economic opportunity exists both on- and (increasingly) off-farm, and it has a strong spatial dimension. To date, however, little progress has been made in developing what might be thought of as a "local economy" approach to agriculture and development.[5] Instead, much of the analysis of technological change and agricultural commercialization in Africa – two critically important aspects of rural transformation (IFAD, 2016) – has been at the farm and/or household levels. A local economy approach is appealing because rural opportunity emerges within the (spatially mediated) interplay between on-farm, rural off-farm and other economic activity. The dynamics of this interplay is at the heart of the livelihood diversification (Ellis, 2000), de-agrarianization (Bryceson and Jamal, 1997; Bryceson, 2002) and pluri-activity literatures.

[5] The "local" in terms such as local economy and local food is not easily defined. For our purposes, we conceive of a local economy as being characterized by a relatively dense network of exchange (including economic and social exchange).

The most common approaches to understanding a local economy include analysis of trends in growth, employment (or unemployment), job creation; distribution of income/wealth, etc. Existing data sets can provide some useful indicators, however available data are often not adequate or appropriate for fine-grained analysis at a localized level. Another challenge is that the nature of much (on- and off-farm) rural work – essentially self-employment and/or, informal, seasonal and (at least partially) subsistence-oriented – means that the value of standard labour market concepts and indicators, such as employment, unemployment, underemployment and job creation needs to be carefully considered.

Any understanding of the interplay between on-farm and rural off-farm economic activity, and the role of agricultural intensification and commercialization in this interplay, must be informed by the well-established literature on structural change, forward and backward linkages, spill-overs and local multipliers.[6] The literature on territoriality and regional economic development is also relevant (de Janvry and Sadoulet 2007; Schejtman and Berdegué 2004).

It is also the case that opportunities within the local rural economy exist alongside, and in relation to, opportunities further afield. The landscape of opportunity extends well beyond what might be considered the local economy, and encompasses other rural, small town and urban settings, both within and across national borders. In this paper, the focus is principally on rural opportunities, however the literature on youth mobility in Africa is certainly relevant too (Porter et al., 2010a; 2010b; 2012; 2017).

3.2 Rural diversity and spatially explicit frameworks

A long-term interest of geographers, economists and agricultural scientists has been to make sense of the diversity that characterizes rural Africa. Some have focused at the “system” level, including early efforts to classify agricultural and farming systems (Allan, 1965; Rutherberg, 1971).[7] The spatial aspect of these classifications was often either very broadly drawn, or implicit. The use of recommendation domains within farming systems research sought to group farms, farmers or households with similar characteristics or facing similar conditions, and for whom the same technical recommendations were likely to be appropriate (Collinson, 2000; Hildebrand et al., 1993). Again, spatial distribution of and/or spatial relations among and between recommendation domains was often of secondary importance.

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[6] Although some common assumptions about local multipliers may need to be re-thought. For example, it is often assumed that farm production-related transactions help sustain local economies, particularly where other production activities are limited. Relatively recent research from the United Kingdom and Europe tested this assumption, and findings from this research highlight:

> the importance of allowing for context when explaining farmer purchasing and sales decisions. They also reveal a highly complex pattern of production-related linkages in the region, with many farmers choosing to bypass their most proximate agribusinesses. Certain towns are found to dominate agriculture related transactions in the region, reflecting the spatial concentration of upstream and downstream agribusinesses. The findings provide new insights into theoretical debates on the role of small towns in the urban system and the changing importance of geographical distance in determining business transactions Kate Pangbourne and Deborah Roberts, 'Small Towns and Agriculture: Understanding the Spatial Pattern of Farm Linkages', European Planning Studies, 23/3 (2015/03/04 2015), 494-508. also see: Deborah Roberts, Edward Majewski, and Piotr Sulewski, 'Farm Household Interactions with Local Economies: A Comparison of Two Eu Case Study Areas', Land Use Policy, 31/Supplement C (2013/03/01/ 2013), 156-65.

These findings suggest the need for a nuanced, context-specific understanding of the structure and dynamics of local rural economies and how these shape landscapes of rural opportunity.

[7] Also see: http://www.fao.org/docrep/003/Y1860E/y1860e04.htm#P1_2

Agro-ecological zonation is an example of a more spatially explicit approach. Here physical and bio-physical characteristics, such as elevation, soil type and rainfall, are used to identify zones with a level of homogeneity sufficient to describe “potential” and thus allow more effective planning and agricultural extension (for an example from Kenya see Jiitzold and Kutsch, 1982; Sombroek et al., 1982). Most exercises along these lines paid relatively little attention to the socio-economic or agrarian relations underpinning ongoing agricultural activities within the agro-ecological zones. The World Bank’s “sleeping giant” analysis of Africa’s guinea savannah is a recent example of this approach (World Bank, 2009).

A simple framework for thinking about the diversity of rural areas that brings together elements of the agro-ecological and the socio-economic was proposed by Wiggins and Proctor (2001). This framework uses differences in quality of natural resources and access to markets to characterize current activities within different rural areas, and potential future agricultural and rural development trajectories (Table 1). Along similar lines, the development domains literature (Chamberlin et al., 2006; Pender et al., 2004; Pender et al., 2006) uses agricultural potential, access to markets and population density to understand “opportunities and constraints facing alternative rural livelihood options” (Chamberlin et al., 2006). A further recent development has been in the mapping of sub-national agricultural development segments linked to typologies of small farms (AGRA, 2017; Hazel et al., 2017; Hazel 2017).

The conceptualization of landscapes of rural youth opportunity that we develop below builds on and extends the Wiggins and Proctor framework and the development domains approach by moving the analysis from a development domain to a local rural economy, and by making explicit the importance of local political economy, local institutions and social norms in shaping landscapes of opportunity (Ripoll et al., 2017).

Table 1. Rural diversity: a characterization, with most likely activities

	Location characteristics		
Quality of natural resources	**Accessible areas**	**"Middle" countryside**	**Remote rural areas**
Good	**Market gardening and dairying** Daily commuting to the city Weekend recreation activities Manufacturing industry may "deconcentrate" from city proper into this space	**Arable farming and livestock production, specialized, with capital investment, producing** **surpluses for the market** [Same for forestry, fishing, mining, quarrying] Tourism and recreation Some crafts Employment in off-farm economy including rural industry Migration (in or out)	**Subsistence farming, with only** **the production of surpluses of high value items that can bear transport costs** Crafts and services for local markets Tourism and recreation Migration (out)
Poor	As above: **i.e. Market gardening and dairying** **NB**: Quality of natural resources not so important since capital can be used to augment poor land – e.g. by irrigation, fertilizer – when needed for intensive farming	Probably lightly settled Extensive farming, probably livestock. **Few jobs** Tourism and recreation Some crafts Migration	Subsistence farming, low productivity. **Surpluses very small or nil** Crafts and services for local markets Tourism and recreation Migration

Source: Sumberg et al. (2015), adapted from Wiggins and Proctor (2001). "Accessible" areas include peri-urban and rural areas with good physical access to urban markets

4. Landscapes of rural opportunity: a framework

4.1 Introduction

Possibility or opportunity?

Most rural situations provide people – including young people – with a range of different economic activities that might be pursued, in principle or in theory. However, a young person is unlikely to consider all of these theoretical possibilities equally as opportunities. We argue therefore that it is useful and important to distinguish between possibilities and opportunities.

We consider a possibility to be an activity that is or may be viable in a given economic geography and local context. A possibility is an option, akin to an element of what is often referred to as an "opportunity set". Due to incomplete knowledge and limited experience, there are likely to be some possibilities that an individual is simply unaware of. Among the possibilities that she or he is aware of, some may be more attractive or more desirable, for a whole variety of reasons, others less so. Some may be so unattractive as to be unthinkable.

We will consider an opportunity to be a possibility that an individual is aware of and which, for whatever reason, is considered desirable or attractive. We would expect that differences in age, gender, class, religion and education will be important in explaining differences in the perceptual classification of possibilities and opportunities. For example, for an ambitious secondary school leaver, doing unpaid labour on family fields may well be a possibility, but it is unlikely to be seen as an opportunity.

While mindful of Kenneth Roberts' caution not to over-emphasize the roles of aspirations and choice in determining how young people enter the labour market, we suggest that the distinction between possibility and opportunity that is being proposed here is likely to be increasingly important as young people have better access to education, and when they think that they have, or should have, livelihood options.

Possibility areas and modes of engagement

In thinking about landscapes of rural opportunity we argue that it is useful to step back from a focus on individual possibilities or specific jobs, and to focus on what we will call possibility areas. A possibility area can be thought of as a something like a micro-sector, sitting between the level of a sector or industry (e.g. agriculture) and a particular job (e.g. agricultural labourer). For example, in a given rural context, cereals might represent an important possibility area, that would include production, as well as the provision of associated goods and services, local processing, transportation and so forth. In the light of the earlier discussion of local rural economies, the notion of a possibility area is attractive because it includes and links together both on-farm and off-farm (or farm and non-farm) activities.

It follows that within any given possibility area, there will be a number of different potential ways that an individual or firm might get involved – we call these different modes of engagement. For example, consider a young man who works as a wage labourer on a neighbour's maize farm because he has no access to land on which to farm on his own account. For this young man, cereals is the possibility area, and wage labour is the mode of engagement. For the farmer who employs him, cereals is also the possibility area, and self-employment is the mode of engagement. The farmer's sister supplies maize seed through a kiosk she operates. For her, cereals is still the possibility area, but the mode of engagement is (off-farm) self-employment.

Social norms and expectations may mean that some possibility areas and/or some modes of engagement are not open to or thought appropriate for members of certain social groups. A young person's access to resources – including land, capital, knowledge and networks – will also influence what possibility area and mode of engagement combinations are open.

4.2 Landscapes are structured, landscapes are read

Landscapes of opportunity are structured

Below we identify four factors that act to structure local landscapes of rural youth opportunity: economic geography, local particularities, social norms and family and access to resources.

Economic geography

The basic insight from economic geography is that in any given location, some economic activities are more viable than others. In relation to natural resource-based activities like crop and livestock production, it is clear that aspects of the natural resource base and agro-ecology, including soil characteristics, altitude and climate, will to a large extent determine what commodities might be produced. The well-established traditions of land evaluation (FAO, 1976) and agro-ecological zonation (FAO, 1996; Fischer et al., 2002) have sought to capture this aspect of rural possibility.

But even if the production of a commodity is possible from an agronomic or agro-ecological perspective, it will not necessarily be economically viable. Economic viability depends on, among other things, access to input and output markets. Depending on the characteristics of the commodity, ease of market access will reflect some combination of spatial proximity, the quality of infrastructure and the cost of transportation services (as first elucidated in the early 19th century, Von Thünen, 1966).

The Wiggins and Proctor framework introduced earlier (Table 1), as well as the development domains literature, integrate differences among rural areas in relation to both natural resources and market access. The basic message is clear: economic geography acts to structure what is possible at the highest level, independent of local context, specific social norms or any individual preferences. In terms of the transformative potential of agricultural intensification and commercialization, frameworks like this should focus the minds of rural development planners, and those interested in employment possibilities for rural youth, on (1) middle countryside areas with good natural resources and (2) peri-urban zones (Ripoll et al., 2017). It is of course the case that these frameworks present a static picture: investments in transportation or irrigation infrastructure, for example, or radical innovations, could fundamentally shift what is possible and what is economically viable in a given area.

