PRACTICES and TRENDS in FORMAL SECTOR ENTERPRISE-BASED TRAINING in AFRICA

Case Studies from Kenya and Zambia

Edited by

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DRAFT

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TERMS and ACRONYMS

TERMS

Copperbelt
Refers to both Copperbelt Province in north central Zambia, including Ndola and Kitwe, and to the copper mining area generally.

Core Business
The principal business activity of an enterprise.

Enterprise
Used as a generic term subsuming business, company, firm, industry *et al*

Enterprise-based training (EBT)
Any form of purposeful skills transfer taking place in an enterprise.

Kshs.
Kenya Shillings

Medium/Large-Scale
Modern sector production and service enterprises with more than 50 employees.

Outsource
An arrangement whereby an enterprise purchases products or services from another enterprise.

Structure
A subjective assessment of the degree to which training reflects a policy basis, needs analysis, HRD planning, orderly and careful delivery and monitoring and assessment.

Training
Any purposeful activity intended to develop skills and knowledge.

Unbundle
The process whereby an enterprise ceases producing a product or service in-house, in some cases replacing this with outsourcing.

Vocational training
Transfer of skills and knowledge in order to pursue a trade or secure a livelihood.

ZHABS (see below)
A British anti-HIV/AIDS awareness, information and support programme designed for medium and large-scale enterprises

24/7
Twenty-fours hours per day, seven days per week
**ACRONYMS**

<table>
<thead>
<tr>
<th>BL</th>
<th>Boart Longyear (Zambia) LTD</th>
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<tr>
<td>Danida</td>
<td>Danish International Development Agency</td>
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<td>DIT</td>
<td>Directorate of Industrial Training (Kenya)</td>
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<td>DFID</td>
<td>Department for International development (UK)</td>
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<td>EBT</td>
<td>Enterprise-based training</td>
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<td>EC</td>
<td>European Commission</td>
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<td>GoZ</td>
<td>Government of Zambia</td>
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<td>HRD</td>
<td>Human Resource Development</td>
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<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labour Organisation, Geneva</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>KCM</td>
<td>Konkola Copper Mines plc</td>
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<td>MDC</td>
<td>Mpongwe Development Company</td>
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<td>MSE</td>
<td>Micro and Small-scale Enterprise</td>
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<td>NGO</td>
<td>Non Government Organisation</td>
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<td>Nortec</td>
<td>Northern Technical College, Ndola, Zambia</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>SADC</td>
<td>Southern Africa Development Community</td>
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<td>SARA</td>
<td>Southern Africa Railway Association</td>
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<td>Sida</td>
<td>Swedish International Development Agency</td>
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<td>SITRA</td>
<td>South India Textile Research Association</td>
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<td>SKF (Zambia) LTD</td>
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<td>SSM</td>
<td>Swap Spinning Mills plc</td>
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<td>TAZARA</td>
<td>Tanzania Zambia Railway</td>
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<td>TEVET</td>
<td>Technical, Entrepreneurial and Vocational Education and Training (Zambian usage, see also VET)</td>
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<td>TNA</td>
<td>Training Needs Assessment</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>VET</td>
<td>Vocational Education and Training (Kenyan usage, see also TEVET)</td>
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<td>ZBCA</td>
<td>Zambia Business Coalition on AIDS</td>
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<td>ZCCM</td>
<td>Zambia Consolidated Copper Mines</td>
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<td>ZHABS</td>
<td>Zambia HIV/AIDS Business Sector programme</td>
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INTRODUCTION AND SUMMARY OF FINDINGS

African enterprises, large and small, face a pervasive dilemma namely that governments keep investing their scarce resources in pre-employment training for sectors that are not hiring, while people who have no choice but to create their own employment, pay dearly (for) training⁴. The skills development needs of enterprises are not being met. Public sector training is both contracting in real terms and increasingly isolated from - and irrelevant to - a rapidly changing private sector. Private sector commercial training provision is embryonic at best and neither focused on nor able to address the diverse skills development needs of modern sector enterprises. The principle response of the modern sector has been to look internally for solutions; enterprises are increasingly addressing their skills development needs through Enterprise-Based Training (EBT). That they would do so is both intuitive and readily apparent. Despite this, very little is known about the actual characteristics of modern sector EBT in Africa. There are two main reasons for this dearth of knowledge. First, labour market information in Sub-Saharan Africa is weak or non-existent in virtually all areas and all countries, with the noteworthy exceptions of South Africa, Mauritius and Botswana². Second, EBT is seldom treated as a discrete sub-category of training; the little information that does exist is usually aggregated with other training or human resource development (HRD) data, even at the enterprise level.

EBT is not a new phenomenon. Much is known about the basic characteristics of EBT (a “brief overview” is included in Section III, pp. 3-4). Enterprises have always trained. This history and ubiquity is not, however, matched by a corresponding sense of what is currently taking place. This lack of insight is a particular problem in light of current developments in Africa. The stagnation and in some cases collapse of public sector training provision, and the consequent breakdown in the long-standing “public-private” partnership in training, is shifting an ever greater part of the training burden back to enterprises, and hence, back to EBT.

This purpose of this paper is to get a better sense of current practices and emerging trends in African EBT in the modern sector by examining practices in a variety of active enterprises. Thirteen enterprises were surveyed during early 2001 in two countries, Kenya and Zambia³.

“Enterprise” is used in this report as a generic term subsuming business, company, firm, industry et al. “EBT” refers to all forms of purposeful skills transfer that takes place in an enterprise.

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² Op.cit. Fluitman goes on to note that these three are “not necessarily representative”.
³ This paper is based upon two reports commissioned by the International Training Centre of the ILO under a larger vocational training research initiative of the World Bank:
This paper is based on two reports that together surveyed 13 enterprises in Kenya and Zambia in early 2001. The Kenya and Zambia studies shared a broad mandate and basic approach (case studies), but they were carried out independently of one another and by different authors. Despite the many differences between Kenya and Zambia, the respective findings displayed more commonalities than differences. The findings are necessarily limited and to a degree anecdotal in character. Nonetheless, they are thought to provide useful insights into current practice and evidence of the need for a more detailed examination of EBT practices in Sub-Saharan Africa. This paper adds a voice of modern sector African enterprise to the on-going training reform debate.

SUMMARY OF FINDINGS

- Formal sector employment is decreasing due to restructuring. Downsizing and outsourcing (with a degree of employment growth in MSEs) are the prominent manifestations of restructuring.
- New investments, new technologies and competitive pressures combine to create the need for training for both the remaining workforce and for new MSE employee.
- The expanding emphasis on training for the restructured workforce is reflected in a more “structured” approach to training, and a focus on efficiency, quality and flexibility.
- There is an identifiable shift away from a short-term ad hoc approach to training to a more long-term strategic perspective. This is a key factor driving the trend towards increased training structure.
- The increased emphasis on structure within enterprises is thought a result of decreased interaction with public-sector training providers; the structure of public sector training is of decreasing relevance to modern sector enterprises.
- Enterprise level training is increasingly competency-based with competency norms determined by the specific demands of individual enterprises (and in many cases by their parent organisations or trading partners).
- There is little inter-firm co-operation in training and no evidence that trade associations offer useful training assessment, training or training support capacity.
- Public sector training policy has little influence on individual enterprises; private sector practice is largely driven by internal or company group imperatives with these determined by current market forces.
- EBT is the most common form of skills training, in part due to the limited options and in part due to EBT’s flexibility in responding to the specific needs of individual enterprises.
- The growing level of enterprise-level self-reliance and the decreasing level of public-private interaction has four main manifestations:
  1. the weak relationship between national training policy and day-to-day training practice in enterprises,
  2. the lack of engagement with and use of formal training institutions (at present largely limited to the hiring of school leavers and graduates as and when needed),
  3. the virtual disappearance of statutory apprenticeship, and
  4. the limited and declining interest in and regard for trade testing.
From the policy perspective perhaps the most dramatic and useful finding is that public-private training linkages appear to be weak and contracting; certainly this was found to be the case among the 13 enterprises surveyed and according to their reports more broadly as well. This breakdown is all the more marked in that it is a breakdown of the very public-private “partnership” that recent reforms have been designed to strengthen. While beyond the scope of this study it warrants mention that virtually all African vocation training reform initiatives also include “re-orientation towards self-employment” as a principal objective. The challenges of training reform are certainly exacerbated by the need to reconcile these two quite different aspects of training reform.

Somewhat counter-intuitively national trade or sector associations did not appear to be moving to fill the gap created by public sector stagnation. This situation was particularly evident in Zambia where no effective trade or sector association based co-operation was identified. King (Part 1, this document) notes the long-standing though largely informal inter-firm training linkages among Kenya-Asian entrepreneurs and the role these linkages play within enterprises, within the larger Kenya-Asian community and beyond. However, notwithstanding the important Kenyan exception, in practice training, training policy and training co-ordination are increasingly addressed as essentially enterprise or enterprise “group” level responsibilities.

The Kenyan and Zambian economies are quite different. Zambia is a classic mono-economy, highly dependent upon copper and a few other sectors. As such the Zambian economy is highly volatile. Zambia’s copper mines were privatised in March 2000 which resulted in significant foreign direct investment (FDI) and significant restructuring of local enterprises in response to the boom generated by privatisation. The fieldwork underpinning Part 2 of this paper was carried out in May 2001 when this boom was well underway. Since then, copper prices have fallen and Anglo-American (the main source of FDI) has announced that it is “pulling back from its copper mining interests in Zambia”. This “pulling back” will undoubtedly influence the scale and manner of EBT practices described in Part 2.

HIV/AIDS was looked at as an aspect of EBT in Zambia. Overall, most enterprises are in the early stages of moving “from rhetoric to action” on the scale needed, a situation that applies generally to Sub-Saharan Africa. A number of enterprises (e.g. Mpongwe Development company and Swarp Spinning Mills) have adopted existing HIV/AIDS packages such as the Zambia HIV/AIDS Business Sector (ZHABS) programme. The Anglo-American Corporation’s Konkola Copper Mine has developed their own multi-faceted preventative and treatment programme (see Part II). In Zambia the enterprises surveyed are using EBT to help manage the HIV/AIDS crisis, both to build awareness and to replace lost skills.

