Prologue

Skills Development in the Informal Sector of Sub-Saharan Africa

Arvil V. Adams

1 Introduction

Since first recognized in the early 1970s, the informal sector of Sub-Saharan Africa has become a growing source of employment for large numbers of youth, but also for older workers pursuing entrepreneurial goals and others adjusting to structural changes in the region’s employment (Bangasser, 2000; Liimatainen, 2002; International Labour Organization [ILO], 2002a; Johanson & Adams, 2004; Becker, 2004; Haan, 2006; Fox and Gaal, 2008). Initially viewed as a safety net for those unable to find employment in the modern sector, the image of the informal sector has begun to change with time and the education of those entering it. More workers have begun to view it not as a temporary stop while searching for employment in the formal wage economy, but as a preferred destination offering opportunities to those wanting to become entrepreneurs.

In countries throughout the Africa region, where job growth in the formal wage sector has stagnated making it difficult to absorb rising numbers of new entrants to the labour force, self-employment has opened opportunities for youths who are acquiring higher levels of education and skills (Fox and Gaal, 2008). Rising levels of education are producing higher earnings in the informal sector. In Ghana, using household data from the 2005 Ghana Living Standards Survey, the comparison of earning gains estimated with multiple regression analysis showed returns by level of schooling for self-employed workers in the urban non-agriculture sector that approach or match those of wage workers in the urban non-agriculture sector (World Bank, 2008).

A cursory look at countries in Sub-Saharan Africa shows that informal sector activities maintain a significant and, in some cases, dominant share of their respective markets covering mining, manufacturing, commerce, finance and other sectors. Examples of this employment are seen on the streets and in home-based activities in countries like Nigeria, Kenya and Senegal in the vending of food and small merchandise, in health care by traditional healers, the tailoring of garments, and the manufacturing of furniture and repair of automobiles. The size of the sector, estimated to account on average for 42% of gross domestic product (GDP) in twenty-three African countries in 2000, is forcing governments to acknowledge its
existence and importance to the national economy and the welfare of those employed therein (Schneider, 2002). In South Africa, with a larger formal sector, the informal economy still contributes between 7 and 12% of GDP (Devey, Skinner and Valodia, 2006).

Confronted with evidence of the informal sector’s growing importance, this prologue examines the question of how workers are prepared with skills for these jobs and how governments are encouraging further investments in skills alongside a menu of other interventions that would raise productivity and earnings in the sector. It looks closely at the unique character of skills development in the sector and the roles played by schools and employers as providers of skills. Unlike the formal sector where workers may be specialized, those working in the informal sector must have skills to perform multiple functions and few can afford long spells away from work for training. These features set skills development for the informal sector apart from that for the formal sector.

The chapter examines recent research covering measurement of employment in the informal sector, impediments to investing in skills within the sector, and policies and programmes to expand this investment. It extends earlier work on this topic carried out under the auspices of the World Bank (Johanson & Adams, 2004). The purpose is to examine what is currently known about these issues, identify gaps in knowledge, and offer a strategy for expanding skills development in the informal sector. Recent research, for example, like that mentioned above in Ghana showing the changing character of employment in the informal sector and the prospects of growing returns to skills, casts a new light on employment in this sector. Further inquiry into the robustness of these findings is merited in other countries to deepen our understanding of how skills influence the welfare of those who create their own employment in the informal sector and how investment in skills can be expanded.

While recognizing informality in the economy and the importance of skills to the earnings of those employed in the sector, the chapter does not address incentives for this informality or suggest ways in which the informal economy might be formalized. The chapter does attempt, however, to unravel differences in the informal sector as a means to better understand how the welfare of those employed in the informal sector can be improved through investments in their skills. It provides a framework of questions for further study to meet this challenge. Finding ways in which to improve the working condition of those employed in the informal sector is part of a broader agenda defined for promoting decent work in the global economy (ILO, 2002b).

2 Measuring the Informal Sector

The ILO first introduced a statistical definition for the informal sector in a January 1993 Resolution adopted by the fifteenth Conference of International Labour Statisticians (ILO, 2002a). The attention paid to the measurement issue was generated by interest in the size of the informal sector and its contribution to national in-
come and economic welfare. A decade later, this interest has grown to include the increasingly precarious nature of employment in the formal sector, joining that in the informal sector, as previously secure jobs and benefits were being threatened by growing global competition. The result has been an effort to derive a broader definition of informal employment. This was reflected in a subsequent Resolution adopted in December 2003 by the seventeenth Conference of International Labour Statisticians (Hussmanns, 2004). Interest in the two concepts—employment in the informal sector and informal employment—has driven efforts to define and measure the informal economy.

2.1 The Conceptual Framework

Just how are these concepts defined? The conceptual framework adopted in defining employment in the informal sector and informal employment uses a building-block approach that disaggregates total employment along two dimensions: type of job and type of enterprise. Labour-force surveys have been a primary source of data for measuring informal sector employment and informal employment. These surveys are conducted on a regular basis in most countries and are used to produce data on the two concepts by adding additional questions pertaining to the informal sector and informal employment (Hussmanns, 2004). Household surveys identify informal production units and then administer ‘enterprise’ modules as part of the household survey, thus adopting a mixed household and enterprise survey approach to measurement of employment in the informal economy. The two-step mixed survey approach is considered superior in coverage to using separate household or enterprise surveys (Roubaud & Razafindrakoto, 2007).

Within the household survey, the type of job held in the informal sector covers the self-employed, own-account workers, contributing family workers, paid workers and members of producers’ co-operatives. In the absence of an enterprise module, the self-employed, own-account and contributing family workers are sometimes used as a proxy for informal sector employment. Where an enterprise module is used, informal sector enterprises are defined as unincorporated private production units owned by individuals or households producing at least some non-agricultural goods or services for sale or barter. Their size in terms of employment is below a certain number threshold determined by national circumstances, but often defined as under ten workers. These enterprises are not registered under specific forms of national legislation and may be separated into production activities that are legal, legal but underground or illegal.