Local particularities

While economic geography is clearly important, it provides only a first step in understanding the economic possibilities within a particular location or local economy. Two local economies situated in similar economic geographies (e.g. middle countryside with good natural resources) might present very different pictures in terms of growth or employment generation because of local agrarian dynamics (including historical patterns of development, demography, land availability and the distribution of land holdings, inward investment in land etc.), and the institutions and politics that underpin them (from inheritance and land tenure regimes, to local political elites, cooperatives and farmer groups). Local agrarian dynamics will also reflect an array of extra-local factors including regional and national politics and policy, and consumer demand.

Local particularities and context structure opportunity landscapes not so much by eliminating particular commodities, but rather by favouring certain modes, models and scales of production (e.g. smallholder, contract, plantation etc), and by creating barriers to entry (e.g. through the availability and/or cost of land) that may affect some groups more than others.

Social norms

Norms and expectations associated with social differences including gender, age, class, marital status, religion and ethnicity act to reproduce preconceived notions of what is acceptable or appropriate [as in Whitehead's "gender-ascribed constraints", and the idea that public institutions act as "bearers of gender" (also see Kabeer, 2016; Whitehead, 1979)]. As a result, in particular locations, some economic activities might not, for example, be considered appropriate for women (or young women, or young single women). The literature on "women's crops" and "men's crops" provides additional examples of how social norms structure rural economic opportunity (Carr, 2008; Doss, 2002; Evans et al., 2015; Githinji et al., 2014; Lambrecht, 2016; Orr et al., 2016b; Orr et al,. 2016a). Gender-based norms and expectations around mobility or long-distance travel is another example.

Norms and expectations are seldom absolute, and there is often some disjuncture between what can or should be done, and what is actually done. Norms evolve over time, and through individual and collective agency young people challenge social norms and thereby play a role in their evolution.

Family and access to resources

Family is widely understood to be a (if not the) major influence on young people's aspirations and imagined futures (Dabalen et al., 2014; Hoskins and Barker, 2017). Particularly for younger people, it is often through families and kin groups that productive resources including land, finance, technology, knowledge and networks are accessed. The key point is that within a particular possibility area, differential access to resources may determine the modes of engagement – e.g. unpaid labour, wage labour, self-employment – that are open to an individual.

It is of course the case that the local particularities and social norms referred to above will also be reflected in the differential access to resources, including education and land, which young people often access initially through families. There has been some discussion of the importance of land tenure and inheritance regimes in restricting young people's access to land in some situations (Amanor, 2010; Berckmoes and White, 2014; Bezu and Holden, 2014), and some observers have called for a new research focus on the effects of intergenerational decision making and transfers on youth livelihoods.

Landscapes of opportunity are read

Our argument is that, in effect, the landscape of opportunity emerges, or becomes meaningful, only as and when it is read by an individual.

Thus, reflecting their social situation (e.g. living at home or away; single or married; with or without children), family background and the future they imagine for themselves, individual young people will have views on the different possibilities that they see as being open to them. Some might be dismissed out of hand ("I would never do that!"); some considered only in times of crisis; others might be acceptable; and a few might be seen as highly preferable.

Information about, and familiarity with, the different possibilities affects the reading of the landscape, particularly for younger people whose knowledge about some possibilities is likely to be incomplete or imperfect, and may even be wrong. We would expect that what an individual finds acceptable or preferable will evolve over time, e.g. with greater knowledge and experience, or increasing obligations.

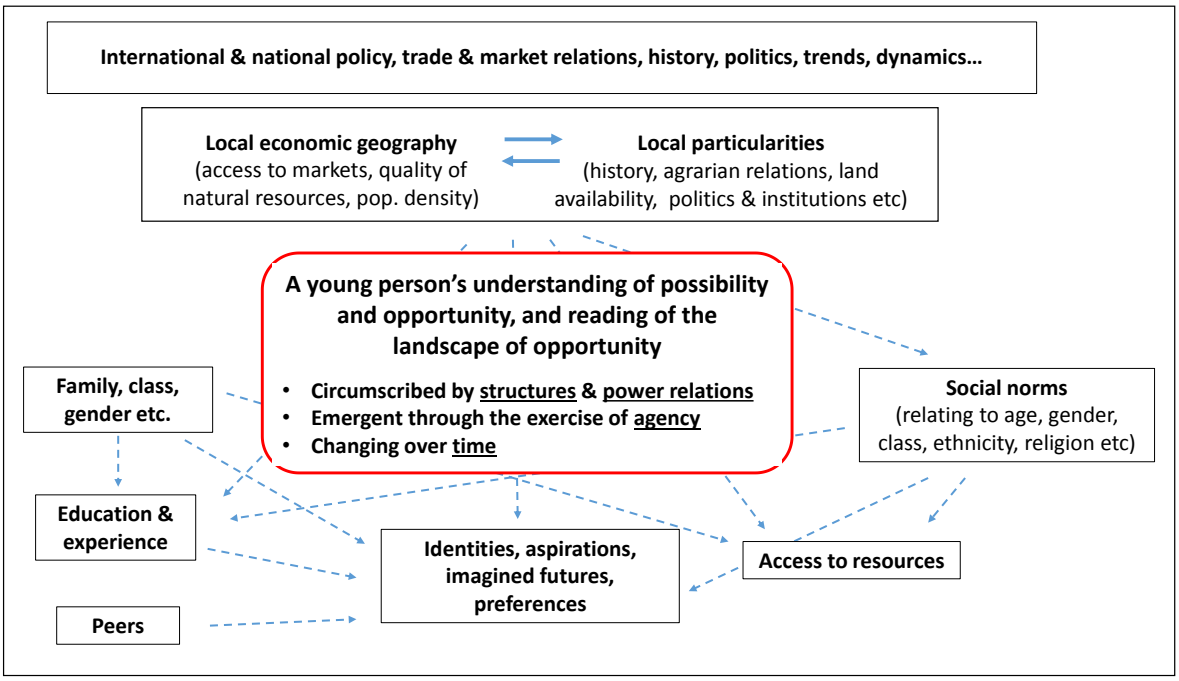
The distinction made earlier between possibility areas on the one hand, and modes of engagement on the other, suggests that an individual's reading of the situation must be considered at two levels. Thus, while a possibility area – e.g. cereals – may be seen as an opportunity by a particular individual, some possible modes of engagement within this possibility area, like small-scale producer or farm labourer, may not be.

Summary

The proposed conceptualization of landscapes of rural youth opportunity is illustrated in Figure 1. This figure suggests that a young person reads and engages with the landscape of opportunity as an actor situated in a certain economic geography, and embedded in a set of specific local historical, environmental, social, economic, political and family relations. Some of these relations will enable and others will constrain.

The central proposition is that a young person's landscape of opportunity emerges from the interplay of structure and agency. It is also dynamic and evolving, reflecting changing circumstances, the exercise of agency, and the accumulation of experience, knowledge and other assets. This understanding is in contrast to the more common focus on aspirations and mind-set, individual decision making and (Sumberg and Hunt, 2018) skills.

Figure 1. Landscapes of rural youth opportunity



Source: Authors

Sumberg and Hunt (2018) acknowledged the reality that compared to older people, young people will generally have less experience of the world of work and more limited access to productive resources.[8] It seems reasonable to expect that these conditions will have important implications for how landscapes of opportunity are read, and the possibility areas and modes of engagement that are open to them. They may also be expected to impact on the success or otherwise of young people's engagement with employment-oriented development interventions.

The suggestion that incomplete or imperfect information affects how an individual reads the landscape of opportunity points to some important questions: How do young people learn about economic or livelihood possibilities? How does information and knowledge about different possibilities and modes of engagement move among young people, and how does social difference affect this? Does the nature of the local economy (more or less diverse, more or less commercialized, more or less dynamic, etc.) affect this learning? What interventions have been used to address the problem of incomplete or imperfect information about the possibility set, and with what effects?

If we accept that young people must read and navigate the landscape of opportunity, and that this navigation is a social process,[9] then it will be important to understand how family, household and individual characteristics affect the process of navigation and associated outcomes. This can be done by focusing on the lived experiences of young people, and how they negotiate changing family expectations, rapidly changing political contexts and fragile environments.

5. New empirical analysis

To explore the degree to which our economic geography framework (laid out in Table 1, above) has empirical traction, we use recent data from several nationally representative household survey datasets, along with geographical contextual factors which represent the two axes of the framework (market access and agricultural potential).

Our basic approach is to first use geospatial estimates of the extent and locations of these conditions to characterize the relative share of Africa's young people who operate within them. We then ascertain how observable labour allocation and other economic engagement outcomes vary by age of individual, and the degree to which these outcomes vary across spatial economic contexts.

[8] This is not to suggest that young people do not have valuable knowledge and experience, or that some young people may not have greater access to productive resources, and knowledge and experience in some areas than some adults.

[9] It may be useful to look to the literature on "social navigation", which is widely used, and particularly "when referring to how people act in difficult or uncertain circumstances and in describing how they disentangle themselves from confining structures, plot their escape and move towards better positions" Henrik Vigh, 'Motion Squared: A Second Look at the Concept of Social Navigation', Anthropological Theory, 9/4 (2009), 419-38, J. Flynn et al., *Failing Young People? Addressing the Supply-Side Bias and Individualization in Youth Employment Programming. Ids Evidence Report 216* (Brighton: Institute of Development Studies (IDS), 2017).

5.1 Data

Data on individual labour allocation, as well as household level income-orientation, were drawn from georeferenced nationally-representative household survey data from six countries, as described in Table 2 (also see Appendix Table 1)[10] Our sample was restricted to the rural component, defined as those households located in enumeration areas defined as rural by the national statistical agency for each country, as well as households located in nominally "urban" enumeration areas, but with population densities below 1000 persons per square kilometre.

Table 2. Household survey data used in this study

Country	Survey	Year used in this analysis	Sample households*	Sample individuals**
Ethiopia	LSMS-ISA	2015-16	3,920	11,091
Niger	LSMS-ISA	2014-15	2,847	8,220
Nigeria	LSMS-ISA	2015-16	3,488	11,817
Tanzania	LSMS-ISA	2012-13	3,393	9,884
Uganda	LSMS-ISA	2012-13	2,212	6,734
Zambia	RALS	2014-15	7,934	28,003

Notes: *Sample restricted to rural and peri-urban areas. **Individuals aged 15 years or more within sample households.

To complement these data, we define zones of economic geography based on the following variables. For market access (represented as the horizontal dimension of the framework: high access, middle-countryside and remote areas), we rely on estimated travel time to the nearest urban centre of 50,000 or more inhabitants, using data from the Malaria Atlas Project (Weiss et al., 2018). "Accessible" areas are defined as locations within 30 minutes of travel time to an urban centre of 50,000+; areas are classified as middle-countryside if they are between 30 minutes and 2 hours; remaining areas are classified as remote. We further net out urban areas using the boundaries defined in the Global Human Settlements database (Pesaresi and Freire, 2016).

