WORKFORCE CONNECTIONS
KENYA YOUTH ASSESSMENT

AUGUST 2014
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<tbody>
<tr>
<td>BPO</td>
<td>Business Process Outsourcing</td>
</tr>
<tr>
<td>BSc</td>
<td>Bachelors of Science</td>
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<tr>
<td>CAADP</td>
<td>Comprehensive Africa Agriculture Development Programme</td>
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<td>CBS</td>
<td>Copenhagen Business School</td>
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<td>CDACC</td>
<td>Curriculum Development Accreditation and Certification Council</td>
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<td>CDC</td>
<td>Center for Disease Control</td>
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<td>CDCS</td>
<td>Country Development Cooperation Strategy</td>
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<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
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<td>DFID</td>
<td>Department for International Development (UK)</td>
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<td>DWCP</td>
<td>Decent Work Country Program</td>
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<td>DYDE</td>
<td>Directorate of Youth Development and Empowerment</td>
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<td>EAC</td>
<td>East African Community</td>
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<tr>
<td>EIIP</td>
<td>Employment Intensive Infrastructure Program</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<tr>
<td>FIELD</td>
<td>Financial Integration, Economic Leveraging, Broad-Based Dissemination and Support</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit</td>
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<tr>
<td>GW</td>
<td>Giga-Watt</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>HP LIFE</td>
<td>Hewlett Packard Learning Initiative for Entrepreneurs</td>
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<td>ICT</td>
<td>Information, Communications, and Technology</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>IGAD</td>
<td>Intergovernmental Authority on Development</td>
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<td>International Labor Organization</td>
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<td>ITMS</td>
<td>Integrated Tax Management System</td>
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<td>Its</td>
<td>Institutes of Technology</td>
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<td>KAVES</td>
<td>Kenya Agricultural Value Chain Enterprises</td>
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<td>KCC</td>
<td>New Kenya Co-operative Creameries</td>
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<td>KCPE</td>
<td>Kenya Comprehensive Primary Examination</td>
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<td>KCSE</td>
<td>Kenya Certificate of Secondary Education</td>
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<td>KDB</td>
<td>Kenya Dairy Board</td>
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<td>KDHHS</td>
<td>Kenya Demographic and Health Survey</td>
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<td>KENSAVIT</td>
<td>Kenya National Alliance of Street Vendors and Informal Traders</td>
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<td>Kenya Private Sector Alliance</td>
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<td>KNEC</td>
<td>Kenya National Examinations Council</td>
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<td>Kenya National Survey for Persons with Disabilities</td>
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<td>Kenya Private Sector Association</td>
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<td>KSh</td>
<td>Kenyan Shilling</td>
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<td>KYEP</td>
<td>Kenya Youth Empowerment Project</td>
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<td>LAPSSSET</td>
<td>Lamu Port-South Sudan-Ethiopia Transport</td>
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<td>LMA</td>
<td>Labor Market Assessment</td>
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<td>Labor Market Information System</td>
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<td>LWA</td>
<td>Leader with Associates</td>
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<td>MAP</td>
<td>Market Assistance Program</td>
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<td>MEDA</td>
<td>Mennonite Economic Development Associates</td>
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<td>MNC</td>
<td>Multinational Corporations</td>
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<td>MoEST</td>
<td>Ministry of Education, Science and Technology</td>
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<td>MOLSS</td>
<td>Ministry of Labor, Social Security and Services</td>
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**WORKFORCE CONNECTIONS:** Kenya Youth Assessment
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<th>Acronym</th>
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<tr>
<td>MSE</td>
<td>Micro and Small Enterprises</td>
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<tr>
<td>MTP</td>
<td>Medium Term Plan</td>
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<td>MW</td>
<td>Mega-Watt</td>
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<tr>
<td>NEB</td>
<td>National Employment Bureau</td>
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<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
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<tr>
<td>NITA</td>
<td>National Industrial Training Authority</td>
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<tr>
<td>NLB</td>
<td>National Labor Board</td>
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<tr>
<td>NMDC</td>
<td>National Manpower Development Committee</td>
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<tr>
<td>NPs</td>
<td>National Polytechnics</td>
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<tr>
<td>NV CET</td>
<td>National Vocational Certificate in Education and Training Curriculum</td>
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<tr>
<td>NYC</td>
<td>National Youth Council</td>
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<tr>
<td>NYS</td>
<td>National Youth Service</td>
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<tr>
<td>OVC</td>
<td>Orphans and Vulnerable Children</td>
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<td>PTSD</td>
<td>Post-Traumatic Stress Disorder</td>
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<tr>
<td>PUCs</td>
<td>Polytechnic University Colleges</td>
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<tr>
<td>ROI</td>
<td>Return on Investment</td>
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<td>SACCOS</td>
<td>Savings and Credit Co-operative Societies</td>
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<td>SDP</td>
<td>Smallholder Dairy Project</td>
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<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
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<td>SRH</td>
<td>Sexual and Reproductive Health</td>
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<td>STIs</td>
<td>Sexually Transmitted Infections</td>
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<td>SYPT</td>
<td>Subsidized Youth Polytechnic Tuition</td>
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<tr>
<td>TEP</td>
<td>Technical Education Program</td>
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<tr>
<td>TOT</td>
<td>Training of Trainers</td>
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<td>TTS?</td>
<td>Trade Testing Systems</td>
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<tr>
<td>TTI s</td>
<td>Technical Training Institutes</td>
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<tr>
<td>TVET</td>
<td>Technical and Vocational Training</td>
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<tr>
<td>TVVP</td>
<td>Technical and Vocational Vouchers Program</td>
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<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>UNIDO</td>
<td>UN Industrial Development Organization</td>
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<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USIU</td>
<td>United States International University</td>
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<tr>
<td>VDMA</td>
<td>German Engineering Federation (Verband Deutscher Maschinen und Anlagenbau)</td>
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<tr>
<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
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<td>WC</td>
<td>Workforce Connections</td>
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<td>WEDDE</td>
<td>Women Entrepreneurship Development and Economic Empowerment</td>
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<td>WEDF</td>
<td>Women Enterprise Development Fund</td>
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<td>WFD</td>
<td>Workforce Development</td>
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<td>YALI</td>
<td>Young African Leadership Initiative</td>
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<td>YECs</td>
<td>Youth Empowerment Centers</td>
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<tr>
<td>YEDF</td>
<td>Youth Enterprise Development Fund</td>
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<td>Youth Polytechnics</td>
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EXECUTIVE SUMMARY

PURPOSE, OBJECTIVES, AND METHODOLOGY
USAID/Kenya is developing a new five-year project for cross-sector youth support, focusing on areas highlighted in the new Country Development Cooperation Strategy (CDCS): private sector-led growth and devolution. The mission engaged the Workforce Connections project, managed by FHI360, to undertake an assessment of the Kenyan youth workforce and labor market.

The key research objectives of the assessment, as defined by USAID/Kenya, were as follows:

1) Employment and sector analysis of labor demand: To provide a brief summary of the employment situation in Kenya, an analysis of the structural and/or other factors influencing employment.
2) Small and medium enterprise (SME) development, entrepreneurship, and self-employment: To identify SME development, entrepreneurship, and self-employment opportunities within the target sectors.
3) Labor supply: To describe the degree to which youth have the potential to meet employment demands in high potential sectors.
4) Mapping of workforce development programs: To better understand who is doing what where on youth workforce development.
5) Policy and regulatory reforms: To identify and examine key policy and regulatory opportunities and constraints which would be critical in addressing the systemic deficiencies of the labor market.
6) The health of youth: To better understand the critical health related concerns affecting Kenyan youth and their quest for economic empowerment.
7) Youth and culture: To identify critical social and cultural factors that contribute to the placement of youth in the current disempowered position in society.

This assessment was conducted by a mixed international-local team with youth participation, and is the first of a series of labor market assessments to be conducted under the Workforce Connections project. The methodology builds on standard approaches to understanding labor markets used in the past by USAID, other donors, governments, and private organizations, with the addition of a more focused economic analysis which makes it possible to generate deeper insight into the drivers of skills demand. Results from this and the other Workforce Connections assessments, and the tools used to generate them, will be shared and further refined through the project’s Community of Practice over the coming year. The assessment also contains a summary of lessons learned about workforce development programming (see Annex 6).

ECONOMIC OVERVIEW
Kenya’s real economic growth rate has been hovering around a modest 1% per year for the past five years,

1 Beginning in 2013, Kenya began a devolution process toward a more decentralized form of government, with service delivery provision and funding devolving to 47 newly established counties with independently elected leadership. Devolution refers to a type of administrative decentralization that includes the transfer of authority for decision-making, finance, and management to local government, as well as the relocation of responsibility for services to local governments that were previously under the domain of the national government.
2 A research and learning project in support of USAID’s Education Strategy Goal 2: education system aligned with labor market needs. Workforce Connections seeks to bring together evidence and best practices from three technical areas, education, economic growth, and positive youth development, to form a cohesive and widely accessed body of knowledge that is consistently applied in USAID programming and beyond.
while its neighbors in East Africa have enjoyed annual GDP growth rates ranging from 3% to 7%. Inequality in Kenya is rising, and issues of education access and quality are placing its current position as a regional leader in human capital development in jeopardy. Kenya’s below-potential recent economic performance can be traced to the factors cited in USAID’s Kenya Growth Diagnostic: issues with governance, political stability, energy and other infrastructure act as a damper on otherwise promising investments, severely reducing the economy’s dynamism and forcing large segments of the labor force into the informal sector.

Although agriculture is the largest single employer in the economy, its growth in terms of employment and GDP over the past five years has been lackluster, with other smaller sectors such as construction, wholesale and retail trade, ICT and even manufacturing adding more workers than agriculture. Agriculture is typically driven by exports, but none of Kenya’s traditional export crops such as coffee and tea, cut flowers or vegetables has experienced strong growth during this period, with the exception of green beans. In contrast, domestic demand drivers have boosted growth in dairy, some horticulture products, construction and services.

There are some bright spots. Investment trends provide a valuable window into future growth, and foreign direct investment (FDI) is particularly indicative of those sectors with a robust prognosis, since investment from international sources is provided on a highly competitive basis. ICT, the financial sector, and manufacturing are the three largest targets of FDI in Kenya, and while these are also the most capital-intensive sectors of the economy, job growth from these sectors seems assured. Resources will also continue to be injected into the economy in the retail trade and tourism sectors, and investments in infrastructure such as transportation and energy will also ensure that the construction industry continues its strong recent growth trend.

Today, Kenya’s workforce is overwhelmingly in informal employment. Only 1.3 million people work in the modern formal sector, against over 12 million in the informal economy, as defined to include smallholder farming (6.5 million), self-employment (2.7 million), and informal wage work (3.1 million). Under current conditions, informal sector activities provide by far the greatest volume of employment opportunities for youth. In the immediate term, we believe there are strong opportunities to upgrade training and workplace learning opportunities within the informal sector.

Over the longer term, however, particularly at the level of policy and economic strategy, it is important to bear in mind that increasing informalization is decidedly a “second-best” outcome for youth employment opportunities, as compared with formal sector employment. Indeed, a review of available data on labor productivity would imply that the conflict – or gap – between the productivity of the formal and informal sectors is the driving dynamic in nearly every sector in Kenya. The informal sector is typically characterized by slow employment growth at the firm level and low productivity, as actors in this sector generally lack access to technology, outside investment, and market information – and, of course, education – limiting the potential for innate entrepreneurial talents to flourish. Productivity is significantly higher in the formal sector component of Kenya’s key sectors; firms that are active participants in global value chains must stay abreast of emerging technology and market trends.

In addition to analyzing growth, export, and productivity trends in Kenya, the Workforce Connections team explored the findings of a Harvard University research project led by Ricardo Hausmann and Cesar Hidalgo. Their “product space” analysis utilizes, across all countries in the world, the correlation between increases in exports for specific products and that country’s subsequent growth. Their theory, which is supported by empirical data, attributes growth in incomes through product diversification to an incremental process of building on capabilities – or skills. The team’s analysis of Kenya’s product space
data reveals a set of subtle and hidden relationships between sectors, whereby skills and tacit knowledge built up in one sector can be applied to other seemingly unrelated sectors. Although this analysis requires further development, a preliminary view indicates that related sectors with both growth and knowledge spillover potential would include: glass bottles, milk, vehicle trailers and cleaning products, food preparation machinery, metal products, polishes and creams, food processing, fish, and fertilizers.

If Kenya’s economy is to provide high quality jobs for the next generation of youth, the country will need to capitalize on investments that have been and are being made in the services and manufacturing sectors, address supply chain constraints in high-demand horticulture sectors such as green beans, and nurture younger, smaller, promising sectors that share a common skills base, as uncovered through the product space analysis. Kenya requires a dual employment generation strategy: promoting growth in those sectors where feasible, which will mainly come from the formal sector, while opening up access to informal sector jobs, despite their low productivity, for the additional members of the labor force who are not fortunate (or qualified) enough to attain formal sector positions. This means that while formal sector growth needs to be a high priority, it should not be gained at the expense of informal sector jobs (as in the case of the dairy industry in the early 2000s, in which officials attempted to encourage a transition from informal to formal milk production by cracking down on informal milk traders).

SECTOR SELECTION
In consultation with USAID Kenya, the assessment team conducted a preliminary sector selection exercise, based on three sets of criteria:

1) job growth (based on past performance and expectations for the future),
2) youth access (including ease of entry, linkages between the formal and informal sectors, and gender, conflict, and geographic analyses), and
3) ability to build on USAID investments (in health, agriculture, education, energy, youth development, financial services, and natural resource management).

Employment generation potential was a requirement to become shortlisted. Once shortlisted, the remaining criteria were major factors in the final selection. The report provides an overview of employment prospects and opportunities in four value chains that are of particular relevance to USAID’s existing portfolio. In addition, the team has identified three additional value chains that are highly promising, and a set of “cross-cutting” economic activities that are important but do not neatly fit into a single value chain or sector. A summary description of the seven value chains is provided below.

- **Dairy and livestock** merges all activities deriving income from livestock (meat, milk, leather) into one value chain. In dairy, opportunities for youth with less than secondary education are primarily in the informal channel for dairy or in input or service provision. There are opportunities for upward mobility for motivated youth within the informal channel that do not require further education (trader to retailer, farmer to trader of feed, veterinary supplies, etc.) Youth with higher levels of education have an even wider array of opportunities within the sector in areas such as agro-vet services, finance, and modern dairy production. As with the dairy industry, the leather industry provides a variety of promising employment opportunities for youth. Kenya has been experiencing shortages of leather in the latter stages of the value chain, with tanneries running at 40% of capacity. One of the most tangible opportunities, which would address this supply constraint, would be for youth to obtain training in skinning cattle, goats and sheep, as this can be applied in almost any corner of the country all year round. Other opportunities exist at the tannery, abattoir, and processing stages as well and many of these occupations are open to applicants with less than a secondary education.
- **Horticulture** includes a variety of products important to export products, including green beans, potatoes, mangoes, and other fruits and vegetables. As in the cases of dairy and leather, there are a wide variety of agricultural, manufacturing and service industry employment and entrepreneurial opportunities available to youth in both the formal and informal sectors. In the case of green beans, there are a number of constraints to sector growth that could be addressed through technical capacity building and awareness building.

- **Health care services** encompass the provision of primary, secondary, and tertiary medical services, as well as public health. For every registered medical personnel employed, there are several entry points for youth in areas ranging from administrative and support staff to couriers, messengers, clerks, cleaners, orderlies, receptionists, groundskeepers, etc.

- **Energy and clean tech** consists of petroleum-based energy, renewable energy (wind power, solar power, biomass, hydropower, biofuels, etc.), and recycling. For youth with degrees in engineering and related fields, the opportunities are obvious, as a variety of large and small enterprises will enter the market. For youth with secondary education or less, the greatest opportunities will lie in fields that have been labeled as “clean technologies:” renewable energy, energy efficiency and solid waste management (e.g. recycling).

- **Metals, machinery & repair** includes formal and informal production of metal products, as well as repair services such as automobile mechanics. The informal sector provides extensive opportunities for economically disadvantaged youth.

- **Construction** includes positions in the formal and informal sector in both skilled (i.e. tradesmen) and unskilled labor. Apprenticeships in trades such as carpentry, electrical wiring, plumbing, and masonry offer a route for youth into skilled work.

- **ICT** includes business process outsourcing (BPO), and cross-cutting activities such as mobile banking, e-retail and e-health. BPO in particular offers employment opportunities for youth in low skilled jobs, while cross-cutting ICT activities provide youth with skills, such as sales, that can be applied in multiple sectors.

- **Rural retail** includes the wide variety of transformational product distribution and personal services activities taking place in rural areas, such as lighting, cook stoves, mobile devices and agricultural inputs. The skills that youth can obtain in these areas, such as sales or trading, could be applied in many other occupations.

- **Entertainment** includes production and distribution related to arts and culture. The sector is evolving with the advent of new technology and emerging new media channels, creating several cross-cutting opportunities in electronic media, entertainment, arts and sports. In addition to these potential employment linkages, youth seem to have favorable views towards jobs in this sector.

► **LABOR SUPPLY BY TARGET GROUP**
On the supply side, despite reform efforts, the public education system at all levels has weaknesses that are contributing to skills challenges for both youth and employers. Large numbers of dropouts, particularly between primary and secondary levels—primarily due to cost barriers—have contributed to large flows
of youth into the workforce with less than secondary level education, who for the most part lack proficiency in literacy and numeracy. At all levels, soft skills are underdeveloped and applied learning is underutilized. In addition, more could be done within the education sector to address information asymmetries in the labor market, which are severe, and better motivate and prepare youth for the workforce or higher education, despite the lack of a national level Labor Market Information System (LMIS).

Although schooling is certainly not the same as learning, a review of educational attainment data yields a revealing picture of skills supply in the youth workforce, as represented by formal education levels. The diagram below shows stocks and flows of students throughout the formal education system, based on gross enrollment rates for 2013.

**YOUTH EDUCATIONAL ATTAINMENT STOCKS AND FLOWS**

The top level shows “flows” representing the waves of students progressing through the system, with dropouts labeled by dotted-line downward arrows. The bottom level depicts youth workforce “stocks,” grouped by educational attainment. The numbers next to the bottom four dashed arrows represent the outflow from these “stocks” of workforce – our best estimate of the number in each category who turn 36 and are no longer counted as “youth”

The “Uneducated Workforce” in navy blue, represents youth with less than secondary education, a group that constitutes about 2/3 of the youth workforce (all youth 15-35). This group can be subdivided into those with less than primary education (4.3 million) and those who have completed primary, but not secondary (5.3 million). As the graphic shows, the stock of youth with less than primary education is

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3 Calculations are estimates. Some needed data are not available and assumptions or simple models were used for estimation. Stocks were based on 2009 population census, and updated for each subsequent year based on a “stock-and-flow” methodology developed by the team. Results have been reviewed with leading professionals in the field and are understood to represent a reasonably accurate picture of the dynamics of youth labor market supply in Kenya.
growing 4% a year, while those with less than secondary is shrinking slightly, as the flows of dropouts are counteracted by the 241,000 youth “graduating” from this stock by turning 36.

The “Educated Workforce” in green is dominated by the stock of 3.5 million secondary graduates, as compared to 1.2 million tertiary graduates. Both stocks are expanding relatively quickly.

Extending the stocks and flows analysis to the county level, the report identifies the ten counties with the lowest levels of educational attainment overall as well as the highest rates of poverty and percentage of rural population. These figures should be taken into account in geographic targeting of future USAID youth programs.

**WORKREADINESS BY EDUCATION LEVEL**

The term “skills gap” is frequently used and assumed to be true, but demonstrable evidence for skills gaps, such as wage spikes or premiums, is less often apparent. At a macro-level, it can be challenging to define whether skills problems are primarily due to supply or demand factors. Nonetheless, the assessment found that a fairly clear consensus is emerging around a number of skills weaknesses associated with the Kenyan public education system at every level.

The table below summarizes those weaknesses based on a variety of secondary sources as well as this assessment’s qualitative discussions with employers, education experts, and youth.

**MAIN SKILLS CHALLENGES FOR THE PUBLIC EDUCATION SYSTEM, BY LEVEL**

<table>
<thead>
<tr>
<th>Level</th>
<th>Main Skills Challenges</th>
<th>Root Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary (University, TVET)</td>
<td>• Soft skills</td>
<td>• Information asymmetry</td>
</tr>
<tr>
<td></td>
<td>• Technical skills (including ICT) may be out of date or irrelevant; particularly for university students</td>
<td>• Curriculum and teaching methods promote theoretical knowledge and rote learning</td>
</tr>
<tr>
<td>Secondary (Form 4, Youth Polytechnics)</td>
<td>• Soft skills</td>
<td>• Applied learning opportunities generally ineffective (university) or absent (Form 4)</td>
</tr>
<tr>
<td></td>
<td>• Few technical skills (including ICT), particularly among Form 4 graduates</td>
<td>• Over-emphasis on test results; rigid tracking system</td>
</tr>
<tr>
<td></td>
<td>• Proficiency in literacy and numeracy not assured for less than secondary graduates</td>
<td></td>
</tr>
<tr>
<td>Primary (Standard 8)</td>
<td>• Basic literacy and numeracy</td>
<td>• Low quality</td>
</tr>
</tbody>
</table>

Employers in Kenya increasingly are identifying skills as a constraint, particularly in services and retail, sectors in which soft skills are a high priority. Interviews with employers and education experts reflect, in general, dissatisfaction with the quality of graduates of the public education system at every level. Common comments about university graduates were that they lack motivation, patience, and applied knowledge, requiring employers to invest significant resources in new employee training. Likewise secondary graduates are viewed as having low skill sets, particularly for occupations in services, but are considered to at least have mastered proficiency in basic literacy and numeracy. Employers reported that even relatively simple, repetitive jobs such as those of machine operators often require a secondary degree, merely due to the required ability to read and follow basic instructions.
Beyond skills, the assessment revealed a major weakness in the area of career guidance in the public education system. Career guidance systems ideally should encompass provision of reliable market information on relevant economic trends, job opportunities, and entry-level skills requirements in one’s area of interest; job placement; and opportunities to network with role models, mentors and other professionals, particularly alumni. Perhaps more importantly, educational institutions should dialogue with employers about skills that are demanded, solicit feedback on their graduates, and act on this information to inform education practice. Little is being done to prepare these students for the world of work.

MAPPING OF STAKEHOLDERS AND WORKFORCE DEVELOPMENT PROGRAMS

The assessment team developed a stakeholder map depicting the current workforce system in Kenya including the key stakeholders from the public and private sectors, education system, and youth and civil society organizations and depicting their relationships. Within the public sector, the system is characterized by fragmentation and weak links among the various ministries responsible for youth, education, employment, and other relevant areas. Bodies that on paper offer promise for playing more of a coordinating function among diverse stakeholders, such as the National Manpower Development Committee, are not currently playing that role effectively. The private sector is strongly linked to parts of the system, such as through NITA, but only weakly linked to the education system (in particular the public system). Meanwhile, government youth programs and youth civil society organizations are largely isolated from the private sector.

Despite increasing priority being given to youth employment by the government and international partners, the workforce system remains largely fragmented across ministries and sectors, and efforts are poorly coordinated. A particular weakness is that youth-serving organizations are largely isolated from employers and labor market intermediaries. A more effective system would be characterized by stronger and more linkages among key stakeholder groups. Key national level coordinating mechanisms creating partnerships between government, business, and the education sector need to be strengthened or created, and improvement of data sources upon which new constituencies can be built, such as the LMIS, is vital. Concentrated “bottom-up” efforts to develop grassroots constituencies for improved regulations and policies at the level of individual sectors and counties must run parallel to any effort at national governance reform.

At the county level, many of the same actors are present but the map is a bit distinct. Health is a devolved function under the Constitution with robust county level authority. Other national line ministries deploy staff at the county level, to coordinate national government functions in areas such as education and labor. Within the TVET system, counties are responsible for Youth Polytechnics (open to youth from a variety of educational levels) and the network of Youth Empowerment Centers now under development, while other institutions remain under the responsibility of the national government. The private sector is often organized locally into business associations that represent interests at the county level, among other activities.4

4 For example, the assessment team attended the annual meeting of the Nakuru Business Association, at which county-level priorities were discussed.
A second map was developed by the team, depicting an idealized vision for the future in which many existing links are strengthened and new ones formed among different stakeholder groups, leading to a more tightly interconnected system with more efficient information flows and more effective skills certification systems. The Presidency was added to the map, denoting the potential impact that greater executive level attention and involvement could bring to youth workforce development. In particular, the youth and civil society sector becomes much more tightly linked with employers and labor market intermediaries under this scenario. This vision recognizes that best practice models for workforce development strategies, such as those adopted by Singapore, Ireland, and Germany, have typically employed centrally coordinated models that institutionalize strong partnerships between the government and industry. Given the existing institutional structure and policy environment, such a shift would likely need to be gradual. Furthermore, in the context of devolution it will be increasingly important to strengthen the workforce system as a component of local economic development initiatives at the county level.

A detailed description and inventory of WFD initiatives in Kenya led by the Government and development partners is included. We find that coordination of efforts on the youth employment challenge could be substantially improved at all levels.
POLICY AND REGULATORY REFORMS

Overall, Kenya’s policy response to the youth employment challenge has been narrowly focused and implementation has been lagging. Inadequate attention has been given to addressing the underlying barriers to growth, which as discussed above have had to do with physical infrastructure, macroeconomic management, governance and political stability issues, and corruption. Recent reforms have focused on strengthening labor protections and establishing youth-targeted employment programs and funds, but youth employment outcomes have been limited due to factors related to design as well as implementation. A new TVET policy has been adopted, which offers promise for improving education relevance and quality, but implementation is now needed.

HEALTH, YOUTH AND CULTURE, AND YOUTH PRODUCTIVITY

Key health concerns for youth in Kenya include sexual and reproductive health, substance abuse, mental health, and disability. Girls generally are disproportionately affected by problems in each of these areas. In particular, early adolescence (ages 12-14) is a crucial time window during which a rise in risky behaviors can be seen. Findings support the hypothesis that external drivers including the lack of economic opportunity, exclusion from education, and trauma are leading to a vicious cycle dynamic of disempowerment and unemployment, which particularly affects more marginalized groups of youth.