King (Part 2, this document) reports that Kenya’s long-standing levy-grant scheme “does not appear to have acted as a spur to more training”. Zambia is on the threshold of introducing a levy-grant scheme, both to encourage training and to fund the newly formed TEVET Authority.

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5 As indicated by the adoption of the term Technical, Entrepreneurial and Vocational Education and Training (TEVET) as an aspect of training sector reform in Zambia.


ENTERPRISE-BASED TRAINING: An Overview

Enterprise-Based Training (EBT) is a straightforward notion. EBT involves the delivery of both structured\(^8\) and unstructured training to employees (and in some cases to customers and customer’s employees) in the private sector workplace. EBT is, however, seldom this tidy in practice in that EBT often involves drawing upon external training and training support resources\(^9\).

The distinguishing feature of EBT is that it takes place in active on-going enterprises. EBT is underpinned by the well-understood strengths of training that takes place on-the-job and in the workplace:

- EBT responds quickly to labour market signals, using market-based mechanisms;
- training can be flexible in response to specific enterprise or market demands;
- training is disaggregated among all enterprises willing and able to train;
- efficient use is made of productive assets (through their use for both training and production);
- EBT is highly practical and usually followed by direct application on-the-job;
- EBT helps develop the social skills and cultural orientation needed to function in the world-of-work; and
- EBT helps establish the social networks and mentoring relationships needed to pursue a career (and in many cases to become an entrepreneur, a particularly important aspect in Africa).

These benefits do not come without costs and complications. The weaknesses of EBT as a pedagogical tool include:

- limited theoretical content and the difficulty of incorporating a theoretical component;
- generally weak pedagogical capacity among workers with training responsibilities;
- the difficulty of integrating training with work, and the tendency for production to take precedence over training;
- the difficulty of monitoring and supporting EBT due to its diverse forms and disaggregated nature;
- the tendency for EBT to focus on immediate, short-term and enterprise-specific needs;
- the tendency for EBT to be disjointed and unstructured in relation to the long-term skills development needs of enterprises; and
- the challenge of developing and maintaining adequate economic incentives and appropriate cost-sharing arrangements.

This paper acknowledges these strengths and weaknesses but does not examine them further.

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\(^8\) Structure is used in this paper to refer to the degree to which training reflects a policy basis, needs analysis, HRD planning, orderly and careful delivery and monitoring and assessment.

\(^9\) Often in carefully structured complementary patterns, such as those found in “dual system” apprenticeships.
Enterprises seek skills from three main sources:

- they hire fully skilled individuals, often expatriates;
- they draw upon external training services; and
- they train in-house (i.e. EBT).

These three broad categories are actively intermingled. Very few employees anywhere are actually “fully skilled” and therefore receive no training whatsoever. In practice training resources are often concentrated on already highly skilled “key” personnel. This was a common finding among the enterprises surveyed for this paper.

Though the manner and focus of training is changing world-wide - sometimes dramatically - it remains true that virtually all employees receive at least some training. Again, this was found to be broadly true for the sample surveyed. The largest single component of this training is EBT.

None of the surveyed enterprises treated EBT as a distinct category of training or HRD. Hence, EBT is necessarily addressed as an aspect of the overall training approach of individual enterprises. Links with external public and private sector training providers are considered when necessary in order to understand particular EBT practices or to place them in context. Accordingly, there are a number of exceptions to the strict EBT rule, the most significant of which reflect the strong training links many enterprises have within company “groups” or through acting as agents or representatives of multinational firms. In such cases training policies, practices, materials and trainers are often provided by - and sometimes required by - the parent enterprise. Such relationships appear to be growing (this was clearly the case in Zambia) and can be seen as a normal and positive aspect of globalisation and in particular, of foreign direct investment. All forms of “group”-based training identified during the fieldwork were deemed EBT for the purposes of this study.
PART I: ENTERPRISE-BASED TRAINING IN KENYA

By Kenneth King

I. INTRODUCTION

A. Background

The intention in this paper is to give a flavour of what is new in the domain of training policies and practices in formal sector enterprises in Kenya. It is being done in conjunction with a similar study in Mali in Francophone West Africa and with a study in Zambia. Although the focus is on enterprise-based training, in reality this cannot be examined entirely separately from institutional training, whether publicly or privately provided. This is for the very good reason that in many training systems, it has been commonplace for there to be a division of labour training between what can best be done in the firm and what is more appropriate to an institutional training provider. Indeed in some incentive systems of the levy-grant type, it has been almost essential for those enterprises wishing to be reimbursed for their training to implement a portion of that in government-approved institutions. It was therefore necessary to pay some attention to the changed role of the National Industrial Vocational Training Centre (NIVTC) in the last decade and more.

B. The Kenyan Context

This study was carried out after a period of extended drought in support of public vocational training institutions, but also after a period in which the new forces of liberalisation and increasing competition for the local formal sector firms had been operating for around a decade. The conjuncture of these two trends has produced a very particular situation for that form of training that was normally split between the firm and the training school. This is of course just one of many pathways from school, through training to work or employment. Fortunately, there are many other pathways, and although these are not the focus of this small study, it will be possible very briefly to refer to these in the course of this analysis.

Returning now to the formal sector firms that are the focus of this study, we shall argue that as a result of the sometimes precipitous removal of import protection, and of dramatically increased competition, they have in many cases been less concerned with the niceties of training arrangements than with sheer survival. Several have not in fact survived. And in Kenya there have been, for instance, severe reductions in the textile sector which, in turn, has had severe knock-on effects for the once-prestigious Textile Training Institute in the NIVTC.

Many others have been obliged to strip out everything except their ‘core business’- to use the jargon - through out-sourcing, lay-offs, and severe pruning. The result has sometimes been that the in-house training school linked to the firm has been seen as an expendable luxury, along with the other items that could be put out of the core. Other firms that were at one time ready, given the strength of their industrial position in Kenya, to send promising young employees to the Kenya and Mombasa Polytechnics and to the universities, have simply stopped doing so, several years ago. Now they just recruit in the open market. It is fortunate that Kenya has a range of other skills development pathways

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10 I should like to acknowledge James Foster’s assistance with enterprise contacts.

11 Director, Centre of African Studies, University of Edinburgh; e-mail: kenneth.king@ed.ac.uk
that firms can rely on for young workers.

As we are concerned with the flavour of the formal sector training that is current in Kenya, we should be aware of what it means to the old ideals of training shared between the firm and the state, that neither the firm nor the state has found it easy, in many cases, to maintain, let alone to invest in training. The NIVTC, in the heart of the largest industrial area in Eastern Africa is, for instance, a shadow of its former self. The machines in many of the workshops date from the 1970s. There has been no refurbishment since then. High-ranking officials refer to the site as a suitable candidate for recognition as a museum. On the part of the most modern firms in Kenya, and especially those that seek, against all the odds, to maintain the highest training standards, the almost obligatory attachment of their trainees to this public sector institution is described as ‘a holiday’ for their own trainees.\(^{12}\)

Compared with the feel of the NIVTC in the mid 1970s, when the ILO was supporting the new apprenticeship arrangements, firms were recruiting apprentices from top secondary technical institutions, and there was a buzz about the new training arrangements and the new levy-grant system, the current discourse is about falling trainee numbers and public sector failure to modernise and transform.\(^{13}\)

In other words, at a time when Kenya has pledged itself to become a modern industrial nation by the year 2020 (Kenya 1996), several of the critical preconditions seem to be absent, and not least in the integration of skills development in firms and in vocational training institutions.

C. Method and Approach

Within the scope of this paper, we shall attempt to pinpoint and discuss a small number of major trends that seem to be affecting even the largest and most progressive formal sector firms in Kenya. We shall look principally at the following questions:

- What have been the key changes in the last 10 years in the macro-economic environment in which firms have to operate in Kenya - i.e. the impact of liberalisation, more imports, greater global competition etc? What has been the effect on the formal sector firms of the state of the political economy of Kenya more specifically?

- What have been the implications of the above two factors on the workforce in the firm? What measures have been taken that directly affect the workforce – such as out-sourcing, lay-offs, changes in human resource policy in order to achieve greater competitiveness, through a focus on the core business?

- What is the current skill profile of the firm? What are the actual levels and descriptions used by the firm? How can the workforce be classified?

- What have been the changes in the last ten years to this profile - e.g. what has happened to “apprenticeship”, or to in-house training schemes?

- How does the official training system of the Government (Directorate of Industrial Training and the different NIVTCs) relate to these changes? What has happened to the Training Levy?

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12 The vocational training centres in Mombasa and Kisumu have been maintained at a higher level through support from Danida.

• What does the future perspective look like?

This exploration of training in the formal sector of Kenya’s economy in 2001 takes as background some relevant work that the Centre of African Studies in Edinburgh was responsible for during the period 1996-1999. This was examining the challenge of globalisation to emerging Micro and Small Enterprises (MSEs) in three countries, including Kenya, and was particularly concerned with the interactions amongst education, training and enterprise development policies. Though the focus was on MSEs, it was necessary to pay attention to the extent of their involvement with the public and private training system, as well as to their linkages to formal sector firms. Through a research partnership with K-REP Advisory Services, it was possible to examine the health of the formal vocational training system. Through the project’s comparative insights from Ghana and South Africa, it has been possible to situate change in the Kenya training and enterprise environment more broadly. This is captured in an overview paper published by the Department for International Development (DFID) at the end of the project. Its summary of the training status of Kenya was not very positive:

“…there is a continuing weakness of training policy whether directed at the larger, formal sector firm or at the needs of the jua kali (informal sector) firm. The system appears to be driven by projects rather than an overall vision”.