For agricultural potential, we use a simple measure of EVI (Enhanced Vegetation Index) as our primary indicator, using data from the MODIS sensor. As a measure of biomass, EVI effectively synthesizes a number of agroclimatic, edaphic and other conditioners of agricultural production potential. We define low potential areas as those with less than 0.5 EVI at the peak of greenness over a three-year period (2014-16). This threshold is fundamentally arbitrary but does provide a useful shorthand way of distinguishing between conventionally recognized high and low potential areas.

5.2 Distribution of Africa's young people across economic geographies

Using geospatial estimates of average annual rainfall and distance to nightlights from the sources described above, Figure 2 shows the distribution of six economic geographies across Africa. We then overlay these mapped geographies with recent geospatial estimates of age-disaggregated population

[10] Burkina Faso is also one of the countries we have targeted for this analysis, but there are no geographical coordinates available for these households, and therefore we are unable to include this in the current study. We have contacted the World Bank's LSMS-ISA team about acquiring these data but have not had a substantive response yet.

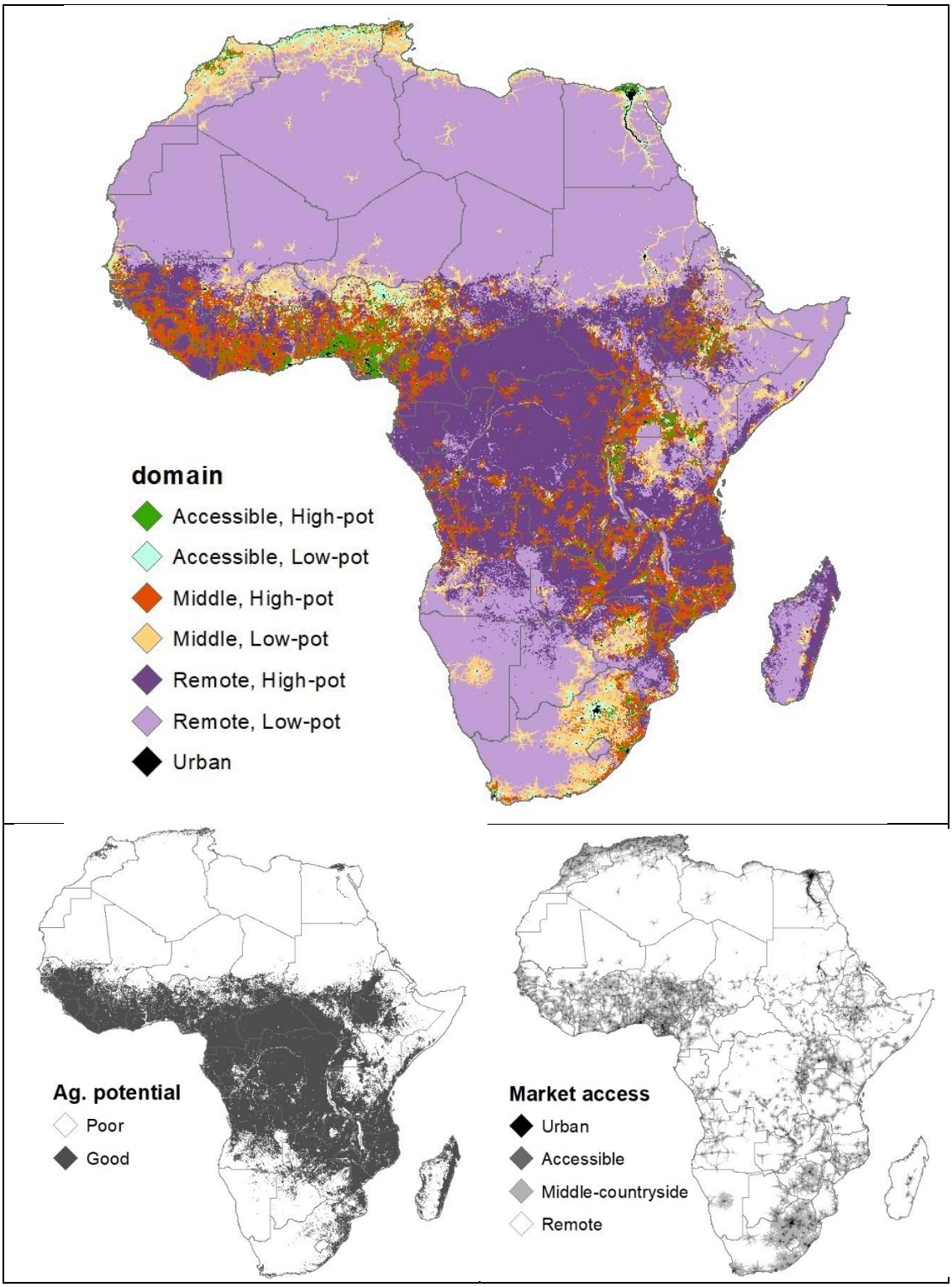
distributions (Wardrop et al., 2018) to quantify the number and shares of young people (aged 15-24) in each geography. Results are summarized in Table 3 (also see Appendix, Table 2, for a larger selection of countries). It is striking that, overall, 56 per cent of young people live in areas with low agricultural potential, and 28 per cent in areas that have low potential and are also remote. The remaining young people are divided between Accessible (28 per cent) and middle countryside (22 per cent) areas, and a slight majority of these young people in areas with relatively low agricultural potential.

These findings would appear to have important implications for youth-focused agricultural and rural development strategies: is it realistic that the rural economy can generate meaningful employment for the 62 per cent of rural youth living in remote areas and low potential middle countryside areas?

Key points:

- Young people in rural sub-Saharan Africa (SSA) face a diverse set of economic geographical conditions, and a correspondingly diverse set of likely opportunities
- Almost half the population lives in relatively highly accessible areas, where non-farm rural opportunities are expected to be particularly relevant
- Of those that live in moderately accessible and remote areas, where agriculture is relatively more important, the majority are in lower potential areas, in which both the farm and non-farm economies are expected to offer fewer economic opportunities

Figure 2. Map of economic geographies in Africa



Source: Authors' analysis

Table 3. Distribution of young Africans (aged 15-24) across economic geographies (1000s)

	Market access			
Agricultural potential	**High access**	**Middle-countryside**	**Remote**	**Total**
High	26,160	22,034	48,194	*96,388*
Low	35,026	25,760	60,786	*121,573*
Total	*61,186*	*47,794*	*108,981*	*217,961*
High	12%	10%	22%	*44%*
Low	16%	12%	28%	*56%*
Total	*28%*	*22%*	*50%*	*100%*

5.3 Individual labour allocation by age

As a precursor to examining how economic engagement is shaped by geographic and other contexts, we examine available indicators of individuals' labour allocation by age. Results indicate that patterns vary strongly by age. Figure 3 shows the percentage of individuals in Tanzania who report participation in wage employment, non-farm business, family farm activities and school. Those who report no participation in any of these categories are also tabulated. As expected, young people are much more likely to be in school. Of particular note, however, is the relatively low share of even relatively young individuals who are in school, even in the 15-18 range, where only about half the sample reports currently being in school.[11] This share drops precipitously between 15 and 20. The difference between 15-19 and 20-24 year olds also highlights some of the drawbacks of packaging information about "youth" into the standard 15-24 year old age range, given the clear heterogeneity of labour allocation patterns within this range. Furthermore, there is a strong spatial dimension to this: individuals in more remote areas are less likely to report being in school at any age, signalling that average school leaving ages are falling with remoteness (Figure 4). Individuals' labour allocation for other countries, presented in the Appendix Table 3 and Appendix Figures 1 through 6, show similar patterns.

A second pattern to note is that, although younger people are somewhat less likely to participate in non-farm wage or business work than older people, and have slightly lower rates of family farm engagement, they are nonetheless an important source of family farm labour.[12]

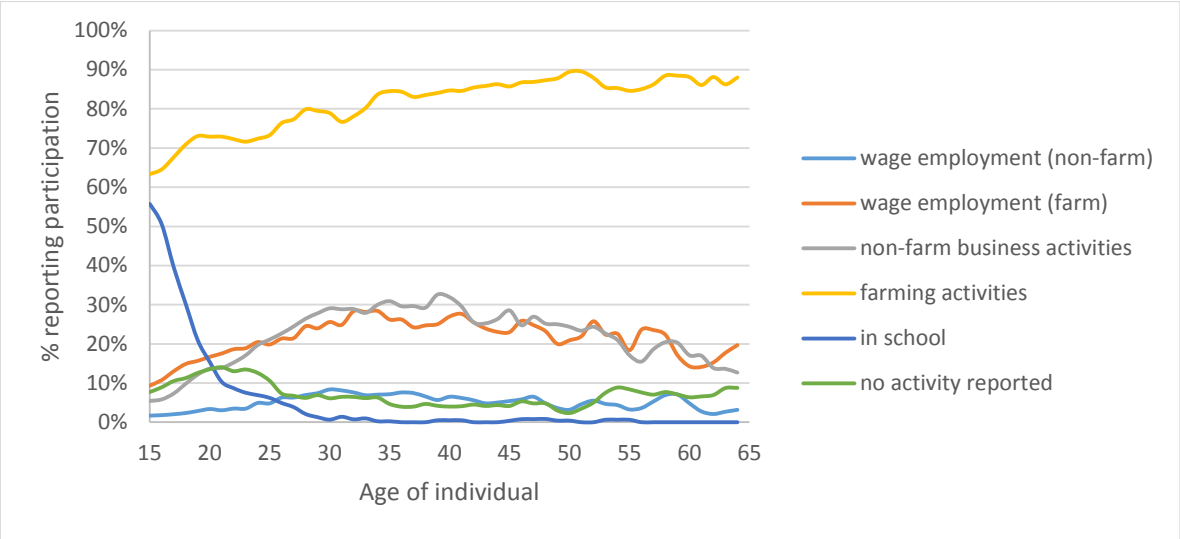
[11] We need to critically examine the possibility that respondents said "not currently in school" if the survey enumeration happened during a school break. This is probably not the case, but it still needs to be ruled out definitively.

[12] We have other data compiled on this, showing that a majority of family farm labour comes from young adult household members. Furthermore, a sizable share of household wage income comes from such members (and wage income is an important component of total income in all countries).

