Income and Work for Young Men and Women in Africa: A Political Economy and Social Equity Approach to the Employment Potential of Specific Sectors and Sub-Sectors in African Economies

A Synthesis Report on Kenya, Senegal and Uganda Country Case Studies

John Mutenyo

***Working Paper* GSYE-005**

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Bringing Rigour and Evidence to Economic Policy Making in Africa

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List of abbreviations and acronyms

ADEPME	Bureau for the Promotion and Supervision of Small- and Medium-sized Enterprises (Agence de développement et d'Encadrement des Petites et Moyennes Entreprises)
AJEB	Bureau for the Employment of the Youth from the Suburbs (Agence pour l'Emploi des Jeunes des Banlieues)
ANAMA	National Bureau for the Support of Street Vendors (Agence Nationale d'Appui aux Marchands Ambulants)
ANEJ	National Youth Employment Bureau (Agence Nationale de l'Emploi des Jeunes)
ANIDA	National Bureau for Agricultural Integration and Development (Agence Nationale d'Insertion et de Développement Agricole)
ANPEJ	National Bureau for the Promotion of Youth Employment (Agence nationale Pour la Promotion de l'Emploi des Jeunes)
APDA	Bureau for the Promotion and Development of Crafts (Agence pour la Promotion et le Développement de l'Artisanat)
BTVET	Business, Technical, Vocational Education and Training
COVID-19	Corona Virus Disease 2019
DER	Delegation of Rapid Entrepreneurship
EAPE	Survey on the Improvement of Employment Policies
ENES	National Survey on Employment in Senegal (Enquête Nationale sur l'Emploi au Sénégal)
FNPJ	National Youth Promotion Fund (Fonds National de Promotion des Jeunes)
FTE	Full Time Equivalent
GDP	Gross Domestic Product
IDRC	International Development Research Center
ILO	International Labour Organization

IMF	International Monetary Fund
IMR	Inverse Mills Ratio
IV	Instrumental Variable
KNBS	Kenya National Bureau of Statistics
KYEP	Kenya Youth Empowerment Programme
LFPR	Labour Force Participation Rate
NSEA	National State-Employer Agreement
OLS	Ordinary Least Squares
PAP	Plan D'Actions Prioritaires
PSM	Propensity Score Matching
SAM	Social Accounting Matrix
SACCOs	Saving and Credit Cooperatives
SSA	Sub-Saharan Africa
SUT	Supply and Use Tables
UIA	Uganda Investment Authority
UNDP	United Nations Development Programme
UNHS	Ugandan National Household Survey
YEDF	Youth Enterprise Development Fund
YESA	Youth Employment Scheme Abroad

Abstract

The issue of youth employment remains a major concern in Africa, particularly in Kenya, Senegal, and Uganda despite the fact these countries have implemented several initiatives to reduce youth unemployment. Evidence from the three countries suggest that the employment programmes have had limited impact on youth employment. This collaborative study was therefore set up to: i) Identify promising economic sectors or value chains for job creation for young men and women in selected countries in Africa; ii) Determine the country-specific conditions needed for local and foreign private sector to invest in these sectors or value chains; iii) Identify the country-specific actors that are needed to create these conditions that enhance or reduce investment security; and iv) to explore ways to promote equal access and opportunity for youth to these new sources of work and income, addressing inequality related to gender, socioeconomic background, and place of residence.

To achieve the above goals, a set of interlinked activities were undertaken, including use of qualitative and quantitative analysis, the multiplier models using Social Accounting Matrix (SAM) and National Household Surveys (NHS) of the respective countries, and regression analysis.

Findings on Senegal revealed that majority of jobs held by young people are concentrated in agriculture, trade, and manufacturing. But due to low incomes, most of the youth employed in these three sectors work fewer hours than the norm and seek additional work elsewhere. The econometric results revealed that young men and women working in the trade sector are more likely to have higher quality jobs, indicating that the trade sector offers better employment opportunities for young people than other sectors. The findings also showed that employment support programmes allow young beneficiaries to access higher quality jobs than non-beneficiaries.

Findings from Uganda showed that more female youth are employed in nonfarm self-employment activities, while male youth are mainly employed in nonfarm wage activities. In addition, the study finds that farm agricultural work employs most of the youth than other sectors. Furthermore, the results show that off-farm self-work is a significant source of youth employment in all regions of Uganda. Sectors such as cash crop production (coffee and tea), light manufacturing, construction, agro-processing, financial and insurance, and tourism sectors have the greatest potential to create jobs for the youth in Uganda.

The Kenyan findings are not very different from those of Senegal and Uganda. Results indicate that agriculture, transport, trade, construction, and education have the highest potential to create jobs for the youth. Activities with high potential to create jobs include livestock, vegetables (horticulture), rice production, textile and footwear production, and hotels and restaurants.

The study recommends that, there is need to increase employment support programmes to improve the employability of young people in sectors offering quality jobs in Senegal. On the other hand, promotion of value addition and supporting agro-processing, import substitution, and supporting firms that use local inputs are recommended in order to create employment opportunities for the youth in Uganda. Further, due to the interdependence among the different sectors where expansion of one sector has backward and forward linkages with the other sectors, it would therefore be important to adopt a comprehensive multi-sectoral approach in job creation strategy in Kenya. Also, since economic activities vary across counties in Kenya, there is need to stimulate activities where each county and economic bloc has comparative advantage to ensure sustained job creation for the youth.

Overall, the policies should be holistic to encompass the whole value chain of the identified sectors. For example, supporting agriculture sector to unlock employment potential for youths and women would require complementary efforts of investing in agro-processing to create market and add value to the agricultural products. Similarly, industrialization would require complementary investments in sectors that would provide inputs.

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1. Introduction

Following the structural adjustment programs in the early 1980s and 90s, most African countries on the advice of the World Bank and International Monetary Fund (IMF) downsized their public service through retrenchments and voluntary retirements and the suspension of recruitment in the civil service, thus leaving room for recruitment to the small private sector. Also, the socio-political conflicts, inter-ethnic wars, and civil wars in several countries that destroyed the economic fabric, aggravated the situation. Further, the demographic boom has seen the African population increase five-fold between 1960 and 2020 (UNDP, 2019) hence worsening the unemployment situation. With unemployment rates reaching 40% in some African countries, the integration of young people into productive employment has become a key challenge (United Nations Development Programme [UNDP], 2015). African youth constitutes two-thirds of its population, hence are the largest group of labour market entrants. It is estimated that close to 500,000 to 800,000 youths enter the Kenyan job market annually. World Bank report on Kenya unemployment in 2015 indicated that, the country needed to create 900,000 new jobs every year between 2015 and 2025 as a way of absorbing the high number of youths joining the job market. While in Uganda, it is estimated that over 400,000 youth enter the labour force to compete for 9,000 jobs yearly. According to estimates, more than 100,000 young people enter the Senegalese labour market each year; but limited opportunities for formal and decent employment push most of them to work in the informal sector (PAP, 2019–23). Indeed, almost all (90%) of youth operate in the informal economy, where there is generally a high degree of job insecurity in both working conditions and remuneration (International Labour Organization (ILO), 2015International Labour Organization [ILO], 2018).

Unfortunately, according to International Labour Organization (ILO, 2017), although the global economy outlook looked promising especially before COVID-19 pandemic outbreak, it was not accompanied by job creation, and the youth are likely to face more unemployment. Worse still, the global unemployment rates for the youth is three times that of the adults, and for the past two decades, there has been a significant decline for the global labour force participation rate (LFPR) for the youth from 55.0% in 1997 to 45.7% in 2017 (ILO, 2017).

African countries are dealing with rising unemployment among its youths, with unemployment being higher among female youths. Both male and female youth face a lot of challenges upon joining the labour market, these include obtaining

employment and most important, getting a decent job that would enable them to live above the poverty line. If they are lucky and find a job, majority are in the informal sector which keeps them below the poverty line. It is estimated that over 98% of the youth in sub-Saharan Africa (SSA) who find a job are in the informal sector (ILO, 2017; van Waeyenberge & Bargawi, 2018). Sub-Saharan African countries, in particular, also face many difficulties in terms of employment. The labour market is characterized by a high degree of precariousness, with 72% of jobs being vulnerable and between 34% and 72% being informal. Over 87% of the youth in Uganda work in insecure, low-income and often unsafe informal-sector jobs or in family income generation activities with little or no pay at all. It is also hypothesized that the current education system in Uganda, just like many African countries, may prohibit the youth from achieving the relevant skills that are compatible with the demands of the labour market. Hence, the youth in Uganda remain highly susceptible to changing patterns in work opportunities, and they experience difficult transitions from school to decent jobs which are grossly scarce.