ALIGNING SKILLS SUPPLY AND DEMAND

Based on the constraints identified for specific cohorts of youth, an overall framework is proposed below for elements of youth programming that would help align supply with demand and is based on evidence and best practices. While the framework has implications for national educational reform, the main focus of this analysis is on complementary interventions that can support more effective educational and career pathways for youth, whether in or outside the formal education system.

FRAMEWORK FOR ALIGNING SKILLS SUPPLY AND DEMAND (BY EDUCATIONAL LEVEL AND SKILL CATEGORY)

Source: Workforce Connections Kenya Youth Assessment Team
The Youth Labor Supply row at top repeats the results of the “stocks and flows” analysis, showing the youth workforce grouped by educational attainment. Down the first column at left is a typology of outcomes that would help youth overcome current skills constraints and achieve employment closer to their potential (i.e. better able to better meet the requirements of employers or of self-employment). At bottom, youth labor demand is represented roughly in proportion to actual patterns of labor market allocation by education level.

**RECOMMENDATIONS**

At the national level, a youth workforce program could focus on addressing identified constraints in the areas of coordination, policy implementation, and labor market information. Our recommendations include:

- **Strengthening workforce development systems to align demand and supply**: USAID can leverage its existing investments and comparative advantage in private sector partnerships to strengthen human capital development in value chains or clusters. Such an approach would focus on facilitating collaborative action for improved workforce development systems, centered on particular value chains or clusters that can provide an organizing principle for defining and pursuing common interests among key stakeholders including employers, education and training institutions, and youth.

- **Labor market information flows**: support could address the issue of information asymmetry, which we find to be a major labor market constraint, by supporting the government and partners (including the private sector) in the development of the LMIS, as well as working with industries to develop outreach strategies that inform youth and educational institutions about trends, entry points and required qualifications, and career pathways.

- **Coordination**: potential solutions to weaknesses in coordination include facilitating interaction among Ministries and between government and the private sector on key cross-cutting policy priorities such as TVET.

- **Policy implementation**: an immediate area for intervention would be support for the new TVET policy, including improving market relevance, quality, and results-focused approaches to certification by encouraging partnerships between the private sector and TVET colleges.

At the regional level, USAID should continue its efforts to support various youth cohorts, with a particular emphasis on marginalized and at-risk youth. Our recommendations are disaggregated by beneficiary group and include a general recommended approach as well as specific recommendations for USAID:

- **In-school youth (primary and secondary)**: in general, school-based mentoring programs and career guidance can improve access to career information and exposure to role models. Applied learning through school-based enterprises, for example, can assist in preparing youth for entering the labor market. Health education and counseling can help mitigate dropping out and risky behavior.

- **Out of school youth (school-age)**: needs-based scholarship/subsidy programs for post-standard education and training are much needed as evidenced by the high dropout rate. In addition key consumer education information for youth should be made accessible and would include local education and training options as well as local skills certification opportunities (identified in
partnership with local employers or business associations, whether formal or informal) and returns to different skills

- **Older youth (less than secondary education) and secondary graduates**: a combination of soft skills and entrepreneurship training and apprenticeships can enhance the productivity of older youth who are already engaged in the informal sector, or soon will be. ICT should be mainstreamed into training as a cross-cutting 21st century skill, as well as remedial literacy and numeracy as needed. Mentoring and career guidance, including labor market information, should also be incorporated.

- **University students and recent graduates**: technical assistance to public universities is recommended in order to enhance career guidance and career services. Workforce programs should strengthen interaction between university students and potential employers in fields of study, whether through events, field visits, or practicums/internships. Programs should also seek to mainstream mentoring into student-faculty interaction and internships.

- **Employees**: awareness should be broadened among employers of the importance of workplace learning, and mentoring can be mainstreamed into employee training programs to provide information on career pathways within the firm/organization. In programs involving national, sector-based or local business associations, USAID should work with them to prioritize human capital development.
OVERVIEW
OVERVIEW

PURPOSE

USAID/Kenya is developing a new five-year project for cross-sector youth support across its new Country Development Cooperation Strategy (CDCS). The new CDCS has three main Development Objectives: Devolution, Health and Human Capacity and Economic Growth. This new five year youth project will have strong linkages with areas related to devolution and private sector led growth.

The Mission engaged Workforce Connections project, managed by FHI 360, with support from the FIELD-Support Leader With Associates (LWA), to undertake an assessment whose broad objective is to provide USAID/Kenya with information, analysis, and recommendations on improving opportunities for youth across the new USAID Kenya CDCS. This is based on a rapid assessment of the Kenyan youth workforce and labor market to determine the best strategic fit for youth programming.

The assessment team was asked to identify and propose interventions that will have the highest potential sector and economy wide impacts that lead to generation of employment, better labor market outcomes and strategies for effective youth participation. Major report sections are as follows:

- **Overview**: includes a brief summary of key youth employment challenges in Kenya.
- **Employment & Sector Analysis of Labor Demand**: includes a review of economic drivers shaping employment opportunities for youth in Kenya. Based on this analysis, it presents a shortlist of economic sectors that have the highest assessed potential for generating youth employment (including entrepreneurship and in micro, small, and medium enterprises (MSMEs), with an explanation of selection methodology and sector analysis.
- **Labor Supply by Target Group**: focuses on the overall stock of skills and how those relate to employer demand for skills. Educational attainment stocks and flows and education system quality are key themes.
- **Mapping of Stakeholders and Workforce Development Programs**: maps workforce development stakeholders in Kenya and how they interact, and provides an overview of workforce development programs in Kenya supported by the government and development partners.
- **Policy and Regulatory Reforms**: reviews the policy and regulatory environment as it relates to youth employment.
- **Health and Youth Productivity**: discusses the major health concerns particular to youth in Kenya, and how they affect youth productivity and employment.
- **Youth and Culture**: discusses social and cultural factors leading to youth disempowerment.
- **Aligning Skills Supply and Demand**: proposes an overall framework for program elements that would help align supply with demand for specific cohorts of youth.

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5 Beginning in 2013, Kenya began a devolution process toward a more decentralized form of government, with service delivery provision and funding devolving to 47 newly established counties with independently elected leadership. Devolution refers to a type of administrative decentralization that refers to the transfer of authority for decision-making, finance, and management to local government, as well as the relocation of responsibility for services to local governments that were previously under the domain of the national government.
- **Recommendations**: synthesizes findings and recommends potential approaches to identify constraints identified.

**METHODOLOGY**

This assessment was conducted by a mixed international-local team with youth participation, and is the first of a series of labor market assessments to be conducted under Workforce Connections. The methodology builds on standard approaches to understanding labor markets used in the past by USAID, other donors, governments, and private organizations, with the addition of a more focused economic analysis which makes it possible to generate deeper insight into the drivers of skills demand. Following two weeks of preparatory research, three weeks of fieldwork were conducted from June 16-July 4. The field assessment included a range of key informant interviews and focus group discussions with a range of stakeholders, in particular youth from a variety of backgrounds and regions, government officials, employers, educators, and youth-serving organizations. See Bibliography for the list of literature reviewed and Annex 1 for the list of meetings. Regions visited included Nairobi, the Rift Valley (mainly Nakuru), and Kisii in Western Kenya.

The key research objectives of the assessment, as defined by USAID Kenya, are as follows:

1. Employment and sector analysis of labor demand: To provide a brief summary of the employment situation in Kenya, an analysis of the structural and/or other factors influencing employment.
2. Small and medium enterprise (SME) development, entrepreneurship, and self-employment: To identify SME development, entrepreneurship, and self-employment opportunities within the target sectors.
3. Labor supply: To describe the degree to which youth have the potential to meet employment demands in high potential sectors.
4. Mapping of workforce development programs: To better understand who is doing what where on youth workforce development.
5. Policy and regulatory reforms: To identify and examine key policy and regulatory opportunities and constraints which would be critical in addressing the systemic deficiencies of the labor market.
6. The health of the youth: To better understand the critical health related concerns affecting Kenyan youth and their quest for economic empowerment.
7. Youth and culture: To identify critical social and cultural factors that contribute to the placement of youth in the current disempowered position in society.

**OVERVIEW OF YOUTH EMPLOYMENT CHALLENGES IN KENYA**

Robust, inclusive economic growth is necessary to keep pace with rapid population growth and provide viable opportunities for youth to obtain employment and advance in their careers. Yet for a variety of reasons, as explored in detail in our next section presenting Findings, there are significant constraints on overall demand for skills as well as on the supply side. Inequality in Kenya is rising and economic performance is falling behind that of its neighbors on many key measures, and issues of education access and quality are placing its current position as a regional leader in human capital development in jeopardy.

The implications for the employment prospects of the vast majority of youth have been dire and have contributed to political instability, conflict, and security. The need for improved youth economic opportunities and skills development in Kenya has been widely acknowledged and emphasized in Kenya’s Vision 2030 long-term strategic blueprint and other recent key policies.
Drawing from secondary research in order to set the stage for the assessment findings, two key overall characteristics of the youth workforce are described further below: demographic shifts leading to a larger and more urban youth population and, relatedly, the high and increasing level of informalization of work opportunities.

### POPULATION GROWTH AND URBANIZATION

Population growth has been a key driver of employment challenges in Kenya, and demographic trends indicate this will continue for the foreseeable future.

**Figure 1: Youth Bulge in Kenya**

The growing youth population has placed a strain on the educational system, which has struggled to ensure access, quality, and labor market responsiveness (as described further in the section on Labor Supply by Target Group). At the same time, due to weak labor demand, formal employment has failed to keep pace with the increasing numbers of youth entering the workplace each year, resulting in falling wages and growing informal employment.

A youth bulge driving favorable shifts in the dependency ratio could potentially be transformed into a “demographic dividend” as achieved in South Korea and China in recent decades, for example. As evidenced by the unrest in several Arab Spring countries with similar trends in the dependency ratio, however, failures to address youth unemployment under such circumstances is far from guaranteed and can be extremely destabilizing. In Kenya, lack of employment has also been shown to be among the key determinants of youth participation in conflict. At least anecdotally, it is also linked to criminality and other prevalent antisocial behaviors.

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6 Lin, Justin Yifu. “Youth Bulge: A Demographic Dividend or a Demographic Bomb in Developing Countries?” World Bank blog.

In Kenya, at least as of the last national household survey in 2005-06, the overall unemployment rate was near 15%, while the rate among youth ages 20-29 was substantially higher and rising (over 30% among youth ages 20-24). Data show that overall unemployment (in absolute terms) is highest in counties in Kenya’s North-Eastern Province – in particular Garissa and Mandera – and Nairobi where the number of unemployed exceeds 150,000. This makes sense given the large population sizes of Nairobi (over 3 million) and Mandera (over 1 million), however Garissa has a more moderate population size with over 600,000 people which indicates this county has a particularly high unemployment rate.

Caution should be taken with formal unemployment statistics in rural areas, which are often highly exaggerated, excluding a range of informal economic activities. Apart from Nairobi, Machakos, and Mombasa, Kenya’s counties are predominantly rural.

At the same time, urban unemployment in Kenya often reflects rural-urban migration patterns, with lack of rural employment opportunities often resurfacing as urban unemployment. Though the population remains mostly rural, Kenya is witnessing rapid urbanization; the urban population is projected to increase from 25% today to 44% by 2050. Moreover, informant interviews indicate that urban wage workers originally from rural areas often cultivate a variety of income streams and are a source of remittances that create opportunities and jobs in their home areas.

HIGH AND INCREASING INFORMAL EMPLOYMENT
As demonstrated below, Kenya’s workforce is overwhelmingly in informal employment. Only 1.3 million people work in the modern formal sector, against over 12 million in the informal economy, as defined to include smallholder farming (6.5 million), self-employment (2.7 million), and informal wage work (3.1 million).

Figure 4: Composition of the Workforce in Kenya

Within the Kenyan context, the evidence suggests that self-employment and informal wage employment – often denigrated due to poor working conditions lacking social protection and workplace safety – can in fact constitute a “stepping stone” out of poverty when compared with most smallholder farming
activities. A comparison of consumption levels shows that household consumption levels for nonfarm informal workers are around 30% higher than those of smallholder farmers, at the median. The average education level of non-farm informal sector workers (around eight) is also higher than for smallholder farmers (around seven).

Improved livelihood pathways for marginal smallholder farmers depend largely on their ability to undertake value-added farm activities linking them to exporting sub-sectors, and/or to diversify or transition into nonfarm informal sector activities. To access either pathway, literacy and numeracy skills are an essential prerequisite. Moreover, the window of opportunity for moving from smallholder agriculture to off-farm activities is during youth. This underscores the importance of quality of and access to education in rural areas for poverty alleviation, as discussed further in our findings and recommendations.

Under current conditions, informal sector activities provide by far the greatest volume of employment opportunities for youth. The informal sector in Kenya is relatively well-organized into local and sector-based associations, such as the national association of street vendors, traders and hawkers (KENASVIT) and its sector-based and local affiliates. Among other activities, these associations are important participants in the private, informal Jua Kali training system, described further in the Labor Supply by Target Group section.

Furthermore, the informal sector’s share of employment has risen sharply over time, growing from less than a quarter of total jobs in 1989 to 83 percent in 2013.

Figure 5: Growth of Informal Sector Employment in Kenya, 1972 to present


Growth in informal sector employment spiked in the early 1990s, driven by a decline in Kenya’s formal sector employment stemming largely from macroeconomic disruptions related to structural adjustment.

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13 Ibid.
14 Ibid.
and liberalization policies. Other factors included a renewed government strategy (implemented to varying degrees since the early 1970s) towards promotion of growth and development of the informal and *Jua Kali* sector, as well as a broadening of the definition and more consistent capturing of informal sector data in national statistics.\textsuperscript{16} The trend has since continued at a less rapid but still steady pace, with expansion of the informal sector still several multiples of the growth rate of the formal sector until 2010, as shown in Table 2.

### Table 1: Growth of Employment in Formal vs. Informal Sectors

<table>
<thead>
<tr>
<th>Year</th>
<th>Formal Sector</th>
<th>Informal Sector</th>
<th>Years</th>
<th>Formal Sector</th>
<th>Informal Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>8,004,000</td>
<td>72,000</td>
<td>1972 – 79</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>1980</td>
<td>1,006,000</td>
<td>185,000</td>
<td>1972 – 79</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>1990</td>
<td>1,410,000</td>
<td>484,000</td>
<td>1980 – 89</td>
<td>3%</td>
<td>10%</td>
</tr>
<tr>
<td>2000</td>
<td>1,695,000</td>
<td>4,217,000</td>
<td>1990 – 99</td>
<td>2%</td>
<td>26%</td>
</tr>
<tr>
<td>2010</td>
<td>2,016,000</td>
<td>9,441,000</td>
<td>2000 – 09</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>2013</td>
<td>2,266,000</td>
<td>11,259,000</td>
<td>2010 – 13</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>


In the immediate term, we believe there are strong opportunities to upgrade training and workplace learning opportunities within the informal sector. Global research on informal sector development suggests that the human capital of managers is likely a key supply side constraint to informal enterprise growth and typically is a major distinguishing factor in whether firms are operate in the formal or informal sector.\textsuperscript{17} While an obvious implication is the need to cultivate more “educated entrepreneurs” in countries such as Kenya who are immediately prepared to enter the formal sector, this points to potential benefits from efforts to increase the human capital of existing or future informal sector managers. Such approaches, and other strategies for MSME upgrading, are explored further in this report.

Over the longer term, particularly in terms of policy and economic strategy, it is important to bear in mind that increasing informalization is decidedly a “second-best” outcome for youth employment opportunities, as compared with formal sector employment. Limitations of the informal sector include low wages due to low productivity, slow growth in employment (5% among informal enterprises vs. 10% per year among formal enterprises), and low value-added.\textsuperscript{18} Over the longer term, expansion of the formal sector must drive growth in income and expansion of employment opportunities necessary to allow youth to work closer to their potential.

\textsuperscript{16} Ibid.
\textsuperscript{17} La Porta, Rafael and Andrei Shleifer, “Informality and Development,” Journal of Economic Perspectives, Vol. 28, Number 3, Summer 2014.
\textsuperscript{18} Ibid.
SUMMARY OF FINDINGS
SUMMARY OF FINDINGS

EMPLOYMENT & SECTOR ANALYSIS OF LABOR DEMAND
This section provides an analysis of structural and other factors influencing employment. The analysis identifies and analyzes opportunities in select sectors with the greatest potential for youth and women employment. SME development, entrepreneurship, and self-employment opportunities are identified within each sector.

As stated in USAID’s 2013 report “Securing the Vision 2030: Kenya Inclusive Growth Diagnostic”, faster economic growth is most effective means to address Kenya’s unemployment dilemma, both for youth and the general population. That report’s “Growth Diagnostic Analytical Framework” identifies 23 specific constraints to growth, with three of the “most binding constraints” relating to governance, as summarized in Table 3 below.

Table 2: Constraints on Growth in Kenya

<table>
<thead>
<tr>
<th>Most binding constraints</th>
<th>Binding constraints</th>
<th>Human capital “not a binding constraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Political stability</td>
<td>• Roads</td>
<td>• Education</td>
</tr>
<tr>
<td>• Corruption</td>
<td>• Land Tenure</td>
<td>• Health</td>
</tr>
<tr>
<td>• Crime and Security</td>
<td>• Government Regulation</td>
<td>• 13 other areas</td>
</tr>
<tr>
<td></td>
<td>• Trade Regime</td>
<td></td>
</tr>
</tbody>
</table>

Although human capital-related constraints such as education and health are not listed among the binding constraints at the national level, our research finds that at the sector level they can be binding. For example, for several horticulture crops such as green beans demand is growing, and the most significant constraints to expansion of supply lie in such areas as certification and adoption of new technologies, both of which are addressed primarily through technical skills training.

The following section reviews the structural factors influencing employment and then identifies the sectors with the highest potential for youth employment.

STRUCTURAL FACTORS AFFECTING EMPLOYMENT
Kenya’s real economic growth rate has been hovering around 1% per year for the past five years, while its neighbors in East Africa have enjoyed annual GDP growth rates ranging from 3% to 7%. This may in part be explained by an antiquated national accounts system, and a reevaluation of Kenya’s GDP later in 2014 could lead to an upward revision of 20% or more. In addition, most agencies including the World Bank are forecasting healthier growth rates of 5% or more in the near future, due mainly to the recently introduced macroeconomic policies that have stabilized the economy.

Kenya’s low growth in recent years has meant that an entire generation has been forced to settle for a sharply constrained set of employment opportunities. As discussed above, during the 1990s, formal sector employment grew at a rate of 3% per year, while the informal sector grew at a shocking 26% per year. In the following decade, formal sector employment growth continued to grow at 2% per year, while the informal sector still grew at 8% per year – four times the formal sector rate. An econometric analysis by the World Bank indicates that GDP growth of 5% will stem the tide, allowing the economy to keep up with

19 The Economist. “Kenya recalculates its GDP figures, Putting on an extra 20%”. April 2014
new entrants into the labor force, but unless growth rates above 6.5% can be achieved, the backlog of workers who have had to settle for less will not be addressed.

The key structural factors that account for this low growth have been: 1) inadequate physical infrastructure, 2) poor macroeconomic management (e.g. high budget deficits and high inflation, which caused a drastic currency devaluation in 2011), 3) governance and political stability issues, with occasional outbreaks of violence and attendant dampening of investment, and 4) corruption, which raises the cost of doing business. Of these four structural factors, it can be argued that macroeconomic management has improved significantly in the past few years, but the other three factors are still critical concerns. Human capital factors such as skills deficiencies are not seen as a binding constraint across the board, although, as detailed later in this report, in a number of sectors facing rising demand, skills-related factors such as standards, use of new technologies and understanding of international markets are binding constraints at the micro level.

Foreign direct investment (FDI) in Kenya has been sluggish but there are signs that the country could start attracting more FDI driven primarily by oil, as well as in the ICT, manufacturing and financial services sectors (see further analysis below). A rapidly urbanizing Kenyan population may present further opportunities in sectors such as retail trade, construction and real estate.\(^\text{20}\)

### SECTOR SELECTION

#### SECTOR SELECTION CRITERIA

The team applied three distinct sets of criteria, as shown in Figure 6. The sector’s potential to generate employment growth was a necessary requirement to become shortlisted. Once shortlisted, the remaining criteria (ease of entry for youth and the extent to which the sector builds on existing USAID investments in that sector) were major factors in the final selection.

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\(\text{20}\)African Development Bank Group, *The State of Kenya’s Private Sector, 2013*
CREATING THE LONG LIST

Prior to arrival, drawing on the literature search and early analysis, the team compiled a “long list” of 42 sectors, representing the widest possible universe of sectors to be considered. Based on information from initial interviews and applying the sector selection criteria, the candidate sectors were subsequently narrowed down to a “medium list” and finally a “short list.” The tentative short list was discussed and finalized during a meeting with the USAID Mission Cross-Sector Youth Team at the end of the first week in-country.

The 2010 Census of Industrial Production provided a starting point with 25 manufacturing sectors. Six agricultural sectors and 11 service sectors were added, to generate a ‘universe’ of 42 candidate sectors, as shown in Table 3.

Table 3: Sector Selection: Long List

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Manufacturing</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legumes</td>
<td>Food processing</td>
<td>Health care</td>
</tr>
<tr>
<td>Cut flowers</td>
<td>Tobacco products</td>
<td>Retail trade</td>
</tr>
<tr>
<td>Coffee/tea</td>
<td>Textiles</td>
<td>ICT</td>
</tr>
<tr>
<td>Dairy</td>
<td>Wearing apparel</td>
<td>Education</td>
</tr>
<tr>
<td>Fruit &amp; Vegetables</td>
<td>Leather &amp; related products</td>
<td>Construction</td>
</tr>
<tr>
<td></td>
<td>Wood products exc. furniture</td>
<td>Finance</td>
</tr>
<tr>
<td></td>
<td>Paper &amp; paper products</td>
<td>Wholesale &amp; distribution</td>
</tr>
<tr>
<td></td>
<td>Printing &amp; reproduction of recorded media</td>
<td>Transportation &amp; logistics</td>
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<tr>
<td></td>
<td>Coke &amp; petroleum products</td>
<td>Hospitality</td>
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<td></td>
<td>Chemicals</td>
<td>Energy based on fossil fuels</td>
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<td></td>
<td>Pharmaceutical products</td>
<td>Clean technologies</td>
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<td></td>
<td>Rubber &amp; plastics products</td>
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<td></td>
<td>Other nonmetallic minerals</td>
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<td></td>
<td>Food processing</td>
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<td></td>
<td>Basic metals</td>
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<td></td>
<td>Fabricated metal products</td>
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<td></td>
<td>Computer, electronic &amp; optical</td>
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<td></td>
<td>Electrical equipment</td>
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<td></td>
<td>Machinery &amp; equipment n.e.c.</td>
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<td></td>
<td>Motor vehicles &amp; trailers</td>
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<td>Other transport equipment</td>
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<td></td>
<td>Furniture</td>
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<td></td>
<td>Other manufacturing</td>
<td></td>
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<tr>
<td></td>
<td>Repair &amp; installation of machinery &amp; equipment</td>
<td></td>
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<tr>
<td></td>
<td>Water collection, treatment &amp; supply</td>
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</table>

The Industrial Census provides information regarding employment, output, compensation and cost of inputs for each sector, providing a valuable baseline. Export data for products in nearly all of the agricultural and manufacturing sectors was also relatively easily accessible.

SHORTLISTING OF SECTORS

Following close consultation with USAID Kenya, ten sectors were selected as fitting the three sets of criteria outlined above, seven of which are standard sectors or value chains,\(^{21}\) and three of which are defined less conventionally but which have some ‘cross-cutting’ characteristics of particular relevance to youth employment. The following section reviews the three sets of sector selection criteria.

KENYA’S KEY EXPORT AND GROWTH SECTORS

Although agriculture is the largest single employer in the economy, its growth in terms of employment and GDP over the past five years has been lackluster, with other smaller sectors such as construction, wholesale and retail trade, ICT and even manufacturing adding more workers.

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\(^{21}\) While the long list was expressed as sectors for ease of data collection and analysis, many of the short-listed sectors would be better characterized as value chains, as they combine one or more agricultural, manufacturing, and service sector components.
Part of this can be explained by the enormous diversity within agriculture: some sub-sectors, such as horticulture and dairy have grown rapidly, while others, such as cut flowers, have stayed stagnant. While construction and trade have been stimulated primarily by domestic demand drivers, agriculture tends to be driven by exports, yet Kenya’s traditional export crops such as coffee and tea, cut flowers or vegetables have not experienced strong growth during this period, with the lone exception of green beans.

One of the best indicators of strong export performance can be found in the upper right-hand quadrant of the Trade Share matrix below, which shows those sectors in which Kenya has been growing but which have also been growing more rapidly than world trade overall – that is, strong performance in a growing (and therefore more competitive) market. Unfortunately for Kenya, over the past four years (2009-2013) only three product categories fit this description: soaps, pharmaceuticals and plastics – all of which are relatively small in terms of employment as well as local linkages (supply of natural resources). Even apparel, which has experienced reasonable growth during this period, is not expected to be able to maintain this performance, given the productivity problems in Kenyan factories.
The overall weakness in Kenya’s performance can be traced back to the factors cited in the Kenya Growth Diagnostic: issues with governance, political stability, energy and other infrastructure act as a damper on otherwise promising investments, severely reducing the economy’s dynamism and forcing the large segments of the labor force to eke out a living in relatively marginal occupations.

**INVESTMENT TRENDS**
Past trends in GDP and employment growth are not necessarily a guide to the future. Investment trends provide a valuable window into future growth, and foreign direct investment (FDI) is particularly indicative of those sectors with a robust prognosis, since investment from international sources is provided on a highly competitive basis. ICT, the financial sector, and manufacturing are the three largest targets of FDI in Kenya, and while these are also the most capital-intensive sectors of the economy, job growth from these sectors seems assured. Resources will also continue to be injected into the economy in the retail trade and tourism sectors, and investments in infrastructure such as transportation and energy will also ensure that the construction industry continues its strong recent growth trend.

