Introduction

Chapter 3 illustrates, with household survey data, how skills, acquired through education and training, are associated with earning and incomes. First, skills are linked to the choice of sectors in which one is employed, and second, to the earnings one attains in each sector. Informal sector work is generally characterized by low levels of education (perhaps enough to build basic capacities like literacy). People who complete no more than a primary education may choose not to work on the farm, but they are not likely to find employment in the formal wage sector and instead wind up pursuing employment in the small and household enterprises of the informal sector. Completing a secondary or higher education does not guarantee employment in the formal wage economy, but a measurable connection exists between higher levels of education and formal wage employment where good economic management and policies are creating these jobs. In both sectors, higher levels of education are observed together with higher earnings, but when compared with the formal sector, the payoff to additional education

In This Chapter

The main factors behind the shortfall in skills for the informal sector are (a) the low education of people in the sector, (b) unequal access to training, (c) underdeveloped markets, (d) lack of attention from public training providers to the needs of the informal sector, and (e) market constraints to training for the small and household enterprises of the informal sector. A comprehensive strategy to improve productivity and incomes in the small and household enterprises of the informal sector needs to weigh all these factors. This chapter identifies the features of a comprehensive strategy for improving the productivity and earnings of the informal sector through skills development with examples of successful interventions taken from international experience and the five study countries.
appears to be lower in the informal sector for a variety of market-related reasons explained in chapter 3.

Different levels of education and sectors of employment also show differences in subsequent patterns of skills development. Whereas apprenticeships are generally available to people in the informal sector with a primary education or less, other forms of vocational training are associated with those who have a secondary education or more and hold employment in the formal wage sector. Vocational training is offered by different providers—public and private, for profit and nonprofit, training centers and employers—and is generally combined in household surveys and reported in the aggregate as “vocational training.” Access to vocational training is shown in the household surveys to be more likely for those with a secondary or higher education and employment in the formal wage sector than for those who hold employment in the informal sector. Thus, education is linked not only to employment in the formal wage sector but also to the wider range of options for skills development and the earnings that come with this employment. The evidence supports the cumulative nature of skills development over the life cycle from the literature in chapter 1.

The evidence of the previous chapter suggests that improving the skills of people employed in the informal sector is important to increasing the productivity and incomes of small and household enterprises. The evidence in chapter 3 points clearly to the importance of ensuring basic education as a basis for further practical or theoretical skills development. However, chapter 4 focuses more narrowly on different training programs and institutions that are, or could be, catering to the informal sector. In each of the countries for this study, reviews were undertaken of training programs offered by public and private providers with the goal of identifying programs that reach out to the informal sector and address the constraints to skills development described in chapter 1. This chapter looks across the five countries of Ghana, Kenya, Nigeria, Rwanda, and Tanzania and to international experience for programs that show promise in addressing the constraints to skills development for the informal sector and raising the productivity and earnings of those employed in the sector.

Employment and earnings in the informal sector can be attractive and can match and even exceed those of the formal sector, as evidenced in chapter 2, which points to data illustrating the overlapping earnings distributions in the informal and formal sectors in Rwanda and Ghana. Education opens the door to opportunities and to later skills development options that improve earnings. Vocational training in different forms, on the job and off, is more likely to be accessible to people with higher levels of education than to those with only a limited education. Apprenticeships in the five countries are the option for those who lack a strong educational foundation. The option value of education and the incentives it provides to households and employers to invest in further skills development is an underappreciated feature of formal schooling. Together, these findings emphasize the importance of Education for All and laying a foundation for learning, but even more, the importance of expanding access to further
schooling for those who complete a primary education and offering second-chance options for those who left formal schooling early.

The five country studies provide the evidence for strategies to improve skills in the informal sector. The country case studies that follow this chapter examine education and training programs that attempt to reach the informal sector in particular. Coverage included technical and vocational education in ministries of education and nonformal training offered by ministries of labor, industry, agriculture, and youth. These nonformal programs produce credits that do not transfer toward further education but provide a skill qualification. The country studies attempt to capture experience from private for-profit and nonprofit training institutions and employers, including those offering apprenticeships. Private provision of training in countries such as Ghana, Rwanda, and Tanzania exceeds public capacity. Other specialized programs related to skills development, such as second-chance education, adult literacy, and entrepreneurship education, were examined along with comprehensive programs offering skills and business development services for self-employment, often with the support of nongovernmental organizations (NGOs) and international development agencies.

The review collected knowledge about the costs and benefits of the training programs and their link to the informal sector (see annex 4A for program descriptions). It looked for rigorous assessments of what does and does not work in addressing constraints to skills development in the small and household enterprises of the informal sector. The results were disappointing. The institutional review of training programs reveals an array of training options, but only a modest number have some form of tracer studies that can indicate labor market impact, and almost no programs could be called rigorously evaluated using random experimental or quasi-experimental evaluation designs. The number is even smaller for those targeting skills specifically for the informal sector. Most of the programs observed are for entry-level training for youth, helping them acquire skills and services for entering self-employment. Apprenticeships provide the majority of this training. Fewer programs are found for in-service training that upgrades the skills of adults already employed in the informal sector and increases their productivity. The chapter contains lessons taken from this review and highlights specific programs that show some potential for success in addressing the constraints to training for the informal sector.

Factors behind the Shortfall in Skills for the Informal Sector

The informal sector is distinguished by the low education levels of the people employed. Chapter 3 demonstrates that skills development is an important part of the story not only for improving productivity and earnings in the informal sector, but also for opening opportunities for employment and higher earnings in the formal sector. Education improves labor mobility and the chances for finding employment off the farm and increasing earnings. People with limited education and literacy are observed to have fewer choices in employment and are more likely to remain in farming or pursue employment in the enterprises of
the informal sector. They lack the qualifications sought for employment in the formal sector, and they are unable to pursue more advanced levels of education. The skills they need to work with the limited technology available to them are acquired informally and with traditional apprenticeships that emphasize learning through hands-on experience. People with more education, represented by a secondary education or higher education, are able to acquire further skills and improve their earnings in the informal sector, using more advanced levels of technology, but also find better chances for employment in the formal sector.