This project also noted the possible importance of skill transfer from larger firms to self-employment. This of course was not in any sense an explicit training aim of the formal sector firms, but a variety of adjustment-related factors, from downsizing to outsourcing - has meant that there has been a fertilisation of the informal economy by skills acquired, often at considerable expense and over a lengthy period, in the formal sector. King has argued, specifically for Kenya, that there has been a very significant Kenya-Asian to Kenya-African skills transfer over the last 30 years. Again, this was not a training objective of Asian entrepreneurs, but in many cases the technology and backward linkages of the Asian sector of the formal economy are more accessible to technological borrowing and reproduction than some of the large continuous process firms. One of the paradoxes of Kenya, therefore, is that the Kenya-Asians are often characterised as the least interested in the formal training schemes of the government, such as the levy-grant system, and are often said actually to be opposed to training. Yet, arguably, there are very much larger numbers of highly skilled “graduates” of the Kenya-Asian formal sector than there are from some of the multi-national branch plants. This may continue to be an important by-product of the Kenya-Asian layer of the formal economy, which, at least on the outskirts of Nairobi, seems to be one of the few sub-sectors that is continuing to expand despite the wider crisis.

However, there is one further background factor affecting training and human resource development in the formal sector of Kenya’s and many other African economies; and that is the emergence of substantial amounts of “straddling” of employees between a job in the formal sector (whether public or private) and the informal sector. Such straddling (which typically involves a second or third job

beyond one’s main job) is driven by the low wages in the formal sector, and the need to acquire additional sources (often untaxed) of income generation. But it can be anticipated that this very widespread phenomenon can mean that staff development and training in one’s present job can directly conflict with additional real income in a separate job 17. Little is yet known about the dynamics of straddling, and further analysis would be valuable both for an understanding of the formal and informal sectors. But it is already clear that it is a factor that substantially alters the whole notion of livelihoods in the formal or informal sector. We currently have no notion of what proportion of the formal sector workforce is also operating effectively in the informal, MSE sector, or in a second formal sector job. It is a topic that would be worthy of serious research.

The reason for mentioning this factor at the outset is that there is potentially a real trade-off between getting better at one’s first job through in-service training, and gaining more income, without tax, in one’s second or third job.

Another important part of the background to these developments is that they cannot be wholly separated from the attitudes of the external donors towards technical and vocational training in Kenya. In particular, it could be argued that there has been something of a retreat from external support to vocational education and training in the formal state-owned public sector 18. This has been the case both in the secondary technical sub-sector as well as in the post-basic vocational training centres and institutes. It has affected several of the traditional supporters of vocational and technical education and training, such as Sida and DFID, and particularly the World Bank. In place of this traditional agency support to public sector VET, there have been a number of initiatives to support the upgrading of informal sector artisans. But unlike the nationally-funded upgrading scheme in Nigeria where the artisanal enterprises and their expanded numbers of new apprentices were encouraged to have training linkages to the formal training system, the Kenya World Bank scheme has sought to encourage the growth of a private training market by the use of a voucher scheme. Most other donors (multi-lateral, bilateral and NGO) have had some scheme to support the informal sector in Kenya, but in very few cases have these had linkages to the public training system. So the switch in patterns of external support to skills development has doubtless played a role in the changes that we have noted in institutions like the NIVTC in Nairobi.

D. Survey Sample

Building on this background and on this earlier work, the present study selected a small number of major formal sector enterprises which could be used as a sample for the questions mentioned above. The firms included:

- Two agro-industries
- Two food and/or drink processing firms
- One motor vehicle import and service firm


• Two IT companies

The study also visited the main National Industrial and Vocational Training Centre (NIVTC) in Nairobi, and the Ministry of Labour, as well as the Kenya Institute of Education.

Most enterprises were visited during mid February 2001; the government departments and the IT enterprises were visited in May 2001.

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19 The enterprises surveyed are not named; it will be appreciated that this means we shall also need to avoid mentioning their principal products.
II CASE STUDIES

With a small group of firms, it is preferable, first, to analyse the specificities of EBT on a case by case basis rather than trying to synthesise their experience. After doing so, it will be useful to make a number of tentative generalisations.

A. Multinational Protection From National Trends?

In the first of our case studies, a multinational agro-industry, there was a genuine interest in knowing to what extent its international reach protected it from some of the trends that might more directly affect local firms. But it was soon clear that the firm did not see itself as protected by its international status from a whole series of factors that affected its operations in Kenya. Infrastructural weaknesses in Kenya, e.g. the state of the telecommunications, roads and railways, and the uncertain power supplies, directly impinged on their competitiveness. And equally the corruption that was pervasive at the ports or at police checks en route to the ports was not something that could be avoided. Even more worrying, it was felt that the professionalism that was a core value of the firm’s operation was compromised by the intensive climate of politicisation. This had a knock-on effect on the firm, because if senior positions in government or parastatals were frequently filled on non-meritocratic criteria, it could even begin to undermine the core training values in the private sector.

For large agro-industrial firms, it is probably the case that the majority of the workers require relatively low level skills. Certainly in this case, where fresh produce was grown on the farms and then processed in the factory, the majority of the labour were unskilled or semi-skilled seasonal labour. Their working days per month would inevitably be affected by the ripening cycles of the produce, but these might often not exceed 15 days per month. It is worth underlining the fact that large multinational firms that are involved in the processing of agricultural produce may well have very large numbers of relatively unskilled seasonal labour.

The major changes in training policy have affected more visibly other, smaller sections of the workforce. For instance, one of the most marked changes has been the shift from the company running its own apprentice school, some 15 years ago, with a close link to the Directorate of Industrial Training to a situation where it is simply selecting young people who have already been trained in youth polytechnics or Harambee (community self-help) Institutes of Science & Technology. This change to a reliance on the market rather than building up a cadre of young people within the firm is a trend that will be noticed elsewhere in these case studies. To an extent it means that the various post-basic training institutions are playing a significant role in the provision of institution-based trainees.

But it has also meant that, in addition to there being no long term enterprise-based apprentice training, there has been a shift away from the firm investing in long term sponsorship of trainees at the national polytechnics. By contrast the emphasis in enterprise training policy is on short-term skill improvement courses.

It is interesting comment on Kenya’s major investment in pre-employment training, much of it originally through community-based funding, that firms can now justify abandoning their long term in-house training investments because of a ready supply in the market. Training managers are now also prepared to say that the much-criticised primary and secondary school system, with its emphasis on practical
skills, is “a valuable do-it-yourself basis for work”.\textsuperscript{20}

What this points to is a very important issue. Most African training systems consist of multiple pathways to work. Like their counterparts in the OECD countries, these consist of school-based pathways (utilising vocational tracks as well as more general orientations to work); pre-employment vocational training in a variety of technical training institutes (public and private), and various combinations of enterprise-based training with linkages to formal training institutes. The last pathway, of course, includes both the formal apprenticeship systems which were in many cases exported to Africa through the ILO in the 1960s, and the very widespread versions of local apprenticeship to be found in West, Central and Eastern Africa. The flexibility and diversity of these various arrangements are very marked in countries such as Kenya. Arguably, the sheer range of alternatives in post-basic education and training is critical in understanding the decisions of large-scale formal industry to retreat from the formal apprenticeship system.\textsuperscript{21}

\textsuperscript{20} At the very time when the practical subjects are being dropped from the 8-4-4 system of education, it is interesting to have confirmation of its value in the eyes of certain enterprises (see also King K., McGrath, S. and Oketch H. Learning to Compete in Kenya: a challenge to education, training and enterprise: a synthesis report, Centre of African Studies, 2001, website: www.ed.ac.uk/centas).

\textsuperscript{21} In Kenya, there are the following post-basic institutions, excluding private for-profit and non-profit training: National Polytechnics - higher education and training for engineers and technologists; National Industrial Vocational Training Centres - artisanal training for formal sector employees; Technical Training Institutes - former technical schools upgraded to provide post-secondary artisanal training; Institutes of Science and Technology - post secondary institutes providing training for technologists; Youth Polytechnics (soon to become Junior Institute of Science and Technology) - mixed post primary and post secondary clientele providing artisanal training.
B. From Training in a Situation of Near Monopoly to Training in a State of Competition

In a number of African countries, including Kenya, some of the major food and drink products have over several decades been produced in a situation of near monopoly. Such firms – and it would include one of the food and drink processing firms in our sample – have faced a number of challenges in the macro-environment. Liberalisation, and removal of protection, have led to the entry of direct competition, including from post-apartheid South Africa. And these forces in turn have led directly to the re-engineering of the company, including of its training policy.

Amongst the items to be subcontracted or outsourced have been the whole system for transporting and distribution of the products; the maintenance and security of the grounds has also been outsourced, as has the canteen. And the housing will shortly follow. The result is that the workforce which was some 4900 in 1992 is only 1000 in 2001. This dramatic reduction has been affected not just by outsourcing but also by technological change. The latest state of the art production line has been introduced, and instead of just a handful of computers ten years ago, there must be 500 to 1000 in the company.

Unlike the agro-industry, just examined, with its thousands of casual and seasonal workers, the core group that are left after the dramatic outsourcing and subcontracting are relatively highly skilled. The union side has a series of five skill levels from technical operatives (at the top) to machine operators and process minders (at the lower end). The most skilled combine technical and operational skills, along with some management; and they may well hold Higher National Diploma and Diploma certification.

But the really big change in the training arena has been the firm’s move away from the apprenticeship system. It had found the Kenyan version of the “dual system” with its interaction with the government training centres problematic, as well as the placement of trainees. But the other reason was that it was impossible to absorb these expensively trained apprentices in an era of dramatic downsizing and intensified competition. The firm realised that it had been maintaining this high cost training, with its separate facility and hostel for apprentices, as a form of social responsibility. The same happened with their old tradition of long term sponsorship of trainees with the national polytechnics. This too was stopped.

Instead it selected those it needed directly from polytechnics and from institutes of science and technology. Understandably there was some reduction in quality, compared to apprentices that had been selected and brought up in the ethos of the firm for 3-4 years, but a series of short skills training and improvement courses have taken care of many of the gaps.

Other training initiatives have reflected the increased use of computing in the production process. Hence basic computer skills have become necessary, and the firm has their own computer lab.

Instead of long term training away from the firm, the emphasis now for the highest level of skill as a technical operative is on distance learning with the relevant professional courses and professional institutes in the UK and Australia. There has also developed a system of accrediting their own on-the-job trainers which now number 30, and licensing these with a little ceremony when they have completed their training. Such licensed employees get access to company shares.