Figure 9: Foreign Direct Investment by Sector

**PRODUCTIVITY PATTERNS**
Unfortunately, attempts to develop cross-sectoral productivity comparisons are hampered by the quality of data. Sectoral GDP estimates cover both formal and informal sector output, while the employment breakdowns by sector only cover the formal sector, so that, for example, the ratio of GDP to employment for agriculture appears higher than manufacturing (which is not true in any country in the world) simply because a greater proportion of the manufacturing workforce is captured in the formal sector, while a much smaller proportion of agricultural employment is counted as formal sector. Thus individual differences can be highly misleading, and only the broadest generalizations can be drawn from such charts, such as the high relative labor productivity of the finance, insurance and real estate sector.
In fact, the conflict between the productivity of the formal and informal sectors is the driving dynamic in nearly every sector in Kenya. The informal sector tends to have low firm-level productivity, as actors in this sector generally lack access to technology, outside investment, and market information – and of course education – severely limiting their ability to develop innate entrepreneurial talents. The formal sector component of Kenya’s key sectors have significantly higher productivity, and are active participants in global value chains, which ensures that they stay abreast of emerging technology and market trends.

This said, certain sectors such as horticulture (especially green beans) have been creeping towards higher standards, improved methods (such as drip irrigation), and better infrastructure, which brings them closer to the productivity of formal sector activities. Similarly, an increasing share of milk production has been shifting toward pasteurization, another indicator of formal sector organization and productivity levels. The healthcare system is probably the furthest along in terms of the formal sector’s share of activity, thanks to rather rigorous educational and regulatory standards in that industry.

On the other hand, industries such as apparel have been experiencing “value attrition rather than value addition,” as expressed in one interview. The sector lacks a clear, shared vision of Kenya’s competitive advantage, and is therefore limping along with poor policy coordination and limited new investment.

**INFORMAL SECTOR CHANNELS**

On the positive side, many of the growing sectors have significant informal sector channels, which provide entry points for less educated youth. This report documents how such channels operate in specific value chains such as horticulture and dairy, and similar dynamics can be found in manufacturing and many services such as repair and transportation, as well as construction. Kenya requires a dual employment generation strategy. That entails promoting growth in sectors where feasible, which will mainly come from...
the formal sector, while at the same time opening up access to informal sector jobs, despite their low productivity, for the additional members of the labor force who are not fortunate (or qualified) enough to attain formal sector positions. This means that while formal sector growth needs to be a high priority, it should not be gained at the expense of informal sector jobs (as in the case of the dairy industry in the early 2000s, in which officials attempted to encourage a transition from informal to formal milk production by cracking down on informal milk traders).

The line between formal and informal sector is somewhat blurred in many service industries such as entertainment and retail trade (especially rural retail), as new technologies are being combined with traditional (mainly informal) organizational structures. These fields in particular are subject to disruptive evolution due to rapid changes in technologies, most notably electronic hardware and software. For example, retailers of non-traditional products such as solar lighting systems are developing innovative new channels to market their products in rural areas. Similarly, entertainers are taking advantage of emerging new media channels to bring their intellectual property to the public, a phenomenon that is also blurring the lines between electronic media, entertainment, arts and sports. The vitality of these sectors in Kenya, and the generally positive attitudes of youth with regard to work in these fields, suggests that they, along with ICT itself (particularly mobile technologies), be regarded as cross-cutting activities whose impact cannot be easily pigeon-holed into a single sector, and which will require further study.

PRODUCT DIVERSIFICATION AND ECONOMIC COMPLEXITY

Our ability to extract meaningful information from highly aggregated and unreliable data is often quite limited, but trade data tends to be of a more uniform quality (since data can be verified from two sources, the exporters and the importers), and some researchers at Harvard University (notably Ricardo Hausmann and Cesar Hidalgo) have developed new methods to utilize these data. Their “product space analysis” utilizes, across all countries in the world, the correlation between increases in exports for specific products and that country’s subsequent growth. Their analysis concludes that income rises faster in countries whose product mix has a higher “economic complexity,” meaning that production is dependent on a denser and more tightly integrated network of overlapping capabilities, ranging from natural resources to infrastructure to human capital such as skills and intellectual property. This economic complexity is correlated with income growth because on the whole, the complex products tend to be more difficult to produce, and their scarcity raises their value.

Figure 11: Kenya Product Space

Source: Observatory of Economic Complexity
Unfortunately, most of Kenya’s existing high volume export products are concentrated in the periphery of the product space, where there are very few of the growth-inducing spillover effects that foster economic complexity. In fact, they identify only one linkage in the product space network for products such as tea, coffee, cut flowers, legumes, and even refined petroleum, while other products such as glass bottles, milk, vehicle trailers and cleaning products (all of which Kenya exports but in smaller quantities) are located in the center of the product space, with as many as 15, 20 and even 25 growth-inducing linkages.

For this reason, despite the difficulties of diagnosing sector potential through more traditional measures such as growth in productivity and investment, the product space results for Kenya provide support for selection of certain sectors that have been shown to lead to higher economic complexity (and therefore incomes) in other countries. In addition to the four products listed in the previous paragraph, these include food preparation machinery, metal products, polishes and creams, food processing, fish, fertilizers, and a wide variety of apparel and clothing products. A recent (as yet unreleased) study of the apparel sector by the World Bank suggests that apparel in Kenya may not be ripe for a strong pro-growth initiative, but most of these other products listed have been kept under consideration for short-listing in the sector selection for Kenya.

One of the more fascinating features of the product space analysis is that it indicates spillover effects between sectors that have very few buyer-supplier linkages (the type of linkages that are used to construct input-output tables, which lie at the core of the national accounts measures and much of our traditional thinking about economic development). Unfettered by the limitations of input-output relationships, the trade growth data have revealed more subtle and hidden relationships between sectors, whereby skills and tacit knowledge built up in one sector can be applied to other seemingly unrelated sectors. Elsewhere in this report we highlight how some of these mechanisms can work in Kenya (for example, where under-educated workers can move from the hospitality industry more easily into health care, or where workers with experience in the apparel industry tend to be better prepared for work in the medical device industry).

> PATTERNS FOR POTENTIAL NEW GROWTH

The previous discussion summarizes some of the key considerations which were applied to the selection of ten sectors of particular interest for employment generation in Kenya. Not only was the past and projected future performance of each sector evaluated, but the ability for women and youth to access these types of jobs, and USAID’s past investments in those sectors was also weighed. This report provides a detailed review of employment prospects and opportunities in the first four of the ten sectors listed below, which are of particular relevance to USAID’s existing portfolio.

1. **Horticulture and Food Processing** has a large informal component, as well as significant ease of entry and attractiveness for youth due to its short growing cycle and variety of products, as well as the opportunities it offers in associated market activities such as trade and transportation. The inclusion of food processing also ensures that some of the promising export sub-sectors identified in the product space, such as “industrial food preparation machinery” and “dairy machinery” will be included. Domestic and export demand growth is forecast to remain high, so addressing supply constraints – many of which involve workforce issues – will almost certainly result in expanded employment.

2. **Dairy, Livestock and Leather** similarly combines several sectors, merging all activities deriving income from livestock (meat, milk, leather) into one value chain. All components include large
informal sectors. In the product space, milk is one of the most highly connected industries. Tanneries are operating at 40% capacity due to lack of raw skins and hides; as in horticulture, if supply constraints can be addressed, significant employment gains can be made all along the value chain.

3. **Heath Care Services** include the provision of primary, secondary, and tertiary medical services, as well as public health. It is more heavily concentrated in formal sector workers who have proper qualifications. Nevertheless, there is significant expansion potential, in terms of improved supply of existing occupations such as “medical officer” (similar to physician’s assistant in the U.S.), as well as growth segments such as medical tourism.

4. **Clean Tech** is being defined here as renewable energy (solar, wind and geothermal), energy efficiency (which includes retrofitting of buildings) and solid waste management (recycling). While renewable energy is expanding, the near-term job growth potential in retrofitting (construction sector) and in recycling is likely to be even higher.

In addition, the team has identified three additional value chains that are highly promising, and a set of “cross-cutting” economic activities that are important but do not fit neatly into a single value chain or sector. These were examined in a preliminary way during the fieldwork but are not explored in depth in this report.

Due to strong evidence of the extent of youth employment in the informal economy, particularly for economically disadvantaged youth, the presence of a significant informal sector component was another important factor.

5. **Metals, Machinery & Repair**, which includes both formal sector production of metal products, but also informal *jua kali* producers as well as repair services such as automobile mechanics.

6. **ICT**, which accounts for approximately 15,000 relatively low skilled jobs in the business process outsourcing (BPO) segment. Other segments are being handled separately as a cross-cutting sector.

7. **Construction** is already employing 112,000 formal sector workers (and probably several times that number in the informal sector). Kenya’s construction sector appears likely to continue its rapid growth trajectory, particularly with planned public works projects as devolution gains momentum.

The three cross-cutting activities are more loosely defined, as they attempt to capture some economic activities and business models that are trending and have potential to affect youth labor absorption, either directly or indirectly, and where impacts/linkages cut across several sectors.

1. Rural Retail covers the myriad product distribution and personal services activities in rural areas, many of which are undergoing transformations, such as lighting (shift from kerosene to solar), cook stoves, mobile devices, agricultural inputs and services (e.g. pesticide application). The skills that youth develop in becoming an effective salesperson or trader, especially door-to-door, could also be applied in many other occupations as their careers development.

2. Entertainment covers areas including production and distribution related to the arts and culture.
3. ICT as a cross-cutting activity focuses on e-applications such as mobile banking, e-retail, e-health, etc.

Figure 12 shows the 11 fastest-growing sectors in Kenya for the period 2008-2013. The top eight sectors in that figure all correspond closely with the sectors shortlisted by the team. Hotel and food services, which are related to tourism and hospitality, was not included since it is regarded as a relatively mature sector in Kenya, in which Kenya is currently exporting its management expertise to neighboring countries.

Figure 12: Employment and Growth in Employment, 2008-2013

As mentioned, sector analysis for four sectors is provided below: dairy/livestock/leather, horticulture, health care services, and clean tech.

DAIRY AND LIVESTOCK
Reliable data regarding employment in specific sectors is unavailable, particularly those with a large informal component. The National Bureau of Statistics only provides an overall estimate of 304,000 formal sector jobs in agriculture in 2013, for example, even though over 6.5 million are engaged in family farming.

With the help of the USAID Kenya Agricultural Value Chain Enterprises (KAVES) project staff, the employment in the dairy sector was estimated based on various IFAD, KDB and SDP data sources, as shown in Table 4.
Table 4: Dairy Employment Estimates for 2012

<table>
<thead>
<tr>
<th></th>
<th>Formal and Semi-formal</th>
<th>Informal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm level</td>
<td>40,000</td>
<td>960,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Processing</td>
<td>135,000</td>
<td>365,000</td>
<td>500,000</td>
</tr>
<tr>
<td>Services</td>
<td>60,000</td>
<td>690,000</td>
<td>750,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235,000</strong></td>
<td><strong>2,015,000</strong></td>
<td><strong>2,250,000</strong></td>
</tr>
</tbody>
</table>

Source: USAID KAVES Project estimates & author calculations

Combining those estimates with data on overall milk production provides an estimate of overall employment growth in the sector over the past ten years, as shown in Figure 13. We can conclude that dairy employment has grown at approximately 10.3% per year, which is over twice the growth rate in GDP over that period. Figure 13 also shows clearly how two severe droughts severely impacted employment. The strong recovery from the 2007 drought provides some grounds for optimism that the sector will rebound from the more severe 2011 drought equally well.

Figure 13: Estimated Growth in Employment in Dairy Sector 2003 - 2013


KAVES forecasts that demand for milk will continue to grow, at the modest rate of 3.3 percent per year in rural areas and more robustly at 7.5 percent per year in urban areas between 2012 and 2022. Urban demand tends to also include a growing preference for pasteurized milk and additional processing (e.g. cheese) and packaging options, so value added is expected to grow in the urban sector even more rapidly than volume.
PASTEURIZED VS. UNPASTEURIZED MILK

It may seem tempting to attempt to accelerate this process by adopting policies to actively discourage informal sector activities (primarily unpasteurized milk) and giving preferential treatment to formal sector dairies due to their higher value added. However, Kenya has already experimented with such a policy, whereby under the guise of improving food safety, informal traders were harassed by authorities. However, the two products are far from being perfect substitutes (with different pricing, packaging, and distribution channels), so this policy only succeeded in depressing employment in the informal channel, without commensurate benefits in the formal channel products, which most poor Kenyans cannot afford. Furthermore, the health issue was exaggerated; most of the informal sector milk is either consumed within a few hours after milking (in the rural areas) or doesn’t require pasteurization since it’s heated to near 100 °C for use in milk bars and ‘hotels’ for consumption with tea or coffee. While there are genuine health concerns, a more even-handed policy was subsequently adopted which targeted training and oversight of traders to ensure that they were using sterile containers and used sensible methods to keep milk cool during the distribution process.

Encouraging formal sector employment is generally a good policy, as productivity is likely to be higher, leading to competitiveness and sustained employment; however, attempting to do so at the expense of the informal sector should be avoided, as this case history suggests.

ENTRY POINTS FOR YOUTH EMPLOYMENT IN DAIRY

The dairy industry should continue to provide an excellent opportunity for employment for Kenyan youth, not only in the informal sector but also in the increasingly sophisticated formal sector. The dairy value chain diagram (Figure 14), based on a map developed by KAVES and discussions with local dairy experts, illustrates the wide variety of entry points for youth in both the formal milk channel (pasteurized milk and milk products) and the informal milk channel.
In this illustrative example, entry points are classified according to arrow patterns indicating minimum education and training requirements. In addition, a gender lens is included; arrows outlined in dotted lines indicate professions that industry experts consider to be particularly suitable for women as well as men (i.e. based on observed practice rather than traditional stereotypes).

As one might expect, opportunities for youth with less than secondary education are primarily in the informal channel for dairy or in input and service provision. Now that the government has abandoned its efforts to shut down the informal milk trade (based on pressure from the larger processors) the informal sector has absorbed increasing numbers of unskilled youth in occupations such as milk bar operators and associated traders.

A preliminary analysis of career pathways reveals potential for upward mobility for motivated youth within the informal channel which does not require further formal education. A young person with a
bicycle or motorbike may enter the industry as a mobile dairy trader, for example, and then expand a business to trade in larger quantities with a pick-up, or diversify into retail (e.g. at a milk bar), farming, or trading other types of inputs and products (cattle, feed, veterinary supplies, etc.) This type of progression requires strong entrepreneurial aptitude, personal finance, and soft skills. Of course, youth with higher levels of education have an even wider array of opportunities throughout the sector, such as agro-vet services, finance, and modern dairy production.

Looking forward, an increasing share of the sector will move toward formal sector production, as urban dwellers’ preferences for pasteurized milk and other processed products such as cheese, butter and ghee continue to grow. This will create more specialized job opportunities in occupations such as quality testers and quality analysis technicians, which require specialized training and as such are especially well-suited for youth graduating from youth polytechnics and TVETs. As skill requirements increase in the formal channel, barriers to entry for women are typically reduced. Women still face specific challenges, however, for example when electricity blackouts during the night shift create risks to personal security. In contrast with the informal channel, upward progression within the formal channel (from Quality Analysis Technician to Supervisor for example) is usually contingent on additional formal training.

The opportunities described in the section above are available, but will only be realized by youth who understand the opportunities and are motivated to grasp them. Skills alone are not enough; greater numbers of youth must see that desirable career pathways exist in order for current attitudes to change.

Most of the formal sector employment opportunities identified in the figure above. As discussed in the Recommendations, engaging with employers’ associations, TVETs, and certification bodies to identify slots for appropriately certified new entrants could expand employment in the formal sector while contributing to an increase in productivity.

**DAIRY SECTOR AND ECONOMIC DIVERSIFICATION**

As noted in Garber and the 2013 USAID Growth Diagnostic, product space analysis has identified a variety of sectors with significant growth-inducing spillover effects on other sectors. While most of Kenya’s agricultural exports are located at the extreme periphery of the product space indicating negligible knowledge spillover effects, dairy is one of the few agricultural sectors located in the dense central region of the network, with over 19 linkages identified (see Figure 15). This finding further strengthens the arguments in favor of supporting the dairy sector.

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SMEs AND ENTREPRENEURSHIP

Well over 50% of the milk sold in Kenya is handled by hawkers (informal traders) who purchase milk directly from producers and transport it mostly by bicycle. These have been and will continue to be the most easily accessible entry point for uneducated youth. Hawkers either sell their milk directly to consumers as mobile traders, or more often to informal milk bars, kiosks and other fixed-location milk dispensers. These small-scale traders and retailers have been important targets for training in hygiene, safety, and quality in milk handling as the government has moved from a stance of active suppression to tolerance of the informal milk channels.

Entrepreneurial opportunities also exist on the processing side. Small-scale processors take milk on contractual arrangements with farmers, and constitute an important intermediate stage between the purely informal channels and the large-scale dairy operations. These can take the form of dairy cooperative unions (as are found in Meru, Nyeri, Muranga and Kiambu) with extensive milk collection infrastructure. According to KAVES, currently there are more than 200 milk coolers in the country, including eleven major cooling plants owned by the New KCC (GoK, 2010). A major constraint to setting up coolers in the rural areas is lack of connectivity to electricity supply.24

LEATHER AND LEATHER PRODUCTS

As with the dairy industry, the leather industry provides a variety of promising employment opportunities for youth. This value chain also begins with herding and livestock husbandry (although there is little overlap between dairy and livestock raised for meat production – producers not raising livestock for own consumption tend to specialize in one or the other), then on to slaughtering, processing (tanning) and production of leather products (see Figure 16).

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24 This section borrows heavily from the USAID-KAVES Dairy Value Chain Analysis report, February, 2014.
Kenya has been experiencing a shortage of leather in the latter stages of the value chain, with tanneries running at 40 percent capacity. This has been partly addressed by raising the export tax on raw and semi-finished (“wet blue”) hides and skins, effectively providing a subsidy to the processors, but the problem still remains. Only about 10-15 percent of the livestock is slaughtered in abattoirs with equipment and staff trained to properly skin an animal. Of the remaining 85-90 percent of skins and hides, less than half is suitable for processing into leather.

**Livestock and Breeding**

Leather is primarily derived from livestock that has been bred for meat and to a lesser degree, for dairy, and it is regarded as a by-product rather than a primary objective for herding of cattle (hides), sheep and goats (skins). Accordingly, many herders pay inadequate attention to problems that affect the quality of the leather, such as scratches from barbed wire fences and parasite infestation (which can be combated with a relatively inexpensive chemical ‘dipping’ and improves not only leather quality but animal health and therefore meat productivity as well). There are extensive opportunities for uneducated youth to obtain employment in this sector, and the advent of fattening farms (taking hold in Ethiopia to increase meat production as well as hide quality during the final 2-4 months prior to slaughter) may also further expand employment opportunities.

**Skinning**

One of the most tangible immediate opportunities for youth would be to obtain training in skinning cattle, goats and sheep, as this can be applied in almost any corner of the country all year around. While not necessarily a full-time job, supplemental income from this activity can provide an entry point into other occupations or industries with strong growth prospects.
There are several constraints, however. These youth would also need to own or have access to reasonable equipment for skinning, and there are several regulatory requirements which also need to be addressed. Formally speaking, two doctors need to be present at the slaughtering of an animal for consumption (one to inspect meat, the other hides). While this regulation is generally not observed, especially in backyard slaughtering, it does represent an official barrier for youth interested in supplementing their income by improving the quality of the skins from informally slaughtered animals, and would need to be addressed, perhaps with streamlined regulations as in the case of the dairy sector.

**ABATTOIRS**

The government has announced a plan to invest in twenty new abattoirs in the rural areas as part of the devolution strategy. This has significant potential not only to provide more high quality hides to the leather industry, but also to provide better jobs for youth who can be directly and indirectly employed there (although the total number of jobs generated will not be as much as in the earlier stages of the value chain). These abattoirs could potentially serve as hubs for networks of youths who obtain training and access to equipment and updated industry information as they move up a career ladder from part-time skinners to skilled butchers or leather industry specialists. Based on our interviews it was unclear whether or not the private sector will play a significant role in the design and management of these proposed abattoirs; the track record of such facilities when managed purely by public sector authorities is not impressive. Further study on this question is recommended.

*Tanneries*

Currently all of Kenya’s tanneries are in the Nairobi region with the exception of one in Nakuru. Tanneries tend only to locate in larger cities in order to be closer to their customers – exporters and footwear factories. Being located in a large urban center allows tanneries either to take advantage of economies of scale (which are significant at this stage of production) or in the case of smaller highly specialized artisanal producers, to cluster where they can share costs of expensive inputs, share machinery, take advantage of a skilled labor pool, and exchange tacit knowledge regarding new techniques and demand trends. In addition, most of the skilled occupations in a tannery require a secondary education, as managers are loath to allow staff who are functionally illiterate to handle dangerous machinery. Unskilled workers tend to be relegated to jobs such as cleaning and stacking.

Figure 17: Machine Operators at a Tannery: Employers report that they must hire secondary graduates in order to assure basic literacy proficiency for jobs like these.

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For such graduates, this segment of the industry is likely to expand rapidly if the supply issues at the abattoir level can be addressed. In addition, there are a significant number of occupations involved in moving and stacking hides, salting, cleaning and packaging which are open to applicants with less than a secondary education.

**Leather products**
Kenya currently exports over 80% of the leather it produces (mostly in the form of semi-processed “wet blue”), but there is a tremendous opportunity to add value by transforming leather into footwear, handbags, apparel and other types of leather products. Many of the skills necessary are transferable from the faltering apparel industry, although some additional training is required. Employment opportunities for skilled and semi-skilled youth of both sexes abound in this stage of value addition. Unfortunately, roughly 80% of the processed and semi-processed leather produced in Kenya is exported directly to countries with more fully developed leather products manufacturing clusters.

**HORTICULTURE**
The horticulture value chain includes a wide variety of products important export products, including green beans, potatoes, mangoes, and other fruits and vegetables. Employment and growth projections are only available on a piecemeal basis.

The best documented value chain is French beans, which have been, along with cut flowers, a Kenyan export success story that relies primarily on smallholders and SMEs in many parts of the value chain. The USAID KAVES project estimates that even though the sector employs over 1 million persons, directly or indirectly, demand currently outstrips supply. Further, this gap is likely to continue to grow in the foreseeable future, leaving opportunities for neighboring countries such as Tanzania to fill in the gap.26 The KAVES report indicates that Kenya will be unable to meet this growing demand due to a variety of constraints such as cold chain and irrigation infrastructure and lack of a centralized system for market information dissemination. However, the biggest constraints are factors related to human capital, such as:

- Slow adoption rate by smallholders new to French beans production
- Limited expertise in the new areas of production
- Limited understanding of export market requirements by farmers
- Low management capacity among new growers
- Time needed for group cohesion to promote collective marketing

These constraints can all be addressed through technical capacity building and awareness building. Thus, as stated in the introduction, while corruption and political stability are the most binding constraints to economic growth at the national level, in specific value chains the constraints relate more directly to human capital development.

Figure 18 shows the value chain map for horticulture products, with the implications in terms of specific occupations shown in the left-hand column.

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26 KAVES projects that Kenya’s 2012 production of 43,938 MT will rise to 69,201 MT by 2022, representing a 57% increase over ten years. USAID-KAVES French Bean Value Chain Analysis Report, March 2014.
As in the cases of dairy and leather, there are a wide variety of agricultural, manufacturing and service industry employment opportunities open to youth in the horticulture value chain, both in the formal and informal sectors.

**SMEs AND ENTREPRENEURSHIP**

The horticulture sector is dominated by small and medium enterprises. Not only is the vast majority of produced by small-scale farmers, but the transportation, processing, and many of the services are also provided by SMEs. However, as in the dairy sector, smaller enterprises face challenges reaching the quality standards required by demanding local high-end hotels and restaurants, much less those of exporters, and are therefore somewhat dependent on extension services, either public or private, to assist them with new techniques and certifications.

They also face coordination challenges. Where transportation costs are often prohibitive for a single farmer whose output will not fill up an entire truckload, when enough farmers in one small area can agree to adopt the same standards, transporters can mix their produce without lowering the quality standards, and achieve economies of scale, thereby making transportation costs affordable. Associations have been helpful in arriving at such solutions, but nevertheless penetration is far slower than desirable.

**HEALTH CARE SERVICES**

Misinformation and misconceptions abound in this sector. For example, in interviews with health care
officials it was stated that Kenya is experiencing a surplus of qualified nursing staff, because each time a job opening is posted in the newspaper, the number of applicants for such positions is greater than 5:1. More experienced observers point out that nurses posted to rural regions, which are considered hardship posts, are constantly applying for new positions in urban areas, thus creating an appearance of surplus. There is actually a shortage not only of nurses but of doctors and trained medical personnel across the spectrum. The main constraint is the budget to hire additional staff.

In fact, Kenya has made significant progress in recent years in terms of increasing the supply of registered nurses, which has grown by an average of 10.8% per year, and enrolled nurses by 8.6%. However, the increase in the number of registered doctors and dentists has been scarcely above the population growth rate, and the number of pharmacists has actually declined (see Table 6). Moreover, the prevalence of “ghost workers” (inability to account for up to 20 percent of the healthcare workers on payroll) makes such statistics particularly unreliable. Despite the shortage of doctors, as many as 40% of all graduates end up not practicing medicine, as opportunities in other fields are often more lucrative, compared with the perceived drudgery of long hours at internships and residencies or rural postings that fresh graduates face. While slightly over 50% of all Kenya doctors who are practicing are now doing so overseas, the majority of the diaspora is made up of doctors who trained overseas. Of those who were trained in Kenya, only 7% are practicing outside of Kenya.