Some groups lack equal access to skills. For employment in the informal sector, residence, gender, and household consumption or income are factors correlated with access to skills. The profile of education and training in chapter 3 provides evidence of this. Apprenticeships are more prevalent in urban than rural areas. People pursuing skills in the informal sector in rural areas are less likely to find an apprenticeship and are more apt to rely on informal measures involving observation and experience on the job to acquire their skills. The lack of industry in rural areas compounds the problem. The Tanzania chapter illustrates this pattern. Limited opportunities for skills in rural areas provide another reason for migration to urban areas. Women account for a large share of employment in the informal sector (a majority in countries such as Nigeria and Ghana), but they are less likely to participate in an apprenticeship as a source of skills for this employment. This pattern is partly explained by women’s concentration in trade and services where apprenticeships are less likely to be used. Even with the advantages of self-financing, the very poorest are the least likely to participate in apprenticeships.

The market for skills in the informal sector is underdeveloped. The popularity of the traditional apprenticeship is evident in all the study’s countries. Sorting among the different providers of vocational training and determining which ones offer skills that are in demand at a fair cost for their quality has its challenges, but doing so for apprenticeships in the informal sector is even more difficult. The number of master craftspersons offering apprenticeships is large. The supply is fragmented, and few market instruments compare cost, quality, and outcomes. Evidence in the country chapters refers to the frequent absence of curricula, variation in training standards, poor instruction, and failure to teach theory. In industrial countries, formal apprenticeships are offered with the oversight of worker organizations and employers, thereby providing better opportunities for quality control and assurance of outcomes. None of these features is present in the free market for apprenticeships of the informal sector, and the potential for abuse and wastage is present. Simple instruments for gauging quality, such as testing and certification of apprentice skills, are underused or missing altogether. Markets for skills in the informal sector rely on informal sources of information, often from friends and family.

The informal sector receives little attention from public training providers. Kenya and Rwanda illustrate the limited response of public providers. In both countries, public providers of skills are found to be slow in responding to the specialized needs of the informal sector for skills and in offering flexible modes of
delivery. Whether for lack of budgetary incentives or institutional flexibility, public providers have retained a focus on traditional technical and vocational education and training, providing industrial skills for young persons looking for their first job. Less attention is given to those who lack basic education and literacy, multiskilling, entrepreneurship education, and skills upgrading for those in service. In Tanzania, the national development and poverty reduction plans acknowledge the informal sector, but the Vocational Education and Training Authority (VETA) does not include the informal sector among the issues addressed in its most recent corporate plan. Similarly, the informal sector is not part of Rwanda’s Education Sector Strategic Plan or its National Technical and Vocational Education and Training policy. The informal sector is off the radar for many public providers of skills.

Small enterprises in the informal sector are less likely to train than larger enterprises, and when training is done, the approach is different. This pattern is illustrated in chapter 1 by drawing on evidence from the Organisation for Economic Co-operation and Development. The factors behind the pattern are the market failures and structural impediments that depress the economic returns to investing in the skills of workers in small enterprises. The higher cost of investing in skills for small enterprises plays a role in reducing returns. The constraints to investing in skills by small and household enterprises of the informal sector are outlined in chapter 1 and are repeated here in table 4.1, along with strategies that address the constraints. The main constraints to skills development in small and household enterprises in the informal sector are as follows:

- **The cost structure for skills development in small enterprises is different from that observed in larger enterprises.** Enterprises of all sizes are able to recruit skilled labor at market wages and realize further gains in productivity and profits by adding to the skills of these workers. Enterprises invest in skills that are tailored to the needs of the enterprise. Gains in productivity are typically shared with the worker in the form of higher wages as an incentive for acquiring the additional skills. Table 4.1 illustrates factors behind the different training cost structure faced by small enterprises. For example, time spent in training during regular production hours can be more costly in forgone production for small firms. Strategies for addressing the higher opportunity cost for training in small enterprises may include offering training during evenings and weekends or when demand for goods and services is low to reduce the indirect cost of the training in forgone production.

- **Capital market failures and the inability of small firms to generate the cash flow needed to finance investments in skills are another constraint to training by small enterprises in the informal sector.** In Nigeria, illiteracy and poverty were rated by 57 percent of respondents as the most important constraints to training in informal sector enterprises. Larger firms often have better access to capital markets and cash flow for this investment. Strategies addressing this constraint
<table>
<thead>
<tr>
<th>Constraints for the informal sector</th>
<th>Strategies to address constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>High opportunity cost to firms for training</td>
<td>Training combined with production (apprenticeships and other forms of enterprise-based training)</td>
</tr>
<tr>
<td>Low cash flow of firms for paying direct cost of training</td>
<td>Training combined with production (apprenticeships and other forms of enterprise-based training)</td>
</tr>
<tr>
<td>Multiskilling needs of the firm</td>
<td>Training combined with production (apprenticeships and other forms of enterprise-based training)</td>
</tr>
<tr>
<td>Lack of skills in firm for training design</td>
<td>Vouchers for training needs analysis</td>
</tr>
<tr>
<td>Information failures on benefits of training</td>
<td>Advocacy of benefits by industry associations</td>
</tr>
<tr>
<td>Limited supply catering to informal skill needs</td>
<td>Vouchers for master craftspersons and apprentices, creating a competitive market for informal sector training</td>
</tr>
<tr>
<td>Absence of economies of scale for training driving up cost</td>
<td>Using industry associations to train</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constraints for the informal sector</th>
<th>Strategies to address constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in nonworking hours or when production is low because of demand</td>
<td>Short, modular competency-based training (CBT) courses reducing time for training</td>
</tr>
<tr>
<td>Training vouchers from government and financing agencies</td>
<td>Financing by training fund</td>
</tr>
<tr>
<td>Competitive grants for development of new curricula for training in multiple skill sets (multiskilling)</td>
<td>Short, modular CBT courses for entrepreneurship skills</td>
</tr>
<tr>
<td>Off-the-shelf courses and curriculum in training centers</td>
<td>Subsidized technical assistance from a training fund</td>
</tr>
<tr>
<td>Monitoring and evaluation by training funds and industry associations</td>
<td>Short-term subsidies for well-evaluated demonstration programs</td>
</tr>
<tr>
<td>Creating a window in training funds for the informal sector</td>
<td>Transfer of management of ineffective public training to industry associations</td>
</tr>
<tr>
<td>Partnering of industry associations with training providers to reach scale</td>
<td>Partnering with larger employers to use their training capacity</td>
</tr>
<tr>
<td>Use of industry associations to identify and deliver training for multiskilling</td>
<td>Introduction of performance-based budgeting with indicators to improve public response to informal sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constraints for the informal sector</th>
<th>Strategies to address constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax credits and training allowances offsetting training costs</td>
<td>Reform of financial markets, thereby improving services to small businesses</td>
</tr>
<tr>
<td>Use of industry associations to identification and delivery training for multiskilling</td>
<td>Use of industry associations to identify and deliver training for multiskilling</td>
</tr>
<tr>
<td>Standard courses by industry associations</td>
<td>Standard courses by industry associations</td>
</tr>
<tr>
<td>Introduction of performance-based budgeting with indicators to improve public response to informal sector</td>
<td>Introduction of performance-based budgeting with indicators to improve public response to informal sector</td>
</tr>
</tbody>
</table>
include financial market reforms to improve financial services available to small businesses and diversification of financing, thereby shifting some of the costs of training to workers. Apprenticeships are an example because they are often financed through small fees paid by the worker and his or her family and by the acceptance of below-market wages during the period of training. The value of the trainee’s production during the training that exceeds his or her wages can be used to offset some of the cost of investment in the worker’s skills.