The company has not completely broken its links with the government’s training arrangements. It still is obliged to contribute to the government training levy, but this is now running at just 300 Kshs per employee per annum, or not much more than $4.50. They do contribute this amount – some $4,500 – and they manage to claim most of it back again.
What seems to have happened in this, one of the best known firms in Kenya, is that the training emphasis has moved over time up market towards management and information technology. The older craft skill apprenticeships have become less essential for the firm to take its own responsibility for, not just because of the availability of such skills in the market but also because technological change has altered the required composition of technical and managerial skills. We shall note later that current government facilities are in a particularly weak position to respond to these IT needs.
C. An Agro-Industry Re-Engineers Its Training

In the second of our agro-industries, there are some similarities to both of our previous examples. Competition from local low cost producers has emerged in the 1990s. The firm’s agricultural branch has the pattern of taking on hundreds of seasonal labourers when the crops need picking, but in Nairobi the main plant has almost no casual labour.

Some of the same outsourcing has taken place as we have already described, removing from the employee base all workers related to cleaning, mailing, transport, canteen and welfare. The result is that the total employment has been halved from some 1100 in 1997-8 to just 600 now.

The same pattern of the reduction in apprenticeship is evident in this firm, but it is not so severe. Where it once had some 15 apprentices a year, this has fallen to 5 and may well fall further. The problems are identical to those just discussed – the problem of absorbing the apprentices after the years of expensive training, and the very low quality of the government side of the dual training arrangements. Thus, the apprentice training side had become essentially a site of “training as a social responsibility”. The firm would admit that their own apprentices were certainly superior to what could be hired externally, but the costs and the relative inflexibility of the training period were against their continuation.

Instead, there are competency-based systems being introduced at different levels within the firm, and with links to the wider multinational branches of the firm. As with our previous case study, there are a significant number of higher level employees – at the technical operative and management levels – who are involved in distance learning masters courses with institutions in the UK. The firm covers the training costs of these courses.

By contrast with this series of firm-based initiatives for different levels of employee, the levy-grant system which still continues with the government must appear like an anomaly, something from the past which makes very little difference to training in the firm. It only raises some $2,700 in a year (which they have found difficult to have reimbursed), but this should be contrasted with the almost $750,000 that the firm believes it is spending on training per year.
D. An Asian Food-Processing Firm Faces Similar Challenges

Competition has become much more intense in the last ten years, with no less than nine local firms competing in some of the same lines where earlier there was a virtual monopoly. In addition there has been massive dumping of certain food lines from Europe and even from food diverted from emergency aid. And there has been the new freedom from competitors to import directly from the Middle East, South Africa and Europe. In total, this new competitive environment has actually resulted in the closure of one entire factory and the sale of another.

These pressures have been very intense in the last three years, and have reduced the workforce from some 500 to 250 in that period; and retrenchment is expected to continue. As anticipated from our earlier examples, all the usual elements have been outsourced to reduce administrative costs. And there is even talk of outsourcing accounts, but not the sales department.

The skills profile of employees includes 50% unskilled (including casuals); 20% semi-skilled; 20% skilled (mechanics and technicians); and 10% supervisory and management.

Training has taken a series of cuts along lines with which we are becoming familiar. In the late 1990s, apprentices that were linked to long term training in polytechnics and universities were stopped and, instead, qualified and experienced recruits were selected in the market which is allegedly flooded with young people looking for jobs.

External, full time training has been cut, and has been replaced by internal training, supplemented by the use of training videos. The levy-grant system continues to operate, but with the reduction in long term apprentice and other training there are no longer any refunds.
E. Sustaining High Quality Motor Vehicle Training in a Competitive Global Climate

In the last of our ‘old industry’ examples, again, the larger economic climate dealt some severe blows to the health of the motor industry in Kenya. Enterprises that had come into Kenya to assemble vehicles were suddenly threatened in the 1990s by the direct import from Dubai and South East Asia of brand new cars and vans, as well as by the massive import of some 25,000 to 30,000 second hand cars coming from Japan until mid 2000.\(^{22}\) The tax differential between the locally assembled and the new import actually discriminated against the locally produced items; and hence the Kenya Association of Vehicle Assemblers sought to get a bill passed to reduce the inflow of these cheaper cars.

But the tax differential and the second-hand imports were not the only economic factors operating. Equally important was people’s sheer incapacity to purchase as a result of the downturn in so many aspects of the Kenyan economy. This was illustrated in the reduction in new car sales from about 10,000 to 5,000.

As to the workforce in this particular motor vehicle firm, the numbers were down from about 1000 in 1990 to around 300 to 400 in 2001. This was not so much from outsourcing – except for cleaning – but more from loss of sales and servicing. Nor was it necessarily the result of customers getting their cars serviced by the more advanced \textit{jua kali} garages.\(^{23}\)

The specific breakdown of the labour is about 1/4 mechanics and 3/4 sales, administration and clerical. The top technical people are termed ‘technical assistants’ and they have all had some external specialist short term training. In addition there is specialist regional training held in Kenya by experts from the mother countries of the brands that are sold and serviced in the firm.

Unlike the pattern that we have noted in most of our case studies, where apprenticeship arrangements have either been completely given up or are dramatically reduced, this motor vehicle firm is the exception. The firm had originally set up an enterprise-based technical training centre in 1973 because they wished to raise the quality of training. Previously they had taken 100\% of their staff from the labour market and had trained them on the job. Now with the training centre established, they recruited from technical secondary schools and they registered the students as apprentices. When the Directorate of Industrial Training (DIT) was well equipped during the 1970s, they did operate something of a dual system between the company training school and periods in the National Industrial Vocational Training Centre (NIVTC), but as a result of the deterioration in the public training provision that has been noted above, they no longer make use of the NIVTC, and can thus no longer have their training levy reimbursed.

In the view of the company the DIT began to deteriorate from the late 1970s, and has had little external support since 1976. In Europe, DIT-type organisations work very closely with the relevant

\(^{22}\) It has been argued that these imports not only threatened employment in Kenya’s few large scale car assembly plants but the ban which was placed on them by Kenya in mid-2000 would threaten the tens of thousands of informal sector mechanics who work on such second-hand cars (\textit{The Japan Times}, “Kenya bans Japan’s junk to save jobs”, Tokyo, September 19th 2000).

\(^{23}\) Unlike some of the enterprises we have examined which involve a continuous process production line in food, drinks, and agro-industrial products, the car industry provides its skilled employees with income-generating skills which can be utilised in their own compounds or residential areas each evening after work and at the weekends. Many formal sector employees do precisely this, and others straddle in this manner prior to moving into full-time self-employment.
industry, but in Kenya the DIT and the national polytechnics no longer have close working relations. In older times, the firm had been much used as a site for industrial attachments but that too seems to have fallen away and not least because of the number of student strikes in the polytechnics.

This firm has not been immune from the lack of employment opportunities, which has been noticed for other companies which once took apprentices. In this particular firm, there have been no jobs for the graduating apprentices for the last two years. So all 15-20 of them have had to go off to other companies. Another example of training being maintained for social responsibility reasons.

This firm has however gradually introduced a policy of the apprentices paying for training. By 1993 all the apprentices were paying some 80,000 Kshs. a year ($1,200). This does make a contribution, but it comes nowhere near covering the firm’s investment in apprenticeship training.

The firm along with other progressive employers in this industry has been assisting the DIT to modernise the curricula for government trade tests so that these reflect more accurately the major changes that have taken place in the last 30 years. This has been done in some measure as far as the syllabi are concerned, but in the public sector, the machinery, equipment and staff are still not there to implement these.

This is clearly a firm that is standing out against the trend that has been so noticeable elsewhere in industry and production. Partly, this is because the training school has always been seen by the firm as a ‘national commitment’ to training, but how long such ideals may survive in the extremely competitive vehicle sales and service markets of today remains to be seen.

Before looking briefly at the training situation in the very different world of information technology and services, it may be worth underlining the severity of the changes that have been outlined in these first few case studies. And in reviewing the employment and training situation in this handful of companies, it should be mentioned that this is not a representative sample. Rather, these firms are some of the best known large firms in Kenya; so that the patterns present in them may well be of larger concern to the nation.

If we take only the four firms for which we have available data, the total employment has shrunk over the decade from some 7,500 employees to just over 2,000. And we have noted in all but one case that the once important apprenticeship training function has been almost completely abandoned. We have also noticed that there is, as a dark background to these trends, a distinct sense of a reduction in the quality of public sector provision.
F. Information Technology and the HRD Challenge

Like the case studies of older industries, our case study of information technology involves one of the more visible companies in Kenya. It is a firm that has taken Human Resource Development (HRD) very seriously indeed. Its top management, unlike some of the more traditional companies and unlike much of government, regards HRD as a company-wide issue. Training is not something that can be delegated to a specialist small department, but is central to all employees and to management.

Unlike the old economy firms, which we have noticed downsizing dramatically from situations of virtual monopoly in earlier years, the IT sector is extremely new, and in many cases, including our case study company, is only a year or two old.

This company is also unlike all our old economy case studies because it combines its IT products and services with a massive IT training arm. And this training arm is not concerned with human resource development in the company but with the sale of very high quality IT training to the general public. We had noted in our motor vehicle firm that a few of those in the technical training centre were from the general public, but in the case of this IT company, it had provided courses to no less than 15,000 in a single year. At the higher level, these courses are all the way up to certificates and diplomas and are linked to professional bodies in the UK, as well as to universities in Kenya. In addition this training system is linked to the ISO 9001 standard in IT training.

What this suggests is that there is a clear desire in the emerging IT sector to link training in Kenya to the highest global standards of IT training. This does parallel some of the trends we have already noted with one of the agro-industries with its support of accreditation and masters level distance training overseas, and also with the motor vehicle sales and service company which ensured that best practice in the mother countries of its main vehicle brands was also provided to their senior technical assistants.

There are, of course, in Nairobi as in other capital cities a plethora of computer courses on offer from every kind of private training provider. A few, like the one we have just described, are of the very highest quality and are branded with some appropriate marker; many others are appealing directly to the sense that computing is a new training market. Another of our IT case studies was a branch of an international company which was specialising in just a single set of computing courses linked to one of the best known international providers. It was basically offering these courses to clients in the corporate sector as well as to some external agencies in Kenya.