Table 5: Number of Registered Medical Personnel in Kenya

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Annual Growth Rate</th>
<th>No. per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>6,369</td>
<td>6,800</td>
<td>7,129</td>
<td>7,549</td>
<td>8,092</td>
<td>6.2%</td>
</tr>
<tr>
<td>Dentists</td>
<td>817</td>
<td>859</td>
<td>898</td>
<td>930</td>
<td>985</td>
<td>4.8%</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>2,860</td>
<td>2,955</td>
<td>3,097</td>
<td>2,432</td>
<td>2,532</td>
<td>-3.0%</td>
</tr>
<tr>
<td>PharmTechnologist</td>
<td>2,250</td>
<td>2,955</td>
<td>3,679</td>
<td>4,436</td>
<td>5,236</td>
<td>23.5%</td>
</tr>
<tr>
<td>BSc Nursing</td>
<td>745</td>
<td>863</td>
<td>988</td>
<td>1,173</td>
<td>1,532</td>
<td>19.8%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>23,310</td>
<td>26,988</td>
<td>29,678</td>
<td>31,719</td>
<td>35,148</td>
<td>10.8%</td>
</tr>
<tr>
<td>Enrolled Nurses</td>
<td>19,107</td>
<td>21,146</td>
<td>23,346</td>
<td>24,375</td>
<td>26,621</td>
<td>8.6%</td>
</tr>
<tr>
<td>Clinical Officers</td>
<td>7,245</td>
<td>7,816</td>
<td>8,598</td>
<td>9,793</td>
<td>11,185</td>
<td>11.5%</td>
</tr>
<tr>
<td>Public Health Officers</td>
<td>6,960</td>
<td>7,192</td>
<td>7,429</td>
<td>7,584</td>
<td>8,069</td>
<td>3.8%</td>
</tr>
<tr>
<td>Public Health Technicians</td>
<td>5,969</td>
<td>5,969</td>
<td>5,969</td>
<td>5,969</td>
<td>5,969</td>
<td>0.0%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>75,632</td>
<td>83,543</td>
<td>90,811</td>
<td>95,960</td>
<td>105,369</td>
<td>8.6%</td>
</tr>
</tbody>
</table>


On the bright side, at least in certain counties, devolution is likely to open the door to greater investment in the health sector and more employment opportunities in health across the board.

**ENTRY POINTS FOR YOUTH**

Efforts to obtain more comprehensive statistics covering the entire range of employment and occupations in health care in Kenya were unsuccessful. However, hospitals reported that for every registered medical personnel employed, they employ several multiples of that number in terms of administrators and support staff of all descriptions: couriers, messengers, clerks, cleaners, orderlies, receptionists, groundskeepers and so on. Thus, the entry points for semi-skilled youth are many multiples of the number of new openings for highly trained medical personnel. In addition, much of the anticipated growth in

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27 The ratio of nurses per 1,000 population in Kenya as of 2011 was 0.79, while for the United States it is 9.8.
28 If the budgets allocated to health from the central government (65% of Kenya’s total health budget) is actually devoted to health and not diverted to other purposes, as some fear.
health care employment in the coming years will be in smaller towns, as devolution spurs additional investment in primary care clinics.

CAN MEDICAL TOURISM BOOST HEALTHCARE EMPLOYMENT?
Despite many deficiencies, Kenyan health care facilities are considered among the best in the region. Among other indicators, Kenya is the preferred evacuation destination for medical emergencies throughout most of East and Central Africa. However, Kenya has not leveraged this preferred market position by launching a determined effort to become a major medical tourism attraction hub in the region. The experiences of Thailand, Singapore, India and Turkey have all demonstrated that success in expanding medical tourism as an industry also benefits the local populations by not only raising standards and increasing the transparency of pricing systems (thereby improving the efficiency of local competition) but also by injecting significant levels of new funds into the system, allowing for expansion and upgrading of facilities and increasing employment in the sector.

Reportedly a committee has been formed and a concept paper is being circulated regarding expansion of medical tourism. Improved systems to provide a seamless transition from patients arriving at the airport to the hospitals, including hotels with service agreements with adjacent hospitals and well-designed internet presence making choices and prices clearly available to both individual patients and insurance companies would need to be implemented. Success with such an initiative could give the health care industry a much-needed “shot in the arm,” as many outdated and protectionist policies, such as those which make it challenging for doctors returning from the diaspora to become easily registered, would need to be reformed along the way. While the public hospitals may benefit from such an initiative, the primary beneficiaries would likely be the private hospitals and clinics (both existing and induced) which are generally in a better position to adapt to the demands of foreign patients. Further analysis and assessment of the potential for devolution and/or medical tourism and to positively impact healthcare budgets is recommended.

ENERGY AND CLEAN TECHNOLOGIES
Currently, direct employment in the energy sector is probably fewer than 10,000 workers. However, this picture may change soon due to a variety of developments in both carbon and non carbon-based energy sources.

PETROLEUM-BASED ENERGY
Significant new offshore reserves have been discovered, which will spur significant requirements for skilled workers in further exploration as well as extraction and processing. However, for most countries the oil industry has developed as an enclave, with relatively tiny employment growth (relative to revenues earned) and few positive spillovers in terms of related industries and upstream and downstream development – despite decades of efforts. Without some specific indications that Kenya can follow a different path, it is best viewed as a “cash cow” industry which needs to be managed carefully in order to generate a flow of income for the country. To be sure, there can be spillover effects for sectors like construction, catering, security and infrastructure from serving the oil industry, but these opportunities are often more limited than the perception.

To the extent that greater skills will be needed, by and large markets work well in this sector, and international oil companies working in partnership with Kenyan enterprises and educational institutions will most likely be able to address these needs, so as a first order of approximation, donors don’t need to

29 The Kenya Census of Industrial Production, conducted by the Kenya National Bureau of Statistics, in 2009, includes a category entitled “Electricity, gas, steam and air conditioning supply” with 8,157 workers.
become heavily involved. There may be some bottlenecks or specific opportunities overlapping with other sectors where interventions can be beneficial, but the greatest short term benefit in terms of youth employment is likely to be the associated construction industry jobs created by increased demand for new infrastructure and facilities as the oil industry expands.

**RENEWABLE ENERGY**

Kenya’s main electricity sources are currently renewable, with 49.7% supplied by hydropower and 12.9% by geothermal. While prospects for expanding hydro are quite limited, the supply of geothermal energy is projected to expand five-fold from 200 MW in 2013 to 1 GW by 2018, and again five-fold to 5 GW by 2030. The government is also planning to launch nuclear facilities, and is in a good position to expand in solar and wind as well. In terms of off-grid energy consumption, in rural areas the transition from kerosene lighting to electricity (and more recently becoming economical: off-grid solar) is proceeding apace, while transportation is the sector that is currently the most petroleum-dependent and expected to remain so for some time.

The potential growth in these sectors indicate significant opportunities for educated as well as uneducated youth. For those with degrees in engineering and related fields, the opportunities are obvious, as a variety of large and small enterprises will enter the market. For uneducated youth, the greatest opportunities will lie in fields that have been labeled as “clean technologies:” renewable energy, energy efficiency and solid waste management (e.g. recycling). Assuming that Kenya can translate goals into action regarding energy-related investments, each of these is a significant job generator. USAID’s Jordan Competitiveness Program estimated that formal sector job creation in the coming five years for Jordan would be 48,600 jobs, in the “best case” scenario of strong government commitment to its renewable energy policy. Applying the same ratio of jobs created per capita from a roughly similar investment in clean technologies would yield approximately 350,000 new jobs in Kenya, all of which create significant social and environmental benefits in terms of energy and pollution savings, health benefits and net foreign exchange earnings.

Table 6: Potential Employment Growth in Clean Tech for Jordan and Kenya (Illustrative)

<table>
<thead>
<tr>
<th></th>
<th>Renewable Energy</th>
<th>Energy Efficiency</th>
<th>Waste Management</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Sector</td>
<td>4,470</td>
<td>9,450</td>
<td>8,270</td>
<td>22,190</td>
</tr>
<tr>
<td>Information Sector</td>
<td>3,353</td>
<td>12,285</td>
<td>10,751</td>
<td>26,389</td>
</tr>
<tr>
<td>Total</td>
<td>7,823</td>
<td>21,735</td>
<td>19,021</td>
<td>48,579</td>
</tr>
<tr>
<td>Kenya</td>
<td>56,061</td>
<td>155,768</td>
<td>136,317</td>
<td>348,146</td>
</tr>
</tbody>
</table>

Source: USAID Jordan Competitiveness Program and author estimates

Note that while many of the jobs came from renewable energy (both centralized and decentralized facilities), a far greater share was estimated to come from energy efficiency initiatives (primarily building retrofitting, which generates mainly construction-type jobs) and in solid waste management, which is primarily recycling. A high proportion of such jobs can be accessible to youth with little or no education if they are motivated to take courses lasting from several weeks to a few months.
Although schooling is certainly not the same as learning, a review of educational attainment data yields a revealing picture of skills supply in the youth workforce, as represented by formal education levels.

Figure 19: Youth Educational Attainment Stocks and Flows

The top level of the diagram shows stocks and flows of students throughout the formal education system, based on gross enrollment rates for 2013.

There are currently 9.3 million children in levels 1-7 of Standard 8 (primary school). Currently, only 76% of students proceed from Standard 7 to Standard 8, with 262,000 students per year dropping out of the system at this critical time prior to the Kenya Comprehensive Primary Examination (KCPE). One level higher, there is another wave of 190,000 dropouts annually following the KCPE. The vast majority of secondary students (2.1 million) enroll in Form 4, while 71,000 enroll in Youth Polytechnics which provide technical and vocational education. A much smaller wave of dropouts (17,000) exits the secondary system annually. The majority of Form 4 graduates, about 450,000/year enter the workforce with no further education. Among the minority who proceed to tertiary education, the vast majority enroll in universities with a small number entering TVET institutions and Teacher Training Colleges. The tertiary education system produces around 120,000 graduates per year.

The bottom level depicts youth workforce “stocks,” grouped by educational attainment. These stocks were based on 2009 population census, and updated for each subsequent year based on a “stock-and-flow” methodology developed by the team. The numbers next to the bottom four dashed arrows represent the outflow from these “stocks” of workforce – our best estimate of the number in each category who turn 36 and are no longer counted as “youth.”

30 Calculations are estimates. Some needed data are not available and assumptions or simple models were used for estimation. However, results have been reviewed with leading professionals in the field and are understood to represent a reasonably accurate picture of the dynamics of youth labor market supply in Kenya.
31 The term “dropout” is not intended to connote a failure of motivation on the part of youth.
The “Uneducated Workforce” in navy blue, for lack of a better term, represents youth with less than secondary education which constitute about 2/3 of the youth workforce (all youth 15-35). This group can be subdivided into those with less than primary education (4.3 million) and those who have completed primary, but not secondary (5.3 million). The annual waves of primary and secondary school dropouts referenced above flow into these stocks. As the graphic shows, the stock of youth with less than primary education is growing 4% a year, while those with less than secondary is shrinking slightly, as the flows of dropouts are counteracted by the 241,000 youth “graduating” from this stock by turning 36.

The “Educated Workforce” in green is dominated by the stock of 3.5 million secondary graduates, as compared to 1.2 million tertiary graduates. Both stocks are expanding relatively quickly.

**COUNTY LEVEL**

The magnitude of the population with an incomplete primary education is compounded in counties with a high youth population (15-34) which raises the absolute number of youth without a primary education. High levels of poverty are also a driver. Counties with the highest population of youth without a primary education are Turkana (over 230,000), Mandera (over 194,000), Nairobi (over 163,000), Garissa and Wajir (over 145,000 each). Taking into account the proportion of the population with less than primary school completed and less than secondary school completed, as well as the proportion of the population with a secondary education and those with a tertiary education, we have determined the ten counties with the lowest levels of educational attainment overall. These findings should be taken into account in needs-based geographic targeting of future USAID youth programs.

Table 7: Counties with Lowest Educational Attainment

<table>
<thead>
<tr>
<th>Rank</th>
<th>County</th>
<th>50%+ of population in poverty</th>
<th>Poverty gap &gt; 20%</th>
<th>Rural population &gt; 85%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Turkana</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>Wajir</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mandera</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Siaya</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Migori</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Kitui</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Garissa</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Marsabit</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>Tana River</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10</td>
<td>West Pokot</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional county-level data is provided in Annex 3.
Of these ten counties six are amongst the most rural with rural populations at or above 85% (West Pokot, Siaya, Kitui, Turkana, Wajir, and Tana River). Out of these ten counties, nine have over 50% of their population living below the poverty line, Siaya being the exception with 38%. Turkana, Wajir and Mandera are the three counties with largest proportion of the population living below the poverty line in the country (88%, 84%, and 86% respectively). Of these ten counties, five have a poverty gap above 20% making them some of the poorest counties in the country (Tana River, Mandera, Wajir, Turkana, and Marsabit).

Figure 20 shows the breakdown of the workforce in each county that has 1) less than primary education and 2) primary, but less than secondary education.

### WORKREADINESS BY EDUCATION LEVEL

The term “skills gap” is frequently used and assumed to be true, but demonstrable evidence for skills gaps, such as wage spikes or premiums, is less often apparent. At a macro-level, it can be challenging to define whether skills problems are primarily due to supply or demand factors. Nonetheless, the assessment found that a fairly clear consensus is emerging around a number of skills weaknesses associated with the Kenyan public education system at every level.

Skills can be defined in three major categories: basic skills, technical skills, and soft skills. Basic skills include functional literacy and numeracy, which are typically learned in school. Essential soft skills in the workplace include interpersonal skills (e.g. teamwork, communications), intrapersonal skills (e.g. time management, problem solving, creativity), and workplace cultural skills (understanding and navigating norms in the workplace). Technical skills are those needed for a task or process used in making a product or providing a service in a particular industry. While some level of technical skills is often required even for entry-level jobs, the vast majority of technical learning takes place on the job.

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Information, Communications, and Technology (ICT) skills are a subset of technical skills that are gaining recognition as increasingly essential and cross-cutting across industries, due to the rapid pace of technological change. Accordingly, ICT skills are given particular weight in much of the recent body of literature on 21\textsuperscript{st} Century Skills.\textsuperscript{35}

The table below summarizes those weaknesses based on a variety of secondary sources (as discussed in greater detail below) as well as this assessment’s qualitative discussions with employers, education experts, and youth.

Table 8: Main Skills Challenges for the Public Education System, by Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Main Skills Challenges</th>
<th>Root Causes</th>
</tr>
</thead>
</table>
| Tertiary (University, TVET) | • Soft skills  
• Technical skills (including ICT) may be out of date or irrelevant; particularly for university students | • Information asymmetry  
• Curriculum and teaching methods promote theoretical knowledge and rote learning  
• Applied learning opportunities generally ineffective (university) or absent (Form 4)  
• Over-emphasis on test results; rigid tracking system |
| Secondary (Form 4, Youth Polytechnics) | • Soft skills  
• Few technical skills (including ICT), particularly among Form 4 graduates  
• Proficiency in Literacy and Numeracy not assured for less than Secondary Graduates | |
| Primary (Standard 8) | • Basic literacy and numeracy | • Low quality |

As depicted in Figure 21 below (from the Country Dashboard in Annex 2), employers in Kenya are increasingly identifying skills as a constraint, particularly in services and retail, with a striking increase from 2007-13.\textsuperscript{36} The central importance of soft skills in services and retail, as compared to other sectors on this list, may provide further indication that those skills are particularly lacking.


Interviews with employers and education experts reflect, in general, dissatisfaction with the quality of graduates of the public education system at every level. Common comments about university graduates were that they lack motivation, patience, and applied knowledge, requiring employers to invest significant resources in new employee training. Likewise secondary graduates are viewed as having low skill sets, particularly for occupations in services, but are considered to at least have mastered proficiency in basic literacy and numeracy. As discussed above under the analysis of labor demand, employers reported that even relatively simple, repetitive jobs such as those of machine operators often require a secondary education, merely due to the requirement of basic ability to read and follow instructions.

The primary and secondary systems in particular are designed primarily around success on tests that determine future academic and career options. Despite the fact that, as our analysis has shown, large numbers of students are dropping out of primary and secondary education in Kenya, and relatively few secondary graduates proceed to tertiary education, this is not reflected in the education model.

Beyond skills, the assessment revealed a major weakness in the area of career guidance in the public education system. Career guidance systems ideally should encompass provision of: 1) reliable market information on relevant economic trends, job opportunities, and entry-level skills requirements in one’s area of interest, 2) job placement, and 3) opportunities to network with role models, mentors and other professionals, particularly alumni. Perhaps more importantly, educational institutions should dialogue with employers about skills that are demanded, solicit feedback on their graduates, and act on this information to inform education practice. Little is being done to prepare these students for the world of work.

Another signal of weakness in the public system is the increasing trend toward private education and training at every level. Since 2005, enrollment in private schools has tripled from 4% to 12% of pupils, and research by Brookings, fees at 2/3 of private schools are lower than in the public system, in which unofficial fees such as for "signing-on," admissions, exams, uniforms, and books.37

For TVET, there is likewise a large and growing private training market, with over 1,000 private providers. In addition, the there is a large traditional jua kali apprenticeship system in the informal sector, under which youth typically pay a monthly fee in exchange for the opportunity to apprentice and learn a skilled trade. Previous voucher initiatives have demonstrated unsatisfied demand for TVET training among informal sector participants; major limitations include time, space cost, and flexibility of hours.38 In addition, such programs have indicated private sector capacity to meet this demand. More evidence is needed on training quality and effectiveness in this sector, however.

At the tertiary level, while the public sector is growing rapidly, private universities such as Strathmore, Daystar, and US International University, are also flourishing. These institutions are recognized for close ties to industry and a strong emphasis on career preparation, not only through career guidance services but also through a focus on participatory learning in the classroom and applied learning through internships. Despite the fact that elite institutions are charging higher tuition than public universities,

Demand is growing rapidly. Private universities currently enroll around 60,000 students, or 20% of the total, according to Commission for University Education figures.\textsuperscript{39}

RETURNS TO EDUCATION

Despite the weaknesses highlighted above, there is evidence for relatively strong returns to education, particularly university education, based on 2005-06 household survey data. This is most evident in the formal private sector, where a 25 year-old university graduate earns three times the wage of a secondary graduate (rising to a factor of five by age 34).\textsuperscript{40} The gap between secondary and primary is less stark, but rises over time, particularly in the formal private sector. In the informal sector, there is a slight premium for secondary education and a higher premium for tertiary.

This evidence points to the continued importance of workforce programs’ supporting pathways for youth to continue or re-enter the formal education system.

MAPPING OF STAKEHOLDERS AND WORKFORCE DEVELOPMENT PROGRAMS

\textbf{OVERVIEW}

This section reviews strategic workforce development programs implemented in Kenya that target youth, with an analysis of their objectives, scope, and focus. It also explores the relationship of existing programs to labor market demand and summarizes opportunities for enhanced youth workforce development over the next 5 years.

\textbf{STAKEHOLDER MAPPING}

The map below depicts the current workforce system in Kenya, including key stakeholders from the public and private sectors, education system, and youth and civil society organizations. The analysis presented herein is qualitative in nature, and represents general findings, but grounded firmly in the interviews and other assessment data.


Within the public sector, the system is characterized by fragmentation and weak links among the various ministries responsible for youth, education, employment, and other relevant areas. Bodies that on paper offer promise for playing more of a coordinating function among diverse stakeholders, such as the National Manpower Development Committee, are not currently playing that role effectively. The private sector is strongly linked to parts of the system, such as through NITA, but only weakly linked to the education system (in particular the public system).\footnote{Note that green circles on the map denoting various education levels encompass public as well as private education.} Meanwhile, government youth programs and youth civil society organizations are largely isolated from the private sector.

Such a map would look somewhat different at the county level, though many of the same actors are present. Health is a devolved function under the Constitution with robust county level authority. Other national line ministries deploy staff at the county level, to coordinate national government functions relating to education and labor. MOEST, for example, has County Directors of Education in each county while MOLSS has County Labor Officers, County Employment Officers, and County Occupational Safety and Health Officers to coordinate these respective functions in the counties. Levels of capacity vary among county governments. Within the TVET system, counties are responsible for Youth Polytechnics (open to youth from a variety of educational levels) and the network of Youth Empowerment Centers now under development, while other institutions (including Teacher Training Colleges, Technical Training Institutes, Institutes of Technology and National Polytechnics) remain under the responsibility of the national government. The private sector is often organized locally into business associations that represent interests at the county level, among other activities.\footnote{For example, the assessment team attended the annual meeting of the Nakuru Business Association, at which county-level priorities were discussed.}
In this idealized scenario, many existing links have been strengthened and new ones formed among different stakeholder groups, leading to a much more tightly interconnected system with more efficient information flows. The Presidency has been added to the map, denoting the potential impact that greater executive level attention and involvement could bring to youth workforce development. In addition, the anticipated national Labor Market Information System (LMIS) has been added to the system. The LMIS has the potential to create a catalytic impact on information flows within the system (see further discussion in the section on the Ministry of Labor, Social Security and Services below). Another potential leverage point is the NITA trade testing system, also discussed further below, or other skills certification mechanisms valued by the labor market. In particular, the youth and civil society sector becomes much more tightly linked with employers and labor market intermediaries under this scenario.

One question posed is whether such a rapid shift is feasible given the existing institutional structure and policy environment. Best practice models for workforce development strategies, such as those adopted by Singapore, Ireland, and Germany, have typically employed centrally coordinated models that institutionalize strong partnerships between the government and industry.43 In Kenya, such a shift is likely to be gradual, in practice. Furthermore, in the context of devolution it will be increasingly important to strengthen the workforce system as a component of local economic development initiatives at the county level.

A more detailed description of existing workforce programs is provided below, with a primary focus on initiatives led by the government and development partners. For a summary table of government initiatives, see Annex 4.

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GOVERNMENT PARTNERS

MINISTRY OF DEVOLUTION AND PLANNING – DIRECTORATE OF YOUTH DEVELOPMENT AND EMPOWERMENT (DYDE)

The DYDE’s main objectives are “to formulate and implement national youth development and empowerment policy, spearhead affirmative action for youth in all aspects of the society, and coordinate youth organizations and inculcate national values.”

NATIONAL YOUTH SERVICE (NYS)

The NYS, established in 1964, offers two-years of paramilitary training and service in public works, followed by 1-3 years of training on vocational, technical and entrepreneurship training, life skills and professional skills. It also acts as a reserve force for the national military. Around 5,000 young men and women ages 18-22 are admitted per year.

The minimum qualification criterion is Kenya Certificate of Secondary Education (KCSE), mean grade D+. In addition, applicants must be unmarried and without dependants. The NYS runs 16 training institutions spread throughout the country with a capacity of 10,000-15,000 students at any given time. 40% of placements are reserved for orphans and vulnerable youth.

The NYS has been successful in promoting skills acquisition and employability of the youth. Although no systematic evaluations and tracer studies have been conducted, reports suggest that most of the NYS graduates are almost immediately recruited and absorbed into the country’s disciplined forces and other civilian public sector services. A few of the NYS graduates are also absorbed by the private sector with some graduates venturing into self-employment. Generally, employers find the NYS graduates to be more disciplined, diligent, and productive as compared to their peers. In interviews for the assessment, most youth affirmed that the NYS is an attractive option and is considered a reliable pathway to improved career opportunities.

The capacity of the NYS to train has unfortunately not kept pace with growth in the youth population and labor market demands. The major limitations are that the NYS does not also offer short tailor-made courses that respond to the unique needs and aspirations of the youth and local communities. Further, the program fails to reach the large number of out-of-school youth who are younger than 18. The government plans to reform the NYS to expand access as well as the scope of courses and services offered.

Funds for Youth, Women, and People with Disabilities

A number of new youth financing models have been established in Kenya in recent years. Models and results are summarized below.

The Youth Enterprise Development Fund (YEDF) was established by the government in 2006 to provide loans for on-lending to youth enterprises. It also aims at promoting youth entrepreneurship and facilitating youth employment abroad. By 2012, the YEDF had received a cumulative financial allocation of about KSh. 3.8 billion from the government. 158,000 youth enterprises have benefited from loans provided directly by the YEDF while 141,552 group and individual youth enterprises received loans through financial intermediaries contracted by the YEDF. In addition, 1,800 youth enterprises were assisted to market their products through local trade fairs with another 32 being supported to exhibit their products in Egypt, Tanzania, Burundi and Rwanda. About 200,000 youths were trained on

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entrepreneurship. The YEDF has partnered with Kenyatta University at the Chandaria Business Innovations and Incubation Centre where the YEDF will provide loans and entrepreneurship training to the incubates.

The Women Enterprise Development Fund (WEDF) was established in 2007 to provide women with access to alternative financial services. Funding for the WEDF has declined to KSh 167 million in 2012, down from KSh 500 million in 2008.

The Uwezo Fund launched in 2013 to provide youth and women with access to grants and interest-free loans. The Uwezo Fund also seeks to promote gainful self-employment among the youth and women, and to model an alternative framework for financing community-driven development. The government also put in place a 30% public procurement quota and preference scheme as part of the affirmative action to provide business and entrepreneurship opportunities to the youth, women and persons with disabilities. It also provides mentorship opportunities to enable beneficiaries to take full advantage of the 30% quota. The Uwezo Fund had a grant of KSh. 6 billion in 2013.

Overall, there are few considerable differences in the target beneficiaries and areas of focus of the three Funds. The financing models do not fully address major challenges around accessibility, affordability and capacity. Accessibility of the YEDF and the Uwezo Fund in particular is limited due to stringent requirements, a lengthy and cumbersome application process, and centralized decision-making. Effectiveness may also be undermined by the central role played by the government as many youths may consider funds to be a gift rather than an instrument of economic empowerment. In general, grants and loan subsidies for entrepreneurship must be carefully designed and implemented to avoid the risk of encouraging youth into unwise business ventures, or of crowding out more sustainable financing models.

In interviews, a number of stakeholders expressed concerns about the transparency of decision-making around the youth funds, and the prevalence of kickbacks required to access public procurement opportunities. Another concern is the funds’ preferential treatment toward “group business” models – in which a large number of youth group together to pursue a common business idea – which are generally unsustainable. Though anecdotal, there are reports that this has in some cases resulted in the emergence of entrepreneurs who specialize in the process of organizing groups to access funds, at which point business ventures may promptly fail or disband.