• Finding providers of training that offer multiskilling for the informal sector is difficult. Training centers and schools train for a particular occupation or trade, whereas in a small enterprise workers need the know-how to perform a number of different tasks. The self-employed owner of a small household enterprise is frequently responsible for purchasing raw materials, producing goods and services, managing inventory, taking care of marketing and sales, doing financial accounting, and managing personnel. Workers with multiple skills are important to the small enterprise, unlike larger enterprises that can employ workers with specialized skills for these various functions. Strategies for multiskilling are often homegrown in the enterprise through on-the-job training in the different activities or through an apprenticeship that includes structured hands-on training in activities the worker needs to perform. Finding training providers that offer multiskilling is difficult, although industry associations that conduct a training needs analysis for their smaller members may identify this need and develop specialized programs offering a range of entrepreneurial skills.

• Financial and technical constraints impede investment in skills. Small enterprises, unlike larger counterparts, lack the expertise to carry out training needs assessments and design suitable training programs. Information failures lead small and household enterprises to discount the value of training and subsequently underinvest in it. The scale of training in smaller enterprises can increase the unit cost of the training above that paid by larger enterprises. Lack of supply and competition among providers serving the specialized training needs of smaller enterprises, particularly in rural areas, may further increase the cost of training. These factors act as constraints to the efforts of small enterprises to train and improve their productivity and incomes. Table 4.1 identifies strategies for confronting many of these constraints. Recognition by policy makers of these constraints is essential to adopting policies that will engage the small enterprises of the informal sector in building a base of skills for improving productivity and incomes.

Few existing programs address these constraints comprehensively. Most programs and training institutions de facto train for the informal sector, simply because that is where most of the nonfarm jobs are. However, the program review shows that training programs in the five countries often fail to consider the specific informal sector constraints (table 4A.1). Several programs offer multiskilling in as far as they combine some form of entrepreneurial training with technical training for a specific trade. Others address affordability constraints by
subsidizing training, by providing a combination of production for sale and training, or by accepting payments in kind. Overall, however, programs are generally less geared toward raising the training capacity for the informal sector by stimulating private sector supply or training trainers, providing flexible modes and times of training to adapt to those in service who wish to upgrade their skills, or raising awareness of the positive payoff to training.

**Strategies for Skills Development in the Informal Sector**

A comprehensive strategy that takes into consideration the constraints the sector faces is required for skills development in the informal sector. The preceding discussion identifies factors that are behind the shortfall of skills development in the informal sector. A comprehensive strategy to improve productivity and incomes in the small and household enterprises of the informal sector needs to consider each of these factors. No ready-made formulas automatically translate into success in different national or regional contexts, however. The importance of different constraints has to be weighed on a country-by-country basis, starting with ensuring a good quality basic education for all and opening opportunities where demand exists for secondary and higher education. The comprehensive strategy needs to promote equity in access to skills training that serves rural areas, women, and low-income populations. In some cases, this will be addressed through broadening supply, and in others, through demand-side interventions that address market discrimination and capacity to pay for skills in demand. Improving efficiency in the market for skills reaching the informal sector is likely to pay large dividends because market institutions that promote this efficiency through better information on quality, cost, and training outcomes are underdeveloped in all the countries examined. Governments are well able to play a role in promoting equity and efficiency.

Financing of public skills provision can affect its response to the informal sector. The strategy needs to look at reforms in public skills provision that shift attention to the requirements of the informal sector. The informal sector accounts for a large and growing share of employment off the farm in the five studied countries of Sub-Saharan Africa. Kenya’s Vision 2030 development strategy recognizes small and medium-size enterprises representing the informal sector as one of its five growth sectors. Some of the factors behind the failure of the public sector to respond to the informal sector are highlighted in chapter 1. Holding public providers accountable for serving the informal sector is probably best encouraged through their financing. Moving away from supply-driven financing focused on inputs, such as the number of training centers built and equipped, instructors hired, and programs offered, to financing formulas based on accountability for training outcomes, such as trainees placed, improvements in retention and completion, and services delivered to targeted growth sectors, can encourage needed reforms. National development and poverty reduction strategies not only need to recognize the importance of the informal sector but also should include action plans for addressing the sector’s development needs, including skills.
Promoting Private Investment in Skills

A key to the success of any strategy intended to promote higher productivity and incomes in the small and household enterprises of the informal sector is the removal of barriers to private investment that promote these outcomes. Reducing barriers to investments in skills by enterprises is an important part of the strategy for promoting higher productivity and incomes in the informal sector. For example, the Youth Opportunities Program in Uganda shows the promising effect of removing credit constraints to acquiring training and business materials (box 4.1). Lowering constraints and enabling enterprises to invest in the skills they need to promote their growth and productivity frees government from this role and allows it to focus on more strategic needs for improving market efficiency and equity. Table 4.1 identifies constraints to investment faced by small enterprises and highlights strategies for responding to these constraints. It draws on experience in the five countries studied and from international experience looking for programs that have been carefully evaluated for their effect on training outcomes. Lessons are drawn from this experience for lowering barriers to private investment in skills by the small and household enterprises of the informal sector.

Box 4.1 Removing Credit Constraints Encourages Skills Development

In 2006, the government of Uganda introduced a Youth Opportunities Program as an extension to an existing Northern Uganda Social Action Fund (NUSAF). By offering cash grants to be used for training and business materials, the program intended to raise incomes and employment among young adults (15–35 years of age) by alleviating critical financial constraints to credit and skills development.