The contrast must be, however, with the lack of any parallel IT training provision in the DIT or its associated NIVTC in the capital city of Nairobi.
III. FINDINGS and TRENDS (Kenya)

In a set of case studies of this kind, we are naturally hesitant to move towards generalisation, but it may nevertheless be useful to underline a number of issues that seem to have emerged from this study. It will also be useful to point to a set of concerns that would merit further investigation.

A Note on the Weakness of Kenya’s “Dual” Provision

We have commented from time to time through this account about the decay on one side of the shared training arrangements between the DIT and the companies. Nowhere is this more evident than in the sphere of computer equipment for the provision of information technology courses. There is virtually no computer equipment at all in the premier training site of the DIT in Kenya, beyond 6-7 very old machines in a heavily barricaded room.

The flagship of the early 80s, the Textile Training Institute, seems to be decaying. Water has come through the roof, great pools of it, and there is no money to carry out essential repairs.

In the automotive workshops, there is no up-to-date equipment; and in the other workshops, plumbing, construction and carpentry, a sense of decay and lack of maintenance.

The training levy continues, but brings in relatively little money, and the legislation does not allow the money to be used for refurbishment or the provision of new machinery or maintenance.

For reasons that we have seen in the industrial case studies, firms are reluctant to maintain long term apprenticeship trainees, and disinclined to send their workers to such an outdated training centre.

In this grave situation, with the effective breakdown of industrial attachments to the NIVTC, the management of the DIT is actively considering advertising courses and charging fees to any member of the public who wishes to enrol. But at the moment the legislation does not allow the DIT to retain the fee income for refurbishment and essential maintenance.

Outsourcing and the Reduction in Security

Even in the rather small number of firms that were case studies, one of the most obvious responses to liberalisation and intensified competition has been reduction in the core number of employees. Core employees in just four of the firms under review had declined by over two thirds. This has allowed the firm to concentrate more on its core business. The reduction of almost 5,000 employees out of an original 7,500 a few years earlier does not of course mean that there are 5,000 additional unemployed workers. The companies to which these services will have been outsourced will have retained many of these. But in many cases this will have meant a reduction in the security and the important perks of a once safe job in one of Kenya’s major firms. One of these perks will have been the loss of good quality training.

Cutbacks in Employment Often Mean Informalisation of Employment

Some of the labour cut out of these formal sector companies will not have found new formal sector work. This will have led to the need in many cases to find informal sector employment. But those most prone to be outsourced or laid off in the formal sector of the economy are not necessarily those
with the skills that can most readily be turned to micro-enterprise success. They are likely to become part of the survivalist rather than the growth side of the informal economy.24

High Level Skills Are Being Used in the Formal Sector, But the Public – Private Training Partnership Has Collapsed

There is no doubt that firms continue to invest in the training of skilled labour, but the role of the government in encouraging this through apprenticeship arrangements and the levy grant system is very greatly reduced. Increasingly young people are being recruited with entry-level skills acquired, at no expense to the firm, in a variety of post-basic training centres and institutes; and short term upgrading and skill improvement courses are attuning them to their new context.

A Variety of Training and Accreditation is Being Offered to the Higher Technical and Junior Management Levels

In several companies we have noticed the reduction in the long term off the job sponsorships whether to local polytechnics or to overseas institutions. Instead, there seems to be widespread support for these technical and managerial staff to have access through distance learning to relevant masters level and professional institute qualifications. Through these mechanisms, new cadres of licensed trainers seem to be being developed. Local higher education institutions seem to be losing out in the provision of such courses.

Creating the Responsive Public Sector Training Institution

The government’s training provision is currently a shadow of its former self. Senior policy makers are aware of the changes that are necessary to allow public provision to become more demand-driven. Sustainability means that responsiveness to demand needs to be underpinned by new legislation that affords greater financial autonomy to NIVTCs.

Many Donors are Exercised About Skills For Development, But New Thinking is Required.

Donor moneys for the institutional development of the training infrastructure of government have been substantially reduced, or have been applied to particular projects, e.g. in the micro and small enterprise training and technology project of the World Bank, or in the refurbishment of particular equipment. There is little evidence of a sector-wide approach to this whole area of skill development. The preoccupation of donors with basic education for the last decade and more will necessarily have to address the requirements of post-basic skills development very shortly. It could be argued that there needs to be a thorough examination of what has occurred in donor commitments to skills development in Africa. The analysis by the World Bank of what has been its own experience of support to this sub-sector over the past ten years is a valuable illustration of what could be carried out more widely.

24 The informalisation of work in Kenya needs to be recognised as part of a wider pattern. According to Tokman, Regional Director of the ILO for the Americas, “Out of every 100 jobs created since 1980 (in Latin America), eighty have been informal” (Tokman, Victor, “Integrating the informal sector into the modernisation process”, in SAIS REVIEW: Special Issue on “Whither informality”, Vol. XXI, No. 1, 2001.
Formal Sector Financing of Training has Little Relationship with Levy-Grant Schemes

Over the 30 years since it was introduced in Kenya, the levy-grant principle does not appear to have acted as a spur to more training. The sums now being raised through this mechanism do not appear to be large enough to influence the character of training nor does the current legislation make it possible to use some of the funding for the improvement of public training provision. In the case of the progressive employers, the amount levied by this system would appear to be a fraction of what the firm actually dedicates to human resource development. Elsewhere in Africa, e.g. in South Africa and Tanzania, new attempts at the levy-grant principle are being tried. But possibly insufficient attention is being paid to the experience of those countries like Zimbabwe and Kenya where there has been a legacy of levy-grant that has been little researched in the last decade.

Too Little is Known about Training in the Asian Formal Sector

The most dynamic sector of the Kenyan formal sector remains the Asian-owned businesses. Despite liberalisation and the removal of protection, Asian-owned companies continue to be one of the more buoyant sub-sectors. Traditionally, they have stayed outside the government’s formal apprenticeship system that was once commonplace, as we have seen, amongst the other large companies, though there have been exceptions. Very much more needs to be known about the systems used by Asian formal sector companies for human resource development. A good deal of evidence would suggest that despite donor-aided interventions in training, Kenyan African entrepreneurs are more influenced by Asian practices than is conceded in the literature on skills development.

The Failure to Develop a National Training Strategy

The government was to have developed a national training strategy but this appears to have lapsed. Arguably the publication of the Koech Commission should have been paralleled in the training sector by some thorough review of training policy. The result is that a number of changes are being summarily introduced in the basic primary and secondary school systems with no regard for the way these may impact on further skill development in other parts of the training arena.

Industrial Transformation by the Year 2020

If Kenya is to move towards its own vision of industrial transformation (Republic of Kenya 1996), it will need to become more conscious of the very dramatic changes that industry and commerce have undergone in this exacting era of adjustment and liberalisation. There is a real opportunity for new thinking now about the contributions of government, the private sector, and development agencies to the achievement of the new vision, and not least because Kenya remains a theatre of industrial and commercial dynamism and creativity, despite the negative economic and political context.
PART 2: ENTERPRISE-BASED TRAINING IN ZAMBIA

By John Grierson and Svend Erik Ladefoged

I. INTRODUCTION

“Training and work no longer occur sequentially, they form an ongoing process.”
Francoise Favennec-Héry

“Work and Training: A blurring of the edges”,
International Labour Review, 1996

A. The Global Context

Globalisation refers to the increasing interdependence of national and local economies and to the diminished local autonomy that operating within a global framework entails. Most countries, Zambia among them, have few alternatives; they must learn to adapt to the realities of globalisation. The problematic reality of globalisation is that it presents externally generated problems that nonetheless demand local solutions. Certainly this is true in the case of the constant demand for new and better productive sector skills and the corresponding need to develop locally viable approaches to skills acquisition.

Globalisation has a direct and dramatic influence on work and on training for work. Globally the world-of-work is becoming increasingly complex, specialised and integrated. The opportunities emerging are accompanied by the challenges of keeping pace with constant, externally driven and often dramatic change. The economic and regulatory environment, the technologies used in production and communications, the work environment and learning and training practices are all in a state of constant flux.

Developing countries, particularly those in Africa, are not well placed to take advantage of globalisation. While fully subject to the forces of globalisation they have heretofore not been able to reap an equitable share of the benefits. One of the keys to improving this situation is to help both national training systems and enterprises improve their human resource development (HRD) capacities.

The purpose of this study is to help improve skills transfer practices by better understanding the changes and trends in Zambia in one particular form of skills transfer, enterprise-based training (EBT). This study is principally concerned with EBT undertaken by existing employees (including new hires and trainees) of modern sector enterprises.

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25 The Royal Danish Embassy, Lusaka, and the Board and Management of the Northern Technical College (Nortec), Ndola, Zambia, granted Mr. Ladefoged the time needed to participate in this study and provided logistical support. The views and opinions expressed in this paper are those of the authors alone and should not be deemed to be those of the ITC/ILO, the enterprises surveyed, the Royal Danish Embassy, Lusaka or Nortec.

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27 Skills Training and Entrepreneurship Development Project, Ndola, Zambia, tevet@zamnet.zm

28 Enterprise-based training (EBT) - any purposeful form of skills transfer that takes place in an enterprise. This study is principally concerned with EBT undertaken by existing employees (including new hires and trainees) of modern sector enterprises.
B. The Zambian Context: Reform and Restructuring in Zambia

The current state-of-the-nation is overwhelmingly determined by three factors. First, by the long-term deterioration of the economy between the 1970s and the 1990s. Second, the further shrinkage of the average Zambian’s slice of the national pie due to steady population growth (~ 2.5 p.a.). Third, and more positively, recent improvement in overall economic performance.

In 1999 Zambia recorded economic growth of 1.5 - 2%. Current economic projections are cautiously optimistic; “largely because of new investment in the mines, the Zambian economy as a whole is expected to grow by more than 5%” in 2001. Growth is highly concentrated in mining and allied industries and in a few other sectors, notably non-traditional agro-exports and tourism. As a result growth is highly concentrated geographically as well with much of it concentrated in the Copperbelt.