Key points:

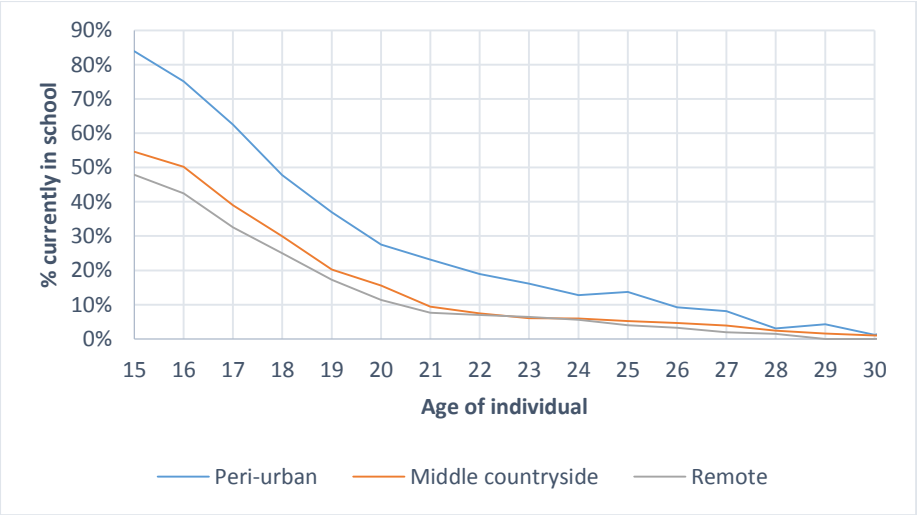
- Strong differences in labour allocation (particularly with respect to school) within the 15-24 year age range signal the heterogeneity of engagements within young people defined by coarse age categories
- For some of these patterns, there are strong spatial dimensions (which we explore further in subsequent sections)
- Most young people participate in household farming activities, in contrast to the oft-made stylized assertion that young people are abandoning agriculture in droves (although this needs some qualification: we only view individuals who are still at home, and we do not examine full-time equivalents of labour supplied to family farming; we can do the latter, but have not done so yet).
- Individuals in the 18-25 year range are the most likely to report no economic activities at all.
- Off-farm wage employment is important in our sample and increases with age – a 35-year-old in rural Tanzania is about twice as likely to have wage employment as a 20-year-old.
- Farm wages are generally much more important than non-farm wages across all age categories.

Figure 3. Individual labour allocation decisions by age (Tanzania)



Source: Authors' analysis

Figure 4. School participation rates, by age and remoteness category (Tanzania)



Source: Authors' analysis

5.4 Individual labour allocation of young people varies by context

Table 4 assembles further evidence on how individuals' labour allocation patterns differ across economic geographies. Most strikingly, wage employment and non-farm business engagement increases with proximity to markets. In some countries (e.g. Ethiopia, Zambia) the relative importance of these non-farm activities decreases with remoteness more slowly in high potential areas. In other words, in more remote areas, non-farm opportunities are greater in higher potential areas. This likely reflects the role of agricultural surplus in enabling non-farm economic activities.

In a countervailing trend, the share of young people engaged in household farming activities generally increases with distance from markets. The relationship between farm engagement and agricultural potential (as currently defined) is less straightforward. In some countries (e.g. Niger), the share of young people engaged in family farming activities is larger in higher potential areas, although in other countries (e.g. Nigeria), the opposite appears to be the case.

The share of young people in school shows a strong positive correlation with proximity to markets; young people in more remote areas consistently show lower rates of school attendance for the same age groupings. These patterns also vary strongly across agricultural potential, with the difference between school attendance in low versus high potential areas increasing with remoteness. This pattern is interesting, although its drivers are unclear; it may be that public investments in education (and, thus, opportunities) are more limited in marginal areas. Alternatively, it may be that relatively higher household welfare levels in high potential areas enable young people to stay in school longer, as there is a reduced need for them work to contribute to household income.

Key point:

- Strong differences in labour allocation (particularly with respect to school) within the 15-24 year age range signal the heterogeneity of engagements within young people defined by coarse age categories.

Table 4. Percentage of 15-24-year-olds reporting labour allocation to different activities

Geography	Wage employment		Non-farm activities		Farming activities		In school		No activity	
	Low pot.	High pot.	Low pot.	High pot.	Low pot.	High pot.	Low pot.	High pot.	Low pot.	High pot.
Ethiopia										
Accessible	8%	11%	10%	16%	32%	41%	49%	47%	25%	23%
Middle	6%	10%	9%	12%	45%	55%	37%	48%	23%	15%
Remote	4%	2%	6%	8%	58%	46%	37%	45%	21%	26%
Nigeria										
Accessible	3%	3.6%	9%	6%	18%	19%	53%	61%	25%	23%
Middle	2%	1%	9%	9%	31%	29%	50%	53%	26%	25%
Remote	0%	0%	21%	17%	30%	4%	38%	52%	24%	26%
Tanzania										
Accessible	25%	23%	14%	11%	56%	46%	29%	31%	13%	20%
Middle	17%	27%	11%	13%	80%	75%	31%	27%	5%	9%
Remote	21%	20%	13%	9%	86%	75%	20%	28%	4%	12%
Zambia										
Accessible	1%	3%	0%	0%	60%	41%	40%	70%	16%	10%
Middle	8%	3%	3%	3%	69%	65%	48%	53%	5%	5%
Remote	3%	4%	3%	3%	72%	63%	48%	54%	4%	7%

5.5 Distribution of employment opportunities

Table 5 shows the distribution of wage employment across geography, in relation to the distribution of young people (aged 15-24). This table shows, for each of the six domains of economic geography, each zone's share of (i) young people, (ii) employed young people, and (iii) employed young people in full-time equivalents (FTEs). Within each country, the top panel (a) shows the distribution of these numbers across domains. The bottom panel (b) shows the number of employed and employed FTEs in each domain as a share of the number of people. The stark (although unsurprising) interpretation is that the distribution of employment opportunities for young people (as measured by the number of employed) is strongly skewed towards more accessible areas. For example, while accessible/good-potential areas in Ethiopia are home to 14 per cent of rural young people, 23 per cent of the employed young are located in these areas (and 28 per cent of the employed young FTEs). (Conversely, remote/poor-potential areas are home to 17 per cent of young people, but only 13 per cent of the employed young and 1 per cent of the employed young FTEs.) The fact that these trends are even more pronounced when shown in per-FTE terms indicates that not only is the distribution of wage employment skewed to more favourable areas, but also the distribution of full-time employment possibilities (which may be taken as one measure of employment quality).

Table 5. Distribution of young people, employed young people, and employed young FTEs

Tanzania	**Accessible**		**Middle**		**Remote**	
(a)	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**
% of people	6%	14%	16%	29%	20%	16%
% of employed	7%	17%	18%	24%	18%	14%
% of FTEs	9%	22%	17%	22%	18%	13%
	Accessible		**Middle**		**Remote**	
(b)	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**
% of people	100%	100%	100%	100%	100%	100%
% of employed	119%	125%	116%	86%	93%	88%
% of FTEs	141%	160%	105%	78%	90%	79%
Ethiopia	**Accessible**		**Middle**		**Remote**	
(a)	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**
% of people	14%	16%	20%	27%	6%	17%
% of employed	23%	17%	22%	20%	4%	13%
% of FTEs	28%	18%	17%	28%	8%	1%
	Accessible		**Middle**		**Remote**	
(b)	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**
% of people	100%	100%	100%	100%	100%	100%
% of employed	164%	106%	110%	74%	67%	76%
% of FTEs	200%	113%	85%	104%	133%	6%
Nigeria	**Accessible**		**Middle**		**Remote**	
(a)	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**
% of people	11%	55%	2%	29%	1%	2%
% of employed	15%	66%	1%	15%	0%	2%
% of FTEs	17%	66%	1%	14%	0%	2%
	Accessible		**Middle**		**Remote**	
(b)	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**	**Good potential**	**Poor potential**
% of people	100%	100%	100%	100%	100%	100%
% of employed	147%	121%	45%	51%	67%	76%
% of FTEs	160%	120%	61%	48%	18%	75%

Table 6 shows the same distributions as above, but drops the agroclimatic potential dimension, so there are just three categories of economic geography: accessible, middle and remote. These more streamlined patterns are possibly easier to interpret (we omit panel b for simplicity).

Table 6. Distribution of young people, employed young people, and employed young FTEs

Tanzania				
(a)	**Accessible**	**Middle**	**Remote**	***Total***
% of people	20%	44%	36%	*100%*
% of employed	25%	43%	33%	*100%*
% of FTEs	31%	39%	30%	*100%*
Ethiopia				
(a)	**Accessible**	**Middle**	**Remote**	**Total**
% of people	30%	47%	24%	*100%*
% of employed	40%	43%	17%	*100%*
% of FTEs	46%	45%	9%	*100%*
Nigeria				
(a)	**Accessible**	**Middle**	**Remote**	**Total**
% of people	65%	32%	3%	*100%*
% of employed	82%	16%	2%	*100%*
% of FTEs	82%	16%	2%	*100%*

Table 7. Distribution of wage employment quality indicators (Tanzania)

(a) Share of young people (15-34) with wage jobs			
	Accessible	**Middle**	**Remote**
Good	0.28	0.26	0.24
Poor	0.25	0.21	0.16
(b) Share of employed young people with skilled jobs			
	Accessible	**Middle**	**Remote**
Good	0.13	0.05	0.03
Poor	0.07	0.01	0.12
(c) Share of employed young people with skilled + semi-skilled jobs			
	Accessible	**Middle**	**Remote**
Good	0.67	0.38	0.35
Poor	0.60	0.53	0.57
(d) Share of wage jobs which are non-farm			
	Accessible	**Middle**	**Remote**
Good	0.72	0.33	0.24
Poor	0.62	0.43	0.46
(e) Diversity of employment sectors (Shannon's D)			
	Accessible	**Middle**	**Remote**
Good	0.76	0.37	0.37
Poor	0.75	0.38	0.30
(f) Diversity of employment types (Shannon's D)			
	Accessible	**Middle**	**Remote**
Good	0.63	0.31	0.38
Poor	0.65	0.29	0.32

Notes: Data are from the 2013 round of the Tanzanian LSMS-ISA data. Employment sectors include: a) agriculture, forestry and fishing; b) mining and quarrying; c) manufacturing; d) electricity, gas, steam and air conditioning supply; e) water supply; sewerage, waste management and remediation activities; f) construction; g) wholesale and retail trade; repair of motor vehicles and motorcycles; h) transportation and storage; i) accommodation and food service activities; j) information and communication; k) financial and insurance activities; l) real estate activities; m) professional, scientific and technical activities; n) administrative and support service activities; o) public administration and defence; compulsory social security; p) education; q) human health and social work activities; r) arts, entertainment and recreation; s) other service activities; t) activities of households as employers; undifferentiated goods- and services-producing activities of households for own use; u) activities of extraterritorial organizations and bodies. Employment types include: (1) administrators; (2) professionals; (3) technicians; (4) clerks; (5) service workers; (6) skilled ag/fish; (7) craft workers; (8) plant/machine operators; (9) elementary occupations; (10) defence forces; (11) not classified. Types 1-3 are classified as “skilled” and types 4-8 are classified as “semi-skilled” employment, with type 9 (elementary operations) defined as “unskilled”.

There are several other measures of the distribution of quality employment opportunities that we might consider. Table 7 provides a number of these, for Tanzania. Comparing panels (a) and (b), we see that while the share of wage-earners in the young population declines strongly with remoteness (and more moderately so with agricultural potential), the share of young wage-earners with "skilled" jobs (i.e. administrators, professionals or technicians) declines even more precipitously across geography, particularly the access dimension. The share of young people with skilled and semi-skilled jobs (panel c) show similar trends, as does the share of jobs which are non-agricultural (panel d). Interestingly, the relative share of these semi-skilled and non-agricultural jobs is larger in the low-potential remote and middle-countryside areas than in the high-potential remote and middle-countryside areas (although the overall share of wage jobs is lower). This may reflect out-posting of civil servants and other workers in sectors which are spatially distributed according to political or social motivations rather than in response to local economic vibrancy. In terms of diversity, both the diversity of sectors (panel e) and of employment types (panel f) show strong gradients across the access dimension, with levels of diversity in the more accessible areas double in magnitude of the diversity of in remote areas. These findings underscore the multidimensional ways in which employment opportunities for young people become more limited with economic remoteness.