Applicants were required to organize into groups of 10–30 people and submit a grant proposal for training and business material for (mostly) individual or joint businesses. Many of the participants were poor and low skilled, although the program attracted middle-class youth as well. They aimed to enter relatively small-scale businesses such as tailoring, mechanics, or hairdressing. Evaluations of the program using a control group who qualified for, but did not benefit from, a grant highlight both a strong demand for training and the importance of resource constraints. Nearly four of five of those receiving grants entered some form of vocational training, compared with less than one in five in the control group. Since starting their business, grant recipients spent four to five times more than control group members on new acquisitions of business equipment. Two years after the grant was made, recipients valued their stock of business assets at US$390, compared with US$158 for the control group (at 2010 market exchange rates). Two-thirds of recipients worked in a skilled trade, compared with one-third in the control group, and grant recipients worked more hours per month. On average, incomes of recipients exceeded those of nonrecipients by 50 percent, and they saw high returns on investment.

The success of the NUSAF approach appears to lie in meeting an unmet demand for training, in the self-targeting approach, and in the discipline imposed by group organization.

Source: Blattman, Fiala, and Martinez 2011.
Improving the Quality of Training Offered by Master Craftspersons in Apprenticeship

The weaknesses of traditional apprenticeships identified in the literature review of chapter 1 are evident in the five countries studied. The search for strategies to address constraints to skills development in small and household enterprises of the informal sector reveals some promising results, yet it also highlights constraints that are overlooked or given less attention. Improving the quality of training offered by master craftspersons in apprenticeships is a popular strategy (box 4.2). Examples are found in Kenya, where the design reduces the opportunity cost of time spent in training by master craftspersons and subsidizes their direct cost. More comprehensive, expanded versions of these programs offer a range of business development services and credit along with training. Tanzania’s Integrated Training and Entrepreneurship Promotion (INTEP) program offers an example. Similar comprehensive programs are observed in the other countries. These comprehensive programs show evidence of working to improve productivity and incomes in small enterprises; however, questions remain about their high cost and sustainability. The initiatives depend heavily on support from

Box 4.2 Improving the Skills of Master Craftspersons Enhances Apprenticeships

The Kenya Micro and Small Enterprise Training and Technology Project, completed in 2002 and financed by the World Bank, offered vouchers to offset the cost of training and access to new technology. The vouchers covered 50–70 percent of training costs for master craftspersons and apprentices, and other vouchers offered access to technology and specialized management and marketing services. The program targeted women as beneficiaries and was implemented by a nongovernmental agency. More than 32,000 people were trained, of whom 60 percent were women. After use of the vouchers, employment, assets, and income showed significant increases: 80 percent were able to grow their business, compared with 13 percent for the control group; 61 percent added business assets, compared with 21 percent in the control group; and 59 percent of women seeking to enter the program had started a business.

The Kenya Youth Empowerment Program, also financed by the World Bank, was launched in 2011, implemented by a public-private partnership of the Kenya Private Sector Alliance and the government of Kenya. Its goal is to provide youth with training and internship experience in growth sectors that include micro- and small enterprises. Master craftspersons are expected to offer training to youth who want to work in the informal sector. To encourage the participation of enterprises in training, the program offers master craftspersons training at the program’s expense to upgrade their business skills and improve their capacity as trainers. The training is offered after working hours to reduce the time away from business. After completion of the first program cycle, a beneficiary assessment found high levels of satisfaction and calls for more training opportunities by master craftspersons. The program will be evaluated again in the future using a control group.

Sources: KEPSA 2012; Phillips and Steel 2003.
Box 4.3 Comprehensive Programs with Skills and Other Business Development Services Can Improve Outcomes for Small and Household Enterprises

Five different programs with different objectives for skills development were reviewed in Rwanda and their lessons summarized. The programs included KURET-Rwanda by World Vision and CARE-NIPS, which both aimed at providing higher earning opportunities to vulnerable youth through skills acquisition; Education Offers Perspective (EOP), which targeted preservice training for labor market entrants and upgrading informal sector operators; and two vocational centers, Centre de Formation Professionnelle and Centre de Formation de Jeunes, that provided preemployment and in-service training. The conclusions from this review were as follows:

- Local market surveys of training demand prior to interventions are important in providing relevant training. Relying on trainee demand is not enough and risks lowering posttraining employability.
- The benefits of training and skills upgrading need to be better marketed, especially to active informal sector operators whose willingness to pay for skills acquisition otherwise may be limited.
- Cost is a problem for access, including for in-service training.
- Training through production, with artisans, appears to pay off better than formal vocational training in terms of skills acquisition, and employability and earnings, although the varying quality of master craftspersons’ pedagogical and technical skills is a problem.
- Upgrading skills requires attention to achieving specific competencies.
- Programs are more effective if they provide a complete package, including multiskilling (especially business training), access to finance packages, and follow-up business services, given that most graduates will end up being self-employed.
- Women remain occupationally segregated. Specifically, they are virtually all in tailoring, which has very limited earning opportunities; thus, finding ways of broadening their access to different types of occupations is important to raise productivity and income.

Most program evaluations are missing information on cost-effectiveness and for judging sustainability. There are clear benefits for the more intensive and expensive approaches that include local market demand surveys up front, comprehensive skills packages, posttraining accompaniment, and access to packages with business services and finance. However, these also tend to be staff intensive and thus costly, and affordable only in the context of ample donor funding.

Source: Johanson and Kayiranga Gakuba 2011.

donors and financing agencies, which support is infrequently sustained by governments after the external financing disappears (box 4.3).

Providing Second Chances for Education

Improving the skills of master craftspersons as trainers and opening pathways to new technologies are important to strengthen apprenticeships, but programs that open further education opportunities for master craftspersons and apprentices
are less frequently found. Formal education is shown to pay off in added productivity and earnings for people in the informal sector and to open new opportunities in the formal wage sector. For the large numbers without literacy or a basic education in the informal sector, few programs offer second chances for this education. Second-chance programs for education are frequently found in Latin America and are largely missing in Sub-Saharan Africa, although literacy programs are present to a varying degree. Malawi is an exception with its Complementary Basic Education Program (box 4.4). These programs reach not

Box 4.4 Second-Chance Education Programs Open Opportunities for Further Education and Earnings Opportunities in Malawi

Completing primary school remains a major challenge in Malawi. Over half of children starting primary school drop out before Standard 5. Only a small proportion makes it to secondary school. In 2010, Malawi had 319,000 out-of-school adolescents, a large number for a small country.