Broad-based growth benefiting all Zambians remains elusive. Inflation is high at ~ 25%, though on a declining trend. GDP per capita is ~ USD 400 ($880 at PPP) with ~ 80% of the population living below the poverty line. Zambia is a young country (i.e. 50% of the population is less than 15 years old) with a low and decreasing life expectancy (~37.5 years). Social indicators are below sub-Saharan averages, in large part due to long-term poor economic performance that has resulted in deepening poverty and declining social services with both exacerbated by the effects of the HIV/AIDS pandemic. HIV/AIDS threatens both recent progress and future possibilities in many areas of social and economic development. HIV/AIDS has had a significant negative impact on HRD, as it has had on virtually all other areas of national life.

Zambia has a population of about ten million. The labour force is about four million. Official unemployment is high at 25%, a figure that masks a very high level of under-employment. Labour productivity is low. More than 70% of all employment is in the “informal sector”, a level projected to increase further as public sector and formal sector employment continue to contract. In general, even in growth sectors, restructuring and investment has not been accompanied by corresponding growth in employment. Quite to the contrary; with few exceptions contracting net formal sector employment is a marked aspect of Zambia’s economic restructuring.

The recent privatisation of the mining sector has led to rapid changes in technology and HRD practices. Prior to privatisation in 2000 the technologies in common use were largely unchanged since the 1960/70s. Privatisation is resulting in large-scale investments by multinational corporations and the introduction into Zambia of technologies and training practices that are in common use elsewhere. These changes present both opportunities and daunting challenges to local manufacturers and suppliers who must acquire the skills needed to compete.

In 1991 the GoZ initiated a structural adjustment programme to facilitate the transition from a “centralised communal approach to a fully liberalised economy, subject to open market forces”. Zambia’s structural adjustment programme is underpinned by two key reforms, the Public Sector Reform Programme (PSRP) and the privatisation programme, both of which strongly influence trends in employment and HRD. Privatisation focuses on the mining sector, particularly the copper industry, and on state enterprises in general. Privatisation plans include placing some state-owned assets, including Zambia Railways (ZR), under private sector management. The mining sector is

29 The Economist (30 June 01) “Zambia: Brighter days in the Copperbelt”, p. 36.
30 Zambia has two railways; the national railway (ZR) and the Tan-Zam Railway (TAZARA), headquartered in Dar es Salaam with a terminus in the Copperbelt.
concentrated in the Copperbelt where the headquarters of ZR is also located.

All reform programmes are constrained by low (but improving) revenue collection, a legacy of very high external debt (in excess of USD 7 billion) and declining external assistance. Donor support has been eroded in recent years due to a range of governance issues. The GoZ’s enthusiasm for reform is motivated in large part by the very limited array of options and tempered by persistent revenue shortfalls, fiscal constraints, weak institutions and political considerations.

The GoZ’s national development strategy has four key components:
• promoting higher growth in key productive sectors,
• attracting foreign investment and expanding international trade,
• rehabilitating and expanding growth enabling infrastructure, and
• expanding and improving human resource development and poverty alleviation.

Technical, Entrepreneurial and Vocational Education and Training (TEVET) reform is an important aspect of Zambia’s HRD strategy. EBT is a significant aspect of HRD in all four main components of the national development strategy, in large part due to its extensive and varied use in the private sector. Nonetheless EBT is not generally addressed as a distinct sub-category of training. EBT practices are not well documented even within individual enterprises.

C. Method and Approach

During 7 - 19 May 2001 John Grierson, Enterprise and Training Specialist, FTP International, Helsinki, and Svend Erik Ladefoged, Danida sponsored Area Adviser to the Skills Training and Entrepreneurship Development Project assigned to Zambia’s Northern Technical College (Nortec), investigated EBT practices in medium and large-scale modern sector enterprises in Zambia’s Copperbelt, as a component of a research initiative of the International Training Centre of the ILO, Turin Italy.

In-depth interviews were carried out with key personnel from six enterprises in the Copperbelt (Appendix A, Contact List). All of the enterprises surveyed are leaders in their sectors or niches. All are actively involved in restructuring in direct response to recent economic and political changes. Many of the firms were visited two or more times; most interviews involved two or more key staff. The interviews followed a semi-structured format seeking information regarding:
• Company history
• Staff complement, prevailing trends and influences
• In-house training systems in use and planned
• Impact of HIV/AIDS on training
• Systems and methods for financing training
• Other critical factors.

Company literature and internal documents were examined, for the most part limited to those that relate specifically to in-house training policy and practice. Additional interviews were conducted with key informants, principally to ascertain if there was additional evidence of apparent trends. Permission to cite the information gleaned was granted in all cases.
II. CASE STUDIES

“Training in enterprises can be a very effective and economical way to develop the skills of the workforce. The prima facie case for the cost-effectiveness of enterprise-based training is strong. Enterprise training is an essential complement to new investment in technology.”

Sanjaya Lall

“Competing With Labour: Skills and competitiveness in developing countries”

ILO, Geneva, 1999

A. Konkola Copper Mines Limited (KCM)

| SUMMARY |
|------------------|---------------------------------------------------------------|
| **Workforce (Breakdown)** | 9700 (c. March 2001) (broadly categorised: 1400 management & administration; 3300 technical & artisanal; 5000 mining) |
| **Workforce Trend (Target)** | Ongoing downsizing, from a peak of 9992 at privatisation (c. March 2000) (no target specified) |
| **Influencing factors** | Retrenchments and new hires; new technologies; strong focus on productivity and profitability |
| **Training approach** | 1) large-scale formal training facilities with professional trainers; and 2) embedding training skills and responsibilities at artisan, technician and supervisory levels |
| **Training objective** | Efficiency, flexibility, multi-tasking, enhanced productivity |
| **AIDS amelioration plan** | Large-scale workforce survey; proactive plan of awareness, prevention and support |
| **Financing model** | Internal financing, initially on a centralised “block budget” basis, followed by rapid decentralisation along with department level activity-based budgeting |

Company Background

The Zambian copper mining industry was nationalised in 1969. After 31 years of state ownership, and following long and sometimes acrimonious debate, the Zambian government returned the mines to private ownership in 2000. Konkola Copper Mines Limited (KCM) is a new enterprise formed as a key part of Zambia’s mining sector privatisation programme. KCM was established in March 2000, with equity participation from Zambia Consolidated Copper Mines (ZCCM) (representing the governments interests), the International Finance Corporation (IFC), the Commonwealth Development Corporation (CDC) and Anglo-American plc (the largest shareholding with 33%).

KCM began operations by moving to “reverse the deterioration of mining assets … turning them around from loss to profit making”. There are four main aspects of the turnaround programme: planning and research (principally feasibility studies), financial investment, retooling/technology upgrading and human resource development.

KCM’s principal “units” are three mines, Nampundwe, Nchanga and Konkola. KCM represents one of the largest investments in modern Zambian history with a three-year USD 270 million investment
and refurbishment programme. KCM is one of the emerging powerhouses of the Copperbelt economy, one of the principal sources of business for many small and large sub-contractors and one of the principal forces driving Zambia’s recent return to growth. As a large-scale modern sector employer, a leader in new investment and new technology introduction, and a leading source of trade for local enterprises KCM is expected to play a large role in both creating and meeting the demand for productive sector skills.

It is KCM’s policy to become the “a world leading copper and cobalt producer”, a profitable player in the world copper market and a “preferred employer” in Zambia. KCM’s HRD and training programmes are a priority aspect of their approach to becoming both profitable and a preferred employer.

**Workforce: Composition and Pattern of Change**

At privatisation in March 2000 KCM inherited a staff complement of 9992. This large workforce was a legacy of decades of state ownership and is deemed appropriate for current needs in terms of either overall staff numbers or in terms of the skill categories and skill levels of the workforce. Immediately following privatisation KCM embarked upon a high priority programme of staff restructuring. The principal characteristics of workforce restructuring are re-skilling and up-skilling, multi-tasking, downsizing and hiring. The net effect of these multiple forces is expected to be a leaner more highly skilled and more flexible workforce. KCM recognises the need to make rapid progress with workforce restructuring if they are to meet their short-term financial targets. They must, in addition, also move quickly to build the large-scale training infrastructure and systems they will need to reach their long-term goals.

Hiring is particularly evident at senior levels. KCM is making a concerted effort to attract the “cream of Zambian professionals” both within Zambia and from abroad. One of these is the recently employed Manager Training who is responsible for putting in place KCM’s ambitious staff training programme. Additional hiring is expected in a number of high-skill areas including HRD and training, information technologies and areas where skilled technicians and artisans are needed to operate new technologies and master newly mechanised processes. KCM recognises that hiring has obvious limits - many of the skills needed are not available locally - and that the bulk of upskilling and re-skilling must be delivered in-house, principally through EBT.

Downsizing has moved slowly in the initial period of privatisation. Between March 2000 and March 2001 the workforce was reduced from 9992 to ~9700. Further downsizing is expected. The current workforce is comprised of:

- 1400 - management & administration (including 200 in HRD and training)
- 1800 - metallurgy
- 100 - geology
- 900 - engineering
- 5500 - mining
EBT Practices in Use and Planned

KCM intends to become a profitable producer and a preferred employer in Zambia. These two main objectives are closely interrelated; achieving both will require a large-scale long-term programme of HRD and skills training. The groundwork for KCM’s embryonic HRD programme is well underway. In September 2000 KCM commissioned Anglo-American (Zimbabwe) to carry out a company-wide training needs assessment (TNA) the results of which form the basis for KCM’s “training and development plan”. KCM is developing a comprehensive HRD policy and a detailed training plan based on this needs assessment.

In its initial stages HRD has two main thrusts. One thrust is to change the business culture of KCM, from that of jobs-for-life with little regard for profit to one stressing transparency, performance and profitability. The other main thrust involves putting in place the systems needed to ensure the supply of the skills needed to meet short and long-term performance and HRD targets. KCM’s training system is a “proactive system of manpower planning” based on a Performance Management System to monitor all staff and the in-house capacity to meet most skills development needs.