In conclusion, while the funds have the potential to address a number of important constraints to youth livelihoods, additional reforms may first be needed to promote greater transparency and better business practices, in order to scale up impact.

*National Youth Council*

In 2009, the government passed the National Youth Council Act (2009), which paved way for establishment of the National Youth Council (NYC). The NYC was established to regulate and coordinate youth-related interventions and activities, promote and popularize the *National Youth Policy* and other policies that affect the youth, lobby for legislation on issues affecting the youth, and inspire and promote the spirit of unity, patriotism, volunteerism and service among the youth. Other functions of the Council are to propagate youth issues, and promote the inclusion of the youth in decision-making bodies, boards, agencies and other public institutions and organizations.
MINISTRY OF LABOR, SOCIAL SECURITY AND SERVICES
The MOLSS oversees employment policy and strategies. A National Employment Policy and Strategy is now awaiting approval which would support enhanced coordination and set up “one stop shop” services for job seekers through a network of Employment Promotion Centers.

National Employment Bureau (NEB)
The NEB is a public employment services provider responsible for registering job seekers and providing and overseeing job matching and placement services (both domestic and foreign).

The NEB operates 30 offices nationwide with a focus on industrial job placement. The offices provide registration of job seekers, advise on job opportunities, and offer entrepreneurship training. The plan is to eventually extend the network to all counties. In addition, there is a network of registered private employment agencies, which are supervised by the NEB and licensed by local authorities, and may operate domestically and/or internationally. There are over 400 active agencies. The Kenya Association of Private Employment Agencies is the industry association for this sector.

Last year, the NEB reports that around 12,000 job seekers were placed domestically. These tend to be focused on the industrial sector as well as placing casual laborers (on infrastructure projects, for example).

In addition, 5,000 were placed in foreign employment. Foreign countries include the Middle East (Saudi Arabia, Lebanon, Jordan, Iraq, and UAE) as well as Afghanistan, Botswana and Seychelles, among others. For foreign placements, there is demand for engineers and electrical workers, skilled trade workers, and domestic workers. Those with Arabic language skills (primarily Kenyans from the coast) find good opportunities. Importantly, foreign employers accept trade tests run by the National Industrial Training Authority (see more detail below) as evidence of skills competency.

The NEB operates a pre-departure orientation program for foreign workers. The primary challenges are working conditions, particularly for lower skilled workers, and including vulnerability to sexual violence on the part of female domestic workers in particular. Kenya would like to emulate the Philippines in terms of its agreements with foreign countries on behalf of its emigrant workers, and the NEB is now making arrangements to go to Manila.

A key partner for the NEB has been the UNDP which is supporting the development of a National Qualifications Framework.

Human Resource Planning and Development
This department is developing a national Labor Market Information System (LMIS), in conjunction with an East African Community (EAC) regional initiative, with technical support from the ILO. It will take significant time for the LMIS to be designed and, eventually, operational. However, a well-functioning LMIS could facilitate improved information flows among employers, the education system, and youth.

Originally the EAC was expected to finance the initiative, but it later ended up as the responsibility of national governments. Kenya and Rwanda have been the leaders on implementation within East Africa. The first step is a Manpower Survey conducted in partnership with the Kenya National Bureau of Statistics. Publication of the survey is forthcoming soon.

A National Technical Committee has been formed to advise the government on design of the LMIS through an ongoing dialogue during the second half of 2014. Its steering committee includes the Federation of
Kenya Employers, Central Organization of Trade Unions, the Kenya Private Sector Association (KEPSA), the Kenya Association of Manufacturers, and the Media Council. The Ministry of Education and Commission for University Education are also closely involved. This dialogue creates an important forum that could potentially support improved coordination on workforce development in the future.

The National Manpower Development Committee (NMDC) was established under Section 8(1) of the Labor Institutions Act (2007) to provide a platform for interaction between training providers and industry, but has remained ineffective. Membership to the NMDC is drawn from that of the National Labor Board (NLB), which is composed of an independent chairperson, representatives of workers and employers, and government employees representing various technical functional areas within the Ministry responsible for labor matters. As a result, the private sector and academia are currently underrepresented. Section 8(2) of the Labor Institutions Act (2007) would allow for integration of people with relevant knowledge and expertise into the committee but this is subject to approval of the Minister in charge of labor matters.

**NATIONAL INDUSTRIAL TRAINING AUTHORITY (NITA)**

NITA is an independent agency under the Ministry of Labor, with joint oversight by the Federation of Kenya Employers and Central Organization of Trade Unions. NITA implements the national trade testing system, administers the Industrial Training Levy Scheme and provides technical training through four Industrial Training Centers, one Textile Training Institute and one Technology Development Center.

**Training Levy Scheme**

The Training Levy Scheme is applicable to all employers in Kenya with at least five employees is payable is KSh 50 per employee. The Levy is used to fund skills upgrading of employers’ existing workforce.

**Apprenticeships, Industrial Attachment and Internships**

NITA implements a formal apprenticeship program and provides sponsorship to between 500 and 600 trainees from levy contributing companies with requisite workplace condition every year. The apprenticeship scheme does not include informal sector companies. The scheme is based on formal apprenticeship contracts where apprentices undergo the normal craft or diploma programs in TVET institutions, and are put in industrial attachment during tuition-free time. Out of the levy fund, NITA pays tuition fees and reimburses the apprenticeship wages to the participating companies for the times the apprentice is trained in the TVET institution. A total of 4,862 students were trained on various industrial skills in 2011/2012.

The form of apprenticeship offered by NITA is only accessible to employees of the levy-paying formal sector organizations. This makes the outreach of the program to be limited since only about 40% of large companies are registered levy contributors. Many SMEs do not participate in the scheme as they are not registered levy contributors. The traditional apprenticeship is provided by the master craft persons in the informal sector. However, the apprenticeship programs run by the informal sector are not structured. Also, not all informal sector enterprises have the capacity to take apprentices.

The industrial attachment and indentured learner scheme facilitates industrial attachment to some 10,000 trainees and students from TVET institutions and universities annually. Companies who contribute the levy fund receive KSh. 3,000 as cost contribution per attached student. Under the indentured learner scheme, levy paying companies receive cost reimbursements for 1 to 3 months on-the-job induction training for new recruits. The scheme is mainly applied in the textile and construction industry. A total of 10,923 students were placed on industrial attachment in 2011/2012.
Skills Training
NITA runs industrial skills upgrading and trade test preparation programs in their training centers. Recorded enrollment is between 1,200 and 1,500 trainees per year. Courses of 120 hours spread over a period of four to six weeks are offered at a cost of KSh 8,000 per course (or KSh 18,000 including accommodation), alongside tailor-made courses. The courses are delivered on evenings and weekends to make them widely accessible to workers in the formal and informal sectors of the economy.

Tracer studies on NITA’s trainees and apprentices show that at least 70% of the trainees and apprentices are absorbed the respective employers. The results of the tracer studies also showed that NITA’s interventions improve employability and wages of graduates.

Trade Testing
NITA implements national trade testing, which shows promise for becoming a key leverage point for change in the workforce system. Skills certification typically poses a major challenge for employers and consumers in Kenya, as there are few institutions that can reliably verify competency levels in the skilled trades. NITA administers examinations to over 40,000 test takers each year.

NITA’s trade testing opportunities are available to any person who can demonstrate competence, irrespective of how and where the skills were acquired. Candidates may include graduates of formal and non-formal training programmes in both the public and private training markets, youth who learned skills through the traditional Jua Kali apprenticeship training system, or workers in industry who learned on-the-job. NITA’s testing system assesses and certifies skilled workers at three levels, ranging from semi-skilled, skilled to broadly skilled. According to NITA, the trade tests were developed with close cooperation of Kenyan industry. Tests primarily assess practical performance, with some written content as well. In many cases, skilled applicants can pass, even when they may lack strong literacy skills.

Over 400 accredited trade testing centers (mainly training institutions) exist, ensuring accessibility throughout most of the country. Testing fees range from KSh 2,500 for Grade III (lowest level) to KSh 5,000 for Grade I (highest level). Trade testing is offered in 37 skill areas, mostly covering traditional technical occupations that are male-dominated. Tailoring, hair dressing and beauty therapy are among those trades in which women are most often tested. The majority of all candidates in 2011-12 were in dressmaking and tailoring, followed by automotive trades, electricians, masons, carpenters and welders. Of all candidates 82% sat for the Grade III test, 15% for Grade II, and only 3% for Grade I.

One weakness at NITA is the lack of a public outreach mechanism. Most youth interviewed, and most organizations providing youth livelihood services, were unaware of NITA’s services. This was the case even in the informal settlement of Kibera, where many youth work in the nearby industrial zone in which NITA’s headquarters are located.

MINISTRY OF EDUCATION
Technical, Vocational Education Training (TVET)
There is a strong trend of increasing enrollment within Kenya’s TVET system, which includes a mix of public and private institutions at a range of educational levels. Public TVET institutions include Youth

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Polytechnics (YPs), Institutes of Technology (ITs), Technical Training Institutes (TTIs), National Polytechnics (NPs) and Polytechnic University Colleges (PUCs). The MTP I (2008-2012) led to the creation of Youth Empowerment Centers (YECs), which are multi-purpose youth centers, combining space for recreation, counseling, information and communication, and education and training. To date, at least 98 YECs have been constructed, with 52 equipped.

Table 9: TVET System Overview

<table>
<thead>
<tr>
<th>Type</th>
<th>Level</th>
<th>Number</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Polytechnics</td>
<td>Secondary</td>
<td>647</td>
<td>71,469</td>
</tr>
<tr>
<td>Institutes of Technology</td>
<td>Post-secondary</td>
<td>14</td>
<td>21,602</td>
</tr>
<tr>
<td>Technical Training Institutes</td>
<td>Post-secondary</td>
<td>35</td>
<td>34,343</td>
</tr>
<tr>
<td>National Polytechnics</td>
<td>Post-secondary</td>
<td>7</td>
<td>8,520</td>
</tr>
<tr>
<td>Polytechnic University Colleges</td>
<td>Post-secondary</td>
<td>2</td>
<td>11,975</td>
</tr>
<tr>
<td>Youth Empowerment Centers</td>
<td>Various</td>
<td>52</td>
<td>n/a</td>
</tr>
<tr>
<td>Private</td>
<td>Various</td>
<td>706</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total enrollment in public TVET institutions increased from 85,200 students in 2008 to 147,909 students in 2013 with much of the increase accounted for by YPs. Increased enrollment in the YPs may be attributed to the government’s effort to rehabilitate, modernize and expand the YPs, and the introduction of the Subsidized Youth Polytechnic Tuition (SYPT) Scheme. The SYPT Scheme, which provides KSh. 15,000 per year per enrolled trainee in the YPs, has considerably reduced the tuition fees in the YPs.

The quality and relevance of the public TVET system has been constrained by a number of issues, primarily:

1) Supply-driven orientation exacerbated by a lack of consultation with industry.
2) Outdated and inadequate equipment.
3) Instructors with inadequate skills, experience and limited exposure with industry and modern technology. Training of TVET instructors is not standardized.

Another significant challenge is that TVET certification is not standardized. Institutions are guided by two major qualification systems, namely the Technical Education Program (TEP) certified by the Kenya National Examinations Council (KNEC) and the NITA Trade Testing system described above. The TEP is a time-based system of training programs based on curricula developed by the Kenya Institute for Curriculum Development.

The Trade Testing System (TTS) on the other hand is administered as a parallel, lower level and employment-oriented qualification system. In interviews a number of stakeholders suggested that NITA’s TTS carries more weight with employers. For example, certain industrial employers regularly require TVET graduates to pass NITA’s trade test prior to being employed, indicating a lack of confidence in quality standards associated with TVET degrees. On a more positive note, it is a signal of validation of the value of the NITA system.

Weak collaboration and linkages among TVET institutions also hinders mobility of the trainers and credit transfer. Additionally, the high cost of training is a barrier to access for many young people. The increase in enrollment following the introduction of SYPT and the preliminary findings of an ongoing randomized
evaluation of the TVET Voucher Program in Western Kenya showing increased enrollment, for example, suggests that affordability is currently a significant constraint on demand.

**DEVELOPMENT PARTNERS**

The table below summarizes initiatives of major international partners. A more detailed description is provided in Annex 5.

As an overall observation, a degree of fragmentation is apparent. Interviews for the assessment revealed a strong general consensus that awareness is lacking among stakeholders about the institutions in workforce development, their areas of intervention, and gaps in coverage and service. Unlike other international development sectors, such as health, the youth employment sector lacks a platform to facilitate knowledge sharing, peer-to-peer learning, and consensus building on best practices. Competition for territory and funding weaken the incentives for collaboration. These constraints have resulted in weak coordination of youth employment interventions in the country. This finding suggests that additional attention may be needed at the policy or systems level, building on existing efforts such as UNDP’s support for NITA programs and trade testing system, and the ILO’s East Africa region-level support to the LMIS initiative.

The table reveals an extensive range of service provision to youth beneficiary groups relevant programming for a variety of beneficiary populations. It is difficult to identify any beneficiary populations that are overserved, relative to the scale of development challenges such as school drop-outs and the lack of second-chance opportunities for youth, as discussed above. In most cases, even the largest programs are limited in terms of geographic scope and scale. In general, we observe relatively little work in the area of career guidance, particularly for in-school and out-of-school youth.

A number of private sector development initiatives and other partnerships are highly relevant to our shortlisted sectors, and may yield synergies for future youth programs. For example, programs by the World Bank, UNIDO, DFID, and GIZ are all working with industry, government, and/or other market actors in relevant areas including agribusiness, leather and hides, and metal fabrication and machine repair, in addition to USAID’s own extensive agricultural value chain investments.

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<table>
<thead>
<tr>
<th>Multilateral Partner: UNDP</th>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for Ministry of Devolution and Planning</td>
<td>County Business Development Centers  YP training  Skills training</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Support for NITA</td>
<td>Industrial training  Testing standards  National Qualifications Framework  Quality assurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for TVET</td>
<td>Policy  National vocational certificate  Vocational rehabilitation centers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya National Youth Development and Training</td>
<td>Life skills training  Internships  Business support  Entrepreneurship</td>
<td>In-school youth (primary and secondary)  Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Youth Employment Scheme-Micro Small Enterprise Programme (YES-MSE)</td>
<td>Entrepreneurship  Enterprise development support  Business skills training</td>
<td>In-school youth (primary and secondary)  Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ILO</th>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decent Work Country Program</td>
<td>Entrepreneurship  Strengthen SMEs  Job growth  Mentorship  LMIS</td>
<td>In-school youth (primary and secondary)  Out of school youth (school-age)  Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Employment Intensive Infrastructure Program (EIIP)</td>
<td>Employment creation  Labor-based technologies</td>
<td></td>
<td>Nairobi, Rift Valley, North Eastern</td>
</tr>
<tr>
<td>Women Entrepreneurship Development and Economic Empowerment (WEDEE)</td>
<td>Entrepreneurship for women  Business development services</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
</tbody>
</table>

**Multilateral Partner: UN-Habitat**

47 Categories are In-school youth, Out-of-school youth (ages 12-20 years old), Older youth (ages 20+ with less than secondary education) and secondary graduates, and Employees.
<table>
<thead>
<tr>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth political engagement</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Youth civic engagement</td>
<td>University students and recent graduates</td>
<td>National</td>
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<tr>
<td>Youth advocacy</td>
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</tbody>
</table>

### Multilateral Partner: UN Industrial Development Organization (UNIDO)

<table>
<thead>
<tr>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
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</thead>
<tbody>
<tr>
<td>Productive capacity building</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Trade capacity building</td>
<td>University students and recent graduates</td>
<td>National</td>
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<tr>
<td>HP-Life</td>
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<tr>
<td>Entrepreneurship</td>
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<tr>
<td>Business skills</td>
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<tr>
<td>IT training</td>
<td></td>
<td></td>
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<tr>
<td>German Engineering Federation (VDMA)</td>
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<td></td>
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<tr>
<td>Agribusiness value chain capacity building</td>
<td></td>
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<tr>
<td>Training on equipment maintenance and repair</td>
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</tbody>
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### Multilateral Partner: World Bank

<table>
<thead>
<tr>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for Ministry of Industrialization and Enterprise Development</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Value chain analysis:</td>
<td>In-school youth</td>
<td></td>
</tr>
<tr>
<td>Leather and leather goods, Textiles and clothing, Food processing, Furniture and metal fabrication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya Youth Empowerment Project (KYEP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
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<tr>
<td>Internships</td>
<td></td>
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<tr>
<td>Life skills training</td>
<td></td>
<td></td>
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<tr>
<td>TVET Voucher Program (TVVP)</td>
<td></td>
<td></td>
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<tr>
<td>Vouchers for TVET (public or private)</td>
<td></td>
<td></td>
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<tr>
<td>Information on returns to education</td>
<td></td>
<td></td>
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<tr>
<td>Randomized evaluation (ongoing)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Busia, Western Kenya</td>
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</table>

### Bilateral Partners: DFID

<table>
<thead>
<tr>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
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</thead>
<tbody>
<tr>
<td>Mombasa County Youth Employment Project</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>Mombasa</td>
</tr>
<tr>
<td>Job creation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TVET</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market and value chain development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy and advocacy support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills training for the following industries:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste collection, recycling and disposal, agricultural production and processing, tourism</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
construction, micro retail and trade

**Market Assistance Program (MAP)**
Strengthen market systems by upgrading youth skills in the following industries: Dairy, WASH, media, livestock, supply chain, agricultural inputs, and seeds

- Older youth (less than secondary education) and secondary graduates
- Garissa
- Makueni
- Taita-Taveta
- Kitui
- Kajiado
- Machakos
- Laikipia
- Lamu
- Marakwet
- Nyeri
- Rachuonyo

<table>
<thead>
<tr>
<th>Multilateral Partner: GIZ</th>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comprehensive Africa Agriculture Development Programme (CAADP)</strong></td>
<td>Agricultural value chain strengthening Vocational training for agriculture Private-public partnerships</td>
<td>In-school youth (primary and secondary)</td>
<td>National</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multilateral Partner: Italy</th>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debt for Development Programme</strong></td>
<td>Improve polytechnics and vocational training centers Capacity building Life skills training Training Internships</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multilateral Partner: USAID</th>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
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<tbody>
<tr>
<td><strong>Yes Youth Can</strong></td>
<td>Youth livelihoods Youth empowerment Youth advocacy Youth financial services SME incubators Vocational training</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td><strong>Kenya Agricultural Value Chain Enterprises Projects (KAVES)</strong></td>
<td>Agricultural value chain commercialization Increase farmer income and nutrition</td>
<td>University students and recent graduates</td>
<td>National</td>
</tr>
<tr>
<td><strong>Value Girls Program (with Nike Foundation)</strong></td>
<td>Economic empowerment Value chain integration Livelihoods</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
</tbody>
</table>

**WORKFORCE CONNECTIONS:** Kenya Youth Assessment
### Business skills training

<table>
<thead>
<tr>
<th>Programme</th>
<th>Technical Focus</th>
<th>Beneficiary Population</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>APHIA Plus-GRANT</td>
<td>Health service, Family planning, Social and behavior change communication</td>
<td>In-school youth (primary and secondary)</td>
<td>National</td>
</tr>
<tr>
<td>Garissa Youth Project (EQUIP3)</td>
<td>Promote transition to secondary and to higher education, Civic education, Scholarships</td>
<td>Out of school youth (school-age), In-school youth (primary and secondary), Older youth (less than secondary education) and secondary graduates</td>
<td>Garissa</td>
</tr>
<tr>
<td>Kenya Horticulture Competitiveness Project (KHCP)</td>
<td>Microfinance, Business training, Psychosocial support, Value-chain coordination, marketing, and trade promotion</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
<tr>
<td>Family Health Integrated Development Assistance (FAHIDA)</td>
<td>Financial services</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>National</td>
</tr>
</tbody>
</table>

### POLICY AND REGULATORY REFORMS

Overall, Kenya’s policy response to the youth employment challenge has been narrowly focused and implementation has been lagging. Recent reforms have focused on strengthening labor protections and...
establishing youth-targeted employment programs and funds, but youth employment outcomes have been limited due to factors related to design as well as implementation. Less attention has been given to addressing the underlying barriers to growth, which as discussed above have had to do with physical infrastructure, macroeconomic management, governance and political stability issues, and corruption. A new TVET policy has been adopted, which offers promise for improving education relevance and quality, but implementation is now needed.

**Macroeconomic Situation**

Since the instability of the economic slowdown of 2008, the government has implemented sound macroeconomic policies, and has taken prudent fiscal measures which has helped to stabilize Kenya’s economy. The budget deficit has been stable at an average of 4.9% of GDP during the last 5 years, although this performance is below that of its East African neighbors. Kenyan’s tax revenue to GDP ratio, estimated at 20.1% in 2013/14, remains high by regional standards, compared to Tanzania’s 18% and Uganda’s at 13%.

In 2011, Kenya was facing large currency depreciation and high inflation. The country has since been able to stabilize its currency and maintain inflation within the allowable margin. The government hopes that the Integrated Tax Management System (ITMS), which will enable online payments and filing of returns will improve Kenya’s ranking as a preferred investment destination. According to the World Economic Forum’s Global Competitiveness Report 2013/2014, Kenya ranks 93rd out of 148 countries with regards to the effect of taxation on incentives to invest.

**Trade and Investment**

The Second Medium Term Plan of the Kenya Vision 2030 details several challenges that impede the growth of trade including a weak business regulatory framework, high cost of doing business, lack of infrastructure, poor access to finance for MSEs, and inadequate capacity to develop new products and innovation. Many of these challenges are reflected in Kenya’s declining global ranking on the World Bank’s Ease of Doing Business Indicators which dropped from 72nd position in 2008 to 129th in 2014 out of 189 countries. According to the same report, Kenya ranks 156th in terms of ease of trade across borders, mainly due to the high costs involved. However, areas for policy reform to facilitate and regulate trade have been outlined in the Second Medium Term Plan including the adoption of a Trade Policy and the fast tracking of the enactment the Trade Development Bill and the Trade Remedies Bill.

Kenya is a member of several regional blocks including the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA) and Intergovernmental Authority on Development (IGAD). Kenya is a key regional trade and transportation hub, facilitating regional trade through the port of Mombasa (now on 24-hour operation); improving the regional road network including the northern corridor, the Arusha-Namanga-Athi River road that provides a trade route to Tanzania, and the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) network that links Lamu port to South Sudan and Ethiopia; and investing in a railway network linking Mombasa and Kampala. However, continued weak transport

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48 Odero and Reeves, African Economic Outlook: Kenya, 2014
49 Odero and Reeves, African Economic Outlook: Kenya, 2014
50 Republic of Kenya, Second Medium Term Plan, 2013
51 Republic of Kenya, Second Medium Term Plan, 2013
54 Odero and Reeves, African Economic Outlook: Kenya, 2014
infrastructure and logistics systems (including customs, goods clearance and weighbridge processes) hinder Kenya’s economic growth.\(^{55}\)

The Government launched four flagship projects during the First Medium Term Plan namely establishment of Special Economic Zones, creation of producer business groups, creation of wholesale hubs, and developing tier 1 retail markets. However, these projects have achieved little progress in their implementation due to inadequate budgetary allocations, the challenge of acquiring appropriate land, and absence of an enabling legislative framework.\(^{56}\) Planned reforms should reduce some of the regulatory barriers to doing business, while the Special Economic Zones could become knowledge-based parks that will produce innovation, and create jobs and economic growth.\(^{57}\)

Actions taken by the government under the Micro and Small Enterprise Act should present opportunities for the inclusion of small enterprises in the formal economy and promote investment.\(^{58}\) Currently investment in the private sector is hindered by poor infrastructure, corruption, and an unfavorable regulatory environment, but the government is taking initial steps to address these issues. In an effort to stimulate growth the government intends to facilitate research in business development and entrepreneurship, under a new entity called “Biashara Kenya.” This entity will provide funding and leverage investment from local banks with the goal of developing capacity and productivity of local manufacturing for competitively priced quality exports.\(^{59}\)

**Labor and Social Protection**

The broad policy framework for promotion of labor and employment in Kenya is guided by the *Kenya Vision 2030* and its Second Medium Term Plan. The policy framework prioritizes the *National Employment Policy and Strategy for Kenya* and a *National Productivity Policy*. It also identifies development of a *National Youth Employment Policy* and *National Action Plan on Youth Employment*. The labor and employment policies are anchored on five sets of labor laws, namely Employment Act (2007), Labor Relations Act (2007), Labor Institutions Act (2007), Work Injury Benefits Act (2007) and the Occupational Safety and Health Act (2007). The MTP II envisages that the policy documents will facilitate enhancement of productivity and competitiveness within the economy, establish an integrated policy framework for youth employment, and provide a coordinated mechanism for implementation of youth-targeted employment programs in the country. Further, a number of youth-targeted funds have been established in Kenya as part of youth employment policies. The government also put in place a 30% public procurement reservation scheme for the youth, women and persons with disabilities.

**Labor Market Rigidities**

A variety of policy measures have resulted in increased labor market rigidity. Such rigidities also limit the flexibility of employers to exercise managerial discretion. When labor regulations are perceived to be prohibitive and/or costly, it provides incentives for both existing and potential businesses to adopt labor-saving techniques of production, operate outside the formal system or not invest at all, thereby hindering creation of good jobs for youth.

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\(^{56}\) Republic of Kenya, *Second Medium Term Plan*. 2013


Rigidity is manifested in the form of high hiring and firing costs, labor market regulations, and information asymmetry. For example the Employment Act\(^6\) grants a female employee three months of maternity leave. It also accords a male employee a paternity leave of two weeks.\(^6\) Both the cost of maternity and paternity leaves are fully borne by the employer. The provisions present a considerable labor market adjustment cost in Kenya and have been used by some employers to discriminate against youth, especially female employees.

The Employment Act also regulates termination of an employee on account of redundancy. An employee declared redundant is entitled to a termination notice of at least one month and a severance pay of at least 15 days’ pay per completed year of service. These payments are further disincentives for employers to hire, and to restructure business practices to become more regionally and globally competitive. The Employment Act\(^6\) also limits employment of workers on casual contracts of service to a period less than an aggregate of one month or to work, which cannot be expected to be completed within a period of three months. However, casual contracts of service and other flexible forms of employment such as temporary contracts are increasingly utilized. In 2013, for example, employees on casual contracts of service constituted 11.2% of wage employees, up from 10.2% in 2012.