To give youth a chance to acquire skills, the government, initially with donor backing, set up the Complementary Basic Education program, which has now been mainstreamed into government operations. The program targets youth 9–17 years of age who either have never enrolled in school or had dropped out before completing Standard 5.

A pilot program was launched in 2006 in three districts. By 2011, the program was operational in six rural districts. The districts had high dropout rates, and the program reached 10,000 children and youth. The plan is to roll out the program nationally in 2012. Half of those reached initially are 14 years of age or older. Almost one in five had never been to school. Only about one-third of older participants are female.

Local nongovernmental organizations (NGOs) implement the program, recruiting and training local facilitators under 35 who have a secondary school qualification. Local recruitment provides jobs and role models for poor local youth. The program has smaller class sizes than formal primary schools, and learner centers have the benefit of being located centrally within villages and are managed by communities.

The curriculum covers basic literacy and numeracy skills, designed around the primary curriculum, as well as more practical skills, including agriculture and the environment, livelihoods and entrepreneurial skills, healthy living, and citizenship. The course is designed so that graduates of the three-year program can reenter Standard 6 in a formal primary school if desired.

The program has been successful in ensuring young people acquire basic skills, with participants often performing better than children in formal primary schools. Over half of learners in the first three-year cycle either completed the program or left early to reenter primary school. For those completing three years in the program, about one-third passed at a level equivalent to Standard 5 of the formal curriculum in numeracy. By contrast, a recent survey found that less than 1 percent of Standard 5 school pupils attained grade-level competency in mathematics.

Source: UNESCO 2012.
only youth but also adults. They serve people who have left the formal education system and provide them with education credentials accepted as equivalent to those offered by formal education. They use community facilities in off hours and contract teachers to reduce the cost of delivery.

**Showing Small Firms in the Informal Sector the Benefits of Training**

Solutions can be found for other constraints to skills development in small and household enterprises of the informal sector. As described previously, improving the technical and pedagogical skills of master craftpersons and opening pathways to an education credential for master craftpersons and apprentices strengthens apprenticeships and enhances the effectiveness of this instrument for promoting skills development in the small and household enterprises of the informal sector. However, other constraints persist to reduce training in small enterprises. These enterprises, unlike their larger counterparts, rarely have the knowledge needed to identify and design curricula for training programs. Information on the benefits of training may be absent along with providers who offer competitive services to small enterprises, tailored to meet the learning needs of workers who often have less than a secondary education. Unless enterprises can combine their training needs and create programs large enough to be economical, the unit cost of training for small firms may be prohibitive. Solutions to these problems can be found; some are already in use in Sub-Saharan Africa.

**Opening a Window for the Informal Sector in Training Funds to Support Small Enterprises as Part of a Value Chain**

Training funds, described in chapter 1, can be effective in responding to the needs of small and household enterprises by providing the specialized skills needed to conduct training needs assessments and design or deliver training on a scale suitable to the needs of these enterprises. Training funds are present in Kenya, Nigeria, Tanzania, and more recently Ghana. They are used widely throughout Sub-Saharan Africa and other regions and typically are financed by payroll taxes and external funding agencies. Tanzania’s VETA, for example, is financed by a 2 percent tax on payrolls. Ghana is setting up a new training fund with support from the World Bank. Funds that are financed by payroll taxes in the formal sector can be used to procure training services for targeted groups in a competitive manner and to finance training in enterprises through a levy-grant system. Training funds supporting only firms that pay the tax are used to spread the cost of training fairly among firms and reduce the free-rider problem of some firms choosing not to train, and instead, to hire skilled workers from enterprises that do train.

Usually, small firms do not participate in training funds. The reasons, explained in chapter 1, are tied to the high cost of administration and compliance in collecting taxes from these firms. Kenya’s Directorate of Industrial Training, which is responsible for administration of its Industrial Levy Training Fund (ILTF), found in a survey of 168 manufacturing enterprises that training enterprises outperform nontraining enterprises. However, although Kenya’s informal sector is
estimated to account for 30 percent of the nation’s gross domestic product, the ILTF did not provide training services to this sector. The informal sector is largely ignored by the ILTF, although the law authorizing the fund does not discriminate against the informal sector. Training funds in Malaysia and Singapore, in contrast, have found ways to encourage small enterprises to pay the payroll tax and participate in these funds (box 4.5). For small firms falling below the minimum size eligible for paying the tax, donors can offer support through training funds.

**Strengthening the Capacity of Small Industry Associations to Play a Larger Role in Skills Development for the Informal Sector**

Industry associations represent another way to confront training constraints in small enterprises of the informal sector. As explained in chapter 1, these associations are able to provide specialized knowledge of training needs to member enterprises, advocate for the benefits of training, set training standards, create a market for training providers through competitive procurement of services, and organize training for members to take advantage of economies of scale (box 4.6). Haan and Serriere (2002) explain the role these associations have played in West and Central Africa in strengthening apprenticeship and other training in the informal sector. They give an example in Ghana for dressmakers and carpenters, but the institutional analysis of training providers in the other countries studied was unable to identify similar examples. Strengthening the capacity of small industry associations to play a larger role in skills development for their members can open the door to better, more affordable training services for enterprises in the informal sector.

**Encouraging Private Providers for Skills Development for the Informal Sector**

Private providers of training, as noted earlier in chapter 1, have been more responsive to the skill needs of the informal sector than have public providers. Thus, encouraging private providers to do more for skills development in the informal sector needs to be part of a comprehensive strategy. Experience in Kenya with the Technical and Vocational Vouchers Program (TVVP) launched in 2008 illustrates how demand-side financing with market information can improve choices for skills development and help build a private supply response to meet the skill needs of people who will seek employment in the informal sector (box 4.7). The program uses a random experimental design to test several hypotheses. It examines whether information on the earnings associated with different trades makes a difference in training choices. It tests what happens when recipients of vouchers are given a choice between public and private providers of training. The program with the use of vouchers illustrates the impact of cost and ability to pay on training decisions and suggests the potential for vouchers to open more training opportunities for women and the poor on equity grounds.