Informal employment can also be found outside the informal sector and includes unpaid family workers, workers with precarious employment in formal sector enterprises, and certain employment in households producing goods exclusively for their own use or employing paid domestic workers. The sum of employment in informal sector enterprises and that outside in these three categories defines informal employment. For an illustration of the building-block approach to measurement of formal and informal sector employment and also informal employment see Fig. 1.
<table>
<thead>
<tr>
<th>Production units by type</th>
<th>Jobs by status in employment</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Own-account workers</td>
</tr>
<tr>
<td></td>
<td>Informal</td>
</tr>
<tr>
<td>Formal sector enterprises</td>
<td></td>
</tr>
<tr>
<td>Informal sector enterprises</td>
<td>3</td>
</tr>
<tr>
<td>Households</td>
<td>9</td>
</tr>
</tbody>
</table>

(a) As defined by the Eleventh International Conference of Labour Statisticians (excluding households employing paid domestic workers).

(b) Households producing goods exclusively for their own final use and households employing paid domestic workers.

Note: Cells shaded in dark grey refer to jobs which, by definition, do not exist in the type of production unit in question. Cells shaded in light grey refer to formal jobs. Un-shaded cells represent the various types of informal jobs.

**Informal employment**: Cells 1 to 6 and 8 to 10.

**Employment in the informal sector**: Cells 3 to 8.

**Informal employment outside the informal sector**: Cells 1, 2, 9 and 10.

*Fig. 1* Conceptual framework: informal employment
While the study of employment in the informal sector is important for capturing the contribution of this sector to national income and welfare, the separate study of informal employment, going beyond the informal sector, has attracted the attention of policy-makers concerned with the increasing precariousness of employment in all enterprises. The ILO has expanded its traditional attention on employment in the informal sector to include informal employment as part of its ‘decent jobs’ agenda.

Preceding the interest of the seventeenth Conference of International Labour Statisticians in the informalization of employment, the ILO set out to measure employment in the informal sector leading to the publication in 2002 of the ILO compendium of official statistics on employment in the informal sector. The 1993 ILO Resolution on employment in the informal sector provided national statistical agencies with a degree of flexibility in their definition of the informal sector and this produced problems in international comparability. Following recommendations by the Expert Group on Informal Statistics (the Delhi Group), a set of recommendations was offered in 1999 for the harmonization of national definitions (ILO, 2002a). The 2002 ILO compendium contains harmonized measures of informal employment, but for only seven countries globally, while also reporting measures based on national definitions for another thirty-eight countries. Only one of the harmonized country reports—Ethiopia—is from Sub-Saharan Africa.

While there is a growing awareness of the informal sector by governments and its importance to national accounts and measures of economic activity and well-being, national statistics capturing the concept continue to vary from country to country. These differences are attributed to:

- Criteria used to define the informal sector, for example, employment size of the enterprise, use of registration status;
- Branches of economic activity covered, particularly concerning the inclusion or exclusion of agricultural activity;
- Inclusion or exclusion of paid domestic employees employed by households or producers of goods for their own final use within their households;
- Inclusion or exclusion of persons with a secondary job in the informal sector;
- Inclusion or exclusion of persons engaged in professional or technical activities; and
- Geographic coverage, some for urban areas only.

Caution, therefore, has to be exercised in making cross-country comparisons of published informal sector data. Careful attention must be given to the concepts and methodology used in each country in national statistics for the informal sector. One of the lessons drawn from this for further study of the informal sector is the importance of benchmarking the definition and methods used by a country’s national statistics agency, and if special surveys are undertaken, using the ILO’s building-block approach to define carefully the concept used in each country in order to harmonize definitions for comparison or to understand their differences. While recognizing the importance of informal employment outside the informal sector, this chapter is largely focused on issues of employment in the informal sector and the skilling of its workforce. It does not address skills in the formal wage sector.

2
2.2 A Profile of Informal Sector Employment

The ILO’s 2002 report provides a glimpse of those employed in the informal sector. Table 1, drawn from the ILO report, presents informal sector employment using national definitions for countries reporting from Sub-Saharan Africa. The variation in this table of the percentage employed in the informal sector reflects the differences in national definitions. The share of informal sector employment varies from nearly 20% in Botswana to over 90% in Mali where agricultural employment is included in the national definition. Though not reported here, the share of informal employment in rural areas tends to exceed that in urban areas. Considerable churning of employment in the informal sector is noted in South Africa by Devey, Skinner and Valodia (2006) with slightly over 44% of those employed in the informal sector in September 2003 continuing to work in the informal sector in March 2004.

Table 1  Persons employed in the informal sector: selected countries in Sub-Saharan Africa (latest available year)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (‘000)</th>
<th>Men</th>
<th>Women</th>
<th>Total as a percentage</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Employment</td>
<td></td>
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<td>Employment</td>
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<td></td>
<td>National definition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>1996</td>
<td>60.5</td>
<td>21.1</td>
<td>39.4</td>
</tr>
<tr>
<td>Benin*</td>
<td>1999</td>
<td>275.5</td>
<td>174.8</td>
<td>100.7</td>
</tr>
<tr>
<td>Cameroon*</td>
<td>1993</td>
<td>119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1999</td>
<td>4814.8</td>
<td>1444.2</td>
<td>3370.6</td>
</tr>
<tr>
<td>Madagascar*</td>
<td>1995</td>
<td>239</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mali</td>
<td>1996</td>
<td>1176.1</td>
<td>485.6</td>
<td>690.2</td>
</tr>
<tr>
<td>South Africa</td>
<td>2001</td>
<td>3319</td>
<td>1572</td>
<td>1746</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1991</td>
<td>2369.4</td>
<td>1531.1</td>
<td>838.3</td>
</tr>
</tbody>
</table>

| * = urban only. |

Self-employed workers, most of whom are own-account workers and unpaid family workers, are considered the major component of the rural and urban informal sectors. Becker (2004) estimates that 70% of the informal sector is comprised of those who are self-employed with the percentage rising to 81% if South Africa is excluded. The number of self-employed in non-agricultural activities, measured by household surveys, has increased over the past two decades. Own-account and family workers represented nearly two-thirds of the non-agricultural labour force in Africa. Women’s share of informal employment is higher than that of men’s in about half of the countries for which data are available.