Kenya’s wage and labor policy has led to a considerable divergence between the market and the actual value of labor, leading to an uncompetitive labor market situation.\(^6\) Data on Kenya’s labor market competitiveness shows that the ratio of average minimum wage to average value added per employee increased from 0.74 in 2010 to 0.89 in 2013. In other words, 89% of Kenya’s value added goes towards payment of wages. In neighboring countries, this metric is considerably lower and has also declined or remained the same over the same period. Despite modest growth and declining labor productivity from 2010-13, minimum wages were increased each year.\(^6\)

Despite modest growth and declining labor productivity from 2010-13, minimum wages were increased each year.\(^6\)

**Education Policy**

The potential of TVET to promote quality and relevant skills training has been constrained by a number of issues. Key among the challenges is that the public TVET curriculum and structure are supply-driven with little synch with industry needs. Though TVET institutions are not restricted from developing and offering short-term courses tailor-made to the unique socio-economic circumstances of the communities in which they operate, not many of the institutions have fully exploited this opportunity. Further, equipment in most of the TVET institutions is outdated and inadequate. There is a shortage of qualified TVET instructors and no standardized program for training TVET instructors.

The government has availed loans for TVET students through the Higher Loans Education Board. However, limited access to the loans by the youth and the high cost of training remain a barrier to access TVET training. The increase in enrollment following the introduction of Subsidized Youth Polytechnic Tuition (SYPT) and the findings of an experiment with TVET training vouchers in Western Kenya, for example, suggests the need for strategies to ensure that TVET is more affordable.

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\(^6\) Section 29(1)  
\(^6\) Section 29(8)  
\(^6\) Section 37(1)  
\(^6\) USAID, Kenya Inclusive Growth Diagnostic, 2013.  
Mechanisms to address the identified gaps would include interventions to improve access to and increase the relevance and quality of TVET. This would include revising the TVET system to flexibly respond to labor market requirements, including through provision of work experience, supporting operations of the Curriculum Development Accreditation and Certification Council (CDACC), including the rolling out of the National Vocational Certificate in Education and Training Curriculum (NVCET) in all Youth Polytechnics.

**Structural Factors**

A major challenge to improving labor and employment opportunities in Kenya is weak policy implementation and the absence of a framework for policy coordination. Though the youth-targeted funds and public procurement reservation schemes exist, youth access is limited due to a variety of challenges and they have not had a meaningful effect in promoting youth employment in Kenya. Further, while the labor laws protect fundamental workers’ rights, they lack specific provisions that would also provide mechanisms to help the labor market clear and/or enhance labor market flexibility.

Effective coordination and linkages between industry and academia is critical for development of appropriate skills and resultant employability of the labor force. Limited linkages and collaboration exist between education and training institutions, and industry. This is reflected in the development and implementation of education and training curricula, which is mostly done without effective consultation and collaboration with relevant stakeholders. Kenyan tertiary institutions have, for example, continued to develop training programmes, which are supply driven rather than demand driven. The NMDC is designed to provide a platform for interaction between training providers and industry, but has remained ineffective. The composition of the NMDC may also inhibit effective representation of the private sector, government and academia.

The NMDC should be strengthened to provide policy dialogue platform between industry and academia, undertake periodic skill gap analysis and systematic monitoring and evaluation, and coordination to ensure that outputs of the education and training system corresponds to national, regional and global labor market demands. Education and training institutions should be encouraged to establish partnerships with industry for developing and executing training programs, and to undertake tracer studies to gauge the skill utilization levels and appropriateness of their programs.

A gap also exists between the level of technology used by industry and that used by education and training providers. While industry has progressed towards modern technology, the education and training institutions have not kept pace. This poses a challenge in regard to the practical applications of the skills acquired by the graduates and their resultant employment. The education and training institutions also rarely conduct tracer studies to gauge the labor market absorption rate of their graduates and the extent to which the skills acquired by the graduates are utilized by the labor market.

### HEALTH AND YOUTH PRODUCTIVITY

This section examines the critical health related concerns affecting the Kenyan youth and their quest for economic empowerment. Key dimensions of health concerns for youth include sexual and reproductive health, substance abuse, mental health, and disability.

**Sexual and Reproductive Health**

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66 Section 8(1) of the Labor Institutions Act (2007).
Sexually transmitted infections (STIs), the most destructive of which is of course HIV, remain a serious problem for youth in Kenya despite what appears to be generally a declining trend in prevalence among youth relative to older generations. Young women are disproportionately affected, as can be clearly seen in the graph below.

Figure 23: HIV Prevalence among Youth, Male and Female

![HIV Prevalence among Youth, Male and Female](source)

Source: Kenya AIDS Indicator Survey 2012

Though perhaps counterintuitive, HIV prevalence is higher among youth with higher levels of education (see figure below). This trend has been attributed to a variety of factors including employment in the formal sector, increased migration, improved transport infrastructure and urban residence associated with higher levels of HIV infection. Additionally, increased sexual behavior correlates with higher education levels because individuals change partners more rapidly and have more control of who their partners are. Men have more disposable income and women, although they begin having sex later than men (see below), are delaying marriage which can result in riskier behaviors.

Figure 24: HIV Prevalence by Education Level

![HIV Prevalence by Education Level](source)

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Nearly all women and men engage in sex at least once before age 25, with 95% and 93.4, respectively, reporting having had sex at least once by age 24. 11.6% of girls report having sex at least once by age 15, and 20.2% of boys report the same.

Source: Kenya AIDS Indicator Survey 2012

The 12-14 age range is a critical period (see figure above) for the onset of sexual activity. Other risky behaviors of alcohol, drugs and sex without condoms also begin to rise at this time, which also coincides with the first wave of youth dropping out of the school system. Of youth ages 12-14 who have had sex, 72.1% of have done so without a condom, and 70.5% never use a condom. About 5% of women and men ages 10-14 have taken alcohol and 1.5% have taken drugs; the trend has been declining since 2007.

**Mental Health**

Though data is limited, there is reason to believe that significant numbers of youth in Kenya may still be coping with mental health challenges as a result of exposure to post-election violence. A CDC-funded survey was conducted six months after the 2007 post-election violence among adolescent youth ages 6-18 within a slum area of Nairobi. Following a survey and follow up diagnostic interviews by Kenyan psychologists, confirmed prevalence of post-traumatic stress disorder (PTSD) among this group was 12%. Though this area had experienced high levels of violence, it was far from unique.

Recent research shows that the adolescent brain is particularly sensitive to violence, marginalization, and isolation, and that traumatic experiences as an adolescent, if untreated, can lead to debilitating struggles with depression and anxiety that last for years.

While more evidence is needed in order to draw firm conclusions, there has been little systematic examination of the issue. Mental health services are limited and mental health problems are generally
highly stigmatized, creating barriers to public awareness.68 Recommended measures include further research, awareness raising, and support to community based provision of counseling services. Mentoring programs could also play a mitigating role.

Disability
Youth with disabilities generally face discrimination and exclusion across social, economic and political spheres. The Kenya National Survey for Persons with Disabilities (KNSPWD) conducted in 2008 put the national disability rate at 9.7% while the KDHS of 2007 put it at 12.5%. According to the KNSPWD, 3.8% of youth ages 15-34 were living with some form of disability. While disability increases with age, there is no marked statistical difference between the rural-urban and male-female divides.

To understand how disability affects youth in marginalized areas, the assessment team met with ANDY-Kibera, which was founded 2005 as a network of all youth organizations with disabilities in Kibera to provide a platform for policy advocacy, dialogue and development. ANDY-Kibera works with disabled youth from less than 35 years old.

Some of the key challenges faced in this community include:

- General stigma and ignorance about disabilities often lead to isolation of disabled youth, who are seen as a “curse.”
- Lack of physical accessibility at schools and workplaces, and no special schools for the disabled.
- Bullying and violence by other children at schools, often causing early drop-outs.

Coping mechanisms for youth with disability have included formation of small groups for peer support and self-help activities. Lobby and advocacy groups such as ANDY-Kibera advocate for their interests at various policy levels and with community stakeholders such as minibus drivers, school administrators, and local employers.

Despite the challenges, some disabled youth (particularly the physically disabled) are able to find employment. Opportunities include microenterprise activities such as hawking, serving as a mobile money agent, or making items such as shoes, beads, and dresses. Local government offices and hospitals where basic support skills are needed also offer some opportunities. However, many more cannot find gainful employment, particularly those who are more severely affected.

Priority areas for support, according to this organization, include skills training, work placement and internship programs, career information, and stronger networking and collaboration at all levels on behalf of youth with disabilities.

YOUTH AND CULTURE
This section seeks to identify critical social and cultural factors that contribute to the placement of youths in the current disempowered position in the society. Analysis is primarily drawn from conversations and focus groups with young people and other informants.

VICIOUS CYCLE DYNAMICS
Drawing from findings presented previously, and from conversations with youth in Kenya, below is a figure conceptualizing a vicious cycle (or negative feedback loop, in the language of systems theory) of youth disempowerment. Key external drivers are exclusion from education, lack of economic opportunity (could also be lack of awareness of opportunity), and trauma (conflict, abuse, etc.) Drivers such as these can set in motion a series of complex interactions that reinforce one another, with an end result of unemployment and disempowerment. As the model suggests, many complaints that are often voiced by adults about Kenyan youth (idleness, short-term thinking, etc.) may in fact be symptomatic of deeper problems. It should also be noted that each of these three drivers of disempowerment disproportionately affects female youth.

Figure 26: Vicious Cycle for Kenyan Youth

KEY SOCIAL AND CULTURAL FACTORS
Kenyan society highly values salaried, formal employment, but such jobs are rare and generally reserved for tertiary graduates. More so among youth than older generations, attitudes appear to be changing rapidly in favor of some job opportunities that in the past may have been considered of lower status, such as in entertainment and the arts, and role models are emerging in this and other industries who embody a new definition of career success.

The conventional wisdom is that youth are not interested in “blue collar” jobs, but interviews with marginalized youth who have recently entered the job market revealed a more nuanced picture. Most such youth are entering the labor market through informal sector apprenticeships, albeit in a generally ad hoc manner. Despite their lack of access to market information, youth are making plans for the future that in many cases are realistic and attainable, predicated on the ability to save and invest in business assets or skills training.
Certain subsets of youth appear to have succumbed to “perpetual sponsorship beneficiary syndrome,” viewing themselves as a disadvantaged group in need of handouts in order to succeed. For example, some focus group participants genuinely appeared to believe that receiving a grant to start a business was the only way they could be economically productive. It appears that a greater focus among donor programs on building knowledge and awareness and facilitating market systems, as opposed to grants and direct subsidies to youth, would yield better results and mitigate this dynamic.

Youth and other informants also describe an entrenched culture and system of corruption, which is of course not favorable to youth empowerment. Young micro-entrepreneurs (or aspiring entrepreneurs) in different fields provided specific examples of business opportunities that are being circumscribed by excessive paperwork, unnecessary fees, and anti-competitive policies or practices at national and/or local levels. Perceptions are that the government’s funds for youth and women are not always distributed fairly and transparently. In addition, youth access to the 30% public procurement preference is perceived to be negatively affected by the expectation of kickbacks.

Gender and Youth Marginalization

Factors that particularly affect women include early pregnancy, traditional gender-based segregation of work opportunities, and expectations of sexual favors when seeking to enter employment or advance in one’s career. In some interviews, young women expressed that they do not necessarily feel the need to be too enterprising in look for work because they will get married anyway or will opt for work that would not be threatening to a potential spouse. In other cases, the risk of sexual violence limits young women’s horizons in terms of work opportunities.
ALIGNING SUPPLY AND DEMAND FOR SKILLS
ALIGNING SUPPLY AND DEMAND FOR SKILLS

Based on the constraints identified for specific cohorts of youth, an overall framework is proposed below for elements of youth programming that would help align supply with demand and is based on evidence and best practices. The framework is illustrative and informs the Recommendations section below.

While the framework has implications for national educational reform, the main focus of this analysis is on complementary interventions that can support more effective educational and career pathways for youth, whether in or outside the formal education system.

Figure 27: Framework for Aligning Skills Supply and Demand (by Educational Level and Skill Category)

<table>
<thead>
<tr>
<th>Youth Labor Supply</th>
<th>Primary School Dropouts 4.3 M</th>
<th>Secondary School Dropouts 3.3 M</th>
<th>Secondary Graduates 3.5 M</th>
<th>Tertiary Graduates 1.2 M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation and Information</td>
<td>Mentoring</td>
<td>Career Guidance</td>
<td>Media</td>
<td></td>
</tr>
<tr>
<td>Literacy &amp; Numeracy Proficiency</td>
<td>Basic Education</td>
<td>Functional literacy and numeracy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Skills</td>
<td>Interpersonal Skills</td>
<td>Intrapersonal Skills</td>
<td>Understanding Workplace Culture and Norms</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>Financial Literacy/Bookkeeping Value Chain Dynamics</td>
<td>Access to Finance Sales</td>
<td>Quality Control Marketing “Mini-MBA”</td>
<td></td>
</tr>
<tr>
<td>Technical Skills</td>
<td>Basic/Advanced Short Courses</td>
<td>Apprenticeships</td>
<td>Internships</td>
<td></td>
</tr>
<tr>
<td>Workplace Skills</td>
<td>New Employee Training Career Pathways</td>
<td>Mentoring Informal Learning</td>
<td>On-the-job Training</td>
<td></td>
</tr>
<tr>
<td>Youth Labor Demand</td>
<td>Modern Formal Informal Farming</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Youth Labor Supply row at top repeats the results of the “stocks and flows” analysis, showing the youth workforce grouped by educational attainment. Down the first column at left is a typology of outcomes that would help youth overcome current skills constraints and achieve employment closer to their potential (i.e. better able to better meet the requirements of employers or of self-employment). At bottom, youth labor demand is represented roughly in proportion to actual patterns of labor market allocation by education level. For more precise figures see Figure 28 below.

Each of these interventions responds to identified constraints in Kenya, providing benefits to both the labor supply (youth) and labor demand (employers).

In almost every case, the outcomes are relevant for each of the four cohorts of youth. The one exception is literacy and numeracy, which is lacking only among those with less than a secondary education. Specific
programs would of course need to be tailored carefully to more specifically defined beneficiary groups, as outlined in detail in the Recommendations.

Moreover, there is empirical evidence (from Kenya or globally, with varying levels of rigor) supporting the efficacy of these approaches. In addition, they are consistent with general lessons learned about workforce development programming (see Annex 6). Below we present the key constraints identified to each outcome and evidence-based examples of the types of interventions that have proven effective in Kenya or elsewhere, are provided below.

MOTIVATION AND INFORMATION
Young people generally report that they are not getting useful career guidance and lack accurate information on economic trends. The problem is particularly acute for marginalized young people who have weaker social networks and are isolated from available institutional services. Factors such as demographic trends and technological change have put pressure on traditional informal systems for mentoring and guiding youth. Formal mentorship programs exist, but not at scale. The public education

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69 These estimates were derived by allocating 5% of the available youth population (those not already enrolled in an educational institution) to “inactive” and 29% to “smallholder farming”, consistent with the population census of 2009. The “formal sector” requirements were derived from the 1,728,090 workers employed in the formal sector, according to the National Manpower Survey Report, and updated to 2013 by the National Bureau of Statistics, then multiplied by the share of youth in the working age population, which is 63%. Those youth in each level of educational attainment who were not allocated to one of the other three categories were assumed to need to find work in the informal sector.

70 For evaluations cited in this section, it should be noted that different levels of statistical rigor are used to estimate returns. While all the evaluations cited below use a control group, many do not control for the likelihood of participating in a program, which can result in selection bias.

71 Lack of information was also a key finding of Adam Smith International’s publication for DFID, “Youth Employment in Mombasa County – Action Research,” September 2013.
system, as a general rule, does little to prepare young people for the world of work. This is particularly true for public primary and secondary schools, despite the large numbers of young people entering the labor force from these levels (and in many cases, having dropped out of the system will less than a secondary or even primary degree). Despite some promising trends in TVET education policy and at some public universities, much more needs to be done to strengthen these systems. Improved career guidance and mentoring would have an impact on youth motivation, a key driver for skill formation.

Mentoring and career guidance are highly adaptable interventions that can be successfully and cost-effectively incorporated into almost any workforce development intervention. An overarching challenge in Kenya is the lack of a national LMIS system to provide reliable data on wages for different occupations and skill levels. The most recent national level wage data is from 2005-06. At a local level, however, programs can still gather wage information and identify areas of opportunity through local surveys (collected using youth-led models, for example) or dialogue with employers.

证据有效性的证据

The Hewlett Packard Learning Initiative for Entrepreneurs (HP LIFE) was designed for youth ages 15-30+ and included general training on entrepreneurship, ICT training, and business plan development, complemented by mentoring. The program took place in Kenya as well as China, India, Nigeria, and South Africa. The evaluation pointed to results including improvements in income from entrepreneurship or employment, which were correlated with the mentoring and encouragement received by participants, and business improvements. 72

PROFICIENCY IN LITERACY AND NUMERACY

In the 21st Century economy, these basic cognitive skills are prerequisites for opportunities to find meaningful employment and advance in a career at almost any level, whether in the formal or informal sector, including smallholder agriculture. However, employers in Kenya report that even many youth with some secondary education may not have achieved literacy levels at a functional level in the workplace. This is a major reason to make prevention of school dropouts a key policy priority. In addition, out of school youth and older youth may require remedial education in order to optimize their potential for productive employment.

证据有效性的证据

The World Bank, with support from the Norwegian government, commissioned a study in to evaluate the impact of skills and literacy training on livelihoods, with special analysis in Kenya as well as Guinea, Senegal and Uganda. The study found that offering literacy courses to farmers, in addition to livelihoods training, resulted in improved course attendance (in Kenya), an improved negotiating ability (all countries), and higher productivity (Senegal). 73

SOFT SKILLS AND ENTREPRENEURSHIP SKILLS

As highlighted in our labor supply analysis, there is ample evidence that public education system in Kenya is failing to develop soft skills adequately, at every level. Among the critical soft skills demanded for formal as well as informal sector employment are interpersonal skills (e.g. communications, teamwork, honesty) and intrapersonal skills (e.g. self-regulation, creativity, problem solving).

72 As discussed in Olenik, C and Fawcett, C. State of the Field Report: Examining the Evidence in Youth Workforce Development. USAID. 2013.
In addition, entrepreneurial skills are essential, or at least highly useful, for the vast majority of youth entering the informal sector (i.e. most youth). Because of the small size of informal sector enterprises, participants typically stand to benefit from entrepreneurial skills including market analysis, marketing, negotiation, and practical math (financial literacy and recordkeeping for example), particularly for opportunities in growing sectors like rural trade and retail. In addition, entry level opportunities are growing in flexible occupations such as microfranchising, agent arrangements with mobile operators etc., which require an entrepreneurial skill set.

Over the long term, these needs can best be addressed through education policy reform. In the meantime, workforce development programs should consider providing or linking to services that develop these skills for various groups of youth.

**Evidence of Effectiveness**

The Kenya Youth Empowerment Program, known as Ninaweza, was a 24-month youth employability program targeting young women living in the informal settlements around Nairobi launched in January 2011. The purpose of the program was to improve the employability and earning capacity of young women living in the informal settlements of Nairobi. The Ninaweza program provides young women with technical training in Information Communication Technology (ICT), training in life skills, work experience through internships, and job placement. A rigorous evaluation found that groups who received ICT and life skills training, and another group receiving only ICT training, had better success both in finding a job and in earnings as compared to the control group. The group receiving both life skills and ICT training outperformed the group receiving only ICT.  

**TECHNICAL SKILLS**

Vocational and technical training is most effective when directly linked to growing or promising sectors such as those shortlisted in this report, which will generate increased demand for particular technical skills, and when linked to credible skills certification mechanisms (whether formal or informal). In addition, ICT represents a cross-cutting technical skill area that has potential to upgrade productivity in almost any sector, formal or informal.

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**A Workplace Learning Model for Kenya: Phillips Healthcare Services**

The Managing Director of Phillips Healthcare Services, Limited, a Kenyan company with links to Johnson & Johnson, noticed that nearly all of the company’s new hires already had a decade or more of work experience. He decided to create an on-the-job training program that provides bright young candidates with a thorough overview of the industry and the company’s key functions. Originally the program was conceived as a CSR initiative, but managers believe the return on investment (ROI) is actually positive, as trainees’ improved productivity outweighs cost of training. Roughly 20% of the graduates are still with Phillips after two years, and are considered to be among the most capable and committed employees.

The program is subject to extensive poaching, but since it was never intended that participants would all stay with Phillips, this is seen as a success rather than as a failure. Although the name is not used internally, competitors and companies in related fields have dubbed it the “Phillips Academy” due to participants’ reputation for quality.

Phillips participates in the Bridge to Employment Program, funded by Johnson & Johnson and managed by FHI 360 in partnership with Kenya Education Fund, which provides mentorship and other services to secondary students to prepare them for future careers in health care.

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Vocational and technical training programs should always be designed in close consultation with employers, and grounded in sector analysis. Demand-driven training models in Kenya (i.e. fee-for-service and private training) typically offer short courses that can be taken part-time concurrent with work obligations, reflecting the needs and preferences of youth. Applied learning methodologies are best; typically internships or apprenticeships are cost-effective delivery models. Scholarships/voucher programs for vocational and technical training, combined with information on returns to various technical skills, have also proven effective in Kenya and globally. An additional, substantial benefit to voucher programs is their potential to develop and strengthen local markets for education and training, including private and informal providers as well as the public education system.

**Evidence Base**

An impact evaluation in Ghana found that participation in any type of apprenticeship program (formal or non-formal) led to increased success in finding a job and increased earnings (up to 50% for those with no formal education).^{75}

Highly rigorous evaluations of vocational training and job placement programs such as Jóvenes en Acción in Colombia, Juventud y Empleo in the Dominican Republic and Panama’s Procajoven, which are targeted to young people from low income households, have shown that positive impacts on labor insertion conditions.\(^{76}\) These programs typically provide classroom and on-the-job training, while private training centers, selected competitively, are in charge of fundamental aspects of the program operation. Letters of intent from firms are introduced in an attempt to make training demand-driven.\(^{77}\)

**EMPLOYER TRAINING AND WORKPLACE LEARNING**

Missing or ineffective employer workplace learning strategies are an often overlooked factor contributing to perceived skills gaps. Workplace learning is a critical driver of formation of both technical and soft skills. Formal on-the-job training is one component, but informal learning is usually more important. Workplace learning is often particularly weak among MSEs, which are focused on short-term survival. In general, informants suggest that most Kenyan employers tend not to view employees as assets to be cultivated. On the other hand, companies that invest in their workforce, whether informally or formally, and provide pathways for upward mobility often report high returns in terms of morale, productivity and retention. Examples identified during the assessment include Phillips Pharmaceuticals, the Spin Knit Apparel Factory in Nakuru, and the Java House coffee chain, each of which places a strategic emphasis on workplace learning and career development for employees. While not all employer programs need to be as extensive as the Phillips Academy (see box), it’s clear that in addition to educational institutions, private employers need to – and can – take on some responsibility for preparing graduates for sustainable employment.

**Evidence Base**


\(^{76}\) These evaluations have the most sophisticated methods of propensity scoring, as well as positive results in various meta-evaluations conducted by the World Bank. Panel data has traced participants in Peru, for 10 years, with positive results.

\(^{77}\) González-Velosa, C; Ripani, L and Rosas-Shady, D. *How Can Job Opportunities for Young People in Latin America be Improved?*. IDB. 2012.
Research from North America has shown that 70-90% of workplace learning occurs informally, rather than through formal training.\textsuperscript{78}

The overarching rationale for the set of approaches outlines above is to counteract the “vicious cycle” of youth disempowerment presented earlier, by catalyzing a virtuous circle, or positive feedback loop, leading to improved motivation, knowledge, and other assets that can lead to empowerment and productive employment.

Figure 29: Virtuous Circle for Kenyan Youth

RECOMMENDATIONS

NATIONAL LEVEL

A national level youth workforce program could focus on addressing identified constraints in the areas of coordination, policy implementation, and labor market information. Key recommended elements are summarized below.

STRENGTHENING WORKFORCE DEVELOPMENT SYSTEMS TO ALIGN DEMAND AND SUPPLY

Findings suggest a range of opportunities to work with workforce development stakeholders including the private sector, both formal and informal (particularly in shortlisted sectors), government, education and training providers, and youth organizations to develop collaborative strategies and goals around human capital development.

Given USAID’s existing investments and comparative strengths in private sector engagement, we recommend these be sectorally focused and situated within or closely related to value chain or cluster development approaches. While specific actors and interventions may vary, such interventions would focus on key areas including 1) labor market information flows among all stakeholders, including career guidance for youth, 2) skills training, with a focus on access and quality (including private and industry-led education and training models), 3) skills certification (i.e. through NITA) or other informal mechanisms for employers to recognize skills acquisition.

Strengthening these functions yields benefits on the supply side (more and better employment opportunities) and on the demand side (better selection and productivity, reduced investment in new employee training). From an implementation perspective, intervening at the sector level makes it easier to mobilize key stakeholders and identify common objectives, which may be industry-specific.

USAID Kenya has made extensive investments in value chain upgrading in two shortlisted sectors: horticulture and dairy. We recommend that USAID Kenya consider both approaches moving forward. For the purposes of employment generation, other shortlisted sectors – particularly those that are more urban-based and dependent on branding and differentiation – might better lend themselves to a cluster development approach. This approach, which focuses more on strengthening horizontal linkages and typically is characterized by geographic concentration of industry, is sometimes preferable depending on geography and the domestic and international structure of an industry. In cluster development, tighter coordination and private sector leadership are crucial.