The problem of youth unemployment has been identified globally as a ticking time bomb (The Guardian, 2013), particularly for developing countries whose demographic composition is increasingly being skewed towards a younger population. This was evidenced during the Arab Spring uprising, where youths were at the centre of it due to lack of decent unemployment and livelihood. The social unrest that resulted into a mass uprising had devastating effects on the economies. Thus, creation of decent jobs for the youths to enable them earn a livelihood is a significant way of avoiding such strife. The 2030 Agenda for Sustainable Development emphasizes productive employment and decent work for youth. The Agenda acknowledges that, to reduce poverty, promote economic growth and peace and prosperity for all, there is need for decent youth employment.

An analysis of the duration of unemployment in Senegal according to the education level reveals that young people with higher education are more affected by long-term unemployment. They are followed by young primary school graduates (62%) and secondary school graduates (52%). The percentage of youth in long-term unemployment is lower among uneducated youth (41%), all of which shows that young graduates are more likely to remain unemployed (National Employment Policy Document updated in 2017, cited by ILO, 2018). This may be counter-intuitive because young non-graduates tend to rarely turn down job offers because of their low salary expectations, unlike graduates who are more demanding. The latter may be led, in extreme cases, to remain unemployed. Moreover, this situation also reflects a limited absorptive capacity of the formal labour market. The informal market is in fact more solvent because of its greater willingness to recruit 'its students' at the end of their apprenticeship. The massive informal employment and the high unemployment rate of youth (the low employability of youth in the formal sector) are partly explained by the low adequacy of youth training to market needs (ILO, 2018).

To address the challenge of youth employment, many African countries have implemented active labour market programmes linking youth to paid labour or self-

employment. Consequently, employment policies focused on recruiting youth into the civil service and public enterprises have shifted to active employment policies that address unemployment economically by tackling the causes of unemployment, and passive employment policies that address unemployment socially by tackling the living conditions of the unemployed. These programmes include new components such as vocational training, intermediation, and support for entrepreneurship. For example, the Government of Kenya with support from various stakeholders has undertaken short-, medium- and long-term measures for employment creation. The short- and medium-term interventions included programmes such as the "Kazi kwa Vijana or jobs for the youth", infrastructure, and rural development. Other measures undertaken to create jobs for the youth have been through the Youth Employment Scheme Abroad (YESA), Youth Enterprise Development Fund (YEDF) and Kenya Youth Empowerment Programme (KYEP). However, youth unemployment and underemployment continue to be major obstacles to full utilization of human resources despite relatively strong economic growth.

Senegal has also undertaken several initiatives to address the issue of youth employment and employability. This has resulted in the creation of several agencies and funds, including: National Youth Employment Agency (ANEJ), the Agency for the Employment of Young People in the Suburbs (AJEB), the National Agency for the Support of Mobile Traders (ANAMA), and the National Youth Promotion Fund (FNPJ). These initiatives, important as they were, proved ineffective, leading to the coordination of youth employment actions in a single structure called the National Agency for the Promotion of Youth Employment (ANPEJ). Since its creation in 2014, there has also been a proliferation of stakeholders with multiple programmes that act directly and indirectly on employment policy, such as the National Agency and the Supervision of Small and Medium Enterprises (ADEPME), the National Agency for Integration and Agricultural Development (ANIDA), the Delegation of Rapid Entrepreneurship (DER), the Agency for the Promotion and Development of Crafts (APDA), the School-Enterprise Training Programme, and the National State-Employer Agreement signed in 1987 and renewed in 2000 and 2009. Despite these many interventions, it should be noted that youth unemployment and job insecurity are still a big concern, as evidenced by national statistics (ILO, 2018; Plan D'Actions Prioritaires (PAP), 2019-23; Enquête Nationale sur l'Emploi au Sénégal (ENES), 2017

In response, Government of Uganda has attempted to reduce the youth employment problem by designing and implementing a number of strategies. Among these include:

i) **Providing enabling investment climate.** The creation of Uganda Investment Authority (UIA) in the early 1990s was aimed at providing a one-stop investment centre for prospective investors who would then create jobs for the local Ugandans, particularly the youth;

ii) **Promotion of technical skills among the Youth**. Since 1997, the government embarked on reskilling the youth through redesigning secondary school curriculum

and deliberately promoting business, technical, vocational education and training (BTVET). The aim was to empower the youth especially those who drop out of school or those who are unable to progress to higher institutions of learning. Unfortunately, however, there is still low enrolment in the BTVET institutions and most do not have the necessary infrastructure such as laboratories, so students end up with theories and little practical skills;

iii) **Entrepreneurship skills;** government emphasized teaching of entrepreneurship at higher institutions of learning in order to equip the youth with business skills as a strategy for self-employment in case one fails to get a white collar job; and

iv) **Youth Livelihood Fund, and youth SACCOs (Saving and Credit Cooperatives).** This was developed for the unemployed and poor youth in the country. The programme started in 2013 targeting youth between ages 18-30 years and covered 112 districts. The major aims of the programme were to provide the youth with vocation skills as tools for self-employment and to make youth entrepreneurship a life skill and an integral part of youth livelihoods. The youth groups received support and interest-free revolving funds on condition that they started an entrepreneurial project. Acquiring a loan did not require collateral, instead it required youth forming saving and credit cooperatives (SACCOs). However, despite these interventions, the problem of youth unemployment has remained high in Uganda, and probably the highest on the continent.

Table 1: Summary of country efforts to reduce youth unemployment

Kenya	Senegal	Uganda
• *Kazi kwa Vijana* or jobs for the youth". • Infrastructure and rural development. • Youth Employment Scheme Abroad (YESA). • Youth Enterprise Development Fund (YEDF). • Kenya Youth Empowerment Programme (KYEP).	• National Youth Employment Agency (ANEJ). • The Agency for the Employment of Young People in the Suburbs (AJEB). • The National Agency for the Support of Mobile Traders. (ANAMA). • The National Youth Promotion Fund (FNPJ). **But these initiatives were ineffective, leading to creation of:** • The National Agency for the Promotion of Youth Employment (ANPEJ). • National Agency and the Supervision of Small and Medium Enterprises (ADEPME). • The National Agency for Integration and Agricultural Development (ANIDA). • The Delegation of Rapid Entrepreneurship (DER). • The Agency for the Promotion and Development of Crafts (APDA). • The School-Enterprise Training Programme. • The National State-Employer Agreement signed in 1987, renewed in 2000 and 2009.	• Rural farmers' scheme. • *Entandiikwa* (Start-up programme). • *Bona baggaggawale* (All should get rich), • The creation of Uganda Investment Authority (UIA) in the early 1990s. • Promoting business, technical, vocational education and training (BTVET). • Entrepreneurship teaching in tertiary institutions. • Youth Livelihood Fund, and youth SACCOs (Saving and Credit Cooperatives) developed in 2013 targeting the youth. • The Parish model (2022).

Source: Adopted from Dumas et al. (2022), Mutenyo et al. (2022), and Onsomu et al. (2022).

Job creation is a key development objective for most economies in Africa given the expanding working age population on the continent. But it remains unclear of what works to support the youth in the labour market. This is one of the most common and pressing question posed by policy makers and practitioners today. Other unanswered pressing questions include: What are the most effective interventions for boosting productive employment for the heterogeneous groups, particularly the rural/urban, male/female, disabled/not disabled, educated/not educated, skilled/unskilled, have access to finance/resources/no access to resources. In what sectors and jobs are youth and women likely to be engaged? Therefore, there is need to identify the sectors that have the potential to provide youth with decent jobs and designing strategies that enable decent jobs creation for youth.

Objectives of the study

The main objectives of the project were to:

i) Identify promising economic sectors or value chains for job creation for young men and women in selected countries in Africa.

ii) Determine the country-specific conditions needed for local and foreign private sector to invest in these sectors or value chains.

iii) Identify the country-specific actors that are needed to create these conditions that enhance or reduce investment security.

iv) Explore ways to promote equal access and opportunity for youth to these new sources of work and income, addressing inequality related to gender, socioeconomic background, and place of residence.