Women comprise most of the unpaid family workers and are often undercounted, since many are home-based. Trade accounts for a major share of informal sector employment. From a survey of South Africa, Lund and Skinner (2003) report that informal employment is concentrated in the retail and wholesale trade with just over half of all informal sector workers located in this sector. A significant number
are also employed in construction, manufacturing and services. Over 10% of those engaged in the informal sector have jobs in manufacturing and this is considered low in comparison with other developing countries. Haan (2006) reports that trade activities, including street vending and ambulant trading, are the most important segments of the informal sector in Africa, usually constituting half and sometimes up to 75% of employment.

The self-employed dominate employment in the informal sector. In a survey of the characteristics of informal sector enterprises in Botswana, Kenya, Malawi and Zimbabwe, Mead and Liedholm contend that on average almost two-thirds of all informal sector enterprises are one-person businesses (quoted in Haan, 2006). Most of these enterprises are labelled as subsistence level firms with only a small likelihood of growing into larger enterprises. Earnings and profits in these small enterprises are low by comparison with larger enterprises that hire other workers. These small enterprises are sometimes referred to as the ‘working poor’.3

Still, evidence from a number of countries confirms that average incomes in the informal sector are generally higher than official minimum incomes and earnings from agriculture. Earnings of self-employed non-agricultural workers in Ghana in 2005, a proxy for informal sector workers, were 35% higher than those for self-employed agriculture workers (World Bank, 2008). Fox and Gaal (2008) conclude that earnings in the informal sector pull workers out of agriculture with average incomes in the informal sector of most countries being at least 50% higher than those in agriculture. The impact on poverty, they report, is positive with data from a number of countries showing that households whose main economic activity is in the informal sector have a lower rate of poverty—the highest poverty rates are always in agriculture. Having a family member earn income in the informal sector raises household incomes.

The education levels of those employed in the informal sector are generally lower than those in the formal sector (Liimatainen, 2002). However, this pattern is changing as young workers are entering with more education. Low education levels limit trainability and lead to modest skill levels. In a survey of five African countries—Kenya, Senegal, Tanzania, Zambia and Zimbabwe—Haan (2006) reports that about half of informal sector workers have either no education or primary education, and less than 5% have a post-secondary education. Slightly better results are reported by Walther (2006) for South Africa. In contrast, a survey of those employed in the informal sector of Nigeria found larger numbers with a post-secondary education (14%), and some 45% with a secondary school certificate (NISER, 2007). Finding ways to continue education and promote skills training forms an important challenge to improving productivity in the informal sector and reducing poverty.

3 Building a Skilled Workforce in the Informal Sector

Skills for work are acquired in different settings in classrooms, workshops and on the job. They are provided by public education and training institutions, private for-profit and non-profit institutions, and employers through training in the workplace and outside. Training may be taken to qualify for employment or to upgrade skills
and prepare for the introduction of new technology in production. For those working in the informal sector, some or all of these approaches to skills may be used. Public and private schools can play an important role in preparing individuals for creating their own employment by providing them with a technical skill, usually through a technical and vocational education curriculum. A commonly used approach to self-employment is working for another employer and acquiring skills on the job, either informally or through an apprenticeship, before leaving to set up one’s own business. Each approach has strengths and weaknesses.

### 3.1 Public Technical and Vocational Education and Training

Public secondary and tertiary schools with technical and vocational education programmes have played a smaller role than might have been anticipated in preparing workers for informal sector employment (Atchoarena & Delluc, 2001). Originally developed at the time of independence in the 1960s to meet the expected skill requirements of industrialization, these institutions have been slow to respond to the structural change and growth of the informal sector (Brewer, 2004; Haan, 2006; Liimatainen, 2002; NISER, 2007; Filipiak, 2007). Structural adjustment programmes and tight government budgets contributed in the 1980s and 1990s to deteriorating facilities and equipment and the inability of these institutions to update programmes and respond to the shift to informal sector employment (ILO, 2002b; Johanson & Adams, 2004).

Other impediments also stand in the way of the public sector’s response to meeting the skills challenge of the informal sector. The training offered by the public sector is considered theoretical in focus without sufficient opportunities for practice and biased toward white-collar jobs in the wage sector (Liimatainen, 2002). Entry requirements and fees are often too high and the training methods used better suited to a more literate population. The courses offered are considered rigid and too standardized to meet the multi-skilling needs of the highly diverse informal sector. Where public financing is used without accountability for results, these institutions have few incentives to reflect and adjust to changes in the demand for skills (Ziderman, 2003). Weak accountability influences not only the responsiveness of the public sector to special needs of the informal sector, but in a more general way to the changing demand for skills in the formal sector.

The population targeted for this training and the mode of delivery are also factors behind the failure to reach out to the informal sector with skills. Public technical and vocational education programmes are largely focused on the full-time student preparing for entry into the world of work and require sustained periods of time in school. The focus on pre-service training is not matched by a focus on in-service training for those already employed. This model has proved ill-suited to those among the poor seeking to combine school and work in a part-time fashion to provide families with income and, similarly, to meet the needs of older workers who are unable to afford time away from work to undergo training. A more flexible
approach is needed. Examples of this are found where schools have adopted modular, competency-based curricula that permit flexible entry to and exit from training at hours not interfering with the workday.

The Kenya Jua Kali programme (Kiswahili for ‘work under the hot sun’), offering training vouchers to those working in the informal sector in the mid-1990s, provides an interesting window on the response of public training institutions to the demand for skills that these vouchers created. The vouchers were observed to produce a positive supply response to the demand created for skills, but mainly from non-governmental organizations and from master craftspersons in the informal sector. New programmes were developed tailored to the needs of voucher recipients and offered during off-hours to fit work schedules. Public institutions showed little interest in adapting their traditional programmes to respond to this new source of demand (Adams, 2001). The motivation for responding to new sources of demand like this with innovative programmes is diminished where public institutions are unable to retain locally-generated income for quality improvements and incentives for instructors.