In Kenya’s case, the metals & machinery, health care services, ICT, clean tech and possibly entertainment sectors are all potential candidates for clustering, as well as the tanning and leather products segment of the leather value chain. Successful cluster approaches – as seen in the examples of Brazilian footwear

79 All of these sectors are more prevalent in urban areas, which means that stakeholders are more concentrated geographically, and can take more advantage of face-to-face interactions to promote exchanges of tacit knowledge – which is a key element of competitive advantage. Even the rural components of some sectors, such as metals and health care, can also be addressed using a cluster approach. Developing rural clusters is less well known but also valid, particularly where a handful of larger towns can be selected initially to develop best practices which can later be replicated more widely.
(SinOs Valley and Cariri), Mexican light manufacturing (Chihuahua, Campeche), Turkish apparel,\(^{80}\) and
ers others, generate increased overall employment. Generally new employment is created in the formal
sector, while informal sector jobs are lost. Gains typically outweigh job losses by two to one or more, with
the benefits flowing mainly to wage workers who were previously in the informal sector and
entrepreneurs who become new entrants. In a small handful of cases (such as the manufacture of textiles,
which is very capital-intensive) overall employment falls.

\[\text{LABOR MARKET INFORMATION FLOWS}\]

Information asymmetry emerged as a key barrier among workforce stakeholders and market actors, with
particularly acute effects for marginalized youth. This is a critical market failure that needs to be addressed
at all levels. The new LMIS under development by the government holds promise for improving
information flows over the medium to long term, but past experience suggests that simply having better
information is a necessary, but not sufficient, element. Mechanisms to make use of the information and
to continuously improve the quality of the information are key to reaping the benefits of a high-quality,
efficient LMIS. For example, many of the exercises undertaken during this assessment in order to better
understand demand for skills are based on widely disseminated methodologies (value chain analysis,
discussion groups, structured interviews) that could be customized and applied at the local level, in
partnership with NGOs, government stakeholders, and interested employers and educational institutions.
As demonstrated by the assessment team’s own methodology, full participation of youth in such analysis
is invaluable. The development of a better LMIS is not just about a technological platform or about
government agencies collecting data – it could and should include youth participation in information
gathering, analysis, and follow-up.

Interim measures could include working with industries to develop outreach strategies that inform youth
and educational institutions about trends, entry points and required qualifications, and career pathways.\(^{81}\)
Complementary technical assistance to education and training providers could assist them to better tailor
offerings to place youth in growing occupations.

\[\text{COORDINATION}\]

Key informants reported that coordination at all levels remains a significant obstacle to collaborative
action on workforce development in Kenya. Potential remedies include facilitating interaction among
Ministries and between government and the private sector on key cross-cutting policy priorities (such as
TVET for example). While the Stakeholder Mapping presented in this report represents a preliminary
effort to map relationships among stakeholders, social network analysis would better illuminate gaps and
opportunities and could also provide a means of measuring results of future system-level interventions.

\[\text{POLICY IMPLEMENTATION}\]

Among the many policy areas covered in this assessment, one immediate opportunity for USAID Kenya is
to support and strengthen implementation of the new TVET policy. As described above, key constraints
for public TVET providers are weaknesses in terms of market relevance, quality, and results-focused
approaches to certification. Technical assistance and facilitation of interaction with industry could assist
the Ministry of Education, Science and Technology and other line industries responsible for sector-based

\(^{80}\) In the case of Turkey, even though jobs per square meter of fabric produced fell rapidly when the sector modernized, the
overall number of jobs in textiles has increased due to the high sustained growth in demand for Turkish fabric from both
domestic and international apparel producers.

\(^{81}\) See for example the “Careers in Dairy” brochure by Dairy Australia
NCDEA/NCDEA_CareersInDairy_www1.pdf
TVET (Ministries of Health, Agriculture and Forestry, Industry and Commercialization, etc.) to improve relevance and quality of the TVET system, and achieve greater synergies between public and private training provision. Tracing of labor force outcomes among graduates, accreditation and certification are key areas for improvement. Partnerships between TVET institutions and local industries are another area that can be strengthened, particularly for Youth Polytechnics and other institutions now coming under the authority of counties.

As described above there is a vibrant private training system, including the informal *jua kali* apprenticeship model. TVET policy reform and other support to the sector, including subsidies, should encompass the private TVET system to the extent possible and promote quality standards, access, choice, and competition in the overall education and training market.

**EVALUATION, RESEARCH, AND ASSESSMENT**

As a cross-cutting recommendation, a range of topics are recommended for further evaluation, research or assessment. These include:

- Participant tracking and tracer studies to complement future youth workforce implementation efforts. Key issues for research the differences between rural and urban labor markets and how these affect returns to education and workforce development programs.

- Research on mental health of youth (including prevalence of trauma); services available that could be made available to affected youth through support or linkages.

- Assessment of private sector involvement in the design and management of proposed abattoirs for the leather and hides industry.

- Analysis and assessment of the potential for devolution and/or medical tourism and to positively impact healthcare budgets.

**REGIONAL LEVEL**

In addition, we recommend USAID Kenya continue its efforts to support various youth cohorts, with a primary emphasis on marginalized and at-risk youth, taking a regional approach that supports local initiatives, particularly in the context of devolution. The table below further disaggregates youth into more specific beneficiary groups for purposes of programing. Groups include 1) in-school youth (primary and secondary), 2) out of school youth (school-age), 3) older youth (with less than secondary education) and secondary graduates, 4) university students and recent graduates, and 5) employees.

For each group, we present a recommended approach as well as specific recommendations for USAID illustrating potential implications for existing or planned investments.
**Table 11: Recommended Programming Approaches by Beneficiary Group**

<table>
<thead>
<tr>
<th>Approach</th>
<th>Specific recommendations for USAID</th>
<th>Anticipated Outcomes</th>
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</thead>
<tbody>
<tr>
<td><strong>In-school youth (primary and secondary)</strong></td>
<td>In the short-term, add or link school-based programming to youth, agricultural value chain, health services, and energy programs. Facilitate greater interaction between sector experts and stakeholders and local schools. Facilitate interaction among students of different education levels (primary, secondary, TVET, university). Long term, develop and test a holistic school-based youth workforce model with specific partner schools through future education programs; coordinate approach with MOEST and county governments. Improve coordination among education and health programs.</td>
<td>Youth with more realistic expectations and career information, through strengthened social networks and exposure to role models. Awareness increased among youth and communities of value-add opportunities in agriculture and other rural activities Schools providing more relevant knowledge and skills for local work opportunities</td>
</tr>
<tr>
<td>Mentoring programs are recommended. Mentors can be parents, students at higher education levels, business leaders whether in the formal or informal sectors, or other community leaders who share their experience and expertise with students. Career guidance can be provided through mentors or more formal structures, but should encompass information on accessible education and training options and local labor market information. To prevent vicious cycle dynamics, Counseling services should be provided to students at risk of dropping out, and their parents (through mentors or formal models). Applied learning can be strengthened through a variety of models, including school-based enterprises (e.g. greenhouses, agro-forestry), serious games or competitive simulations based on local economic conditions, good practice youth agricultural education models such as Junior Farmer Field Schools, community service, and linkages to apprenticeships and internships with local employers for graduates. In each case, strong parent and community participation is key to effectiveness and sustainability. Health education should be strengthened with a particular emphasis on SRH, mental health, substance abuse prevention, and disability, recognizing gender differences. This must be well established before the critical window of ages 12-14 when dropouts and risky behaviors increase.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Out of school youth (school-age)</strong></td>
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The massive scale of the dropout problem – which appears largely to be driven by affordability and value for money of secondary education as well as a dearth of cost effective alternatives – demands scaling up of needs-based scholarship/subsidy programs for post-Standard 8 education and training.

Such a program should strengthen the local training system by including targeted subsidies for public or private secondary education, or public or private TVET, or literacy and numeracy training. Youth should be given the broadest array of options possible, including training through the informal *jua kali* sector so long as providers comply with quality and workplace safety standards.

Key consumer education information for the youth would include local education and training options as well as local skills certification opportunities (identified in partnership with local employers or business associations, whether formal or informal) and returns to different skills. Traditional gender segregation norms should be addressed through the information component.

Literacy and numeracy proficiency should be a key outcome measure for all participants.

A mentorship component should be included and is typically embedded in *jua kali* training for example.

Gender balance and accessibility for youth with disabilities should be ensured.

As a condition of scholarships, youth may also be expected to engage in community service projects or mentor younger youth for example.

<table>
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<tr>
<th>Approach</th>
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<tbody>
<tr>
<td></td>
<td>Younger youth bulge members could benefit; older members could participate in collecting and disseminating local labor market information through participatory models, and serve as or recruit mentors for participants.</td>
<td>Educational attainment improved for marginalized youth (drop-outs prevented)</td>
</tr>
<tr>
<td></td>
<td>In the short-term, some components (mentorship and career guidance) could be added to existing secondary level scholarship programs such as for OVC youth.</td>
<td>Literacy and numeracy proficiency achieved</td>
</tr>
<tr>
<td></td>
<td>Coordinate with TVVP TVET voucher program (Busia, Western Kenya) on geography and learning.</td>
<td>Local TVET training and education system/market strengthened (quality, outreach)</td>
</tr>
</tbody>
</table>

Youth understanding of industry and returns to education improved

Gender segregation by occupation reduced
Approach

A lottery system for selection among qualified youth is recommended, in order to promote and model fairness.

Rigorous controls and ethical, sophisticated management must be in place to prevent fraud, with any training subsidy scheme.

Older youth (less than secondary education) and secondary graduates

Productivity of older youth, most of whom will be employed in the informal sector, can be enhanced through a combination/mix of soft skills and entrepreneurship training and apprenticeships. ICT should be mainstreamed into training as a cross-cutting 21st century skill, as well as remedial literacy and numeracy as needed. Mentoring and career guidance, including labor market information, should also be incorporated.

Urban areas likely offer greater opportunities to implement apprenticeships at scale. The KYEP program implemented by KEPSA is already implementing such a model on a relatively large scale. However, it has been limited geographically to a few major cities to date. It is also unclear what the depth of outreach has been within the informal sector.

Approaches aiming to strengthen informal sector apprenticeships should consider how the program can add value to the enterprise (beyond offering a short-term subsidy as compensation). This could include business advisory services for participating enterprises, or an orientation to employers on how skills youth apprentices gain through the soft skills/entrepreneurship training (such as basic

Specific recommendations for USAID

Close coordination or partnership with KEPSA, given their existing experience and scale of implementation with this beneficiary group, in order to synergize learning and avoid potential duplication in terms of geography.

In addition, for deeper outreach into the jua kali sector—particularly important for more marginalized youth—close coordination or partnership with KENASVIT, the national association of informal sector traders, and/or other sector-based or local informal sector associations, would also be recommended. Such associations could have a role in training, quality standards, or skills certification.

Anticipated Outcomes

Literacy and numeracy proficiency

Acquisition and application of soft, entrepreneurial, and technical skills.

Knowledge of career options

Job placement

Enterprise productivity
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<tr>
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</tr>
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<tbody>
<tr>
<td>bookkeeping or ICT skills, for example) could benefit firm-level productivity.</td>
<td>Future USAID higher education partnership programs should seek to mainstream career services and guidance interventions, with a goal of strengthening overall university systems in addition to those within particular departments. Returning Young African Leadership Initiative (YALI) Fellows could play a role as advisors to universities or students/incubees.</td>
<td>Quality of university career services enhanced. University tracking of labor market outcomes improved.</td>
</tr>
<tr>
<td>Literacy and numeracy proficiency should be a key outcome measure for all participants with less than a secondary degree.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In rural areas, a greater emphasis on training and networking, rather than apprenticeship, may be needed in order to prepare youth for the variety of rural trading and retail opportunities that may be available to them. Training should be offered in partnership with local training providers or TVET institutions willing to offer short, flexible, custom courses.</td>
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</table>

**University students and recent graduates**

Technical assistance to public universities is recommended in order to enhance career guidance and career services.

Workforce programs should strengthen interaction between university students and potential employers in fields of study, whether through events, field visits, or practicums/internships.

Programs should also seek to mainstream mentoring into student-faculty interaction and internships.

Programs should recognize and study innovations at private universities such as Strathmore, USIU, and Daystar, local education industry leaders in aligning education offerings with labor market demand and emphasizing career development as a core aspect of tertiary education. These should be viewed as resources and potential models to be adapted to the
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</tr>
</thead>
<tbody>
<tr>
<td>needs of public institutions aiming to reform services and offerings along similar lines. Programs should link to emerging business incubators such as those at Kenyatta University and USIU.</td>
<td>Existing or future programs working closely with national, sector-based or local business associations should work with them to prioritize human capital development and broaden awareness of good practices in talent development within the workplace in Kenya.</td>
<td>Workplace training programs created or strengthened Employer perceptions of importance of workplace learning enhanced.</td>
</tr>
</tbody>
</table>

**Employees**

Broaden awareness among employers, especially in the informal sector, of the importance of workplace learning. Mainstream mentoring into employee training programs, provide information on career pathways within the firm/organization.
BIBLIOGRAPHY

Adam Smith International, for UK Department for International Development. “Youth Employment in Mombasa County – Action Research,” September 2013.


De Vroom, Bert; Ramioul, Monique. Knowledge management and value chains. https://lirias.kuleuven.be/bitstream/123456789/338614/1/D12.4


Education Development Center (EDC). EQUIP3. Gender in Youth Livelihoods and Workforce Development Programs. April 2012.


Fintrac Inc. USAID-KAVES Potato Value Chain Analysis. March 2014.


González-Velosa, C; Ripani, L and Rosas-Shady, D. How Can Job Opportunities for Young People in Latin America be Improved? IDB. 2012.


Infrastructure and Inclusive Growth Kenya http://siteresources.worldbank.org/INTDEBTDEPT/Resources/46980-1218567884549/5289593-1224797529767/5506237-


KNBS. “2009 Census: Population Aged 5 years and above by Sex, Activity Status, rural/urban and county”.


Lin, Justin Yifu. “Youth Bulge: A Demographic Dividend or a Demographic Bomb in Developing Countries?” World Bank blog.


Odero and Reeves, African Economic Outlook: Kenya, 2014


USAID. The “Seven Virtues” of Youth Workforce Development: Best Practice Technical Briefer. (Unpublished)


World Bank, “Improving Skills Development in the Informal Sector.”


## ANNEX 1. LIST OF MEETINGS

### Youth
- Youth recycling social enterprise (in Kibera Informal Settlement)
- 4 focus groups of youth (urban and rural, male and female) in Nakuru/Rift Valley region
- Youth bunge representatives and members in Kisii
- Young part-time entrepreneur, employee at US International University

### Youth Serving Organizations
- CLUSA (Yes Youth Can Nairobi and Coast)
- Global Peace Foundation
- Umande Trust- Boigas Initiative, Kibera
- Power women group, Kibera
- Pamoja FM community radio station, Kibera
- Inuka Kenya Trust (Good Governance NGO)
- Kenya Education Fund (partner to the Johnson & Johnson Bridge to Employment program with FHI 360 and Phillips Health Care Services)
- African Youth Trust
- TEARS Nakuru

### Government
- MoEST (Directorate of TVET, Directorate of Youth Training)
- Ministry of Devolution and Planning/Youth Directorate
- Ministry of Labor
- National Youth Council
- NITA (National Industrial Training Authority)
- MSE Authority, Ministry of Industrialization and Enterprise Development

### Health
- Aga Khan University Hospital
- Gertrude’s Children Hospital

### Education
- Kenyatta University-Manu Chandaria Business Incubation Centre
- US International University - Placement and Career Services
- RVIST – Post-secondary TVET institution in Rift Valley
- KITI – Post-secondary TVET institution in Nakuru

### Employers/Private Sector
- Kenya Association of Manufacturers (KAM)
- KNCC (Kenya National Chamber of Commerce)
- Engineers Association of Kenya
- D. Light (manufactures and distributes solar lighting and power products in rural areas)
- Kenya Private Sector Association (KEPSA)
- Nakuru Business Association
- Tannery in Nakuru
- Spin Knit Factory in Nakuru
- Sarova Hotels
- Phillips Pharmaceuticals
- Informal market actors in dairy and meat
| **Multilateral Organizations** | • AFDB (African Development Bank)  
• World Bank – Investment Climate group  
• ILO (International Labour Organization)  
• UNIDO |
|---|---|
| **Donor Projects** | • Fintrac: Kenya Agricultural Value Chain Enterprises Project  
• Land O’Lakes: Kenya Feed the Future Innovation Engine Program  
• Kenya Markets Trust (DFID)  
• CLUSA  
• World Vision  
• Intrahealth  
• Dignitas  
• Kenya Education Fund |
| **Independent** | • Rockefeller Foundation  
• Johnson & Johnson  
• Institute of Economic Affairs (IEA)  
• Dr. Andrew Riechi, Education Expert |
ANNEX 2. KENYA DASHBOARD

1 Introduction: Kenya Country Dashboard
The Workforce Connections Dashboard provides a big picture visualization of labor supply and demand drivers in Kenya, and places the country in a regional context, based on available data sources. The Dashboard’s analytical framework informs a national labor market assessment by providing insight into the country’s economy, as well as its workforce composition and employment situation. Using data that is externally accessible, the Dashboard illuminates key topics and questions which can then be explored in more depth through fieldwork in-country.

The Dashboard complements the youth assessment report and serves as a backdrop for the assessment’s main findings. It provides a quick visualization of key relevant trends and indicators relating to economics and human capital. The economics section encompasses growth, exports, investment, productivity, and diversification, while the human capital section covers demographics, employment, education, and skills.

Ideally the Dashboard would cover all major indicators required for a complete economic analysis and overview of human capital but this is ultimately contingent on available data. Identifying data sources requires making a choice between data that can be cross-comparable across countries, or data that is more particular to a single country (and therefore may be more in-depth). Cross-comparable data is preferred whenever possible; however, the lack of available data for developing countries often necessitates the use of country-specific data sourced from national statistics departments. Specific data limitations are identified in the narrative below.
2| Demographic Trends (Overview of Labor Supply)

Kenya’s population remains heavily rural, despite rapid urbanization, and is characterized by a high [ ] (though declining) growth rate. A quarter of the population currently lives in an urban setting (an increase of 5 percentage points since 2000); this is projected to increase to 44 percent by 2050.\(^\text{82}\)

The youth bulge will contribute to employment challenges for the foreseeable future, as rapid employment creation will be required in order to keep pace with the expanding workforce. [ ] The population pyramid is indicative of a large youth bulge where 15 percent of the population is now under the age of 10. This demographic trend could prove to be a dividend (due to benefits from declining dependency ratios) or a time bomb for Kenya depending on economic growth and labor market absorption. The final graphic depicts the composition of the workforce, with wage work highlighted in red, showing that only 15% of employed persons are in the modern formal sector. The vast majority of available jobs for youth are and will continue to be in the informal sector, including family farming and self-employment.

\(^{82}\) United Nations Department of Economic and Social Affairs. “2014 Revision of World Urbanization Prospects”. 2014
3 | Economic Trends
Kenya’s slow economic growth, relative to neighbors, is leading to a diminishing position as a regional economic center. Moreover, the largest economic sector – agriculture – is experiencing relatively slow growth, and greater dynamism is seen in certain sectors, particularly in service-related industries and in construction. Slow growth in agriculture can partly be explained by the enormous diversity within the sector: some sub-sectors, such as horticulture and dairy have grown rapidly, while others, such as cut flowers and coffee, have stayed stagnant or declined. Construction and services are stimulated primarily by domestic demand. Construction in particular has benefited from Kenya’s large population growth which is driving the need for adequate housing.

It must be noted that revisions to Kenya’s GDP calculations are scheduled for later in 2014 and are expected to increase Kenya’s GDP over the last decade. This underlines an important point about data reliability in developing countries.
4 Investment Trends

ICT, manufacturing and financial services are the primary magnets for foreign direct investment (FDI) in the country, accounting for more than 70 percent of FDI in 2008. Overall FDI has declined from previous years and lags severely relative to neighbors Uganda and Tanzania. Investment trends provide a valuable window into future growth, and foreign direct investment (FDI) is particularly indicative of those sectors with a robust prognosis, since investment from international sources is provided on a highly competitive basis. ICT, the financial sector, and manufacturing are the three largest targets of FDI in Kenya, and while these are also the most capital-intensive sectors of the economy, job growth from these sectors seems assured. Resources will also continue to be injected into the economy in the retail trade and tourism sectors, and investments in infrastructure such as transportation and energy will also ensure that the construction industry continues its strong recent growth trend.
Trends in Exports

The trade-share matrix was originally developed by the Boston Consulting Group to analyze product performance within companies. Ulrich F.W. Ernst, former Chief Economist at DAI and currently consulting as a Senior Economist with FHI 360, adapted the matrix in the early 2000s to examine export performance of countries. It is comprised of four quadrants:

1) “Rising Stars”: industries at top right quadrant demonstrate a relatively high growth rate in both market share and market size. Not all rising stars offer sufficient job growth and further analysis is required to determine their job-creating capacity, but potential exists for long-term growth because it is a competitive export product. Unfortunately for Kenya, over the past four years (2009-2013) only three product categories fit this description: soaps, pharmaceuticals and plastics – all of which are relatively small in terms of employment as well as local linkages (supply of natural resources). Even apparel, which has experienced reasonable growth during this period, is not expected to be able to maintain this performance, given the productivity problems in Kenyan factories.

2) “Dogs”: conversely the lower left quadrant, houses industries in which the country is losing relative market share and worldwide trade is decreasing. It may not be advisable to allocate resources toward supporting this industry, but analysis should be conducted at a disaggregated level (up to the 6 digit HS code) to understand the performance of specific products. Unfortunately for Kenya, cut flowers, one of its biggest industries, is located in this quadrant.

3) “Cash Cows”: the industries at the top left are increasing relative market share in a slow-growing global economy. Workforce allocation in the short term is promising, however long-term prospects are dependent upon the projected world market size in the medium to long term. We don’t look at industries in this area for immediate dynamic growth, but rather for long-term maintenance of revenue streams.

4) The industries in the lower right quadrant have relatively low levels of growth of market share for an industry that is growing worldwide. The growth in world demand suggests that focused investments and workforce training could lead to reinvigoration of that industry or product area. It should be noted that the period 2008 to 2013 was a particularly difficult export climate for several industries worldwide and further analysis would be needed to determine whether these industries will recover. For example, green beans, located in this quadrant under “vegetables”, has promising export projections.

The overall weakness in Kenya’s performance can be traced back to the factors cited in the Kenya Growth Diagnostic: issues with governance, political stability, energy and other infrastructure act as a damper on otherwise promising investments, severely reducing the economy’s dynamism and forcing the large segments of the labor force to eke out a living in relatively marginal occupations.

It should be noted that data from Kenya’s largest trading partner, Uganda, is not available and thus not included in this analysis. The inclusion of exports to Uganda could shift the position of certain industries into different quadrants or highlight other industries of importance.
Kenya

What are the trends in relative market share and market size of exports?

Coffee and tea remain staple exports to the world market, but more dynamism is seen in pharmaceuticals and soap, where Kenya is gaining market share in slightly growing markets (2008-2013) (GTA)


**Product Space**

The product space map is a network-style visualization of relationships between traded products. Products that require similar inputs are connected on the visualization. Researchers Ricardo Hausmann and Cesar Hidalgo, who led the development of this analytic approach, went on to publish additional information on the methodology and implications in “The Atlas of Economic Complexity: Mapping Paths to Prosperity.” This document, along with additional data visualizations, is available through the Observatory of Economic Complexity (OEC). In the context of a labor market assessment, the product space map serves two main purposes:

1. **It puts export strengths in context.** In general, countries with more colored dots in the center are likely to experience higher GDP growth. Colored bubbles (with colors varying by industry) represent products with a Revealed Comparative Advantage (RCA) index value greater than 1. That indicates that some degree of specialization, or more specifically that the country’s export market share in that product is higher than its average market share across all exported products. Products on the periphery of the product space (such as cut flowers, legumes and coffee in the map above) have fewer connections than products in concentrated central regions, so the potential for growth-inducing spillovers is far lower.

2. **It shows potential links between products requiring a common set of workforce capabilities.** The product space map also depicts which products are “connected” in terms of knowledge, technology, or other capabilities required by the workforce. If products are connected, it means they share similar knowledge requirements, indicating the potential for sector-to-sector knowledge-sharing. Consequently, it can help researchers determine potential paths of industrial expansion or sector selection for the workforce. For example, if a certain industry has developed specific capabilities among its workers, and it is connected on the product space to another industry, there could be potential for a workforce shift (and expansion), since it would not require as much training or industry-specific knowledge to make the transition. Some of these connections are quite surprising, as they involve industries that are otherwise seemingly unrelated. For example, as higher labor costs made apparel less competitive in Costa Rica, the rapidly expanding medical devices industry picked up most of those workers, whose experience was nearly ideal preparation for assembly of simple medical devices such as surgical gowns and orthopedic braces and bandages. Similarly, while it is difficult for workers with little education to obtain employment in hospitals, if they have previous experience in the hotel industry their chances of graduating to better-paid jobs in the healthcare industry are much better.

Unfortunately, many of Kenya’s top exports (including cut flowers, legumes, coffee, and tea) are located on the periphery of the product space, which means that there are limited opportunities to leverage spillover effects from their existing patterns of specialization. On the other hand, a number of more centrally located exports demonstrate high interconnectedness with other products. Food preparation machinery – part of the horticulture and food processing industry – and milk – part of the dairy value chain – are highlighted in the central cluster. As described further in the assessment, these industries were selected for further analysis given their relevance to USAID’s existing portfolio as well as their employment prospects. In addition, metals and machinery are located in the central cluster. Further exploration showed that this sector also offers multiple entry points for youth as well as a strong presence in the informal sector.

83 The product space analysis uses 4-digit Harmonized System trade data from the United Nations Statistical Division (COMTRADE database).
84 The Observatory of Economic Complexity. http://atlas.media.mit.edu
Kenya
How can Product Space analysis improve sector selection?

Product Space analysis indicates that products in the central, dense portion of the space offer the greatest potential for growth and diversification due to spillover effects.

Some of Kenya’s less prominent exports are located more centrally (red). Due to their high interconnectedness with other products in the center, these sectors may be better candidates for assistance than their current ranking in the export statistics would indicate.