**Improving Market Efficiency with Information about Training Providers**

The market for information in each of the countries studied is underdeveloped. The chapter on Nigeria refers to the absence of instruments monitoring
Box 4.5  Singapore and Malaysia Provide Incentives to Increase Training by Smaller Firms

Singapore established its Skills Development Fund (SDF) in 1979, and Malaysia created the Human Resources Development Fund (HRDF) in 1992. These funds are financed by a 1 percent levy on wages, and grants are given to eligible enterprises to encourage the training of employees. The goal of these funds, as part of a national development strategy, is to expand the resources available for training and to engage employers in developing a more flexible and adaptable workforce. Both funds include special incentives to encourage smaller firms to train. Smaller firms tend not to have capacity for assessing training needs and designing appropriate programs to meet those needs. Releasing key employees for training often harms production and leads to higher training costs for these firms. The small scale of training required adds to this cost, thus discouraging smaller firms from training in comparison with larger ones.

Singapore offered a training voucher to companies with fewer than 50 workers. Working like a discount voucher, it allowed firms to pay 30–50 percent of training costs up front while the SDF supports the balance. The voucher helped small enterprises ease cash flow problems when investing in staff training as well as reducing the amount of administrative procedure. The voucher helped SDF reach 65 percent of enterprises with 10–49 workers and 14 percent of those with fewer than 10 workers. In Malaysia, large enterprises with excess training capacities are encouraged to offer training places to employees of other enterprises, particularly small and medium-size enterprises that do not have the expertise and resources to formulate and run their own training programs. Small enterprises sending workers to these programs are eligible for training grants from the HRDF.

SDF grants were extended to enterprises to engage external consultants to conduct company-wide training needs analyses leading to the submission for financing of a worker training plan to the SDF. Companies with at least 51 percent local ownership could apply for grants covering 70 percent of the consultancy fee subject to a maximum. Although available to all firms, this grant helped smaller firms access the specialized resources needed to assess training needs and design appropriate training programs. Malaysia’s HRDF offered similar support, helping companies select the most suitable programs to plan for skills development of all employees. This support helped employers formulate annual training plans that led to only one application for a training grant rather than one every time they wanted to train.

The SDF made available a wide range of preapproved public courses for companies to subscribe to under its Approved-in-Principle system. This program was effective in attracting small companies that had neither the expertise nor the critical mass to conduct such programs on their own. Malaysia’s HRDF offered a similar Approved Training Program. Employers could select any Approved Training Program course and send employees for training without prior approval of the Human Resources Development Council and claim for reimbursement, subject to terms and conditions set by the council for completion of the training program. With many smaller firms employing workers without education, the SDF and the HRDF also supported programs providing the equivalent of a primary six levels of functional literacy and numeracy and further access to English and mathematics at the secondary education level.

Source: Adapted from Hirosato 1997.
Strategies for Improving Skills in the Informal Sector

Improving Skills Development in the Informal Sector

Box 4.6 What Role Can Informal Sector Associations Play in Training?

Associations of informal sector operators exist in many African countries although their level of organization and influence in many instances remain weak. Their roles can range from risk pooling and information sharing to more ambitious approaches, including organizing training, providing financial assistance to start-ups, and the like. Different countries (for example, Benin and Ghana) show that these informal sector associations (ISAs) can play a role in increasing access to training, improving its quality, and enhancing the market value of training as follows:

- Determine training needs: ISAs can become a partner in identifying skills gaps and help prepare curricula.
- Supervise quality of training: ISAs can help monitor the quality and output of training services.
- Certification: ISAs can provide trade tests and certification of skills acquired in different forms of training.
- Information and outreach: ISAs can provide outreach activities to raise awareness of the importance of training for productivity and earnings; they can channel information about access to different forms of training.


Box 4.6 What Role Can Informal Sector Associations Play in Training?

Associations of informal sector operators exist in many African countries although their level of organization and influence in many instances remain weak. Their roles can range from risk pooling and information sharing to more ambitious approaches, including organizing training, providing financial assistance to start-ups, and the like. Different countries (for example, Benin and Ghana) show that these informal sector associations (ISAs) can play a role in increasing access to training, improving its quality, and enhancing the market value of training as follows:

- Determine training needs: ISAs can become a partner in identifying skills gaps and help prepare curricula.
- Supervise quality of training: ISAs can help monitor the quality and output of training services.
- Certification: ISAs can provide trade tests and certification of skills acquired in different forms of training.
- Information and outreach: ISAs can provide outreach activities to raise awareness of the importance of training for productivity and earnings; they can channel information about access to different forms of training.


Requiring That Governments and Private Organizations Play an Important Role in Providing Market Information

Providing market information is a tool for quality assurance and market development that could help small businesses and trainees sort among providers of skills training. Market information is especially important to voucher and other demand-driven programs where enterprises and trainees as consumers need
information to sort by quality, cost, and outcomes among the choices of training providers available. Requiring public and private training organizations to conduct and publish tracer studies that account for the placement record and starting salaries of people completing their programs can furnish information that would help enterprises and youth choose cost-effective options for training. It would also doubtless create pressures for reform where the results are disappointing. Licensing and setting minimum standards for operating a training program can screen out private providers who do not offer effective, good quality services. Accreditation systems that establish higher standards for performance can further help enterprises and youth sort among providers of training services in terms of quality and relevance. Accreditation systems can be maintained not

Box 4.7 Vouchers and Information Improve Choices in Skills and Help Create a Supply of Private Training Providers

The Technical and Vocational Vouchers Program launched in 2008 in western Kenya (Busia) is a research project focusing on factors affecting demand for skills development and the economic and social impact of skills development. Among youth who applied for the project, 50 percent were randomly selected to receive a voucher, with the remaining 50 percent serving as a control group. Of those receiving vouchers, half were given restricted vouchers that could be used only in public institutions.

Although final results are still pending, some preliminary analysis points to interesting results from a policy perspective:

• High costs of accessing technical and vocational education are potentially a significant barrier to access to skills development. Of the voucher holders, 75 percent attended training, compared with 4 percent of the control group.

• Private training appears to increase the choice in the training market and improve chances that youth find a provider that matches their needs and individual circumstances. The share of unrestricted voucher holders making use of the voucher was 10 percentage points higher than the share for holders with the restricted voucher.

• There is more evidence of the need for a large supply of institutions that flexibly can accommodate individual constraints, including family considerations. When asked for reasons for choosing a specific program, almost half of the youth indicated “proximity to home,” and almost a third the “ability to find accommodation nearby training center.”

• Information on training supply and labor market contexts is low. Participants turned out not to be properly informed about labor market outcomes, including the likely returns.

• Vocational training can serve as an effective second-chance program for youth with low educational achievements. Participants with at most completed primary were more likely to finish their education than those with secondary levels of education.

• Systematic information on returns to training is not yet available, but very preliminary indications are that training helps in shortening job search and increasing remuneration (especially for women).