The recent introduction of entrepreneurship education represents an innovation in public secondary and tertiary education institutions that is relevant to the informal sector. These programmes help develop attitudes favourable to starting one’s own business and provide knowledge and skills for running a business, e.g. business law, accounting and bookkeeping, credit and finance, and marketing.5 Farstad (2002) examined entrepreneurship education programmes in secondary and tertiary education institutions in Botswana, Uganda and Kenya. He found instructors generally well qualified, but observed no immediate impact on the numbers of students leaving school to start a business.

The fact that students did not immediately start new businesses is not by itself an indicator of failure on the part of these programmes. Farstad acknowledged that the more traditional route to self-employment starts with an initial period of apprenticeship or wage employment to gain practical experience and build professional self-confidence. In a comparison of graduates of general secondary education programmes and those from technical and vocational education programmes, he observed that the latter group was more likely to start businesses within a few years of graduation. The technical education provided a skill that was then honed on the job with an apprenticeship and wage employment before setting out to start a new business.

Entrepreneurship education has encouraged schools to think outside traditional patterns of pedagogy and classroom instruction. Periods of mandatory work placement have been introduced along with compulsory development of a business plan subject to examination and grading. In Kenya, entrepreneurship education is delivered with the assistance of small business centres attached to all public post-secondary and some private technical and vocational education institutions. In Botswana, students benefited from the requirement that they establish and operate a student enterprise. Co-operation between training institutions and private enterprises in curriculum development and training delivery was found to add value in the three countries studied (Farstad, 2002).
Other options for engaging public education and training institutions in skills development for the informal sector are discussed below in the section on employers and traditional apprenticeships. The low educational background of many of those employed in the informal sector opens opportunities for greater attention of public sector institutions to adult education and literacy programmes, and to the offering of what is becoming known as second-chance education tailored to the needs of those who have missed opportunities for early education (World Bank, 2007; Adams et al., 2007). Where found, these programmes have provided low-cost education to open doors for employment, but have not been carefully evaluated for their impact on further training and earnings.

### 3.2 Private Providers of Skills

While the public sector has been slow to respond to the changes in demand for skills brought about by growth of the informal sector, private institutions have been more responsive to this demand (Brewer, 2004). These institutions are of two types: for-profit and non-profit institutions (Bennell, 1999). The for-profit institutions have grown in numbers in the 1990s with the decreased capacity of public providers (Atchoarena & Esquieu, 2002). While many are registered trainers and follow official curricula and prepare trainees for government trade tests like their public counterparts, a large number are unregistered, small in scale and form part of the informal sector themselves. They appear as storefront operations that can be observed in any African city.

Tuition and training fees constitute the main sources of income for these institutions, although registered institutions may receive subsidies from the government. Largely dependent on fees, for-profit institutions are concentrated in urban districts and less frequently found in rural areas. They are responsive to demands for skills, adjusting quickly to changing needs. The programmes offered often require limited investment in equipment and facilities and provide easy market entry and exit for the providers. Commercial courses are popular, including IT programmes. Other soft courses cover tailoring, driving schools, food preparation, auto repair, cosmetics, etc. Programmes are often of short duration to fit the ‘just-in-time’ learning needs of trainees.

Fees are kept low, but still are not affordable by the poorest of the poor. Quality varies widely where standards are left to the provider (Johanson & Adams, 2004). Private for-profit providers could play a larger role in the provision of training to those in the informal sector. Their programmes are demand led. Their sometimes modular short courses are well suited to a more flexible delivery of skills training for those who cannot afford long spells away from their work. Expanding their role will require attention to the capital market constraints they face and the incentives needed to encourage more services in rural areas and to the poor. The promotion of private training associations could also open opportunities for co-operation and reduction of costs, while providing a framework for accreditation and quality assurance. Examples of these associations merit further study.
The term non-governmental organization (NGO) generally refers to a range of non-profit organizations that include providers of training (Haan, 2006). Churches and international agencies play an important role in this capacity, along with national and local community-based organizations. NGOs include local branches of strong international NGOs and national NGOs with wide coverage and smaller ‘community-based organizations’. Training by larger NGOs is sometimes linked to other support services for small businesses, including micro-credit. Small business incubators, operated by NGOs, often offer entrepreneurs a package of business services, including training, but have not been carefully studied in Africa. Large church-based training NGOs like Don Bosco and secular NGOs like Opportunities Industrialization Centres (OIC) are found in a number of African countries.

Many of the smaller church-based NGOs and community-based organizations maintain a strong social emphasis in their training outreach to the rural poor, minorities, women and the handicapped. Their training activities tend to have social and cultural rather than economic objectives with the result that their training is of limited value in helping participants enter into self-employment (Haan, 2006). They focus training on traditional trades. Curricula are outdated and the training offered is theoretical rather than practical. Quality is low. Services are generally free-of-charge, but with some beginning to charge minimal fees. These NGOs serve the poor, but they offer little that translates into preparation for self-employment.

What Haan (2006) calls ‘traditional training NGOs’ are larger in size and specialized in skills training. Don Bosco schools are an example. They benefit from international assistance and tend to resemble training provided by the public sector with full-time, centre-based training of long duration directed at wage employment in the formal sector. In many respects they look like modern, better equipped versions of public technical and vocational education schools. The quality of training offered in these traditional training NGOs tends to be better than that found in public institutions, offering more practical experience, but still without a focus on self-employment. These institutions are more likely to reach rural areas and serve the poor. Their financial base, however, is often limited and insecure.

3.3 Enterprise Investment in Skills

Enterprises are a source of demand for and supply of skilled workers. They train and provide needed skills and experience for employees to promote competitiveness and profitability. Some workers who are trained may choose later to take their skills and create their own employment. The training offered by enterprises tends to be short-term in nature and uses the firm’s own skilled workers or engages external vendors for its delivery. The training may be offered on-site in the enterprise, such as a typical apprenticeship, or off-site in an institutional setting. The World Bank provides a profile of enterprise training in over 100 countries world-wide through its Investment Climate Assessment (ICA) surveys. In Fig. 2, these surveys show
considerable variation in enterprise training across regions with enterprises in Sub-Saharan Africa being active trainers.