Table 2: Objectives of the country case studies

Country Objectives	Kenya	Senegal	Uganda
i)	Identify the most promising sectors and activities that have the potential to improve youth employment.	Define and identify the sectors that provide quality jobs based on a descriptive analysis.	Identify growth sectors which are most promising and the activities that have the potential to improve youth employment, and why?
ii)		Identify the main constraints that limit youth access to employment opportunities in these sectors.	Identify inequalities related to gender, spatial, or socio-economic background, and their effects on youth's access to employment in the growth sectors.

continued next page

Table 2 Continued

Country Objectives	Kenya	Senegal	Uganda
iii)		Evaluate the impact of the different employment support programmes (vocational training, job intermediation, and entrepreneurship support) implemented by the national state-employer agreement on the quality of youth employment in the job-providing sectors.	Identify factors underlying youth's access to employment opportunities in the growth sectors.

Source: Adopted from Dumas et al. (2022), Mutenyo et al. (2022), and Onsomu et al. (2022).

To achieve the above goals, a set of interlinked activities have been undertaken, including:

i) **Identifying economic sectors and activities for job creation in Africa: Which approach?** This synthesis paper analyses the different approaches that were used to identify the potential growth sectors for job creation for young men and women in selected countries in Africa.

ii) **Work and Income for Young Men and Women in Africa: Similarities and differences in the potential employment sectors and sub-sectors in African economies:** This synthesis paper discusses the similarities and differences in outcomes between the country case studies in as far as work and income for young men and women in Africa as well as the specific sectors and sub-sectors having potential for employment is concerned.

iii) **Growth sectors, youth and employment: Challenges and way forward":** This synthesis paper discusses youth and employment while highlighting the challenges of and conditions that drive youth unemployment and the alternative policy options.

2. Methodology and data

Identifying the most promising employment sectors in Kenya

To identify the most promising sectors and activities that have the potential to create youth employment in Kenya, the study used the Input-Output (I-O) table. The I-O table provides a framework for analyzing the interrelationships between industries in an economy in terms of the production and uses of the products. The I-O framework assumes that the inputs used in production process of a given product are linearly correlated to the industry outputs and that the production coefficients are fixed in the short run (European Commission, 2008). In the table form, the I-O framework is presented as a square industry-by-industry table, consisting of equivalent number of columns and rows. The same rows and columns represent production and use of one output. Thus, each column represents a production technique in an input-output coefficient table. The columns of the Leontief inverse Input-Output table show the amount of (direct and indirect) inputs requirements on all other producers, generated by one unit of output (European Commission, 2008). Under the I-O framework, the following two identities must hold: (i) Total supply of product/industry = Total use by product/industry; and (ii) Total input by product/industry = Total output by product/industry.

Methodology for Ugandan study

Identifying the key growth sectors

To identify the most promising sectors and activities that have the potential to create youth employment in Uganda, the study used the Social Accounting Matrix (SAM) multiplier model.

The SAM is an advanced version of the Input-Output (I-O) Table and Supply and Use Tables (SUT). The SAM is a framework that captures transactions (linkages and leakages) between all economic agents in the country via the factor and product markets (Round, 2003). The 2016/17 SAM provides aggregate information on all transfers and real transactions regarding production, and the generation, distribution

and use of income between sectors and institutions (including different domestic industries, household groups, enterprises and governments) in the economy.

The multiplier model employs matrix algebra and algorithm to develop multipliers by using the backward and forward leakages embedded in the structure of the economy. The Leontief coefficients are transformed into a customized SAM model to be able to assess the response of the economy to exogenous shocks and the impact on employment of the youth and women. Employment is measured in terms of Full Time Equivalent (FTE). The multiplier model is used to form an interactive process and feedback effects between the policy instrument variables (exogenous) with policy target variables (endogenous) and leakage variables. For every exogenous shock introduced to the system, incomes of the endogenous accounts adjust up to the point where the sum of injections is equal to the sum of leakages.

Linking youth labour by gender to productive sectors

The study first identifies sectors with highest potential for youth employment using labour income multipliers for the youthful workers. Thereafter, it extends to capture number of youth employees per sector by using the Full Time Equivalent (FTE) approach. After deriving the changes in the endogenous accounts, they are used to derive other accounts like number of employees categorized by age and gender. It is at this point that the study implements the relevant policy simulations.

Further, the study estimates youth employees and women employed in economically weak sectors, by computing leakages of multipliers from the economic system. Payments from endogenous variables to exogenous variables within the SAM are categorized as leakages since this exit the endogenous framework, and thus stop contributing to the multiplicative process. For example, youth workers and women employed in sectors with higher import content on the market; these would be weak in job creation as most job creation efforts are exported through import demand.

Thereafter, the magnitude of leakages per sector is correlated with the intensity of youths employed in those sectors. This provides policy information in regard to where most youths are employed and inequalities in their distribution across sectors. Simulations were built with scenarios which switch youths across sectors to assess the impacts to their economic welfare and the general impacts to the economy.

Computing backward and forward linkages for youthful labour supported sectors

It is important to identify the drivers of sectors with potential to employ the youths. Some sectors may not employ a significant portion of youths, but may have strong backward and forward linkages with other sectors that employ a larger portion of youths. Parra and Wodon (2009) show that, a sector with both strong backward and forward linkages would be key in accelerating economic growth and employment.

Thus, expansion of such sectors might generate more employment for the youths compared to sectors that employ more youths but with weak backward and forward linkages. This is key for policy guidance and, thus can be demystified through computation of backward and forward linkages for each of the sectors.

The study considers a sector to have a strong backward or forward linkage if its linkage index parameter is greater than 1. Thus, sectors with backward and forward linkages greater than 1 are interpreted as key sectors that can spur economic growth and employment across the whole economy. Sectors with backward linkages lower than 1 and forward linkages higher than 1 are forward-oriented sectors; whereas sectors with backward linkages larger than 1 and forward linkages lower than 1 are categorized as backward-oriented sectors. Lastly, sectors with both backward and forward linkages lower than 1 are weak sectors in terms of their relevance to create output and employment especially for youths and women. This classification criterion is shown in Table 3.

Table 3: Classification of strong and weak backward and forward linkages

		Backward Linkages	
		Strong (>1)	**Weak (< 1)**
Forward Linkages	Strong (>1)	(1) Key sectors with strong output and employment multipliers	(2) Forward-oriented
	Weak(< 1)	(3) Backward-oriented	(4) Weak sectors with weak output and employment multipliers

Source: Adopted from Mutenyo et al. (2022).

Measuring inequality

Estimating inequalities

To investigate the inequalities related to gender, spatial or social-economic background, and their effect to youth's access to employment, the study employed descriptive analysis and empirical analysis by estimating a probit model and Tobit model. The descriptive analysis focuses on participation in the labour force among the youth keeping in mind the gender aspect. Also, the shares of FTEs in total employed time by sector by analyzing how individuals allocate their time among economic activities by computing the share of total FTEs recorded that were allocated to one type of employment for all individuals in a given group. In addition, the analysis involves the type of work—on-farm vs nonfarm, and wages vs self-employed.

Further, to account for the potential selection bias caused by the two-step decision process of LFP, a two-stage probit model was estimated (Heckman, 1979). Sample selection bias can arise if the group of observations for estimation is not taken from a random sample. The hours worked are only observed for the youth who are employed, and those who are employed tend to have characteristics different to those who are

not in the labour force or unemployed. Hence, excluding the unemployed results in a non-random sample being used; this may bias results.

One major problem in estimating Heckman models is finding relevant 'instruments'; that is, variables which affect youth labour force participation, but do not influence actual weekly hours worked. In this study the instrumental variable used is having a child aged 0-14 (including squared and cubic terms). In the second stage, a Tobit model with Full Time Equivalent (FTEs) for each of the growth sector employment categories as dependent variables is used to account for the clustering of zeros due to lower bounded nature of the labour category variables.

In addition, control function approach is used by including an instrumental variable (IV) in the LFP equation and an inverse Mills ratio (IMR) in the second stage equation. The IV proxies incentive to participate in employment as individuals see others work, and it proxies for capacity as it signals available employment opportunities.

The study controls for four employment dimensions-employment types (no wage farm-employment, farm wage employment, non-farm wage, and self-employment), spatial heterogeneity by controlling for population density (based rural-urban gradient), age cohorts, and gender.

Study variables for youth labour participation

The key variable of interest is the time spent by a youth on an economic activity that is considered employment (FTEs), which is assumed to be 12 months per year, 21 days per month, and 8 hour per day. FTE takes into account actual hours worked, not just participation in a sector/job relative to a standard benchmark of 40 hours per week (FTE=1.0). A youth who is not in the labour force has a FTE = 0, while a youth working half-time in a sector/job has a FTE of 0.5 for the job.