Unfortunately, most of Kenya’s top exports (blue) lie in the periphery of the Product Space and have few linkages, indicating limited opportunities to leverage spillover effects from their existing patterns of specialization.

The apparel cluster is Kenya’s only major export industry that is located in a high-density location (though it is itself somewhat isolated). Assistance to the apparel sector may therefore have wider implications for growth.

Observatory of Economic Complexity
**7| Trends in Employment**

Data show that unemployment (in absolute terms) is highest in counties in Kenya’s North-Eastern Province -- in particular Garissa and Mandera -- and Nairobi where the number of unemployed exceeds 150,000. This makes sense given the large population sizes of Nairobi (over 3 million) and Mandera (over 1 million), however Garissa has a more moderate population size with over 600,000 people which indicates this county has a particularly high unemployment rate. Absolute numbers for unemployment better represent the magnitude of unemployment by county and this information helps to target interventions to reach the greatest number of people possible.

Caution should be taken with formal unemployment statistics in rural areas, which are often highly exaggerated, excluding a range of informal economic activities.\(^8^5\) Apart from Nairobi, Machakos, and Mombasa, Kenya’s counties are predominantly rural. At the same time, urban unemployment in Kenya often reflects rural-urban migration patterns.\(^8^6\)

In general, women have fewer employment opportunities than men as most sectors employ higher numbers of men than women, with the exception of health and social work, and household employment. This raises questions regarding possible barriers to employment for women, a theme explored in the assessment. It should be noted that there is a lack of data regarding informal employment by sector, which limited our assessment of employment within the different sectors.

The final graph shows the decreasing proportion \(\) of formal sector employment and growing share\(\) significance of informal sector employment to total employment in Kenya.\(^8^7\) Jobs in Kenya have increasingly become informal, growing from less than a quarter of total jobs in 1989 to 83 percent in 2013. Growth in informal sector employment spiked in the early 1990s, driven by a decline in Kenya’s formal sector employment stemming largely from macroeconomic disruptions related to structural adjustment and liberalization policies. Other factors included a renewed government strategy (witnessed since the early 1970s) towards promotion of growth and development of the informal and Jua Kali, as well as a broadening of the definition and more consistent capturing of informal sector data in national statistics.\(^8^8\)

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\(^8^8\) Ibid
Kenya
Where is employment/unemployment highest?

Unemployment is highest in counties in the North-Eastern province, 2009 (KNBS).

Outside of Nairobi and immediate surroundings, Kenya’s counties are more than 60% rural (KNBS).

More males are employed in education than females, and the health and social work field employs a higher number of females than males (KNBS).

Employment in the informal sector has been rising as a % of total employment, reaching 83% in 2013 (IEA).
### Labor Productivity by Sector

The chart contributes to our understanding of the performance of specific sectors based on production and employment. It also serves as a measure of productivity and how it relates to competitiveness. Labor productivity is defined as “output per worker” or GDP/employment for each sector. The Y axis shows GDP/number of workers for each sector. The X axis shows the GDP contribution of each sector. The size of the bubbles represents the number of workers in each sector.

In this case, we see that labor productivity is highest in electricity and water supply, followed by financial and business services. However, these sectors have a lower employment base and are not major contributors to GDP. At the other end of the spectrum, agriculture and forestry contributes the most to GDP and employs a large proportion of the workforce, but is a low productivity sector.

It is important to note that the most effective analysis is attained if productivity over time is considered. In order to understand if low productivity is caused by inefficiency, historic measures of productivity must be assessed. Unfortunately attempts to develop cross-sectoral productivity comparisons are hampered by the quality of data. Sectoral GDP estimates cover both formal and informal sector output, while the employment breakdowns by sector only cover the formal sector, so that, for example, the ratio of GDP to employment for agriculture appears higher than manufacturing (which is not true in any country in the world) simply because a greater proportion of the manufacturing workforce is captured in the formal sector, while a much smaller proportion of agricultural employment is counted as formal sector. Thus individual differences can be highly misleading, and only the broadest generalizations can be drawn from such charts, such as the high relative labor productivity of the finance, insurance and real estate sector.

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**Kenya**

**What sectors have the greatest labor productivity?**

Labor productivity in electricity was USD 478,000 in 2012, dramatically higher than the average of USD 50,000 across all other sectors. Employment is highest in agriculture and forestry, which also contributes the most to GDP. [KNBS]
9 | Educational Attainment

Data on educational attainment and composition of the youth workforce reveal important patterns and questions that are examined in detail in the assessment report based on extensive in-country data collection. Educational attainment varies across counties with Nairobi having the highest percentage of secondary school graduates (33 percent) and Wajir the lowest at 3 percent. The map at top left shows the lowest secondary education attainment (less than 5 percent of the population) is in Turkana, Marsabit, West Pokot, Mandera, Wajir, Garissa, and Samburu. Five of these seven counties border Sudan, Ethiopia or Somalia and are among the poorest counties in Kenya.

Unlike other countries, the gender gap in educational attainment in Kenya is relatively narrow. Although women are much more likely to have no schooling compared with men, educational attainment is fairly even for primary school. The gap increases slightly for secondary attainment but evens out at post-secondary levels.

The last graph shows that unemployment rates are highest among youth with advanced levels of educational attainment, as well as among those with no schooling. However, figures for those with no schooling or only primary education may be inflated, as a large proportion are employed in informal, seasonal agricultural employment.
**Skills Supply and Demand Challenges**

A snapshot of supply and demand suggests that the most pressing workforce development constraints are on the demand side, particularly for highly skilled workers. The skill levels of the workforce are above the regional average in a range of industries. At the same time, a large proportion of university graduates leave the country to pursue other opportunities, indicating limited opportunities at home. As one prominent example, 51 percent of doctors born in Kenya work abroad.

One apparent exception to this trend is the dramatic increase in the number of employers that identified a skills shortage, particularly in the service industry, between 2007 and 2013. This requires further exploration, but points to a potential shortage in certain skills, particularly those that are more prevalent in service industry professions.
### EDUCATIONAL ATTAINMENT BY COUNTY IN KENYA

**Kenya Manpower Survey - FROM 2009 POPULATION CENSUS**

<table>
<thead>
<tr>
<th>County</th>
<th>LESS THAN PRIMARY EDUCATION</th>
<th>LESS THAN SECONDARY EDUCATION</th>
<th>SECONDARY EDUCATION</th>
<th>TERTIARY EDUCATION</th>
<th>TOTAL</th>
<th>LESS THAN PRIMARY EDUCATION</th>
<th>LESS THAN SECONDARY EDUCATION</th>
<th>SECONDARY EDUCATION</th>
<th>TERTIARY EDUCATION</th>
<th>TOTAL</th>
<th>LT Prim</th>
<th>LT Sec</th>
<th>Sec Edu</th>
<th>Ter Edu</th>
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<td>LESS THAN SECONDARY EDUCATION</td>
<td>SECONDARY EDUCATION</td>
<td>TERTIARY EDUCATION</td>
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<td>Top 10 Counties by Rank</td>
<td>Lowest 10 Counties by Rank</td>
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<td>53%</td>
<td>22%</td>
<td>8%</td>
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<td>15%</td>
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<td>100%</td>
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<td>100%</td>
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<tr>
<td>Kajiado</td>
<td>190,320</td>
<td>254,859</td>
<td>119,692</td>
<td>50,747</td>
<td>615,618</td>
<td>31%</td>
<td>41%</td>
<td>19%</td>
<td>8%</td>
<td>100%</td>
<td>63</td>
<td>63</td>
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<tr>
<td>Kericho</td>
<td>90,993</td>
<td>323,234</td>
<td>94,421</td>
<td>23,124</td>
<td>531,772</td>
<td>17%</td>
<td>61%</td>
<td>18%</td>
<td>4%</td>
<td>100%</td>
<td>75</td>
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<tr>
<td>Bomet</td>
<td>142,334</td>
<td>504,589</td>
<td>128,994</td>
<td>26,330</td>
<td>802,247</td>
<td>18%</td>
<td>63%</td>
<td>16%</td>
<td>3%</td>
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<td>2</td>
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<tr>
<td>Kakamega</td>
<td>320,569</td>
<td>885,156</td>
<td>227,675</td>
<td>46,271</td>
<td>1,479,671</td>
<td>22%</td>
<td>60%</td>
<td>15%</td>
<td>3%</td>
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<td>111</td>
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<tr>
<td>Vihiga</td>
<td>91,516</td>
<td>310,697</td>
<td>84,098</td>
<td>15,892</td>
<td>502,203</td>
<td>18%</td>
<td>62%</td>
<td>17%</td>
<td>3%</td>
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<td>6</td>
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<tr>
<td>Bungoma</td>
<td>230,357</td>
<td>733,301</td>
<td>219,951</td>
<td>39,375</td>
<td>1,222,984</td>
<td>19%</td>
<td>60%</td>
<td>18%</td>
<td>3%</td>
<td>100%</td>
<td>93</td>
<td>93</td>
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</tr>
<tr>
<td>Busia</td>
<td>157,178</td>
<td>401,447</td>
<td>86,692</td>
<td>15,537</td>
<td>660,854</td>
<td>24%</td>
<td>61%</td>
<td>13%</td>
<td>2%</td>
<td>100%</td>
<td>130</td>
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## ANNEX 4: GOVERNMENT OF KENYA

<table>
<thead>
<tr>
<th>Government:</th>
<th>Technical Focus</th>
<th>Target Population</th>
<th>Geographic Region</th>
</tr>
</thead>
</table>
| **Government of Kenya** | Kenya Youth Empowerment Project  
Technical vocational training  
Internships  
Business support  
Labor intermediation  
Life skills training | Older youth (less than secondary education) and secondary graduates | National |
| **Ministry of Devolution and Planning (DYDE)** | National Youth Service (NYS)  
- Paramilitary training  
- Public works service  
- Vocational training  
- Technical training  
- Entrepreneurship  
- Life skills training  
- Professional skills training | Secondary graduates | National |
| **Youth Enterprise Development Fund (YEDF)** | Older youth (less than secondary education) and secondary graduates | National |
| **Women Enterprise Development Fund (WEDF)** | Older youth (less than secondary education) and secondary graduates | National |
| **Uwezo Fund** | Older youth (less than secondary education) and secondary graduates | National |
| **Ministry of Youth Affairs and Sports** | National Youth Council  
- Youth advocacy  
- Youth political engagement  
- Community service | In-school youth (primary and secondary) | National |
<p>| <strong>Youth Empowerment Centers</strong> | Out of school youth (school-age) | National |</p>
<table>
<thead>
<tr>
<th>Organization</th>
<th>Target Group</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business support</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td></td>
</tr>
<tr>
<td>Labor intermediation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Youth Development</strong></td>
<td>In-school youth (primary and secondary)</td>
<td>National</td>
</tr>
<tr>
<td>Career fairs</td>
<td>Out of school youth (school-age)</td>
<td></td>
</tr>
<tr>
<td>Life skills training</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td></td>
</tr>
<tr>
<td>Business support</td>
<td></td>
<td></td>
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<tr>
<td>Mentorship</td>
<td></td>
<td></td>
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<tr>
<td>Financial services</td>
<td></td>
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<tr>
<td>Internships</td>
<td></td>
<td></td>
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<tr>
<td><strong>Kazi Kaw Vijani</strong></td>
<td>Out of school youth (school-age)</td>
<td>National</td>
</tr>
<tr>
<td>Employment creation</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
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<td></td>
<td></td>
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<tr>
<td><strong>Department of Sports</strong></td>
<td>In-school youth (primary and secondary)</td>
<td>National</td>
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<tr>
<td>Life skills training</td>
<td>Out of school youth (school-age)</td>
<td></td>
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<tr>
<td>Internships</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td></td>
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<tr>
<td>Training</td>
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<tr>
<td><strong>Ministry of Labor, Social Security and Services</strong></td>
<td>National Employment Bureau</td>
<td>National</td>
</tr>
<tr>
<td>Job matching</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td></td>
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<tr>
<td>Job placement</td>
<td>University students and recent graduates</td>
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<tr>
<td>Entrepreneurship</td>
<td>Employees</td>
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<tr>
<td><strong>Human Resource Planning and Development</strong></td>
<td>Employees</td>
<td>National</td>
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<tr>
<td>Labor Market Information System (LMIS)</td>
<td></td>
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<tr>
<td><strong>National Manpower Development Committee (NMDC)</strong></td>
<td></td>
<td>National</td>
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<tr>
<td>Link between training providers and industry</td>
<td></td>
<td></td>
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<tr>
<td><strong>National Industrial Training Authority (NITA)</strong></td>
<td>In-school youth (primary and secondary)</td>
<td>Nairobi</td>
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<tr>
<td>Skills upgrading</td>
<td>Out of school youth (school-age)</td>
<td>Kisumu</td>
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<tr>
<td>Apprenticeships</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
<td>Mombasa</td>
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<td>Internships</td>
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<td>Athi river</td>
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<tr>
<td>Ministry of Education</td>
<td>Technical, Vocational Education Training (TVET)</td>
<td>In-school youth (primary and secondary)</td>
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<td></td>
<td>Skills training</td>
<td>Older youth (less than secondary education) and secondary graduates</td>
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<td>Technical training</td>
<td>University students and recent graduates</td>
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<th>National Employment Bureau</th>
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<tr>
<td>Labor intermediation</td>
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<td>Career guidance</td>
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<td>Career counselling</td>
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<td>Job placement</td>
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<td>Older youth (less than secondary education) and secondary graduates</td>
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<td>University students and recent graduates</td>
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<td>University students and recent graduates</td>
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<td>Employees</td>
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ANNEX 5: DEVELOPMENT PARTNERS

**UNDP** The UNDP supports the Ministry of Devolution and Planning – DYDE. Primary focal areas are to establish and operationalize public-private County Business Development Centers as a one-stop-shop for youth and women MSEs, and to support the mainstreaming of YP training within the TVET system and enhance their capacity to offer market focused and driven skills training.

The program also supports NITA on the finalization and implementation of the sessional paper on industrial training and attachment, review of the national industrial training and testing standards, development of a national qualification framework and building the capacity of in-service staff on quality assurance and standards.

Within the TVET system, the UNDP supports the finalization and implementation of the national policy on YPs and the vocational training sector, and review and implementation of the national vocational certificate in education and training. UNDP is also working to establish governance structures within the YPs, particularly vocational rehabilitation centers for people with disabilities.

**ILO** The International Labor Organization (ILO) implements youth employment and entrepreneurship programs within the framework of the Decent Work Country Program (DWCP) for Kenya. Key interventions include:

- **Promotion of Employment Creation and Employability:** seeks to improve access for young women and men to productive employment, promote skills development for employability of young women and men, and strengthen the capacities and competitiveness of SMEs.
- **Entrepreneurship in Secondary Schools:** aims at nurturing and developing leadership and entrepreneurial culture among the youth in secondary schools.
- **Employment Intensive Infrastructure Program (EIIP):** seeks to promote employment creation, particularly for the youth through use of innovative and low cost technologies, and locally available human, physical and social capital resources. Targets young women and men in selected areas of Nairobi, Rift Valley and North Eastern regions.
- **Women Entrepreneurship Development and Economic Empowerment (WEDEE):** aims to strengthening capacities of constituents and stakeholders to promote entrepreneurship among women.

The ILO supports an SME mentorship program that seeks to link out-of-school youth who are already in business with mentors. The program is a structured model for training and qualifying business mentors and advisors that could provide support to the SMEs. It is being implemented by Inoorero University in collaboration with Copenhagen Business School (CBS). So far, 100 TOTs have been trained on mentorship, and 300 youth trained by the TOTs. Also, 115 mentors, 340 individual mentees and 200 group mentees benefitted from the program. Preliminary evaluation results suggest that mentorship has the capacity to increase business earnings and employment.

As mentioned above, at a regional level ILO is supporting the development of an LMIS initiative for East Africa. Kenya’s LMIS will form part of this system.

**UN-Habitat** The United Nations Human Settlements program (UN-Habitat) implements programs that aim to create a safe and favorable space for young people, while empowering young people to take up leadership roles. Specifically, the UN-Habitat in collaboration with the UNDP is implementing
interventions that seek to promote young people’s effective inclusive engagement at the local, national, regional and global levels. Some of the measures in this intervention seek to facilitate youth mainstreaming and advocacy by ensuring mechanisms for youth engagement and participation in decision-making processes. Others are strengthening capacities of youth and youth networks to support civic engagement, development of youth engagement manual and putting the youth at the center stage in the implementation of national civic education programs.

- **UN Industrial Development Organization (UNIDO)** UNIDO’s portfolio includes productive capacity for poverty reduction, trade capacity building, and economy and the environment. Key workforce development initiatives have included a partnership with Hewlett Packard to provide entrepreneurship training to youth, using the HP-Life e-learning curriculum, in partnership with four local partners. This model synthesizes e-learning with fee-for-service instruction and mentoring delivered in-person. Its effectiveness was rated highly in a 2013 UNIDO Evaluation Report.

UNIDO is partnering with the German Engineering Federation (VDMA) to find opportunities to build the capacity of agribusiness value chains in Kenya. The focus is on the establishment of centers of excellence for preventive maintenance and repair of equipment used in agribusiness (processing, transport, warehousing, energy, and irrigation). They hope to embed this capacity in existing institutions, which would become trade schools capable to train and certify repair and maintenance technicians. VDMA is the largest engineering industry network in Europe, representing over 3,100 mainly small and medium-sized enterprises in the engineering industry.

Under the new UN Development Assistance Framework for 2014-18, Kenya is moving to a “One UN” delivery system which promotes greater harmonization of UN agency efforts. Under this system, UNIDO will chair the Economic Pillar.

- **World Bank** The World Bank is supporting the Ministry of Industrialization and Enterprise Development on its plans to upgrade four key strategic sectors: leather and leather goods, textiles and clothing, food processing, and furniture and metal fabrication. The World Bank is conducting value chain analyses for the selected sub-sectors to understand the current state of the value chains, build a vision, and develop an action plan for implementation. Part of the value chain analysis focuses on skills and the potential role of skills upgrading in strengthening the four sectors.

The World Bank also funds the Kenya Youth Empowerment Project (KYEP), a training and internship pilot project that is being implemented by the Kenya Private Sector Alliance (KEPSA). KEPSA is a national umbrella body representing the private sector, with a primary focus on advocacy. KEPSA views human capital development as a top priority for the private sector in Kenya.

The project represents an employer-led approach to improving youth employability that is based on skills demanded by employers, including life skills training. Internships are offered in both the formal and informal sectors.

The KYEP is a four-year pilot project (2011-14) implemented in Nairobi, Mombasa, and Kisumu. It aims at improving youth employability and integration into the workforce through training and internships. KYEP

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89 Interview with UNIDO.
92 Interview with Ehud Gachugu, KYEP Director at KEPSA.
targets youth aged 15-29 years with a minimum of eight years schooling, who have been out of school or college for at least one year. Program management expect the program to be continued and scaled up based on promising results to date.

The internship and training component of KYEP is divided into eight internship cycles of six months each during which time two months are spent at the workplace while the other four months are spent in training with an identified training provider. The interns are placed in the Kenya Vision 2030 growth sectors such as energy, finance, tourism, information and communication technology, manufacturing and MSEs. The youth that are placed in the formal sector (typically those with tertiary education) go through life skills training, core business skills training and sector specific training while those in the informal sector (those with less than secondary) go through entrepreneurship skills training. Youth aged between 15 and 17 years are eligible for internships in the MSE sector. Under the arrangement, each intern is given a monthly stipend of KSh. 6,000 while employers get a monthly reimbursement of KSh. 3,000 per intern.

To date, KYEP reports that 13,000 youth have been trained, with 5,200 completing the full course. Tracer studies show that 71% of young people who benefitted from the internships were employed six months after completion of the internships, and 13% had returned for more schooling. The life skills trainings are particularly valued by both young people and employers. Being a pilot program, the KYEP is now concentrated only in Nairobi, Mombasa and Kisumu, but may be scaled up to additional areas in the future.

BILATERAL PARTNERS

**DFID** DFID supports the Mombasa County Youth Employment Project, implemented by Adam Smith International. The project focuses on job creation in Mombasa Country through TVET, market and value chain development, and policy and advocacy support. The project is based on a market analysis, which shortlisted five sectors of primary interest: waste collection, recycling and disposal; agricultural production and processing; tourism; construction; and micro retail and trade. The project is focusing on providing youth with skills training and information relevant to selected sectors.

DFID also supports a range of programming in relevant sectors. For example, the Market Assistance Program (MAP) utilizes a market systems approach to strengthen performance of agriculture and basic service markets in Kenya, including dairy, WASH, media, livestock, supply chain, agricultural inputs, and seeds. MAP is also funded by the Embassy of the Netherlands and Gatsby Charitable Foundation. MAP has identified a range of opportunities to strengthen market performance through upgrading youth skills and knowledge.

**GIZ** GIZ works in Kenya as a pilot country for its support to the Comprehensive Africa Agriculture Development Programme (CAADP), which is an initiative of the African Union and the New Partnership for Africa’s Development (NEPAD). CAADP aims to increase agricultural production, in part through value chain strengthening. However, a shortage of qualified staff within country-level CAADP teams as well as ministries – has been identified as a constraint. GIZ reports that it has contributed to placing vocational training for the agricultural sector on the national agenda in Kenya and other countries, raising awareness on the topic of agricultural training among policymakers. GIZ is also promoting cooperation between the

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93 Adam Smith International, for UK Department for International Development. “Youth Employment in Mombasa County – Action Research,” September 2013.

94 Interview with Mike Field, Kenya Markets Trust.

95 http://www.giz.de/en/worldwide/15974.html
private sector, government and civil society through structured forums, in order to address a variety of development challenges such as corruption.

**USAID**

USAID/Kenya in collaboration with implementing partners, the MoEST and local private and public sector institutions is funding the *Yes Youth Can* program. The program seeks to promote youth voice and livelihoods, and has mobilized one million youth through a network of democratic youth parliaments (*bunges*). The youth *bunges* have structures spanning from the village to the national level under the umbrella of the National Youth *Bunge* Association. The youth *bunges* are aimed at providing voice to the youth and advocating for issues that are important to the youth at all levels of government.

The program also focuses on promoting youth access to capital. It has facilitated formation of youth-owned, run and managed Savings and Credit Co-operative Societies (SACCOS) that are open to bunge members. SACCOS have mobilized youth savings, provided access to credit, and dispensed grants. A total of 25 youth SACCOS have been established.

USAID also funds a range of relevant programs supporting sectors including energy, health, agricultural value chains, education, and orphans and vulnerable children.

**FOUNDATIONS**

**Rockefeller Foundation**

The Digital Jobs Africa Initiative focuses on promoting youth employment opportunities that involve the application of ICT. The Kenya country strategy focuses on support for impact sourcing as part of the larger business process outsourcing (BPO) sector. It also seeks to expand online work opportunities for youth. The focus for this initiative is on secondary graduates who are disadvantaged but have high potential.96 The project will prepare youth for jobs in the digital economy ranging from data entry and management to online freelancing work such as editing, writing, and graphic design. Kenya already is the largest source of online workers in Africa and Rockefeller sees good potential for additional expansion.97

**COORDINATION**

Interviews revealed a general consensus that awareness is lacking among stakeholders about the institutions in workforce development, their areas of intervention, and gaps in coverage and service. Unlike other international development sectors, such as health, the youth employment sector lacks consensus on best practices, a problem furthered by the absence of a platform to facilitate knowledge sharing and peer-to-peer learning. Competition for territory and funding weaken the incentives for collaboration. These constraints have resulted in weak coordination of youth employment interventions in the country.

96 Interview with Rockefeller.
ANNEX 6: LESSONS LEARNED

This section provides a general overview of international best practices in youth workforce development. Evidence supports the effectiveness of holistic workforce development programs that have included one or more of the following: vocational training, applied learning (apprenticeships/internships); entrepreneurship training, soft skills, job match services, and mentoring. Key results have included increased employment, earnings, and employability. Youth who may benefit the most include female, low-income, at-risk, and out-of-school youth or those with little formal education. However, further research on such approaches is needed, particularly on scale and cost-effectiveness.

Principles for effective practice include the following:

- Provide multiple pathways for learning and employment. Program participants may seek continuing education, formal employment, or self-employment; effective programs tailor their offerings to desired outcomes but also equip youth with competencies that will open up a variety of options.

- Ensure employer demand for skills. Programs should begin with an assessment of labor market demand, directly engaging employers, in order to understand the mix of technical and soft skills that are in demand in local labor markets.

- Focus on applied learning methods, such as internships and apprenticeships. These are more effective than classroom learning for acquisition of soft skills and a variety of technical skills.

- Tailor classroom training to the needs of young people. Out of school and older youth often prefer short courses with flexible schedules that allow them to balance learning with work responsibilities. This is particularly important for female participants who may have domestic responsibilities.

- Offer ongoing support through mentoring. Also known as “accompaniment,” this type of support is especially important for disadvantaged youth.

- Strengthen local training systems through partnerships. Engaging local partners, rather than direct provision of training, enhances cost-effectiveness and sustainability.

- Provide entrepreneurial skills for youth for whom self-employment is a likely career pathway. Successful entrepreneurship typically requires a rare combination of skills, aptitude for managing risk, and assets (financial and social). It also generally carries a high risk of failure. In many contexts youth become “necessity entrepreneurs” due to a dearth of (or lack of awareness of) other livelihood opportunities. Entrepreneurial skills such as communications, negotiations, market analysis, and business math are transferable to wage employment (in sales and marketing for example) or alternative arrangements such as contract work, microfranchising, etc.

- Support enterprise development in the context of increased value chain competitiveness: Learning from the microenterprise development field over the past decade suggests that economic growth with poverty reduction does not happen solely through support to individual enterprises, but also by raising competitiveness at all levels of the value chain.

- Track results that matter. Rather than short-term metrics such as training completion rates that give little indication of meaningful outcomes, programs should measure longer-term results such as student retention, job placement rate, employment status 6 months or more after completion, earnings, and both student and employer satisfaction.

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99 Adapted from USAID’s “The Seven Virtues of Youth Workforce Development: Best Practice Technical Briefer” (Unpublished) and Alliance for International Youth Development, “Guiding Principles for Youth Development,” 2013.