An earlier version of the ICA surveys in Sub-Saharan Africa, the Regional Programme for Enterprise Development (RPED), captured training by enterprises in the mid-1990s and the correlates of this training (Biggs, Shah & Srivastava, 1995). Enterprises found to be active trainers were large in size measured by employment, active exporters, users of technology and beneficiaries of foreign direct investment (Johanson & Adams, 2004). RPED surveys in Kenya, Zimbabwe and Zambia found that the training of workers was selective, with those having higher levels of education more likely to be chosen by the enterprise for training (Nielson, Rosholm & Dabalen, 2007).

Smaller enterprises, especially those with less than ten employees—a proxy for the informal sector—are less likely to train. In Kenya, Zimbabwe and Zambia, only 4.6% of firms with ten or fewer employees trained in comparison with 81% of firms with 151 employees or more (Nielson, Rosholm & Dabalen, 2007). The impact of this training was favourable on the output of enterprises and wages of workers. A 1% increase in the workers trained from the sample average of 9% translated into a 60% increase in value added for all firms and a 99% increase for micro and small enterprises. Training was estimated to increase wages on average by 15–21% (Biggs, Shah & Srivastava, 1995).

The returns to training for micro and small enterprises, noted above, raise the question of why a larger percentage of these firms do not train. A number of factors are offered to explain this pattern. Already observed is the fact that the education

![Fig. 2 Enterprises are active trainers world-wide (as a percentage of total training)](image)

EAP = East Asia and the Pacific; LAC = Latin America and the Caribbean; SSA = Sub-Saharan Africa; ECA = Europe and Central Asia; MENA = Middle East and North Africa.

levels of workers in the informal sector are lower than those in the formal sector. With a small number of workers performing a wide range of tasks, multi-skilling is required, which can be expensive. The time away from work by a single worker in a small firm can be costly in foregone output. Small enterprises in the informal sector also face cash flow constraints in paying for training and a lack of professional capacity from human resources officers who can define training needs and design training programmes. For many in smaller firms, there may also be a lack of awareness of the benefits of training.

While each of these factors requires careful consideration, one of the possible solutions to constraints on training comes in the form of support for industry associations (Johanson & Adams, 2004). The formation of industry associations and their engagement in training can offer solutions to a number of the problems above. These associations can promote a greater awareness of the benefits of training among small enterprises, help in defining training needs for members and the design of appropriate training programmes, contribute to economies of scale in the delivery of training, reduce the unit cost to the enterprise, establish training standards for a sector and certify the skills acquired as a means to promote the quality of the training offered. This role is already played by construction associations and many others and could be expanded. There has been little rigorous examination of the effect of these associations on skills development in the informal sector.

3.4 Employers and Traditional Apprenticeship

Traditional apprenticeships are by far the most important source of skills training in Africa for the informal sector, with these apprenticeships concentrated in West and Central Africa (Haan, 2006; Filipiak, 2007). Liimatainen (2002) estimates that up to 70% of urban informal sector workers in Africa have been trained through the traditional apprenticeship system. The Ghana Statistical Service, for example, found 207,000 youths registered as apprentices in 2002, while in this same period a much smaller number of young people, just over 50,000, was enrolled by public and private providers (World Bank, 2008). Traditional apprenticeships in the informal sector consist of private contractual arrangements between a parent or apprentice and a master craftsperson who agrees to provide practical training in the workplace, ranging from several months to three or four years in duration, and subsequently certify the training in return for a fee or reduced earnings while learning.6

Traditional apprenticeships are distinguished from other formal apprenticeships registered with a government agency, usually a ministry of labour, and administered by employers and worker organizations. Traditional apprenticeships as individual contracts are self-financing and self-regulating and provide practical, hands-on training with good prospects for employment after the training. At the same time, traditional apprenticeships suffer from the weak level of education of those entering apprenticeships. Few have passed beyond lower secondary education and many will not even have completed primary education. Literacy is an issue. Choices of trades follow gender biases. Master craftspersons, in turn, do not provide theoretical
knowledge alongside practical experience and, more often than not, teach out-dated technologies. Pedagogy varies and there are few market standards available for judging the quality of the training provided (Johanson & Adams, 2004).

These apprenticeships are available in a wide range of trades, mostly in blue-collar occupations, and are a substitute for school-based instruction. Most trades offered by public and private training institutions can also be mastered through a traditional apprenticeship. The flexibility of apprenticeships in combining work and learning, their affordability and self-financing, their connection with future employment, and their generally lower entry standards make them attractive as a source of skills to disadvantaged youth. Haan (2006) reports that apprenticeships are less evident in Eastern and Southern Africa than in West and Central Africa with youth sometimes described in the former merely as ‘helpers’. Still, in countries like Kenya, Tanzania and Zimbabwe, he finds large numbers of youth who are acquiring skills in informal enterprises under the guidance of a master. In Kenya, available information indicates that some 40–60% of informal sector operators acquire their skills through apprenticeships.

Household data from the Ghana Living Standards Measurement Surveys in 1991/1992 and 2005/2006 provide a profile of changes in apprenticeship over time. Table 2 compares the share of youth aged 15–30 years who have gone through an apprenticeship in each period. The share entering an apprenticeship has been rising for young men and women, but with a higher growth rate for young women. Apprenticeships are more evident in urban than in rural areas. Education levels for youths are rising as a consequence of Ghana’s efforts to provide basic education for all and the share of those following their education with an apprenticeship is also rising at each level of education except post-secondary. While those with a technical or vocational education are likely to acquire their skills in an institutional setting, those with a general education are more likely to pursue skills through an apprenticeship.

Studies of traditional apprenticeship in other African countries could examine the robustness of these patterns. An apprenticeship opens opportunities for employment in the informal sector, but also in other types of employment as seen in Table 2. Those working in the private informal sector as self-employed or wage workers are likely to have acquired their skills through an apprenticeship. Reflecting the growing importance of traditional apprenticeships, 51% of youth in non-agricultural self-employment in 2005 acquired their skills in this manner—a rate twice that of the earlier period. With consumption levels used as a proxy for family income, apprenticeships are accessible to all income groups, but favour those who are better off. Those in the lowest consumption quintile demonstrate much lower rates of participation in apprenticeships.