KCM’s in-house training capacity will have two major components: 1) sizeable formal training facilities with a cadre of fulltime trainers and 2) a broad-based initiative to ensure that skilled and key staff have training responsibilities backed by basic pedagogical skills. In both cases appropriate training qualifications are called for all those with training responsibilities.

KCM will re-establish, rehabilitate and expand the training centre that existed prior to privatisation. KCM’s Training Centre is projected to grow to include a full-time staff of 120 professional trainers, all of whom will have formal pedagogical qualifications in addition to their subject specialisations. The training department is currently building up a core staff of 20 trainers whose primary responsibilities at the outset will be to upgrade the pedagogical skills of the training staff. In future a significant portion of all trainers will be based in production and service departments, with primary responsibility for planning and co-ordination and for developing the pedagogical skills of senior technicians, artisans and supervisors. Considerable responsibility for training will be devolved to Head of Department level.

All those with supervisory and production line training responsibilities will undergo a Trainer Development Programme (TDP). The TDP is a one-year on-the-job competency-based programme of four modules designed to ensure that key production and service staff become competent trainers.

Prior to privatisation most basic artisanal skills training was carried out by an array of separate training institutions dispersed among ZCCM’s various mining facilities. Each training institution addressed a limited number of trades or technical specialities (e.g. rigging or electrical). Collectively, this system addressed the bulk of the mining sector’s artisanal level skills training needs while sharing the costs and complications of training among the many “units” making up the sector. Though adequate in its day this system of de facto sector co-operation in training has largely collapsed.

KCM is investigating how best to restore a training capacity of sufficient scale and sophistication to address the large-scale and rapidly evolving needs of a modernised private sector mining industry. Their current “vision” is that the KCM’s Training Centre will become the “lead industrial training facility” in the Copperbelt and will either subsume or support the rehabilitation of most other mining sector training facilities, particularly in mining sector trades. The goal is to ensure the long-term

31 A few facilities remain operational (e.g. Mopani Mine’s electrical training school) albeit at a low level with inadequate funding and staff, out-dated curricula and obsolete equipment.
dependable supply of the skills they need at the volume they require. Beyond this, they envisage that this “lead facility” can become a profit-making training facility providing a variety of research, training and consultancy services to the mining industry in Zambia and the region. KCM’s perceived need to expand in-house and EBT training beyond their own needs is driven by the “mammoth scale” of their internal needs. On the one hand their need to too large to be addressed by outsourcing, while on the other hand it offers sufficient critical mass to justify taking the lead in addressing and ensuring sector wide needs. KCM’s strong commitment to training, the resources they can bring to bear, and their access to an impressive array of resources from within the Anglo-American Group allow them to consider going well beyond normal inter-firm co-operation or sector co-ordination.

The scale of KCM’s needs encourages them to participate in many levels of external skills development. These span the range from helping the higher education authorities upgrade undergraduate level programmes (particularly in engineering, geology and sciences) to training sub-contractors. KCM has at any given time up to 5,000 sub-contracted employees. All of those who work on KCM’s premises receive mandatory training in health (including HIV/AIDS) and safety. A much small number receive skills or management training as well.

KCM will be a major employer of artisan level graduates of trade schools and technical training institutions. Their expectation is that TEVET graduates have “basic skill exposure” at entry point with skills upgrading taking place on-the-job through EBT. Those without insufficient skill exposure are put through KCM’s one-year in-house “improvership” programme. As a potential consumer of trade and technical school graduates KCM has strong incentive to work with TEVET institutions if, however, these institutions can demonstrate the willingness and flexibility to respond to KCM’s needs.

KCM is cautiously considering multi-skilling. There is little likelihood of multi-skilling being broadly applied, for the most part due to a history of problems with multi-skilling (for the most part to do with labour administration). They do, however, intend to expand training for multi-tasking (within trades) as a component of their efforts to increase both efficiency and flexibility. The initial focus will be on multi-tasking artisans within the engineering trades.

KCM was broadly familiar with recent TEVET reforms and endorsed the concept of greater private sector participation in TEVET policy formulation and administration. They noted the slow pace of reform and contrasted this with their pressing need to implement large-scale high-quality skills training programmes. While endorsing the notion of a training levy in principle KCM expressed concerns about both its likely administration and that it was too narrowly conceived to be broadly useful to KCM. There was little indication of either the influence of recent reforms on KCM’s ambitious skills training plans or of KCM’s “mammoth” power in the market influencing TEVET reforms. There was no sense that a “partnership” between key players is emerging.

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32 KCM is currently “monitoring” the University of Zambia and Copperbelt University and considering targeted support for any or all of: 1) books, 2) lecturers; 3) technologies, 4) equipment, 5) infrastructure, and 6) scholarships and sponsorships (for both KCM employees and qualified school-leavers)
**HIV/AIDS: Impact and Response**

There was no institutionalised HIV/AIDS awareness of amelioration programmes in place prior to privatisation.

KCM is very aware of the HIV/AIDS problem and moved quickly to assess the situation and formulate a response. As an initial step in early 2001 KCM commissioned a large-scale formal survey of their entire workforce in close collaboration with the mineworker’s union. The survey was carried out by a professional public health institution on a voluntary participation basis using saliva sampling. Sixty-four percent of the workforce participated. Both the level of participation and the survey’s findings were more positive than anticipated.

The overall incidence of HIV was 18%, which was lower than expected (based on the conventional wisdom) but consistent with broader evidence of HIV/AIDS incidence among industrial workers in Zambia. KCM was the only firm surveyed that had a specific and detailed sense of the incidence of HIV/AIDS among their workforce. The survey produced no support for the common belief that the HIV/AIDS is more pronounced in the mining sector than among the population generally. The incidence of HIV was lowest among the youngest age groups, a result that may be due in part to more limited exposure but which is also thought to reflect a degree of awareness induced behavioural change among the young. The survey found that awareness was high, but as expected, that behavioural change lagged far behind awareness.

KCM is using the survey as the basis for formulating a broad-based HIV/AIDS programme that is expected to include education and awareness campaigns, preventative measures (e.g. provision of condoms), counselling and financial support. KCM is assessing the appropriateness of other programmes used by medium and large-scale enterprises in Zambia (e.g. ZHABS, ZBCA). There is an interim programme in place that includes aspects of voluntary testing, counselling, awareness and preventative measures.

The direct impact of HIV/AIDS is noted in work days lost, provision for sick leave, financial support for AIDS sufferers, staff turnover, skills shortfalls and retraining costs.

**Methods of Financing Training**

KCM’s staff development and training costs are internally funded. Initially this is being done on a centralised "block budget" basis. Block budgeting is an interim measure used to get sufficient funds in place quickly in order to initiate priority training even while planning training systems and developing training infrastructure. Training budgeting are being rapidly decentralised to department and section level, with department and section heads soon to be responsible for preparing training plans and activity-based budgets.

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33 The survey report had not been finalised or released when the fieldwork for this study was done in May 2001. The findings reported are based on an initial analysis of the unrefined data and should be deemed “interim” only.
B. Boart Longyear (Zambia) Limited

| SUMMARY |
|--------------------------|---------------------------------|
| **Workforce (Breakdown)** | 86 (20 senior staff; 40 artisans; 26 admin and clerical) |
| **Workforce Trend (Target)** | Further reduction (60 - 70) |
| **Influencing factors** | Restructuring (seeking a “lean” work force organised in “cells”), efficiency, multi-skilling, reduced product line |
| **Training approach** | Well-established, structured training programme overseen by qualified trainers (training design influenced by Japanese management practices). Emphasis on EBT, supported by external training for mid-level and senior staff. GoZ recognised in-house training centre (closed in 1999) |
| **Training objectives** | Efficiency, flexibility, consistency and quality control multi-skilling, increased team-working capacity; all skilled and supervisory staff to have pedagogical skills |
| **AIDS amelioration plan** | Education and awareness programme (outsourced) |
| **Financing model** | Fixed general budget (calculated as a % of sales) with a large portion of actual training costs subsumed under various operational headings |

Company Background

Boart Longyear (Zambia) Limited (BL) is a member of the South African based Boart Longyear Group (BL Group), comprising more than 60 companies in 38 countries on five continents. BL Group is a subsidiary of the Anglo American Industrial Corporation. BL Group is a leading global manufacturer and supplier of precision tools, equipment and services to international mining, quarrying and construction markets. “Boart” refers to low-grade industrial diamonds used in many BL Group products.

BL (Zambia), established in Ndola in 1963, is a manufacturer and importer (acting as an agent for BL Group manufacturers) of precision drilling tools and equipment for the mining industrial. BL is the only Zambian manufacturer of most of the items in their product line. Precision drilling tools are BL’s core business and are the focus of their on-going restructuring. BL has shed or is in the process of shedding many non-core products and jobbing services including manufacturing coil and leaf springs, specialised vehicle and machinery spares, bronze and aluminium castings and subcontracting heat treatment of ferrous alloys. At the same time BL is expanding their agency/import activities and customer support activities, including training, in relation to their main product lines. BL has a strong and intensifying focus on precision, quality, consistency and efficiency.

BL anticipates that changes in mining technology (e.g. from pneumatic to electro-hydraulic drilling) and increasing international competition will result in a constant demand for new skills, new products, greater specialisation and improved quality. Their operational and training systems are designed to be a synergistic response to these challenges.
Workforce: Composition and Pattern of Change

At present BL has 86 staff comprised of 20 managers and senior staff, 26 clerical and administrative staff and 40 skilled artisans. Most of the skilled artisans have been with BL for many years. In general the workforce is mature and has the skills and experience to reflect this. Most skilled artisans have been “trained up” rather than “bought in”, hence they are both skilled and intimately familiar from long experience with BL’s internal systems and practices.

BL’s workforce is projected to contract further, from a high of approximately 400 in the early 1990s to 50 - 60 within the next few years. Downsizing is driven by a strong BL Group mandated focus on core activities (i.e. precision drilling tool manufacture and supply and related customer support) and further shedding of non-core activities.

BL intends to do more with less. Downsizing will result in the reduction in the number of specialised job categories accompanied by multi-skilling virtually all production and customer support staff. For example, BL no longer employs a specialised cadre of fitters. Machine operators have been multi-skilled in fitting as well as multiple machine operations.