5.6 Alternative ways of capturing geographical context

So far, our classification of agricultural potential and accessibility has been discrete and based on thresholds to define agricultural potential and accessibility. These types of classifications have several limitations. Most importantly, agricultural potential and (market) accessibility are not potentially discrete outcomes, rather latent continuous outcomes that involve continuous variation in opportunities associated with the agricultural and non-agricultural sector. Thus, another slightly different and data-driven approach is to compile a number of attributes and spatial characteristics that are expected to influence and explain agricultural potential or market accessibility. Aggregating these various spatial and agro-ecological attributes of communities can provide more explanatory power along a continuous gradient of related conditions. One benefit of such an approach is it allows us to explore non-linear threshold effects or natural breaks in associations, which may inform how we construct category thresholds.

For this purpose, we compile a set of geospatial attributes of survey locations, which describe different aspects of agricultural potential or market potential. For instance, in an attempt to explain the market potential of a locality, we compiled the following spatial attributes: population density, distance to market, distance to nearest paved road, nightlight intensity and distance to the nearest non-zero nightlight. Similarly, considering spatial attributes that may explain agricultural potential we compile the following variables: enhanced vegetation index (EVI), annual rainfall, soil nutrient availability and water retention capacity. We then employed factor analysis to quantify the loadings of these variables into some unknown latent factors. Consistent with our intuition and classification above, those spatial attributes expected to explain market potential have higher factor loadings into the latent index that we refer to as the accessibility or market potential indicator. Similar patterns are observed with all other remaining variables. Based on these factor loadings, we then construct two continuous indexes that we interpret as capturing agricultural potential and market potential (or accessibility).

In Figures 5 and 6 we explore whether these two indexes can meaningfully explain labour market outcomes of young people in Africa. We particularly estimate nonparametric polynomial regressions of young people's labour allocation and outcomes on these two indexes. In these figures, panel (a) plots the predicted share of individuals participating in agricultural farming activities (in the vertical axis), plotted against the index representing agricultural potential (on the horizontal axis). Panel (b) plots the same dependent variable (predicted share of individuals participating in agricultural farming activities) against the index representing market access on the horizontal axis. Panels (c) to (f) show similar plots

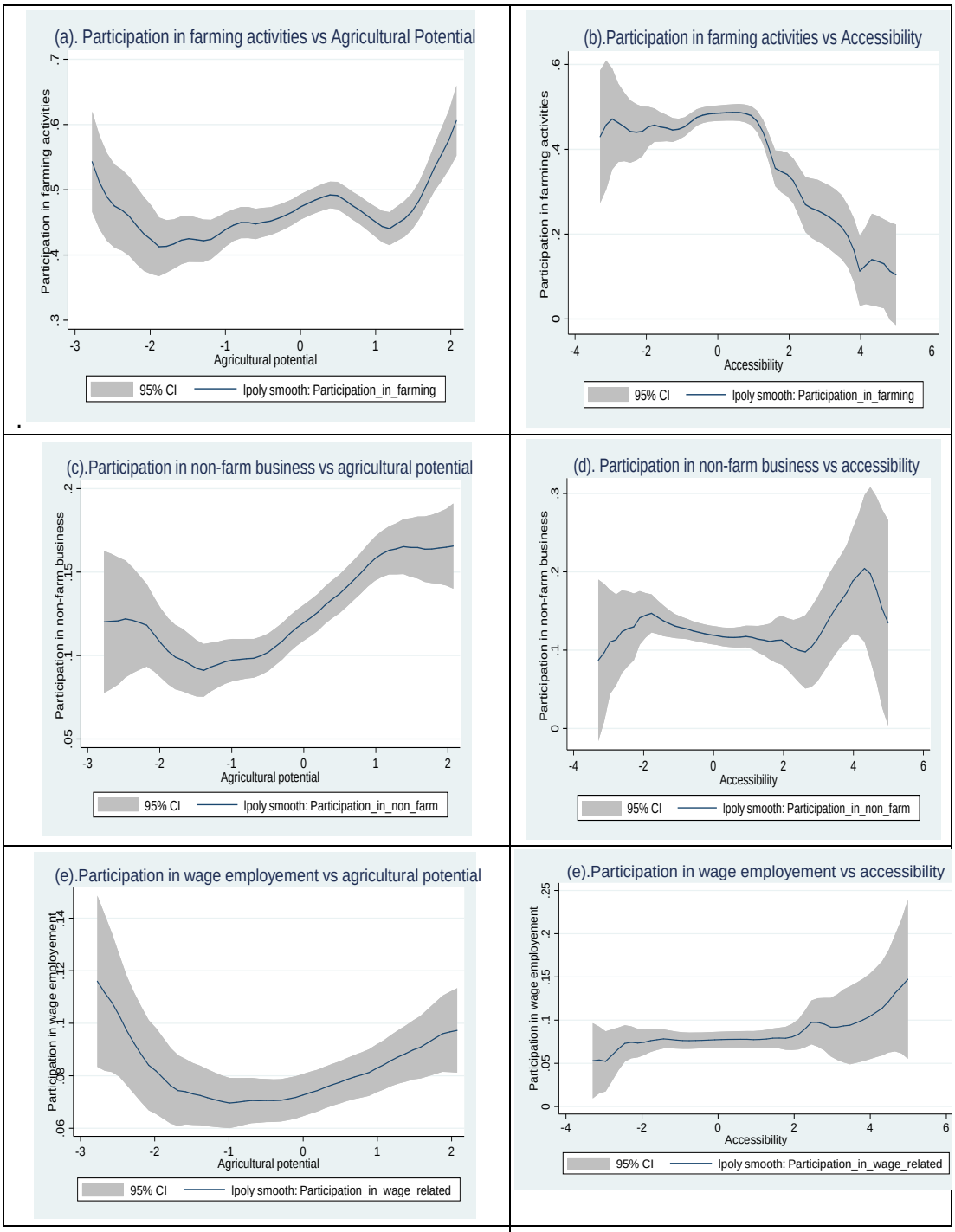
for non-farm business participation (c) and (d), and wage employment (e) and (f), against the same indices of agricultural potential and market access. The indices are constructed such that values on the horizontal access read from low (left-hand side) to high (right-hand side).

Figure 5, for Ethiopia, shows that rates of participation in farming activities are positively and strongly correlated with agricultural potential, while negatively correlated with accessibility and proximity to urban areas. Figure 6 shows that similar patterns are observed for Niger (results for Nigeria are given in Appendix Figure 7). Besides confirming the key empirical regularities from our previous tables, the non-parametric figures below provide some fresh insights into the linkage between agricultural potential and non-farm activities. We can observe, for example, that young people living in high potential areas have higher rates of participation in both the farm and the non-farm economy. This probably reflects the fact that a vibrant farm economy in high potential areas has important spillover impacts on the non-farm economy.

Key points:

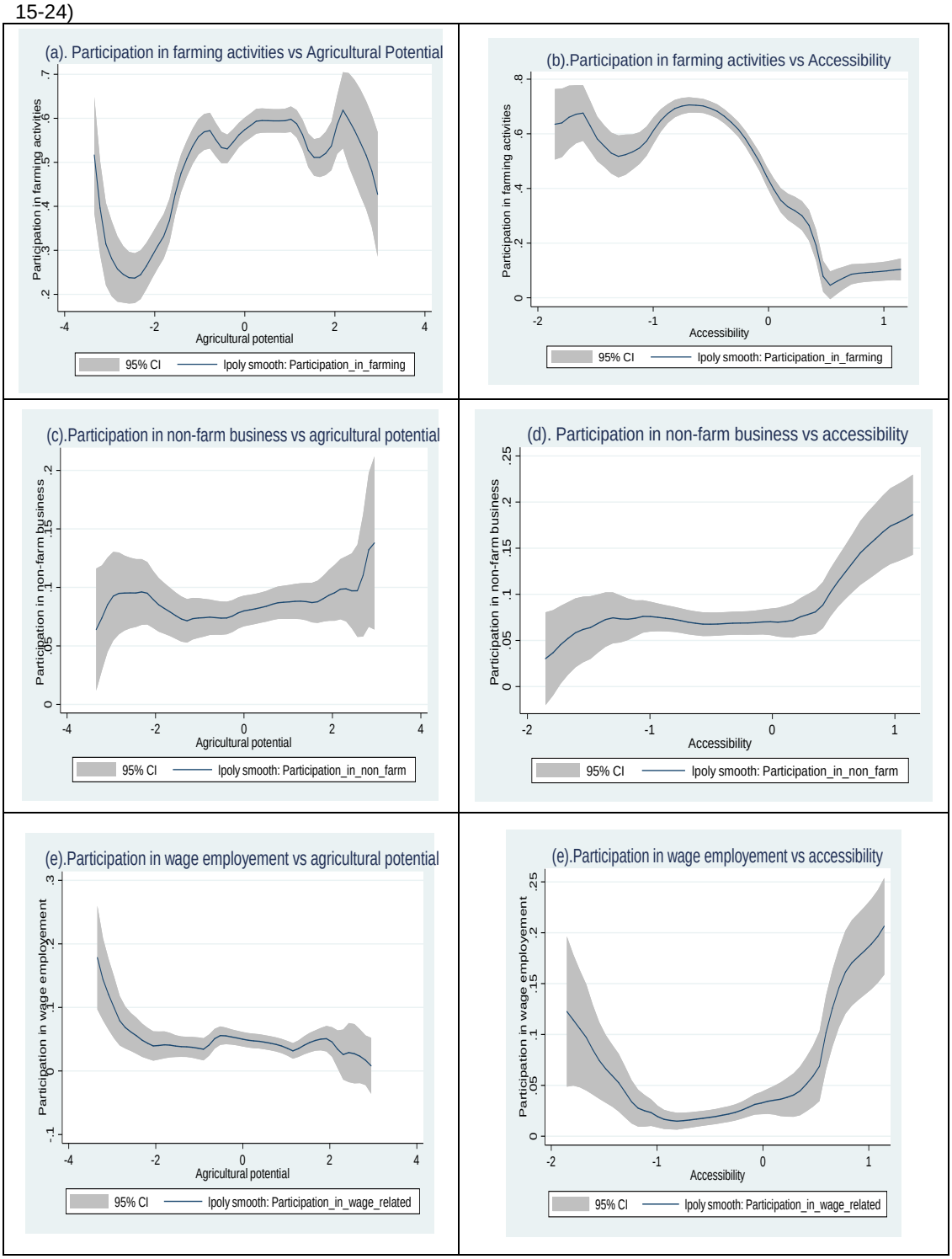
- Young people's farming activities increase with alternative measures of agricultural potential and decrease with market access.
- Young people's wage income participation rates increase with market access (and seem to increase with agricultural potential, although this relationship is less straightforward).
- Other patterns (e.g. non-farm business participation) are less clear.
- We are still exploring the best way to capture the spatial patterns of labour allocation.