There is a question of whether traditional apprenticeships should form part of a strategy for skills development in Sub-Saharan Africa. It is doubtful, for example, that small firms in the informal sector acquiring their skilled workers through apprenticeships will contribute in a significant way to the export-led development strategies of many countries. Moreover, the ability to leverage large numbers of apprentices is constrained by the number of skilled craftspersons available. These
considerations aside, improving traditional apprenticeships can contribute in a positive way to employment and poverty reduction. As shown in Table 2 for Ghana, traditional apprenticeships are a source of skills for employment in both the formal and informal sectors. Those employed in the informal sector earn more than those in agriculture and improving their productivity with skills can further contribute to poverty reduction (Fox and Gaal, 2008).

As presently structured, public vocational and technical education programmes appear to have little to offer employment in the informal sector, but this could be changed if public financing for these institutions is instead shifted to focus on outcomes, such as their success in serving target populations of master craftspersons and apprentices, rather than simply financing inputs, i.e. classrooms, courses offered, instructors hired, etc. Performance-based budgeting for public institutions could provide incentives to upgrade technical skills for master craftspersons and

| Table 2 Share of youth in Ghana (15–30 age group) who have gone through an apprenticeship |
|---------------------------------------------|---------------------------------------------|
|                                             | Urban | Rural | Total | Urban | Rural | Total |
| Gender                                      |       |       |       |       |       |       |
| Male                                        | 36.0  | 18.1  | 21.9  | 46.7  | 19.0  | 27.3  |
| Female                                      | 21.1  | 11.1  | 13.9  | 40.7  | 20.1  | 26.3  |
| Age group                                   |       |       |       |       |       |       |
| 15–19                                       | 10.6  | 5.2   | 6.1   | 30.9  | 6.9   | 11.1  |
| 20–24                                       | 34.5  | 16.4  | 20.8  | 44.3  | 24.4  | 31.0  |
| 25–30                                       | 28.8  | 21.4  | 23.7  | 46.2  | 24.3  | 31.9  |
| Education level                             |       |       |       |       |       |       |
| No education                                | 15.1  | 5.8   | 7.5   | 21.4  | 6.9   | 8.7   |
| Some primary                                | 16.7  | 15.9  | 16.0  | 42.1  | 16.6  | 21.4  |
| Primary                                     | 25.4  | 10.5  | 13.3  | 54.1  | 25.5  | 32.6  |
| Secondary (lower)                           | 38.5  | 25.9  | 29.9  | 60.4  | 43.2  | 50.9  |
| TVET                                        | 22.2  | 12.5  | 19.2  | 20.0  | 19.2  | 19.8  |
| Secondary (higher)                          | 14.7  | 13.5  | 14.3  | 29.6  | 17.5  | 25.7  |
| Post-secondary                              | 13.3  | 11.1  | 12.1  | 7.6   | 3.4   | 6.5   |
| Type of employment                          |       |       |       |       |       |       |
| Wage public sector                          | 9.1   | 12.7  | 10.8  | 12.4  | 10.9  | 11.9  |
| Wage private sector formal                  | 50.7  | 56.4  | 52.7  | 28.0  | 42.5  | 31.6  |
| Wage private sector informal                | 53.8  | 57.5  | 55.2  | 36.0  | 49.6  | 41.2  |
| Self-employed agro, paid                    | 12.2  | 16.3  | 16.0  | 32.2  | 18.8  | 19.7  |
| Self-employed agro, unpaid                  | 16.2  | 7.6   | 8.4   | 22.1  | 8.4   | 9.2   |
| Self-employed non-agro                      | 27.0  | 24.2  | 25.7  | 56.8  | 44.1  | 51.2  |
| Standard of living                          |       |       |       |       |       |       |
| Lowest quintile                             | 12.1  | 8.4   | 8.6   | 30.3  | 9.4   | 10.9  |
| Second quintile                             | 6.9   | 10.3  | 9.9   | 36.2  | 15.2  | 18.3  |
| Third quintile                              | 25.9  | 14.0  | 16.4  | 35.9  | 25.1  | 28.0  |
| Fourth quintile                             | 27.0  | 17.1  | 20.3  | 43.4  | 31.5  | 36.7  |
| Highest quintile                            | 31.4  | 28.4  | 30.0  | 49.6  | 41.3  | 46.9  |
| All                                         | 26.9  | 14.4  | 17.5  | 43.5  | 19.6  | 26.8  |

improve the pedagogy they use (Ziderman, 2003). More attention and accountability could be given to these institutions in partnership with traditional apprenticeships for addressing the low levels of basic education that handicap the training of apprentices and master craftspersons and for providing the complementary theoretical training needed to accompany the practical training of apprenticeships.

It is reasonable to question whether emphasis on skills alone will improve the productivity and incomes of those who are employed in the informal sector (ILO, 2000). The improvement of financial services and access to credit are often listed as critical needs in surveys of small businesses, along with secure worksites and access to new technologies and business services (Liimatainen, 2002; Riley & Steel, 2000). NGOs play an important role in the provision of these services to micro, small and medium-sized enterprises, often offering a menu of services alongside training. Working through informal sector employer associations, as already noted, can further assist in organizing services, particularly in skills training, by using their size to reduce the cost of training needs assessments, establish competency standards, develop curricula and certify skills obtained in traditional apprenticeships.

National training authorities (NTAs) in a growing number of countries throughout Sub-Saharan Africa influence training policies and resources for training. Training funds operated under NTAs or independently, as described below, can play a role in providing incentives for NGOs and industry associations to serve the training needs of the informal sector (Ziderman, 2003). In Côte d’Ivoire, the Vocational Training Development Fund helps NGOs organize training for informal sector enterprises (Johanson & Adams, 2004). Chafa (2002) describes the Skills Development Initiative of Malawi’s Technical Entrepreneurial Vocational Education and Training Authority (TEVETA) and its efforts to obtain credit in the national training system for skills acquired through training in the informal sector. There are few rigorous evaluations of these programmes available and more attention needs to be given to their impact on apprenticeship. The same can be said for the impact of apprenticeships and other forms of training on employment and earnings.