Other factors that affect youth labour capacity to reach employment opportunities include: distance and travel time to the nearest business areas (*NBA*), individual variables (*Ind*) such as age groups to control for varying incentives and capacities of individuals in varying life stages, female to control for gender discrimination and difference in expectations to engage in types of labour, school completion time at primary and secondary schools both which increase human capital, increasing capacity to work, marital status (being married can increase or decrease one's incentive to work, depending on spousal income and one's capacity to work due to household responsibilities).

The household factors (*HH*) include type of dwelling (permanent, semi and temporary), the dependency ratio (share of household members less 15 years or older than 64 years) to proxy both incentive and capacity as dependants increase one's need to earn income and limit one's time to work, dummy for receiving remittances to capture the incentive to work as they increase non-labour income, and owning farm land, which increases one's capacity to engage in farm labour, and proxies one's wealth status and therefore the incentive to work. Also, the study used age range of 15-35 for the potential economically active youth to allow comparative analysis with studies in other countries.

Methodology for Senegal study

Model for determinants of job-quality

To identify industries that are more likely to provide quality jobs to young people in the Senegalese labour market, the study specified the following model:

$$Q_i = \gamma Secteur_i + X_i + \mu_i \quad (1)$$

Where: Q_i is the index of youth's job quality; $Sector_i$ represents the sector of activity in which youth *i* is employed. In the database, it is a categorical variable that takes the value of 1 if the youth is employed in agriculture, 2 if he or she is in industry, 3 if the youth is employed in trade, 4 if the young person is employed in the services sector other than trade, and 5 if the youth is employed in any other sector. *X* is a vector of control variables related to the demographic and socioeconomic characteristics of youth i; γ and β are vectors of parameters to be estimated; and μ_i is the error term of the equation. The dependent variable, quality job, is a multidimensional concept that encompasses several dimensions such as wages, non-wage benefits, job security, and working conditions (ILO, 2013). Since the dimensions selected for the calculation of the youth employment quality index are measured at different scales, indices for each of the dimensions are constructed and aggregate them into an overall composite index.

The study uses the two-step Heckman procedure to correct for potential selection bias. The first stage concerns the decision of youth to participate or not in the labour market, while the second stage corresponds to the possibility for youth to work or not in a sector providing quality jobs conditional on the first stage. The factors determining youth participation in the labour market and quality job sectors are analyzed in the selection equation and the main equation, respectively. The inverse of the Mills ratio is introduced in the main equation as an explanatory variable to correct for potential selection bias. However, if the coefficient associated with the inverse of the Mills ratio is not significant, it means there is no selection bias and that the Ordinary Least Squares (OLS) method gives unbiased results.

For the model to be identified, the selection equation must include at least one instrumental variable affecting the dependent variable in the selection equation, but not the dependent variable in the main equation. Following the extensive work on estimating labour force participation models (Hyslop, 1999; Buchinsky et al., 2010), the study used the youth's marital status and the number of dependents living in the household as instruments. The idea is that marital status and the number of dependents affects youth participation in labour market but do not directly affect their insertion into their quality job sectors. For example, married youth and youth living in households with high dependency ratios, other things being equal, may be less likely to remain unemployed. However, this should have a limited impact on their access to quality employment sectors, at least in the short run. In the end, the motivation level

may affect career paths, and thus, access to quality employment sectors. However, this problem arises to a lesser extent because our study focuses on the beginning of a career, specifically on the situation of new entrants to the labour market.

Construction of the job-quality composite index

Job-quality is a multidimensional concept that encompasses several dimensions such as wages, non-wage benefits, job security and working conditions (ILO, 2013). Since the dimensions selected for the calculation of the youth employment quality index are measured at different scales, the indices are constructed for each of the dimensions and aggregate them into an overall composite index. To normalize the indicators measured at different scales into indices, the study adopted the following equation from UNDP (2018) that is used to calculate human development indices:

$$IndiceA_i = \frac{A_i - A_{\min}}{A_{\max} - A_{\min}} \quad (2)$$

Where: A_i is the actual value of an indicator in a sub-dimension, and A_{max} and A_{min} are the maximum and minimum values of a given indicator in the data set. After normalization, the indices are between 0 and 1 to indicate a low-quality job and high-quality job, respectively.

Model specification for impact analysis of employment support programmes

To achieve the objective of assessing the impact of employment support programmes on the integration of young people into sectors that provide quality jobs, the study used a quasi-experimental approach or the propensity score matching (PSM) method. While policy evaluation is done with double differences to analyzed the situation before and after treatment (Duflo, 2001), with the random assignment method (Buddelmeyer & Skoufias, 2004), and with the random promotion method (Gertler et al., 2008), this work uses the propensity score matching (PSM) method which takes into account the observed effects of participation in employment support programmes. This method refers to the probability of being exposed to a treatment according to a set of observable characteristics and allows for outcomes attributable specifically to programme type.

For this work, it was assumed that for each individual *i* of the sample *N*, the following variables are observed: T_i a variable reflecting the individual's situation *i*, which is equal to one unit if the individual *i* participated in the employment support programme offered by the National State-Employer Agreement (NSEA), and 0 if not. *T* is linearly dependent on a vector of explanatory variables (Z) and a residue (ε).

$$T_i = \beta Z_i + \varepsilon_i \quad (3)$$

We consider certain variables that may indirectly influence participation in employment and employability support programmes in sectors that provide employment, such as: the size of the household, the employment status of the household head, the number of episodes of unemployment, the state of health before enrolment in the programme, religion, etc.

Table 4 presents a summary of the methodologies used in the three country case studies.

Table 4: Summary of methodology

Objective	Method Kenya	Method Senegal	Method Uganda
Identify the most promising sectors and activities that have the potential to improve youth employment.	The study used the Input-Output (I-O) table, SAM, Kenya National Bureau of Statistics various surveys, and SAM 2015.	Estimated a two-step Heckman procedure/ regression of index of quality job, against sector of activity (categorical) and youth's demographic and socioeconomic characteristics. Uses the youth's marital status and the number of dependents as the IV.	The study used the UNHS 2019/20 and Social Accounting Matrix (SAM 2016/17) multiplier model.
To identify the main constraints that limit youth access to employment opportunities in these sectors.			
To identify inequalities related to gender, spatial, or socioeconomic background, and their effects on youth's access to employment in the growth sectors.			The study employed Kernel density estimation and Gini coefficients.
To evaluate the impact of the different employment support programmes on the quality of youth employment in the job-providing sectors.		The study adopted a quasi-experimental approach or the propensity score matching (PSM) method.	

continued next page

Table 4 Continued

Objective	Method Kenya	Method Senegal	Method Uganda
To identify factors underlying youth's access to employment opportunities in the growth sectors.			The study employed descriptive analysis and empirical analysis by estimating a probit model and Tobit model (a two-step Heckman procedure/regression). The IV is number of dependents (Children 0-14 years).

Source: Adopted from Dumas et al. (2022), Mutenyo et al. (2022), and Onsomu et al. (2022).

The data

The empirical analysis for the Kenya and Uganda studies are based on two data sets, namely: Kenya National Bureau of Statistics (KNBS various economic surveys) and Kenyan Social Accounting Matrix (SAM 2015), the Ugandan National Household Survey (UNHS 2019/2020) and Uganda SAM 2016/17. The UNHS covers a total of 15,110 households. The Senegalese study uses primary data from the Survey on the Improvement of Employment Policies (EAPE) conducted in 2018 among 2,746 individuals, 41.26% of whom were women and 58.74% men in Senegal, with the technical and financial support of the International Development Research Center (IDRC).

3. Results

Uganda

Structural analysis of youth labour and value addition by gender and skills

On average, labour contributes 27.2% to the national value-added. Out of this contribution, 10.2% is contributed by youths. The skilled youths contribute 7.2% followed by unskilled youths (2.0%), and lastly the semi-skilled youths (1.0%). This shows the importance of skilling the youth in national value addition. By sector, the contribution of skilled youth is highest in the services (10.0%) followed by industry (5.7%) and least in agriculture (1.3%). Within the services sector, the contribution of skilled youths is highest in the financial intermediation and insurance (25.1%). This is followed by the transport sub-sector (12.5%). In the industry sector, the contribution of skilled youths is highest in the construction sector (15.9%); and in the agricultural sector, skilled youths contribute highest in Tea (3.7%).