Source: Hicks and others 2011.
only by government bodies, but also by private industry groups that wish to distinguish their services from others in the market place.

**Expanding the Supply of Training for the Informal Sector to Promote Competition and Innovation**

Private providers in Kenya and Rwanda have proven to be more responsive to the needs of the informal sector for skills, showing a willingness to innovate in a manner that addresses constraints of financing and cost for training in small and household enterprises. Rwanda’s microtrainers show a willingness to innovate (box 4.8). Demand-side financing instruments such as vouchers or grants by training funds to small enterprises to train can help promote this private market by creating new purchasing power for enterprises and stimulate a supply response to the need for training by smaller firms. Opening capital markets and improving financial services to enterprises in the informal sector also has the potential to encourage private investment in training and stimulate the supply response to this market.

**Building a Knowledge Base**

Much more knowledge is needed about the role of skills in the informal sector and what policies could be effective in promoting skills and productivity in different contexts. Household surveys need to be enriched to better measure skills and training. In particular, different forms of training—vocational formal training, apprenticeships, short-term training, on-the-job training—need to be captured with more detail. Work has begun to provide richer measurements of skills, both cognitive and noncognitive, for example, through the World Bank’s STEP Skills Measurement Surveys. Moreover, although the emphasis on results-based policy making is increasing, a serious lack of information on program effectiveness still exists. Full randomized, controlled trials may not be feasible in all settings. However, better monitoring and evaluation of processes and outcomes is necessary to understand what can be done and how to improve the access of informal sector operators to skills development and increase the effect on productivity of this skills development.

**Defining Roles and Responsibilities for Reforms**

Governments can play an important role in building a market for skills for the informal sector and by supporting basic education. This book shows that the market for skills serving the informal sector is underdeveloped. The market lacks institutions providing the information needed for decision making by consumers of training services and employers, especially for choosing among apprenticeships. Employers lack information on the level of skills attained by workers completing apprenticeships. Information asymmetries arising from this information gap lead to inefficiencies in the labor market. National skills testing and certification systems can be strengthened to include certification for apprenticeship trades. Governments can take other steps to improve the flow of information in training
Box 4.8  Rwanda’s Innovative Microtrainers Offer an Alternative for the Informal Sector

A survey of training providers (financed by the German Organization for Technical Cooperation, GTZ) was undertaken in 2009. The survey provides unique material in that it attempted to identify all organized types of training providers and provide information on them using an extensive questionnaire.

The survey showed that private providers of training dominate the training market in Rwanda, accounting for 9 of 10 trainees enrolled. Public providers account for only 1 of 10 trainees. Training is generally financed through apprentice fees and income from sales of goods and services. With the exception of training in commerce and business, employment outcomes were generally reported to be favorable, with four of five graduates finding a job. These private providers differ from the public providers in several respects: they accommodate a higher share of female trainees—possibly because one-third focus on tailoring—and have considerably fewer trainees per teacher or instructor. Courses average one year in duration, with about 70 percent of the time dedicated to practical activities. They are comparatively better connected to labor markets with practical rather than theoretical training and produce directly for the market.

The survey also identified an innovative approach to training. Microtraining providers (MTPs) have 12 or fewer trainees enrolled, on average only 6 trainees per provider, and 3 trainees per teacher or instructor. MTPs account for less than 10 percent of total private enrollment registered in the survey but nonetheless enrolled twice as many trainees as the public technical and vocational education and training institutions. They are young institutions (half were established between 2006 and 2009); half of them are individual proprietorships, and the other half are associations or cooperatives. Four of five MTPs derive income through tuition, and four of six from sales of goods and services.

MTPs are different from informal sector firms offering traditional apprenticeships. Many informal sector enterprises have workers called apprentices (three-fourths of whom appear to receive some compensation for their work) who learn skills without any organized curriculum. The main business of the informal sector enterprise is production of goods or services. In contrast, MTPs have trainees who pay fees. The main business of microtrainers is training; they follow organized curricula and often use special-purpose training materials. Two-thirds of the microtrainers supplement their income with some production, which helps keep tuition fees down (and, in the case of very poor people, may take the place of tuition). Microtrainers issue certificates of completion or achievement to their graduates; apprentices may receive a letter from the business owner.

One can fairly assume that this MTP segment is serving women to a greater extent than any other type of provider, including traditional apprenticeships, and MTPs are concentrated in a few areas. Two-thirds of enrollment is in tailoring (45 percent), carpentry (14 percent), and beautician services (8 percent). Compared to traditional apprenticeships, MTPs provide a clear curriculum (designed by the MTP), offer fixed-length courses (though the length varies among providers), and charge a fee. Like traditional apprenticeships, MTPs provide a certification at the end of the training period.
Box 4.8 Rwanda’s Innovative Microtrainers Offer an Alternative for the Informal Sector (continued)

These findings indicate that the training market is diverse in Rwanda and that a large segment of private training providers are responding to strong popular demand for skills acquisition; in particular, they appear to compensate for lack of female places in public training institutions. They make up the overwhelming majority of training providers in the country, and their numbers suggest ease of access for clients. A vast majority is fee based, which suggests people are willing to pay to acquire skills. They focus on practical training and link to demand for services and goods (and skills), because two-thirds also derive income from production of goods. They operate, apparently successfully, without government regulation or support.

Compared to formal vocational training, these providers specifically address some of the skills acquisition problems inherent in the informal sector, including the low level of income and limited cash flow to pay for training (through production of goods and services), and similarly the opportunity cost of training. However, MTPs are less good at addressing the need for multiskilling (for example, providing business skills to future self-employed individuals). They are also generally limited to preservice training and consequently do not cater to people who need to upgrade existing skills. Although employment outcomes appear relatively good, no clear evidence indicates how well the skills provided actually correspond to demand. The high demand for tailoring in what appears to be a rather saturated market suggests that there may be weak links in some areas. Finally, MTPs do not operate in a standardized context of qualifications.

Source: Johanson and Kayiranga Gakuba 2011.
Public providers of skills can play a larger role in providing skills for the informal sector by introducing reforms. Chapter 1 identified many of the factors affecting the response of the public sector to the needs of the informal sector. Reforms introducing modular curricula for training can open options offering greater flexibility than offered by current delivery modes. Rather than requiring two or more years to attain a degree or skill qualification, a modular approach allows the delivery of skills in shorter time bands that are more suitable not only to the just-in-time learning needs of people working in the informal sector, but also for in-service training and upgrading the skills of those in the formal sector. Organizing training in modular form focused on specific competencies can reduce the cost of a worker’s time away from production and remove this important constraint to developing skills in the informal sector. The building of skill qualifications in modular steps can serve the trainee who is willing to invest in longer periods of training, as well as those needing to upgrade specific skills quickly and return to work. Curriculum reforms like this are an important step to increasing the flexibility of public provision and building capacity to serve small and household enterprises of the informal sector. The modular, competency-based curriculum is also well suited to developing a lifelong learning framework.