4 Policies Encouraging Enterprises to Invest in Skills

Government policies to encourage enterprises to invest in skills subsidize the cost of this investment through various measures. The incentives may vary in their impact on the actual amount of training done. Twenty-one countries in Sub-Saharan Africa have introduced training funds financed by payroll taxes, while others, such as in Namibia, have recently proposed such a scheme (Ziderman, 2003). These funds reimburse enterprises for the cost of qualified training undertaken. Training vouchers are also an instrument used by governments and training funds to subsidize the cost of training by enterprises and individuals (Patrinos, 2002). Offered to master craftspersons and workers in the informal sector, vouchers can help pay for training...
selected by the worker. The cost of training is also subsidized by governments by allowing enterprises to deduct eligible training costs from their income for tax purposes or providing tax credits for qualified training expenses.

The introduction of training levies on payrolls is used globally to mobilize additional resources for skills development (Ziderman, 2003). The fairness of the levy is judged on the taxation principle that those who benefit from the resources spent on training should be those who pay. Payroll levies have been used to finance the provision of training by national training organizations, as is found in Latin America in such countries as Brazil, Colombia and Venezuela, but also training directly by enterprises where a levy-grant system is adopted and administered through a training fund. Enterprises are reimbursed in a levy-grant system for the cost of qualified training expenditures by these funds. This is the dominant model found in Sub-Saharan Africa.

The impact of these funds on training in the informal sector, however, is limited. Most funds exempt smaller enterprises (below fifty employees) from the payment of a levy because of the higher administrative cost of enforcing compliance on the part of these enterprises. Dar, Canagarajah & Murphy (2003), in a review of international experience with training funds, found that small employers do not benefit substantially from these schemes. The financial incentives offered are insufficient to offset the other factors mentioned earlier that deter training by small enterprises. As a result, training funds with levy-grant schemes tend to favour larger enterprises, particularly the training of more highly educated and skilled workers in these enterprises.

There are exceptions, however, as found in Malaysia and Singapore. Both countries recognized the low participation on the part of small enterprises in their levy-grant funds and set out to address the problem. Among the solutions offered were subsidies for conducting training needs assessments, pre-approved training courses not requiring costly application and justification, and the use of excess training capacity of large enterprise by smaller firms. Singapore offered training vouchers to enterprises with less than fifty employees that could be used to pay up-front training costs to ease cash flow problems. The vouchers helped Singapore’s Skills Development Fund reach 65% of enterprises with ten to forty-nine workers and 14% of those with fewer than ten workers (Hirosato, 1997). Limited evidence is available in Sub-Saharan Africa on the initiatives of national training funds to reach small enterprises in the informal sector.

Other voucher programmes have been introduced to encourage training in the informal sector (Johanson & Adams, 2004). The Kenya Jua Kali voucher programme, described earlier, was successful in its pilot stage in expanding the supply of training to workers in the informal sector and lowering cost. There was evidence of its positive impact on the earnings of participants and strengthening of the capacity of local Jua Kali Associations responsible for distribution of the vouchers, but problems were encountered with corruption in scaling up that led to high administration costs (Adams, 2001; Riley & Steel, 2000). A similar voucher programme targeting informal sector enterprises was offered in Ghana in the early 1990s that largely failed due to lack of attention in the design to the marketing and distribution of the
vouchers (Johanson & Adams, 2004). The role of vouchers in training is an area that merits further study in Sub-Saharan Africa.

Worldwide, countries allow enterprises to deduct the cost of training from their income as a cost of business before taxes, but for the informal sector where small enterprises may not earn sufficient income to pay taxes or may avoid taxes altogether by not being registered, these deductions provide a limited incentive for training. The same result may apply to tax credits that are targeted to selected enterprises in return for agreed training and employment actions. Where the credit can be refunded to the enterprise in the absence of a tax liability, this may serve as an added incentive for training and even registration of the enterprise, but once again may not be sufficient to prompt small enterprises in the informal sector to train. As a general conclusion, the impact of these various financial incentives on training is not well documented for enterprises in the informal sector.

5 Moving the Skills Agenda Forward

Employment in the informal sector is now an important feature on the landscape of Africa, accounting for a significant share of GDP and influencing the well-being of a growing number of households. Its character has changed ever so slightly as growing numbers of those who now enter this employment do so with higher levels of education than those before them and with entrepreneurial aspirations that look at this employment as a preferred destination for their future, rather than merely a staging ground in the on-going search for wage employment in the modern sector. Capturing the scale and characteristics of informal employment and its contribution to national welfare and poverty reduction is a first step for many countries in defining policies that can promote gains in productivity and incomes in this sector. Among these policies are ones that would improve the skills of those employed in this sector.

5.1 Elements of a Strategy

A strategy based on what is known about the informal sector for improving skills as a means to promote its growth and productivity and improve the incomes of those employed in the sector needs to include the following:

- Acknowledging the existence of the informal sector for policy;
- Raising the educational and literacy levels of those employed therein;
- Recognizing the complementarity of training with other small business services;
- Promoting sustainable financing for skills development;
- Strengthening traditional apprenticeships;
- Defining a role for public providers of skills;
- Building the capacity of industry associations;
- Monitoring and evaluating outcomes for skills development.
The informal sector has emerged as a reality and has to be recognized for policy purposes. How it is treated by governments will probably influence its future as an instrument for employment and poverty reduction. Forcing compliance with the regulations and imposing the taxation of an industrial economy through stronger enforcement measures is likely to drive it further underground or out of existence altogether. Finding the right balance of regulation and taxation that recognizes the higher risk and costs associated with operating a small business and providing the incentives for expansion and formalization of its activities forms a challenge for governments. Looking for ways in which government policy can support skills development in the informal sector is one way to promote the growth of small businesses and improvements in household welfare.

The low education level of many of those employed in the informal sector impedes the upgrading of their skills and their capacity for absorbing new technologies. Policies that promote adult education and literacy and that offer second-chance education programmes enabling youth and adults to acquire non-formal education, recognized as equivalent to the basic education offered by traditional education, can open up opportunities and incentives for further investments in skills by workers and enterprises (World Bank, 2007). Investments in skills, as noted earlier, are part of a menu of services that are needed by small businesses, along with opening access to credit and business services (ILO, 2000). Policies that open credit markets and clear the way for non-governmental organizations to form and deliver these services along with training can create a more favourable investment climate for enterprises in the informal sector.