Sectoral multipliers and linkages

Commodity multipliers capture the total effect on commodity demand, whereas output multipliers are the portion of commodity demand that is supplied through domestic production. The difference between commodity and output multipliers is the leakages or multiplicative capacity lost due to imports. The results show the changes in commodity supply and output resulting from a unit change in demand for the respective commodity. This captures the quantitative impact of the expansion of demand through backward and forward linkages within the economic system. Sectors with higher leakages export jobs to countries where imports are purchased. Thus, reducing leakages would increase employment opportunities for youths.

The results show that the services sector has the highest output multipliers (2.61) followed by the agricultural sector (2.55), and lastly the industry sector (2.3). In agricultural sector, the multipliers are higher in animal husbandry (2.75) and cash crops like coffee (2.6) and tea (2.6). In the industry sector, output multipliers are high in the construction (2.87) and agro-processing (2.50). These are followed

by light manufacturing industries. In the services sector, financial intermediation (2.90), wholesale and retail trade (2.77), and tourism (2.64) have strong multipliers. The leakages are highest in industry (26.1%) followed by agriculture (21.4%), and lastly services sector (20.1%). The sub-sectors with strong leakages include: heavy manufacturing (37.6%, transport (33.2), and light manufacturing (31.5%).

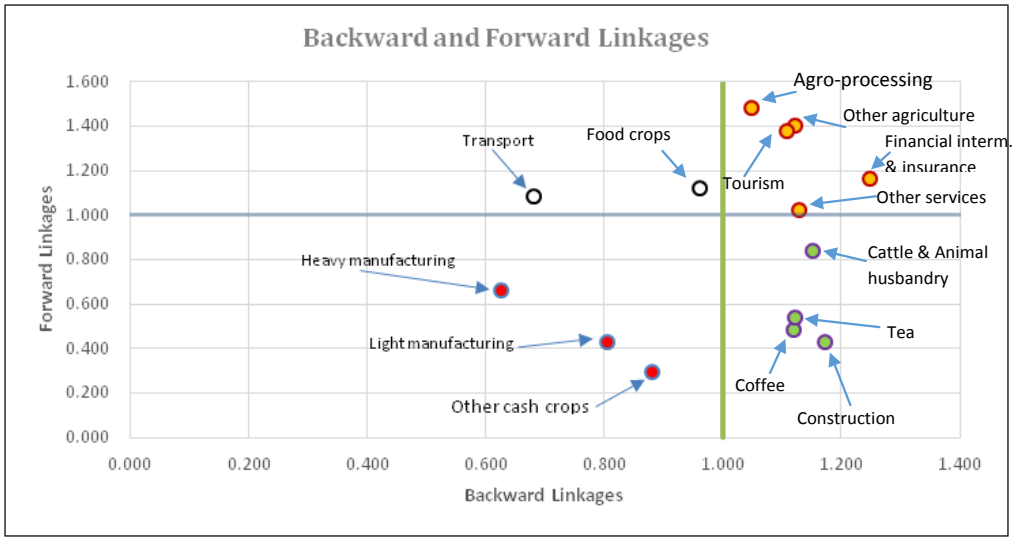
Decomposed labour income multipliers by youths, gender and skills types

This addresses the question; if demand for a given sectoral commodity increases by one billion shillings, by how much in Uganda shillings does labour income increase for different labour types? The results show that, on average, a unit increase in demand of any given sector at the national level would result into changes in labour income by 0.433 units, and it is highest in the services sector (0.501) followed by industry (0.401) and last in agriculture (0.396). Regarding the youths, an average national unit increase in aggregate demand for any commodity would increase youth labour income by 0.183 units. Youth labour income is highest in the services sector (0.205 units) followed by agriculture (0.183), and industry (0.161). In the agriculture sector, youth labour income multipliers are highest in tea (0.215) followed by coffee (0.211). In the industry sector, youths labour income multiplier is highest in the light manufacturing (0.181) followed by construction (0.180), and agro-processing (0.154). In the services sector, youth labour income multipliers are higher in the financial and insurance (0.301) and tourism (0.208).

Sectoral backward and forward linkage analysis

The study assesses the strength of each of the sub-sectors in terms of the backward and forward linkages with other sectors. Sectors with backward and forward linkages greater than 1 are considered as strong sectors; thus their expansion would relatively accelerate economic growth faster. Sectors with backward linkages greater than 1 but forward linkages less than 1 are backward-oriented sectors. Those with forward linkages greater than 1 and backward linkages less than 1 are forward-oriented sectors. Sectors with both forward and backward linkages less than 1 are weak sectors in terms of accelerating economic output. The results are shown in Figure1.

Figure 1: Backward and forward linkages



Source: Adopted from Mutenyo et al. (2022).

Figure 1 shows that the key sectors with strong forward and backward linkages are: agro-processing, tourism, financial intermediation and insurance, other agriculture (i.e., forestry), and other services. These are the sectors that would accelerate economic growth if supported in terms of enhancing aggregate demand for their products. The weak sector include: light and heavy manufacturing and also other cash crops. The manufacturing sector has weak forward and backward linkages largely because they are capital-intensive, their inputs are largely imported, and the outputs are produced for final consumption.

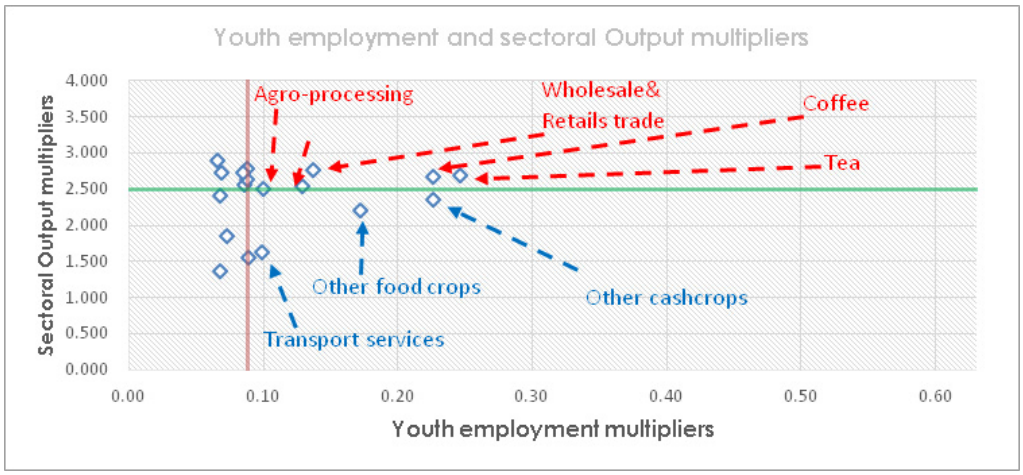
Employment and output multipliers for youths

This subsection is aimed at identifying sectors with strong output and youth employment multipliers. A sector with both strong output multiplier and youth employment multipliers (in FTE terms) would simultaneously boost economic growth and youth employment given the current government policies. The study uses the median of multipliers as the relative cut-off points for strong and weak multipliers. Sectors are categorized into four quadrants, namely: (1) sectors with both strong output and employment multipliers; (2) sectors with strong output multipliers but weak employment multipliers; (3) sectors with strong employment multipliers and weak output multipliers; and (4) sectors with weak output and weak employment multipliers.

The findings show that, sectors with strong output and youth employment multipliers are: tea, coffee, wholesale and retail trade, agro-processing, and animal husbandry. These have great potential to accelerate general job creation for youths

in Uganda. Also, transport services, other cash crops, and other food crops have strong youth employment multipliers but weak output multipliers. The results are shown in Figure 2.

Figure 2: Youth employment and output multipliers



Source: Adopted from Mutenyo et al. (2022).

Impact sector expansion on youth employment and economic growth

This subsection assesses the impact of increased aggregate commodity demand of a given sector on the number of new youth jobs created as well as the resulting impact on economic growth (GDP). The study conducts a simulation of an increase in demand worth of Ush10 billion. The impact on the general employment in the economy is disaggregated into direct jobs, indirect jobs, and total jobs. Direct jobs refer to new jobs created in the sector to which the additional demand is made. Indirect jobs refer to new jobs created in other sectors other than the immediate sector due to backward and forward linkages. The results are shown in Table 5.