Figure 5. Individual labour allocation and generalized indices for Ethiopia (individuals aged 15-24)



Source: Authors' analysis

Figure 6. Individual labour allocation decisions and generalized indices for Niger (individuals aged 15-24)



Source: Authors' analysis

5.7 Household type as a contextual factor

We would expect labour allocation to vary by household type, reflecting the importance of context at that level. We classify our sample of individuals into three types of households: “starter households” are those in which all working aged members are aged 15-24 (i.e. all the members aged between 15-64 are in the 15-24 age range); “mostly young” households are those in which the majority of working aged members are aged 15-24; and “mostly older” households are those in which the majority of working aged members are aged 25 or older.

We find that young people in starter households are much more likely to be engaged in wage employment and non-farm business activities than young people in other household types (Table 8). Differences between young people in “mostly young” and “mostly older” households are generally similar in nature, but smaller in magnitude. In parallel to these trends, young people in starter households are much less likely to report being in school than those in older household types. The farming activity trend is less pronounced, but generally indicates that young adults in older households are slightly less likely to report working on the family farm. In aggregate, these results suggest that young people in “younger” household types are more likely to need to contribute to household income, possibly as a result of relatively fewer economic resources.

Key points:

- Young people’s labour allocations differ strongly by household context.
- Young people in starter households much more likely to have wage employment and non-farm business activities, and much less likely to be in school.
- Young people in mostly young and mostly older households are more likely to be in school, but also more likely to report no activities.

Table 8. Labour allocation of 15-24-year olds across household types

Household type	Wage-employment	Non-farm business	Family farm activities	In school	No activity reported
Ethiopia					
Starter	14%	12%	40%	27%	28%
Mostly young	7%	10%	44%	42%	23%
Mostly older	8%	12%	54%	51%	15%
Tanzania					
Starter	36%	24%	73%	6%	9%
Mostly young	16%	10%	69%	25%	12%
Mostly older	16%	9%	70%	30%	12%
Uganda					
Starter	23%	16%	77%	18%	6%
Mostly young	9%	5%	69%	54%	6%
Mostly older	10%	2%	63%	56%	6%
Nigeria					
Starter	5%	12%	25%	37%	27%
Mostly young	3%	9%	22%	51%	25%
Mostly older	2%	9%	23%	52%	25%
Niger					
Starter	3%	20%	76%	20%	12%
Mostly young	3%	9%	58%	43%	17%
Mostly older	3%	8%	62%	43%	16%

Note: The Ethiopian and Nigerian questionnaires only asked about labour allocation decisions within the last 7 days. Labour allocation for the other countries was identified for the previous 12 months.

In Table 9, we provide households' income portfolio and orientation, categorized by household types. Non-farm orientation, measured as the share of household income from non-farm business and wage employment, is generally largest for household types with more young members, i.e. "starter" and "mostly young". Nigeria is the biggest exception to this; Uganda and Tanzania show this pattern for wages but not non-farm business. This signals a generally higher level of reliance on the non-farm economy by young households. This is consistent with individual-level labour allocation data, which we do not show here (it is the focus of another paper). A major conclusion from that work is that young people are relatively more engaged in non-farm activities than older labour market participants, signalling their importance to the region's ongoing rural economic transformations.

Table 9. Household income shares by household type

Household type	Crop production	Livestock	Non-farm business	Wages	Transfers	Total	No. obs
Ethiopia							
Starter	71%	0%	18%	11%		100%	148
Mostly young	83%	0%	8%	10%		100%	1429
Mostly older	84%	0%	7%	9%		100%	2237
Tanzania							
Starter	29%	4%	20%	47%		100%	262
Mostly young	35%	15%	19%	30%		100%	1360
Mostly older	32%	12%	22%	34%		100%	1597
Uganda							
Starter	41%	7%	28%	24%		100%	181
Mostly young	35%	7%	41%	16%		100%	1138
Mostly older	34%	5%	42%	19%		100%	1266
Nigeria							
Starter	55%	1%	36%	6%	2%	100%	181
Mostly young	50%	3%	38%	8%	1%	100%	1138
Mostly older	47%	3%	40%	10%	0%	100%	1266
Niger							
Starter	37%	2%	29%	2%	29%	100%	76
Mostly young	36%	4%	39%	5%	18%	100%	744
Mostly older	41%	4%	38%	3%	14%	100%	1897

Note: The Nigerian questionnaire only asked about labour allocation decisions within the last 7 days. Labour allocation for the other countries was identified for the previous 12 months.

5.8 Income orientations of young households change over economic geographies

The structure of available survey data means that we are unable to build individual level estimates of income orientation. Instead, we must aggregate income and income shares at the household level, which means the link with “young people” is more tenuous.

The conventional approach is to use the age of the household head to say something about how household-level outcomes are related to young people. This approach is problematic for at least three reasons: first, for most definitions of “young”, most rural young people are not household heads and do not live in households with young heads; second, the “head” identified by survey enumerators may be the titular head only, and obscure the de facto economic leadership of one or more younger members; third, if we restrict our sample to “young” heads, we often end up with samples which are too sparse to enable any further disaggregation in analysis.

Table 10 shows income orientations for young households, organized by economic geography. A number of observations stand out. First, farm orientation (particularly with respect to crop production) strongly increases with distance from markets and with agricultural potential. These trends are consistent across alternative definitions of market access and agricultural potential.

Second, livestock income shares differ significantly across countries, reflecting different agro-ecologies and farming systems, but in those countries where livestock income is relatively important, its share is generally also increasing with market remoteness, probably reflecting relative land availability.

Third, non-farm business and non-farm wage income shares of total household income generally increase with proximity to markets, as expected. These shares also generally increase with agricultural potential, indicating the positive linkages between the farm and non-farm economies.

Finally, transfer incomes (remittances and gifts) differ highly across countries, but in many countries they decline with remoteness. This is in line with other work (not shown here) that out-migration rates are highest in higher access areas.

Key points:

- Young households more likely to be non-farm oriented.
- Non-farm business and non-farm wage income shares of total household income generally increase with proximity to markets.
- Non-farm business and non-farm wage income shares of total household income also generally increase with agricultural potential.

Table 10. Income orientations of young households

	Crop production		**Livestock**		**Non-farm business**		**Wage**		**Transfer**	
	Low pot.	**High pot.**	**Low pot.**	**High pot.**	**Low pot.**	**High pot.**	**Low pot.**	**High pot.**	**Low pot.**	**High pot.**
Ethiopia										
Accessible	9%	35%	6%	8%	32%	15%	38%	15%	15%	28%
Middle	34%	71%	10%	8%	21%	9%	16%	8%	19%	4%
Remote	52%	35%	18%	23%	11%	16%	16%	24%	2%	3%
Nigeria										
Accessible	56%	15%	1%	0%	35%	39%	8%	30%	0%	16%
Middle	62%	60%	5%	0%	29%	40%	4%	0%	0%	0%
Remote	20%	-	3%	-	78%	-	0%	-	0%	-
Tanzania										
Accessible	10%	14%	6%	1%	27%	29%	57%	56%	10%	14%
Middle	27%	17%	5%	6%	28%	25%	41%	52%	27%	17%
Remote	28%	37%	6%	6%	25%	17%	40%	40%	28%	37%
Zambia										
Accessible	19%	36%	8%	0%	32%	25%	41%	39%	0%	0%
Middle	52%	23%	6%	4%	16%	48%	22%	25%	3%	0%
Remote	59%	63%	6%	2%	25%	23%	8%	10%	2%	2%

Note: Sample consists of households with heads younger than 30.

5.9 Economic geographies as opportunity structures

Table 11 presents a reformulation of Table 1, showing how economic geographies act as opportunity structures and the resulting economic activities that are likely to be particularly important for one or more groups of young people.

Table 11. Economic geographies as opportunity structures

	Location characteristics		
Quality of natural resources	**Accessible areas**	**"Middle" countryside**	**Remote rural areas**
Good	Non-farm HH income orientation predominant Wage labour allocation (ind) Finishing school [Y] Idle youth? [Y] Land rental markets more important [Y] Household more specialized Migration (in + out) [Y]	Market oriented farming Important non-farm sector (**rural industry**) Non-farm HH income orientation important Wage labour allocation (individual) Migration (out) [Y]	Subsistence farming Livestock Limited non-farm sector (**Crafts and services for local markets; tourism and recreation**) Leaving school early [Y] Household more diversified Migration (out) [Y]
Poor	[*relatively few areas like this*] Non-farm HH income orientation Wage labour allocation (individual) Finishing school [Y] Idle youth? [Y] Land rental markets more important [Y] Household more specialized Migration (in + out) [Y]	[*relatively few areas like this*] Extensive farming Livestock Limited non-farm sector (possibly tourism and recreation) Migration (out) [Y]	Subsistence farming, low productivity; Surpluses very small Livestock **Crafts and services for local markets** **Tourism and recreation** Migration (out) [Y]

Notes: The superscript [Y] denotes an activity likely to be particularly important for young people.

Entries in bold denote were with further analysis it may be possible to disaggregate wage and business activity by sector.

6. Conclusions

Several conclusions emerge from the conceptualization of landscapes of opportunity developed in this paper, and the accompanying empirical analysis. The first is that it is critically important that policy makers and development partners acknowledge explicitly that rural areas differ in their potential to provide decent employment for young people. It follows that the focus of any policy or programme to "invest in youth" should be on those areas having both more potential and larger populations of young people (i.e. high-access and middle countryside areas).

It must also be acknowledged that young people are highly differentiated by their educational, family, social, cultural, economic backgrounds and by their local contexts (e.g. economic geographies). The implication is that young people will see a diverse range of opportunity landscapes, and are likely to respond to policies and programmes in different ways. As young people are deeply embedded in

family and social networks, any strategy or intervention that implies that rural young people are or can be dealt with as isolated economic or social actors must be avoided.

At its core, investing in youth should mean investing to change the opportunity structures that govern how young people enter and progress in the labour market. In this sense, investment in good rural and social development (e.g. infrastructure, education, health) can provide many important direct benefits to rural youth. It is important not to frame policy or interventions in ways that suggest that individual characteristics such as agency, aspirations, skills, entrepreneurial behaviour and ability to make “good choices” are or should be first order concerns.

Finally, it is important to acknowledge that existing, nationally representative data sets have clear limitations in their ability to provide insight into the dynamics of local rural economies, and the impacts of opportunity structures on how young people establish their livelihoods. For example, qualitative studies suggest that there is far more multiplicity of engagements (e.g. multiple jobs, business activities and schooling or education) than indicated by survey statistics. Furthermore, the temporal dynamism of many engagements is high, and probably not well captured by the labour modules in standard survey instruments.

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Appendix

Appendix Table 1. Household survey data available for this study

Country	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Burkina Faso							wave 1†	
Ethiopia				wave 1		wave 2		**wave 3**
Niger				wave 1			**wave 2**	
Nigeria			wave 1		wave 2			**wave 3**
Tanzania	wave 1		wave 2		**wave 3**		wave 4*	
Uganda		wave 1	wave 2	**wave 3**		wave 4†		
Zambia				wave 1			**wave 2**	

Notes: * = new panel formation. † = no spatial data available. Data for Burkina Faso, Ethiopia, Niger, Nigeria, Tanzania and Uganda are from the LSMS-ISA project. Data for Zambia are from the RALS survey conducted by IAPRI, MSU and the Zambian CSO.