Public providers of training can offer other services that contribute to skills needed by people in the informal sector. These providers include not only the technical and vocational education offered by ministries of education, but also the nonformal training offered by other ministries, such as labor, youth and sports, industry, and agriculture. Introducing adult literacy, second-chance education, and entrepreneurship courses into the programs offered by these public training providers can enhance the relevance of their training to those in the informal sector who lack a basic education and requisite entrepreneurial skills. Special programs for people who want to pursue self-employment that combine skills in production management, accounting, sales and marketing, and human resources along with technical skills can add to their readiness for starting a business. Public providers have proven to be slow in responding to the needs of the informal sector with their focus on longer-term training for finding a first job. Opportunities exist to broaden the market served by offering courses relevant to self-employment and in-service training. As explained above, governments can encourage the introduction of programs like these through their financing for public provision of training.

Private providers of skills already play an important role in serving informal sector enterprises and can be encouraged to do more. Strengthening the capacity of informal sector associations (ISAs) for organizing and delivering of training is possible and can be done by donors and governments. Demand-side financing through vouchers and training funds, if carefully targeted, can improve equity and access to skills for the informal sector. The added purchasing power in the market provided by this financing can create incentives for a private supply response. The evidence from several countries in the study suggests the responsiveness of private training providers to increased demand in the informal sector.
The demand encourages competition, lower prices, and innovation in service delivery for enterprises in the informal sector. Helping workers and trainees sort out good training from bad training in this market remains important. The study evidence suggests that private training capacity exceeds that of the public sector in most countries of Sub-Saharan Africa, and better regulation and market information can improve the efficiency of private provision.

Finally, international development and financing agencies can play an important role in the financing of skills for small and household enterprises. International development and financing agencies are already supporting efforts to improve productivity and earnings in the informal sector through skills development programs and comprehensive programs offering an array of business development services and credit to small and household enterprises. The discovery of this study is just how little can be said about the impact of these programs on beneficiaries for lack of rigorous evaluations. The study points to a number of activities that show promise for improving productivity and incomes in the informal sector through skills. Beyond support for basic education and expansion of secondary and higher education in line with market demand, the study provides a strategic framework for improving productivity and incomes in the informal sector that can be supported by external aid. This support should be accompanied by efforts to evaluate results in a rigorous manner and share the knowledge widely.

The assistance given by international development and financing agencies can focus on a number of interventions that promise improvements in productivity and incomes for the informal sector. Among the interventions identified in this report are efforts needed to reach those in the informal sector with literacy and second-chance education programs. Helping build a foundation of basic education for the large numbers in the informal sector who lack this foundation opens new opportunities for income and further skilling. Beyond this, the list is lengthy and includes (a) improving the skills and pedagogy of master craftspersons; (b) building the capacity of industry associations to serve the skill needs of the informal sector; (c) opening and financing windows in training funds for training in small and household enterprises; (d) offering targeted demand-side financing to promote equity in access to skills and a competitive supply of skills training for the informal sector; (e) supporting public sector technical and vocational education reforms that expand services to the informal sector; (f) strengthening market institutions that provide information and promote greater market efficiency in training for the informal sector; and (g) supporting rigorous evaluations of programs for skills development serving the small and household enterprises of the informal sector.

**Annex 4A: Programs That Address Some of the Informal Sector Training Constraints**

The following table provides examples of programs that have tried to address some of the informal sector training constraints discussed in this chapter.

Improving Skills Development in the Informal Sector • http://dx.doi.org/10.1596/978-0-8213-9968-2
### Table 4A.1 Examples of Programs Addressing Informal Sector Training Constraints

<table>
<thead>
<tr>
<th>Program</th>
<th>Constraint addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Kenya Youth Employment Project (KYEP) | Training of master craftspersons provided in evening hours (opportunity cost)  
| | Scholarships for trainees/interns and allowances for informal sector master craftspersons to provide places (cash flow, opportunity costs)  
| | Attachments in informal sector are preceded by training master craftspersons in entrepreneurship, production, marketing, human resources development, and coaching/training methodologies (training capacity) |
| World Bank Busia Informal Sector Vouchers (WB IS) | Providing informal sector operators with vouchers to partially cover training costs (cash flow)  
| | Stimulating demand, which was met by a newly emerging type of training providers (within the informal sector) (supply for informal sector needs) |
| African Centre for Women, Information and Communications Technology (ACWICT) | Combined technical with entrepreneurial and life skills (multiskilling) |
| Informal Sector Business Institute (ISBI) | Linking training to microcredit scheme (low cash flow)  
| | Providing “street MBA” (business skills) to informal sector operators (multiskilling) |
| Technical and Vocational Vouchers Program (TVVP) | Inviting youth to apply for vouchers (information failures) |
| **Nigeria** | |  
| Start Your Own Business | Business training for potential informal sector operators (multiskilling) |
| Shell Youth Development Scheme (YDS) | Technical and business training (multiskilling) |
| **Rwanda** | |  
| Combating Exploitive Child Labor through Education in Kenya, Rwanda, and Ethiopia Together (KURET) | Business development services (multiskilling) |
| Education Offers Perspective (EOP) | Training of trainers in entrepreneurship (training capacity) |
| **Tanzania** | |  
| The Small Industries Development Organization (SIDO) | Provides a range of training programs in business and technical areas to informal sector, also provides specific business training to graduates VETA (multiskilling) |
| SIDO/Vocational Education and Training Authority (VETA) | Accepts in-kind contributions as payments (cash flow, opportunity cost)  
| | Generates master craftspersons who take on traditional apprentices (training capacity) |
| Integrated Training and Entrepreneurship Promotion (INTEP) | Provides technical and business skills plus literacy, if needed (multiskilling)  
| | Subsidized training schemes (cash flow, opportunity cost) |

### Note

1. Acquiring some human capital provides a person with the option to continue to further studies (human capital accumulation) or not, that is, to make the decision about further education once more information is available. The value of the option increases with higher variability of the returns to education.
References