The results show that expansion of demand worth Ush10 billion would generate, in total, 3,502 FTE jobs in the agriculture sector, 2,291 jobs in the services sector, and 2,071 new jobs in the industry sector. New youth jobs by sector would be highest in agriculture (1,556) followed by services (924) and industry (868). At sub-sector level, new jobs that would be created are: 2,468 in tea, 2264 in coffee, 2,262 in other cash crops[1], 1,724 in other crops, 1,371 in trade, 1,294 in animal husbandry, and 1,002 in agro-processing.

Table 5: Impact on GDP, youth and female full time employment as a result of Ush10 billion expansion in demand

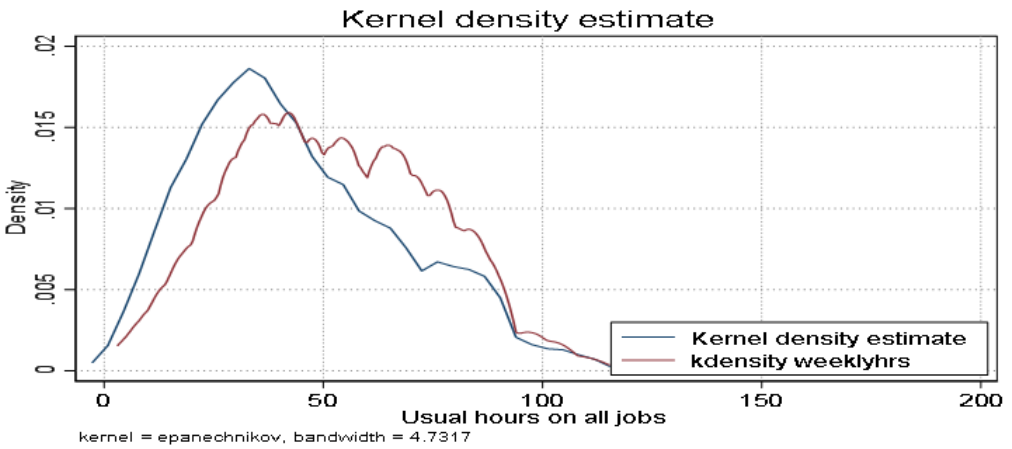
	Total Jobs Created				Of Which Jobs For Youths			GDP
	Direct Jobs	Indirect Jobs	Total Jobs Created	o/w Female Jobs	Total Youth Jobs	o/w Direct Youth Jobs	o/w Female Youth Jobs	Impact on GDP
1. Agriculture	**2,075**	**1,428**	**3,502**	**1,646**	**1,556**	**984**	**733**	**0.021%**
Coffee	3,089	1,643	4,731	1,938	2,264	1,578	911	0.020%
Tea	3,439	1,708	5,146	2,109	2,468	1,756	993	0.020%
Other cash crop	3,033	1,862	4,896	2,547	2,262	1,495	1,190	0.020%
Other crops	2,626	1,194	3,819	1,998	1,724	1,267	906	0.021%
Animal husbandry	1,395	1,638	3,033	1,009	1,294	614	418	0.021%
Forestry	411	1,811	2,223	1,048	880	126	423	0.021%
2. Industry	**301**	**1,770**	**2,071**	**933**	**868**	**127**	**392**	**0.017%**
Mining	459	1,700	2,158	973	889	195	395	0.017%
Agro-processing	258	2,105	2,363	1,172	1,002	96	498	0.017%
Light manuf.	197	1,622	1,819	887	732	73	363	0.016%
Heavy manuf.	109	1,556	1,666	784	679	45	328	0.015%
Construction	461	1,552	2,013	739	856	214	311	0.017%
3. Services	**888**	**1,403**	**2,291**	**1,061**	**924**	**326**	**452**	**0.019%**
Tourism	472	1,652	2,124	1,145	875	175	467	0.019%
Transport	977	1,477	2,454	699	987	370	302	0.017%
Utilities	90	1,536	1,625	741	692	43	325	0.021%
Financial interm. & insurance	106	1,459	1,565	718	662	51	315	0.018%
Wholesale & retail trade	2,276	1,233	3,508	1,755	1,371	833	714	0.020%
Telecommunication	49	1,589	1,637	754	679	23	327	0.016%
Other Services	707	1,377	2,085	955	845	255	419	0.019%

Note: Computed using 2016/17 SAM Multiplier Model.
Source: Adopted from Mutenyo et al. (2022).

Measuring inequality in youth employment in Uganda

The Gini coefficients and Kernel density estimation show that there is more inequality to employment among female youth than their male counterparts.

Figure 3: Kernel estimation of employment inequality



Source: Adopted from Mutenyo et al. (2022).

Determinants of youth participation in the labour force in Uganda

To test whether youth self-select into labour force participation, we estimated a Heckman two-stage selection model by using a rich set of variables aimed at capturing observable differences in youth labour force participation rate. The first-stage selection equation is estimated via a probit model. Subsequently, we compute the inverse Mills ratio (IMR, also termed Lambda), which takes account of the possible selection bias, which is insignificant at conventional levels. This implies that there is no significant selection bias into labour force participation. As such, we use a Type-1 Tobit model. We report both coefficients and marginal effects (ME) of the respective models. The marginal effects, quantifies the actual effect of each predictor of the estimated probabilities.

The marginal effects for the estimated labour participation are obtained using Maximum Likelihood (ML) and two-step Heckman. The findings suggest that education has a significant effect on youth labour force participation. All education levels have a positive probability of youths' engagement in labour force participation. Having primary education raises the probability of youth's labour force participation between 28 and 27 percentage points, secondary education between 31 and 30 percentage point, and postsecondary between 23 and 21 percentage points compared to youth with no education. Also, living in urban areas shows a positive probability of engaging

in labour force participation than counterparts living in rural areas. Living in an urban area increases the probability of youths' labour force participation between 7 and 10 percentage points, while being in school reduces youth labour force participation between 59 and 75 percentage points; while the household size of the youth shows a negative association between labour force participation and employment. The results show that one additional member of the household reduces the probability of being in work by 0.8 percentage points. In addition, results show that age still influence the youth's likelihood in labour force participation. The results show that one additional year in the age of the youth raises the probability of being in work by 9 percentage points.

Table 6: Marginal effects for labour force participation

	MLE		Heckman	
	ME	**Pval**	**ME**	**Pval**
Education (RC: No education)				
Primary	0.283***	(0.000)	0.273***	(0.000)
Secondary	0.305***	(0.000)	0.303***	(0.000)
Postsecondary	0.232***	(0.001)	0.213***	(0.001)
Female	0.174	(0.151)	0.170	(0.150)
Urban	0.104***	(0.002)	0.070**	(0.034)
Household size	-0.012	(0.181)	-0.008**	(0.035)
In School	-0.745***	(0.005)	-0.586***	(0.008)
Age in years	0.009**	(0.044)	0.009***	(0.020)
Wealth index (RC: Very poor)				
Poor	0.028	(0.652)	0.096*	(0.045)
Non-poor	0.069	(0.352)	0.138**	(0.015)
Rich	0.054	(0.569)	0.173***	(0.007)
Richest	0.024	(0.838)	0.170**	(0.032)
After Covid-19	-0.036	(0.225)	-0.053*	(0.071)
Received remmittance	-0.124***	(0.001)	-0.174***	(0.000)
Has farmland	-0.061	(0.255)	-0.131***	(0.000)
Observations	5,736		235.13	
Wald Chi(2)	156.6	(0.000)	235.13 (0.000)	

Note: p-values are in parentheses: *** p<.01, ** p<.05, * p<.1
Source: Adopted from Mutenyo et al. (2022).

As expected, wealth status has a significant effect on youths' labour force participation. The results show that being poor raises the probability of youth's labour force participation by 10 percentage points, non-poor by 14 percentage point, rich and very rich by 17 percentage points compared to counterparts that are very poor. This shows that, in Uganda, the children of the rich have a relatively higher opportunity of getting employed than their poor counterparts, which could be as a result of their

rich parent's networks, let alone going to better schools. The findings also show that post COVID-19 outbreak show a negative probability of engaging in labour force participation than before COVID-19 outbreak. Indeed, COVID-19 outbreak has reduced the probability of the youth being in work by 5 percentage points. Surprisingly, receiving remittances reduces the probability of youth participation in the labour force between 12 and 17 percentage points. This is similar to unemployment benefits in the developed countries. Beneficiaries of such benefits tend to sit back and wait instead of joining the labour force. However, owning farmland raises the probability of youths' participation in the labour force by 13 percentage points.