As suggested above, countries with training funds can adopt new approaches like those used in Malaysia and Singapore that remove the barriers to investment in skills faced by small businesses. At the same time, public expenditures on skills development can be more effectively targeted through vouchers and tax credits to improve the incentives for investments in skills by informal sector enterprises. Cost-sharing is possible through these instruments. The Kenya Jua Kali programme, for example, shows how these targeted expenditures can be expanded to subsidize and improve the access of small businesses to technology and other business services, and also that these businesses are willing to share the costs (Riley & Steel, 2000). Traditional apprenticeships are observed to be a solution for skills development that works well in the informal sector, but there are steps described earlier that can be taken to improve the outcomes of this training without destroying what already works well.

There are roles that can be successfully played by public education and training institutions to serve the informal sector, if financial incentives are in place to encourage this. Emphasis on adult education and literacy programmes are part of this process. The introduction of education equivalency programmes—so-called second-chance education—is designed for those who have left traditional education and are unlikely to return to this learning environment, but can be reached through non-formal programmes of education. There are many examples of this in Latin America, but fewer in Sub-Saharan Africa. Public technical and vocational education through reforms adopting modular, competency-based curricula delivered in
a more flexible timeframe can teach students basic theories underlying a trade to complement the practical skills taught by master craftspersons in traditional apprenticeships.

Industry associations serving the informal sector are prevalent in many countries throughout Sub-Saharan Africa. Strengthening these associations so as to play a more active role in advocating skills development by members, defining training needs, designing and delivering short-courses, and engaging employers in setting competency standards and skills certification, including those for apprenticeships, can help address many of the issues that impede the investment of small enterprises in skills. Skill certification may also be undertaken as part of national qualifications frameworks and extended to cover apprenticeships (Johanson & Adams, 2004). These are some of the elements of a skills strategy suggested by this review of how skills are acquired for the informal sector. Refinement of this strategy and policies supporting skills development for the informal sector need to be informed by regular monitoring and rigorous evaluation of programmes.

There are interventions that do not seem to work well for further skills development in the informal sector. Among them, training funds that are expected to promote training carried out by enterprises show limited evidence of this as far as small businesses are concerned. As suggested, there are tools that these funds could use to encourage training by small enterprises, but examples in Sub-Saharan Africa are largely absent. Treating training expenses as a tax deduction offers an incentive for training in larger enterprises, but this policy is unlikely to have an effect on training in smaller enterprises that operate at the subsistence level and pay hardly any taxes. Tax credits may in turn be a more effective tool for smaller enterprises in the informal sector. Smaller NGOs focusing on social and cultural skills rather than economic ones do little to help beneficiaries create new employment. Finally, public vocational and technical education that remains rigidly focused on skills for the formal sector at a time when this employment is stagnating provides little benefit to those who must find their employment in the informal sector.

5.2 The Role of Government

This chapter has reviewed the sources of skills development in the informal sector along with their strengths, weaknesses and opportunities for improvement. It has highlighted questions along the way where more research is needed to deepen our knowledge of skills in the informal sector. An over-riding theme of the review is the need for more data and information on the informal sector and its participants, particularly how the numbers and characteristics of those employed in this sector are changing with time and the factors affecting these patterns. From this review, it has been possible to sketch the elements of a strategy for moving the skills agenda forward for the informal sector. Fully developing the strategy, however, will require filling many of the knowledge gaps that remain around employment and skills development in the informal sector and adding to our confidence in other findings offered by a small number of countries.
What can governments do as part of this strategy? While governments need to promote a more friendly investment climate for those who create their own employment, where skills are concerned their role in policy development and reforms to promote a more equitable, market-responsive training system for all is of greater importance than initiatives to provide or finance training for the informal sector. Policies that open the market to private providers, including NGOs, are important to expanding access to skills and reducing demands for public expenditure. Policies that provide information to the market about the skill requirements of jobs available and the quality and relevance of training offered by different providers can lead to a more efficient allocation of public and private spending on training. Policies that promote competition in delivery and financing and enforce accountability among providers can together improve training outcomes and lower costs. These actions by government serve the interest of all workers, not just those in the informal sector.

Notes

1. The ILO (2002a) reports that more than sixty countries have started to collect and publish data on employment and other characteristics of the informal sector.
2. For a review of skills in the formal sector of Sub-Saharan Africa, see Johanson & Adams (2004).
3. Bennell (1999) distinguishes between what he calls ‘survival’ enterprises and enterprises with ‘growth potential’. He argues that the former require few skills and therefore it is difficult to see how ‘conventional training services could significantly increase productivity and incomes’.
4. In a study of the informal sector in seven African countries, Filipiak (2007) estimates that on-the-job training, self-training, and traditional apprenticeships account for 95% of training in the informal sector. Senegal, for example, has some 400,000 youth in apprenticeships compared with 7,000 in technical and vocational education and training. Monk, Sandefur and Teal (2007) in Ghana, using a household survey, found that 80% of training is acquired through on-the-job training and traditional apprenticeships.
5. While curricula for entrepreneurship education are often locally developed, other packages have been developed and tested by donors, e.g. ILO’s Start/improve your business and GTZ’s Competency-based economies through formation of enterprises (Haan, 2006).
7. In South Africa a new learnership scheme has been adopted to broaden the present apprenticeship system beyond traditional blue-collar trades to include white-collar occupations in the service sector, as well as the informal sector (Gill, Fluitman & Dar, 2000).
8. The German dual system training provides an example where this complementarity has been achieved, but it has proved difficult to accomplish in other settings where the roles and responsibilities of the public sector and employers for skills development are not defined in this fashion.
9. Given the tendency noted earlier for large enterprises to train without subsidies, training funds are subject to criticism for their high deadweight effects. That is, the funds pay firms to train who would have trained without the subsidy. At the same time, these funds correct for a ‘free rider’ problem that transfers the cost of training more evenly across firms of all sizes and types.
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