Appendix Table 2. Distribution of young people (aged 15-24) across economic geography zones, by country

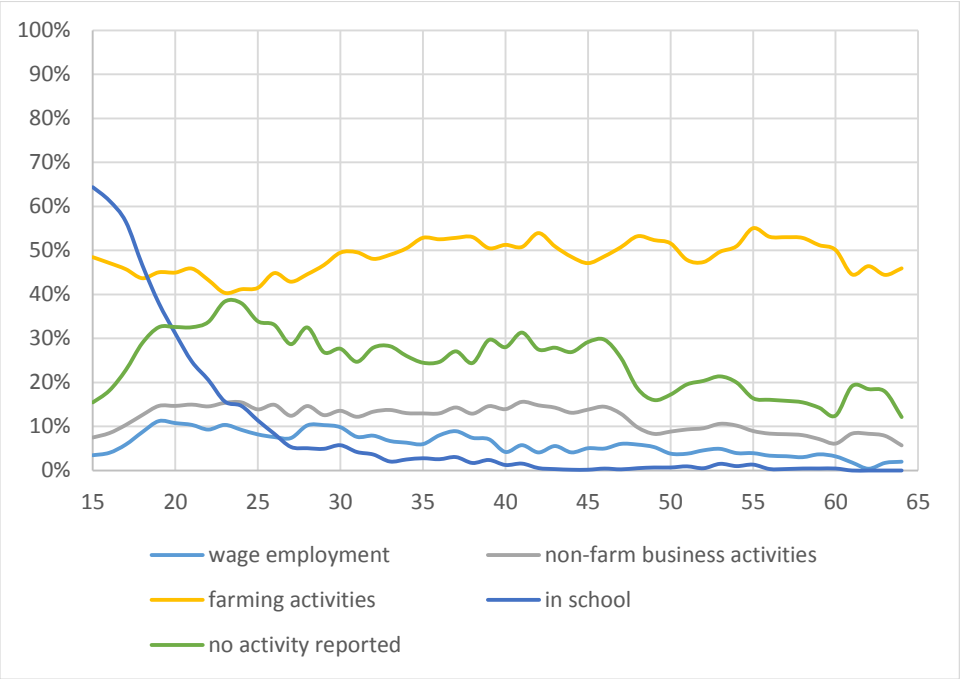
Country	High-access/ high pot.	High-access/ low pot.	Middle/ high pot.	Middle/ low pot.	Remote/ high pot.	Remote/ low pot.
Algeria	12%	60%	1%	22%	0%	4%
Angola	4%	11%	16%	12%	38%	19%
Benin	22%	7%	49%	10%	12%	1%
Botswana	0%	29%	0%	29%	3%	39%
Burkina Faso	1%	14%	10%	48%	7%	19%
Burundi	54%	8%	31%	6%	1%	0%
Côte d'Ivoire	22%	3%	54%	3%	18%	1%
Cameroon	27%	7%	36%	8%	20%	1%
CAR	4%	0%	7%	0%	86%	2%
Chad	4%	5%	15%	13%	29%	33%
DRC	8%	2%	24%	3%	61%	3%
Djibouti	0%	40%	0%	29%	0%	31%
Egypt	45%	48%	1%	4%	0%	3%
Equatorial Guinea	3%	1%	23%	1%	70%	2%
Eritrea	0%	15%	0%	27%	2%	55%
Ethiopia	13%	6%	25%	16%	19%	21%
Gabon	6%	9%	8%	3%	66%	9%

Country	High-access/ high pot.	High-access/ low pot.	Middle/ high pot.	Middle/ low pot.	Remote/ high pot.	Remote/ low pot.
Gambia	20%	9%	31%	12%	24%	4%
Ghana	29%	9%	40%	10%	11%	2%
Guinea	14%	3%	55%	5%	23%	1%
Guinea-Bissau	8%	2%	34%	8%	42%	7%
Kenya	37%	10%	28%	15%	3%	6%
Lesotho	0%	13%	0%	47%	0%	40%
Liberia	10%	1%	40%	1%	46%	2%
Libya	1%	57%	0%	26%	0%	16%
Madagascar	1%	8%	6%	10%	39%	36%
Malawi	17%	2%	60%	11%	8%	3%
Mali	2%	7%	13%	21%	15%	42%
Mauritania	0%	6%	0%	8%	4%	82%
Morocco	13%	37%	6%	40%	0%	5%
Mozambique	11%	6%	36%	8%	34%	5%
Namibia	0%	3%	0%	16%	4%	77%
Niger	0%	13%	0%	43%	0%	43%
Nigeria	34%	22%	21%	17%	4%	3%
Republic of Congo	8%	9%	20%	6%	47%	11%
Rwanda	32%	7%	43%	15%	2%	1%
Senegal	10%	19%	24%	26%	11%	11%
Sierra Leone	12%	1%	59%	3%	24%	2%
Somalia	1%	11%	4%	28%	4%	52%
South Africa	11%	25%	15%	39%	2%	8%
South Sudan	5%	3%	20%	6%	49%	17%
Sudan	0%	14%	2%	18%	11%	56%
Swaziland	20%	11%	44%	25%	0%	0%
Tanzania	8%	8%	21%	22%	28%	13%
Togo	17%	12%	43%	16%	10%	2%
Tunisia	10%	28%	9%	48%	0%	5%
Uganda	23%	5%	54%	8%	7%	2%
Western Sahara	0%	2%	0%	2%	0%	96%
Zambia	16%	4%	32%	6%	33%	9%
Zimbabwe	9%	9%	27%	28%	15%	12%

Appendix Table 3. Labour allocation by age of individual

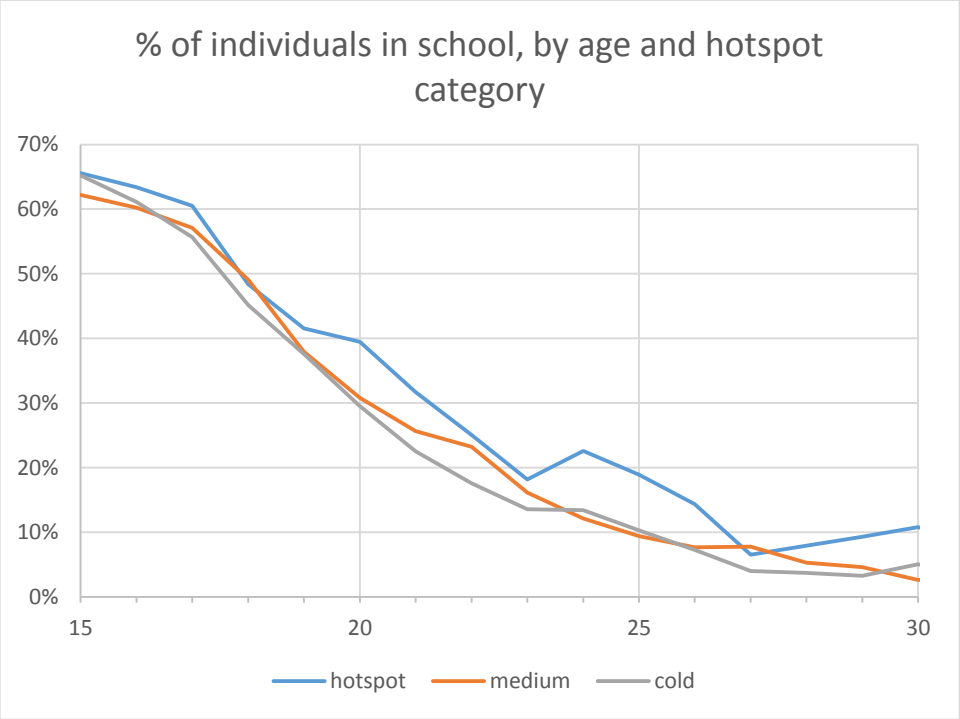
Age category	Employment	Non-farm business activities	Farming	In school	No activity reported
Ethiopia					
15-24	9%	13%	40%	46%	
25-34	12%	16%	39%	44%	
35-44	10%	16%	45%	6%	
45+	6%	10%	42%	2%	
Tanzania					
15-24	19%	11%	70%	23%	12%
25-34	33%	26%	78%	2%	7%
35-44	31%	30%	85%		4%
45+	25%	22%	87%		6%
Uganda					
15-24	9%	5%	78%	50%	4%
25-34	21%	25%	83%	2%	3%
35-44	22%	26%	87%		2%
45+	15%	17%	82%		1%
Nigeria					
15-24	3%	9%	23%	51%	
25-34	8%	33%	28%	7%	
35-44	11%	43%	40%	2%	
45+	10%	31%	50%	0%	
Niger					
15-24	3%	9%	60%	42%	17%
25-34	3%	19%	66%	17%	19%
35-44	4%	24%	71%	13%	17%
45+	3%	22%	65%	7%	24%
Zambia					
15-24	4%	3%	68%	51%	7%
25-34	16%	25%	89%	6%	4%
35-44	19%	34%	91%	3%	3%
45+	11%	24%	87%	3%	9%

Appendix Figure 1. Individual labour allocation decisions by age, in Ethiopia



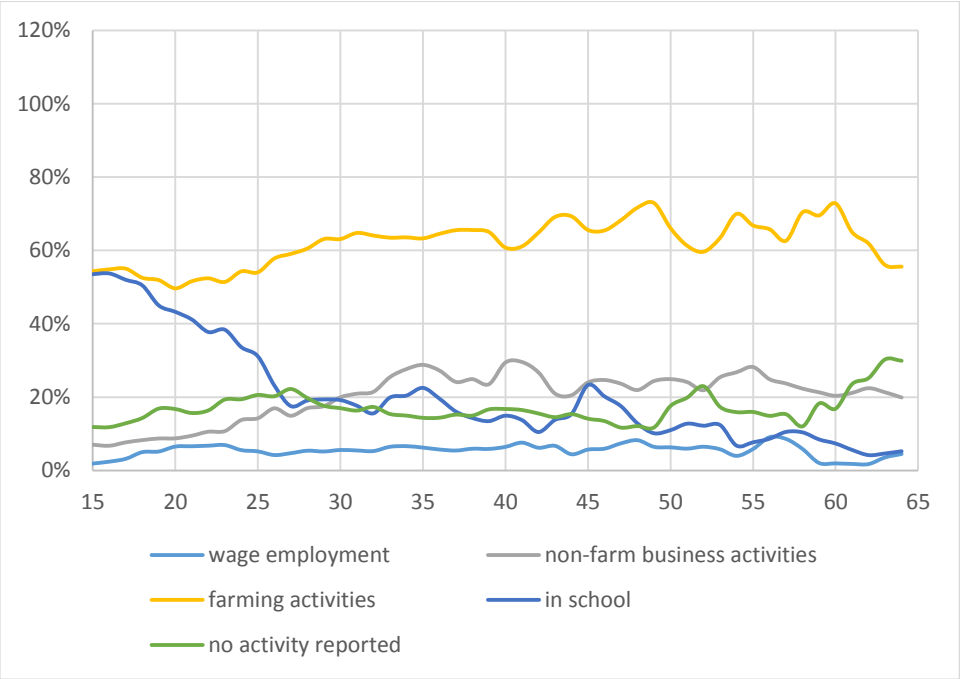
Source: Authors' analysis

Appendix Figure 2. School participation rates, by age and remoteness category, in Ethiopia