Results for Kenya study:

Input-output multipliers

The multipliers results show that the average employment multiplier is 1.71, suggesting that about 1.7 units of jobs are created for every unit increase in demand for output. The sectors with the highest level of employment multipliers are agriculture, fishing, and forestry (2.10); finance, real estate, and business services (2.04); and trade (1.89). Manufacturing, hotels and restaurant, and electricity and water have the lowest employment multipliers which are below the national average (1.71), at 1.03, 1.25 and 1.56, respectively. The employment multipliers were as follows: agriculture (2.1); trade (1.89); mining and quarrying (1.86); education (1.85); construction (1.84); and transport (1.74).

Table 7: Linear output multipliers for the Kenyan SAM 2015

	Sector	Output Multiplier	Employment Multiplier
1	Construction	4.01	1.84
2	Trade	3.75	1.89
3	Finance, real estate, and business services	3.64	2.04
4	Education	3.62	1.85
5	Mining and quarrying	3.57	1.86
6	Agriculture, fishing, and forestry	3.56	2.10
7	Health and social work	3.45	1.75
8	Transport and communication	3.44	1.74
9	Public administration	3.38	1.66
10	Other services	3.16	1.63
11	Electricity and water	2.97	1.56
12	Hotels and restaurants	2.60	1.25
13	Manufacturing	2.18	1.03
	Average	**3.33**	**1.71**

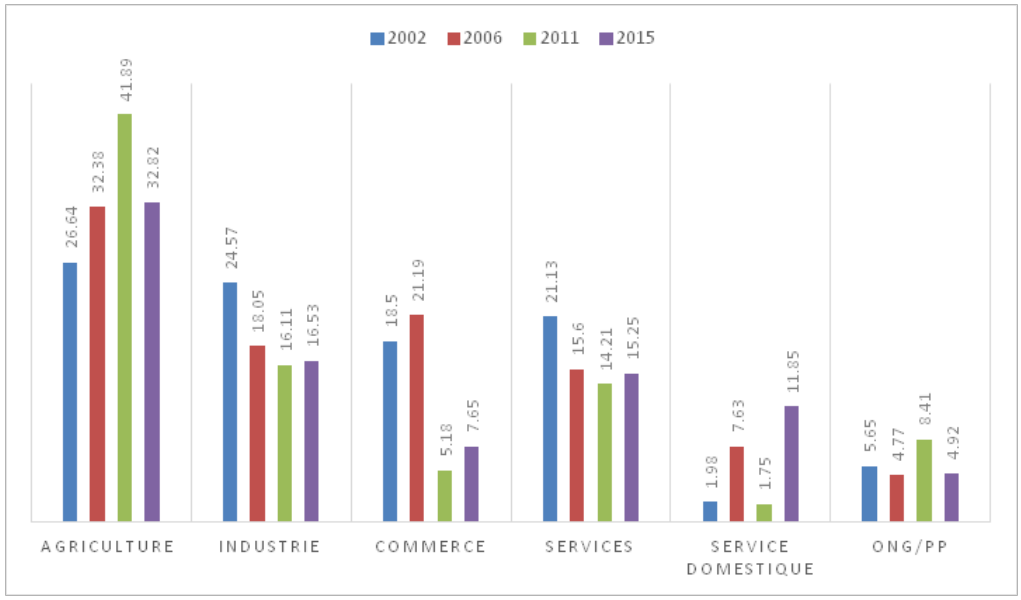
Source: Kenya SAM 2015 computation; Adopted from Onsomu et al. (2022).

Results for Senegal study

Distribution of employed youth by sectors of activity

The distribution of employed youth aged 15-35 by sector shows a clear predominance of agriculture[2], regardless of the survey year considered. There is also a rising trend in the number of young people engaged in agriculture between 2002 and 2015, with a peak of about 40% in 2011. Although the share of young people employed in agriculture is declining over the 2011–2015 period, agriculture remains the dominant employer of the youth. Indeed, agricultural employment accounted for nearly 30% of total youth employment in 2015 compared to almost 40% in 2011. The share of youth employed in trade has also experienced a decline over time, but this sector remains the largest provider of jobs after agriculture.

Figure 4: Sector of activity that employs young people



Notes: AGRICULTURE=Agriculture; INDUSTRIE=Industry; COMMERCE=Trade; SERVICES=Services; SERVICE DOMESTIQUE=Domestic Services; ONG/PP=NGO/PP.
Source: Adopted from Dumas et al. (2022).

This is followed by the manufacturing sector (manufacturing activities) whose share of jobs has changed slightly over time. It should be noted that the majority of jobs held by young people are concentrated in three of the fifteen sectors of economic activity selected: i) agriculture, livestock, forestry and fishing, ii) trade, and iii) manufacturing activities. The structure by gender shows a predominance of young men in agriculture and manufacturing activities and a higher concentration of young women in the trade sector. There is also a relatively low presence of young men and women in mining,

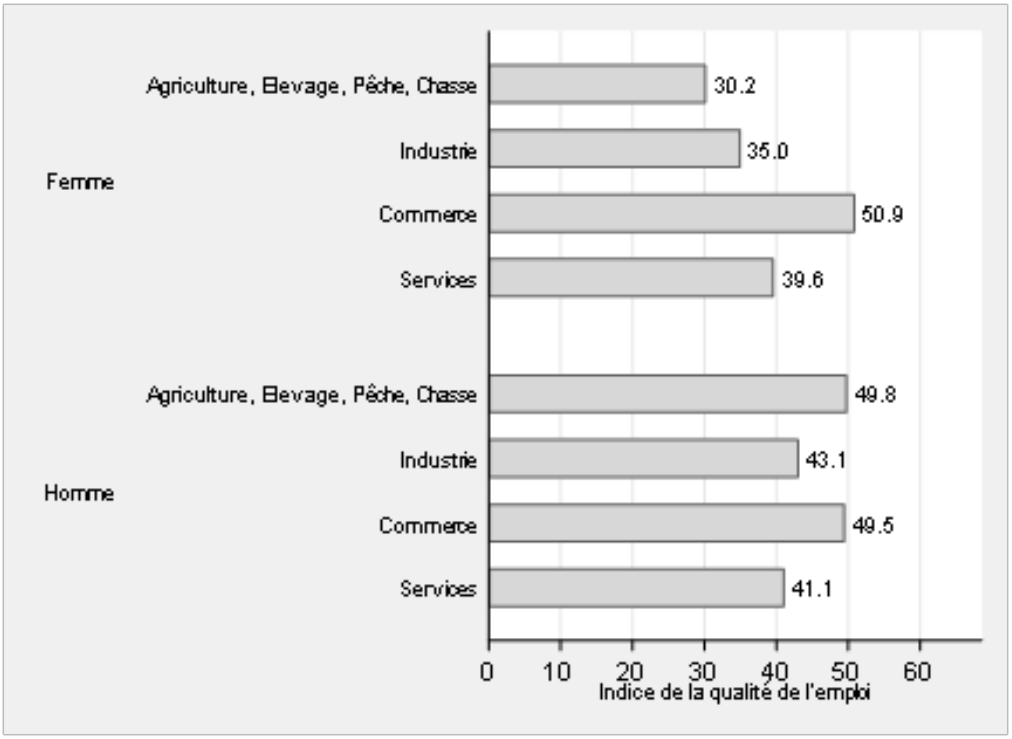
restaurants and hotels, and finance. In any given year, the percentage of young people employed in mining, restaurants, hotels, and finance is less than 4%. This is also true for young men and women in these sectors.

Generally, an analysis by sector shows that the agricultural sector employs the majority of young people, followed by the industrial sector, services, and trade.

Statistical analysis of job-quality determinants in Senegal

On average, the value of the job-quality index is higher for male youth than for female youth. This indicates that young women are more likely to be in low-quality jobs than their male counterparts. As shown in Figure 5, job-quality index varies by sector. It can be seen that, young women working in trade, services, and industry have better job prospects in that they rank highest in terms of job-quality. Young women working in agriculture in the broadest sense are the lowest-ranked in terms of job quality. In contrast, young men working in agriculture and trade are more likely to have quality jobs. This is followed by youth in industry and services sectors.

Figure 5: Average job-quality index by activity sector



Notes: Femme=Female; Homme=Male; Agriculture, élevage, pêche, chasse=agriculture, livestock, fishing, hunting; Industrie=Industry; Commerce=Trade; Services=Services; Indice de la qualité de l'emploi=job-quality index.
Source: Adopted from Dumas et al. (2022).