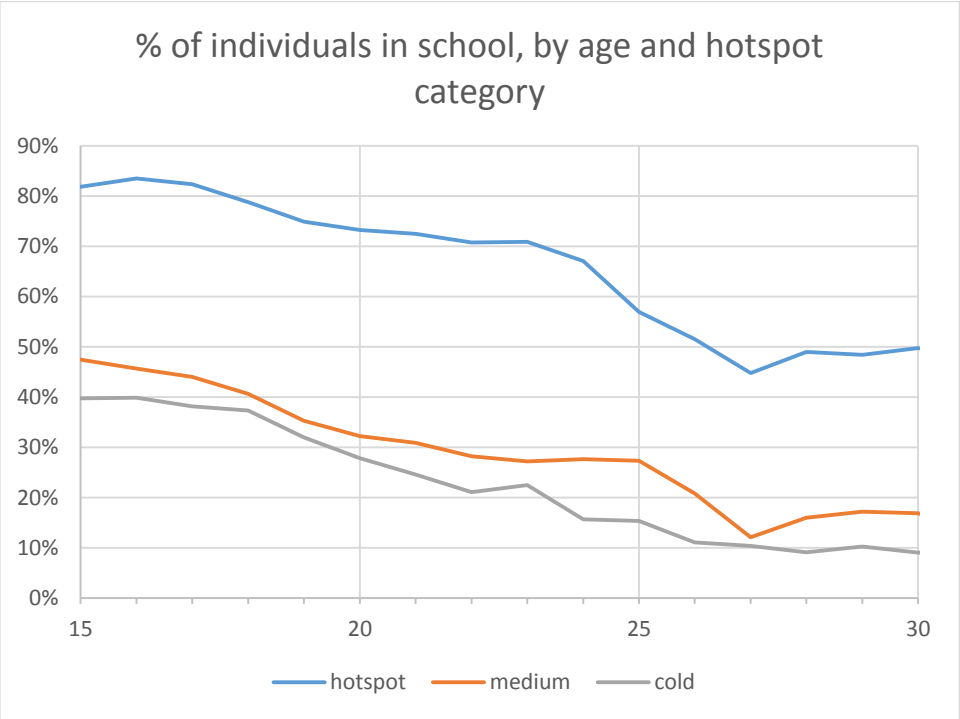
Source: Authors' analysis

Appendix Figure 3. Individual labour allocation decisions by age, in Niger



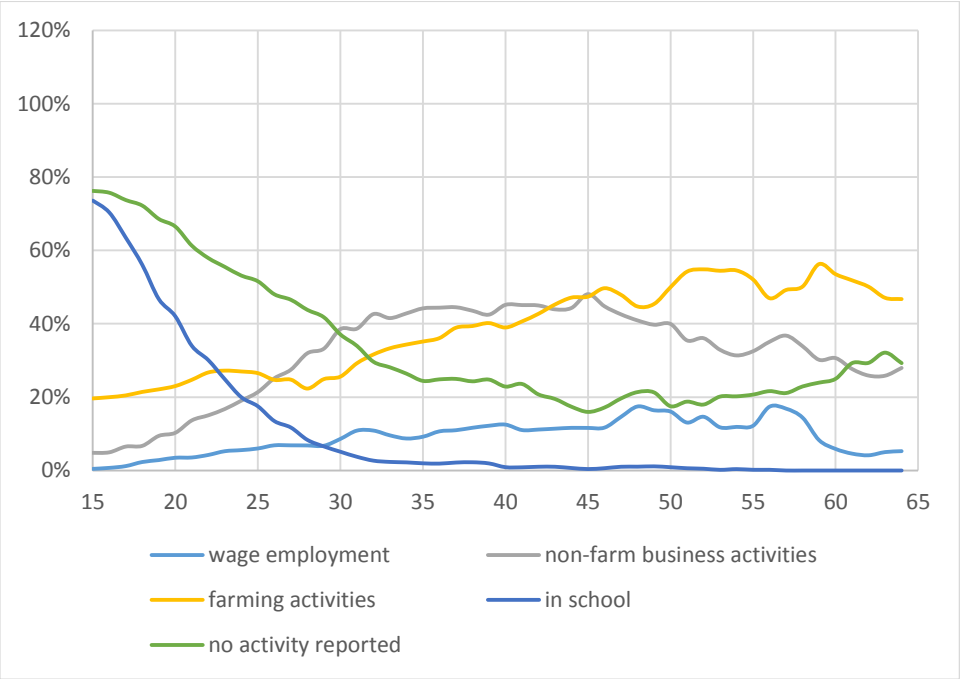
Source: Authors' analysis

Appendix Figure 4. School participation rates, by age and remoteness category, in Niger



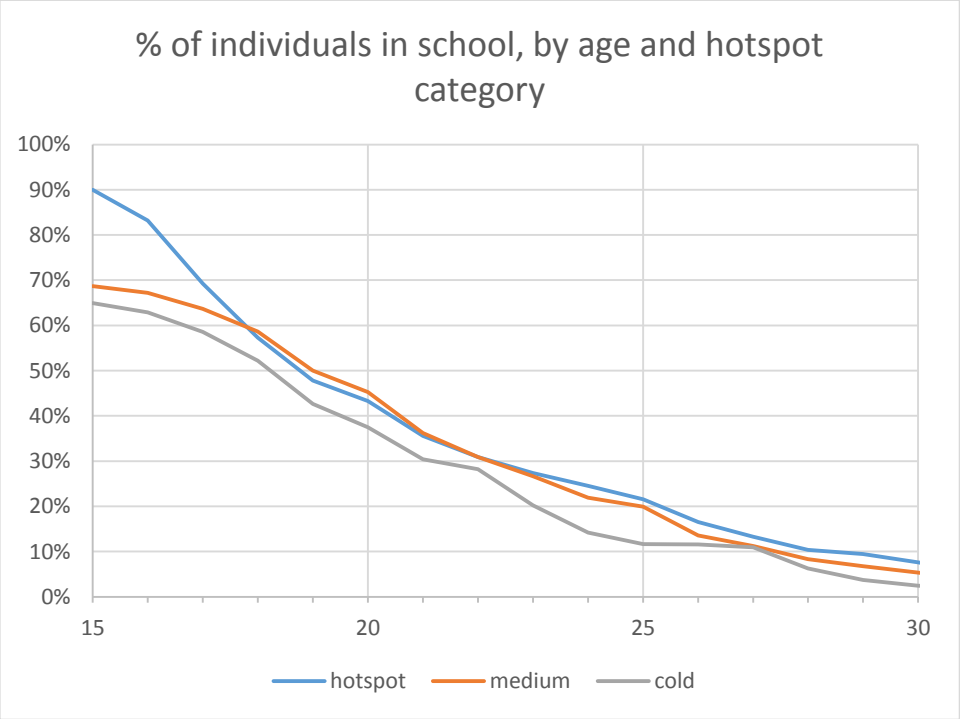
Source: Authors' analysis

Appendix Figure 5. Individual labour allocation decisions by age, in Nigeria



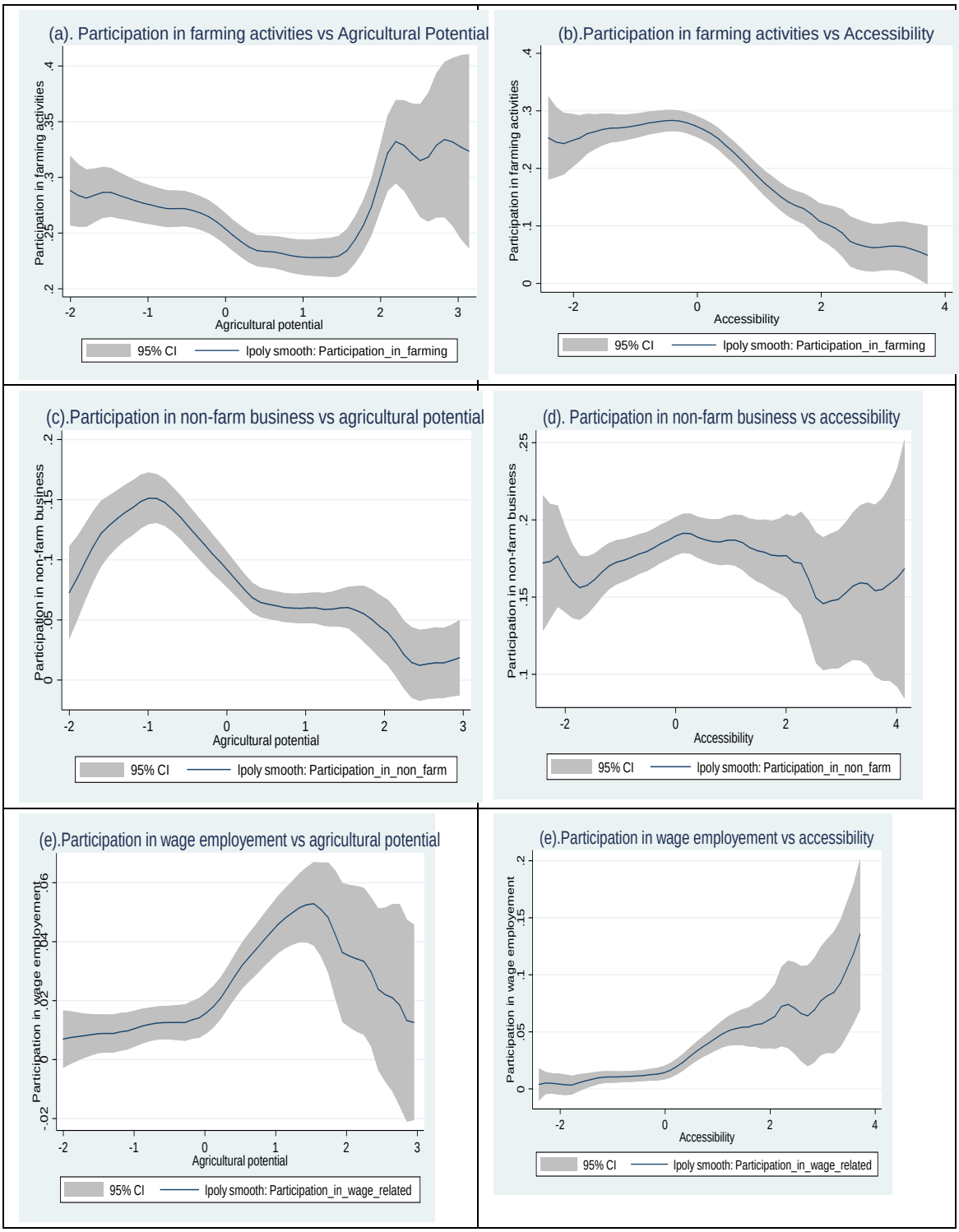
Source: Authors' analysis

Appendix Figure 6. School participation rates, by age and remoteness category, in Nigeria



Source: Authors' analysis

Appendix Figure 7. Individual labour allocation decisions and generalized indices for Nigeria (individuals aged 15-24)



Source: Authors' analysis

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