The findings show that entrepreneurship offers better job prospects for young people than salaried employment. Indeed, regardless of gender, self-employed youth score higher on job-quality than youth working for others. This result has important policy implications, in that it shows that promoting entrepreneurship among young men and women could help combat the unemployment situation faced by most youth in the Senegalese labour market.

Econometric analyses of job-quality determinants

The analysis in this subsection sought to identify sectors that provide more quality jobs for young people while correcting for potential selection bias. The study first tested for the presence of selection bias based on the level of statistical significance of the inverse of the Mills ratio. For this, estimates are performed separately for young men and women. The results show that the coefficient associated with the inverse of the Mills ratio is not significant implying that there is no selection bias. Therefore, estimating the econometric model used the OLS method. To consider a possible serial correlation in the different surveyed communities, standard deviations robust to heteroscedasticity and cluster structure at the sector level was used.

Table 8: Estimates of the job-quality determinants

Variables	Young Women	Young Men
Sectors of Activity		
Agriculture	32.07***	53.30***
Industry	39.40***	49.97***
Commerce	51.12***	53.57***
Services	43.36***	49.02***
Employment Status		
Entrepreneurs	-4.422*	-8.672*
Waged employees	8.080**	3.114
Age in Level and Squared		
Age	-1.701	-0.265
Age-squared	0.0256	-0.00232
Household Size	-0.0238	0.169
Education Level		
Secondary 1	3.168	3.210*
Secondary 2	0.854	0.0372
Higher	-1.896	-2.446

continued next page

Table 8 Continued

Variables	Young Women	Young Men
Knowledge of Wolof		
Low proficiency	-3.717	-0.865
Good knowledge	-3.240	-0.199
Knowledge of French		
Low proficiency	--	7.510*
Good knowledge	2.111	7.237*
Knowledge of English		
Low proficiency	-0.331	-0.876
Good knowledge	0.316	-1.227
Political Party Activist	3.276*	-1.221
Constant	33.46	4.955
Comments	969	1295
R2	0.804	0.756

Notes: The symbols *, **, and *** represent statistical significance thresholds at 10%, 5%, and 1%, respectively. Standard deviations are corrected for heteroscedasticity and adjusted for cluster effects at the departmental level.
Source: Calculations based on the EPAE; adopted from Dumas et al. (2022)

The results indicate that the trade sector offers better employment opportunities for young women in the labour market than other sectors. Indeed, young women working in trade are more likely to hold higher-quality jobs. It is followed by young women working in the services and industry sectors, respectively. We find that young women working in agriculture are more likely to hold low-quality jobs. Compared to young men, the results show that job-quality is also higher in trade than in other sectors. In contrast to young women, agriculture is the second most important sector for quality jobs for young men. It is followed, respectively, by industry and services, following the descriptive approach presented above.

Concerning employment status, the estimates show that self-employed young people (i.e., entrepreneurs) have better quality jobs than salaried youth. However, this result is significant only for young women. Similarly, young women who are political party activists are more likely to have higher-quality jobs, but knowledge of Wolof, French, or English languages does not matter. In contrast, young men who are fluent in French and those who have attained secondary 1 education are more likely to hold higher-quality jobs.

4. Conclusion and policy recommendation

Conclusion

Table 8 summarizes the study findings regarding the sectors that have the potential for youth employment.

Table 9: Sectors with potential for youth employment

Kenya	Senegal	Uganda
• Agriculture	• Agriculture	• Agro-processing
• Fishing	• Livestock	• Tea
• Forestry	• Forestry	• Coffee
• Finance	• Fishing	• Animal husbandry
• Real estate	• Trade	• Forestry
• Business services	• Manufacturing activities	• Tourism
• Trade		• Wholesale and retail trade
		• Financial intermediation and Insurance
		• Construction

Policy recommendations

Recommendation for Uganda

Accelerating economic output and growth would involve adoption of policies that would structurally transform the weak, backward- and forward-oriented sectors into strong sectors. The backward-oriented sectors like coffee and tea would be transformed into strong sectors through supporting value addition to their products, especially before they are exported. Forward-oriented sectors like transport and food crops would be transformed into strong sectors through encouraging the use of domestic inputs. The weak sectors like manufacturing would be transformed into strong sectors through supporting the use of domestic inputs accompanied with production of intermediate inputs for other sectors. It should be noted that, sectors such as agro-processing was found to have strong output multipliers, strong

employment multipliers for youths and female workers, and strong backward and forward linkages with other sectors. Thus, supporting this sector would accelerate inclusive economic output and growth as it has strong capacity to increase output of other sectors and also create numerous jobs for both male and female youth workers.

The observed importance of skills in accelerating economic growth calls for need for government to adopt policies that improve the relevant skills of youths in the given sector.

Regarding youth in general, enhancement of their earnings requires focusing on skilling and increased productivity in sectors such as cash crop production, light manufacturing, construction, agro-processing, financial and insurance, and tourism sectors.

Overall, the policies should be holistic to encompass the whole value chain of the identified sectors. For example, supporting agriculture sector to unlock employment potential for youths and women would require complementary efforts of investing in agro-processing to create market and add value to the agricultural products. Similarly, industrialization would require complementary investments in sectors that would provide inputs and reduce on imports.

In addition, empirical results suggest five broad interventions that may greatly promote decent job creation and youth participation in the labour markets in the country. These are:

i) Controlling for personal characteristics, occupational choice of the youth is strongly related to education attainment and residence of the youth. This shows the relevance of education among the youth for labour market participation. It further highlights the need for policy makers to be cognizant of the rural-urban migration in the development of labour policies.

ii) Support to skilling and reskilling of the youth in skills required by high potential job creation sectors through practical skills, creation of incubation centres, and supporting youth who start business.

iii) Promotion of agriculture modernization and making the sector appealing to the youth by supporting agro-processing which in turn increases demand for the agricultural produces hence providing market for youths' agricultural produces.

iv) “Equitable regional development” for both the urban and rural areas in terms of roads, health and education infrastructure, electricity provision in order to limit rural-urban migration that could in turn exacerbate the employment problem, but instead provide employment opportunities even in the rural areas.

v) Policies intended to enhance labour incomes for youths should focus on supporting: cash crop production, light manufacturing, construction, agro-processing, financial and insurance, and tourism sectors.

One key barrier for youths and female workers in accessing job opportunities is high leakages in some of the identified sectors. For example, about a third of the potential output from an additional demand for industrial goods, and approximately a fifth of the potential output in the service, sector leaks out of the economy, thus exporting jobs. This barrier could be removed through supporting import substitution by subsidizing firms that use local raw materials. This in turn would increase value addition which, through the multiplier effect and backward and forward linkages, would increase employment opportunities for the youth.

Recommendations for Kenya

The findings indicate that agriculture, trade, transport, construction, and education have the highest potential to create jobs for the youth. Activities with high potential to create jobs include livestock, fishing, vegetables (horticulture), rice production, textile, and footwear production.

Going forward, it is imperative that all sectors of the economy are stimulated to grow at a higher and sustainable rate to ensure creation of quality and productive jobs in the modern economy. Efforts to help the firms avoid coordination failures by providing early investments in areas such as training, technology, education, and infrastructure development, supported with strong institutions and regulatory frameworks, should be emphasized. It would, therefore, be important to adopt a comprehensive multi-sectoral approach in job creation strategy for the country. Indeed, economic activities vary across Kenya's counties hence need to stimulate activities where each county and economic bloc has comparative advantage to ensure sustained job creation for the youth.

Recommendations for Senegal

The findings from adoption of government programmes such as: the programme of comprehensive vocational training in the company and alternating in a training centre (apprenticeship), the pedagogical internship programme in private educational institutions (solidarity contract), the work experience programme (adaptation internship), and the training and orientation programme for qualified individuals for the creation of enterprises (outsourcing contract), all increased the chances of the young men and women access to quality jobs. Therefore, this calls for the continuation of the activities of the national state-employer convention for young men and women in Senegal. Although this work does not confirm the performance of employment policies in Senegal, the results indicate that, for the activities of the National State-Employer Agreement to be more effective, the provision of employment support programmes must respond to the socioeconomic and sociodemographic characteristics of the youth to reduce job insecurity and the level of underemployment, and to promote job quality and entrepreneurship.

Notes

1. Other cash crops include: Cocoa, Vanilla, Flowers, Cotton, Tobacco-Farm, Sunflower, and Other Cash Crops.

2. Agriculture is broadly defined to include crop and animal production, hunting and related services, forestry and logging, and fishing and aquaculture.

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