BL’s restructuring objective is to further refine the skills of an increasingly “lean work force” organised into teams (“cells”) in order to deliver quick, precise and flexible production on a “single flow production” basis. Both recent changes in the organisation of production and BL’s well-established approach to training have been strongly influenced by Japanese practices. The use of EBT to “train up” staff using a carefully designed and professionally led internal system is a prominent aspect of the BL approach. BL Group policy strongly influences and supports BL’s business model and their approach to training.

EBT Practices in Use and Planned

BL’s training objectives can be summarised as efficiency, flexibility, consistency and quality. The system has always had a strong emphasis on consistency and quality; the more recent emphasis on efficiency and flexibility is an aspect of restructuring. BL has a well-established, carefully structured training system. The system is overseen and implemented by senior staff who are all qualified trainers and in most cases skilled artisans as well. Training is a consistent and important aspect of BL’s operations. BL’s training system is largely internal to BL Zambia and the BL Group. Most BL (Zambia) training is EBT. In-house training is supplemented by external training, both within BL Group and drawing upon external resources. Externally sourced training includes technology upgrading, pedagogical skills (i.e. training of trainers) and HIV/AIDS awareness and prevention.

It has been BL’s consistent practice to “train up” staff so that they are both skilled in the BL’s specific needs and fully integrated into BL’s system of operations. BL has raised their entry-level standard over the years and currently requires that new employees be “school leavers”. BL periodically employs graduates of technical schools and colleges but does not deem them “skilled” at the point of entry. In all cases BL is seeking a good basic foundation and the willingness and ability to learn.

Though significantly downsized in recent years BL’s current staff is both stable and mature. Hence the focus of training has remained on constantly raising the quality of a stable workforce rather that re-orienting cycles of new employees.

BL’s training system has four basic components: job analysis and structure based on strategic
objectives; training needs analysis; training targets (overall and for every employee); and implementation using the “ILU” Concept. I, L and U are a simple graphic device used to represent three key stages in staff development:

1. “I” - basic operating skills
2. “L” - intermediate operating skills + machine setting skills
3. “U” - advanced operating skills + machine setting skills + training skills

Key production staff are expected to have or acquire “U” level skills; that is they are expected to master machine setting and machine operations of multiple machines and to be able to teach others, particularly within their cells. BL is amending their basic ILU concept to include multi-skilling (within trades) at all three stages.

Currently the intensity of training is low in that recent staff reductions have resulted in a workforce that is highly skilled and that has long experience of BL. All current production staff are at “L” level with many at “U” level. The current focus of training is on multi-skilling and expanding “U” level training skills consistent with the new business model.

The training system continues to be implemented using the I-L-U concept but is changing in practice and emphasis to support current and anticipated changes in BL’s business model, which include seeking ISO 9000 certification. The change in emphasis is on two aspects, adapting to the new operational model (i.e. team/cell organisation, single batch production, greater self and cell-level management responsibility); and acquiring the skills needed to respond to new technologies. In practice this means giving key production staff both multiple-skills and equipping them for increased training responsibilities, particularly within their assigned “cells”. Virtually all skilled staff will become trainers; many will be given pedagogical training. Hence, while seeking an increasingly lean overall staff there will be an expanded in-house training capacity, with training skills concentrated on and dispersed among key production staff.

The training system is seen as a crucial component of BL’s ability to respond to change. Training is expected to intensify soon in response to new technologies and product lines.

BL operated an in-house GoZ recognised training centre - the Boart Longyear Training Centre (BLTC) - from 1977 - 1998. BLTC operated as a formal apprenticeship centre for fitters with most shopfloor and classroom training taking place in BL. BLTC was closed in 1998. BL no longer has any formal (statutory) apprentices. A number of reasons were cited for both these changes.

- BL could not retain formally qualified fitters who are in high demand and were hired away soon after training. BL trained fitters have a good reputation in the Copperbelt.
- Staff reductions and the termination of training-related tax advantages both served to render BLTC non-viable. The cost could no longer be justified.
- Curriculum and apprenticeship guidelines became increasingly irrelevant to BL’s evolving needs.
- GoZ recognition (standardised certification) has little value in the BL system which is both competency oriented and tightly focussed on BL’s specific needs.

BL has satisfactorily filled the gap created by closing BLTC and discontinuing fitters as a distinct job category and by multi-skilling machine operators with fitting skills.

BL places little emphasis on trade testing. The goal and the standard of measure is competence in the skills needed to perform effectively as a team member within BL’s production system. BL values
pedagogical qualifications (e.g. from the public sector technical and vocational teachers’ training institute).

BL’s principal training relationships are within the BL Group. BL Group provides broad-based guidance and support and gives BL access to group training resources. BL has little direct interaction with public sector institutions beyond periodic hiring of graduates on an as-needed when-needed basis. Nonetheless, senior BL staff participate at board level in the restructuring and management of the recently autonomous local technical college (Nortec).

There is no evidence of trade or sector associations with a training support or co-ordination capacity that would be useful to BL, nor is there any degree of inter-firm co-operation in training (due to both the very limited local manufacturing base and BL’s specialised needs).

While BL’s overall operations are highly consistent with broad national development priorities (i.e. productive sectors growth, foreign investment, HRD) there is little evidence of BL’s training being influenced by Zambia’s TEVET policy or drawing upon public sector training resources. BL’s training approach is strongly influenced by BL Group policy, itself driven by the global market forces that are shaping markets and influencing management philosophy and practices.

BL is well placed in terms of training systems, training infrastructure, qualified staff and inter-Group guidance and support to meet the it’s current and anticipated training needs.

**HIV/AIDS: Impact and Response**

HIV/AIDS continues to have an impact on BL. BL finds that the effects of HIV/AIDS losses are exacerbated by downsizing rather than hidden in the process of attrition. BL described the loss of key staff to HIV/AIDS as a “big problem”, the effect of which is measured in terms of loss of key skills, reduced return on investment in skill develop and the added challenge of maintaining competitive levels of consistency and quality. BL has a Group mandated HIV/AIDS information, awareness and counselling programme. Implementation has been sub-contracted to a local specialist provider.

**Methods of Financing Training**

BL has a Group policy of allocating 3% of gross sales to training. Unquestionably this understates the real costs in that BL’s relatively intensive EBT-based approach tends to understate actual training costs by subsuming many costs under other operational categories (e.g. labour). Direct training costs are largely reflected in materials costs and the costs of external training (e.g. travel, course fees and consultants expenses). In addition BL has a small staff relative to sales. The percentage-of-sales model has not been modified to reflect recent aggressive downsizing. As a result the per capita direct training budget is both generous and growing. This fact, together with a model that tends to subsume actual training costs elsewhere results in a generous defined training budget while making it difficult to calculate the actual cost of training. All BL’s training costs are borne by BL directly or by other enterprises within the BL Group.

BL was familiar with the details of Zambia’s forthcoming training levy scheme but do not consider the levy to be a likely source of support for future training. There are a number of reasons for this. BL’s training is principally EBT. BL has a refined training system overseen to foreman level by highly qualified trainers. Training tends to be competency-based and tailored to their special needs. BL no longer has apprentices. They do not, however, consider the levy a “threat” in that the levy is payroll-based and BL’s labour costs are a very small part of their overall costs.
C. SKF (Zambia) Limited

| SUMMARY |
|-----------------|--------------------------------------------------|
| Workforce (Breakdown) | 83 (43 management, administration and sales; 40 artisans) |
| Workforce Trend (Target) | Stable, following recent downsizing from 137 (extensive staff restructuring seeking to: a) upgrade the overall skill base; b) replace/re-skill non-core artisans; and c) develop a cadre of highly skilled precision service artisans) |
| Influencing factors | Group policy mandated staff stability; restructured business model and staff structure (highlighting core business focus and high-skill high value-added services) |
| Training approach | Two distinct unrelated models: 1) sophisticated formal training seminars, principally as a customer support “product”; and 2) largely ad hoc and unstructured training of production staff; both supported with Group resources |
| Training objectives | Upskilling and multi-skilling leading to an expanded array of high value-added customer support services; production staff upgrading |
| AIDS amelioration plan | Informal HIV/AIDS information and awareness programme; recruitment |
| Financing model | Sale of training services (e.g. bearing installation and maintenance seminars); internal general budget; parent Group support |

Company Background

SKF (Zambia) Ltd is a wholly owned subsidiary of SKF Group, a Swedish multinational with 45,000 employees in 130 countries including 80 factories in 17 countries. SKF Group is a leading international manufacturer of high precision roller bearings, grinding machines, linear motion products, textile machinery, fasteners and other mass-produced precision products. SKF Group is a leading global manufacturer and service agency in all areas in which it specialises.

SKF Zambia (SKF) is the leading supplier (with a market share exceeding 70%) of precision bearing and industrial rubber products to heavy and general industries, including the mining industry. SKF is also the cost leader in most of their product lines and is hence under considerable pressure to provide a product-plus-service package that justifies the high initial cost. SKF is a sales agent and customer support and service representative for SKF Group as well as an equipment manufacturer. SKF does not, however, manufacture precision bearings or industrial rubber products in Zambia, all of which are imported. SKF manufactures a number of product lines in Zambia, most of which use SKF precision bearings as component parts. SKF offers an array of customer support services including machine balancing, shaft alignment, bearing inspection, lubrication, mounting and dismounting, and training seminars. SKF has manufacturing and customer support facilities in Kitwe in the Copperbelt and a small sales facility in Lusaka.
In Zambia SKF manufactures a number of products for the agricultural sector and for heavy industry. Zambia manufactured products include oxcart components (hub and axle units) for the agricultural sector; and conveyor equipment, machine part reclamation and rehabilitation, shaft rebuilding and rolling stock rehabilitation and component manufacture (principally wheels and axles for mining sector rolling stock) for heavy industry. Precision and specialised bearings and related products are critical components of the heavy-duty hoists, headgears and rolling stock used in mining.

SKF offers specialised training on all of its products. Training seminars are principally designed for SKF’s heavy industry customers and are strongly focused on understanding, installing and maintaining precision bearings, seals and related products. Training seminars are a “product” line and a profit centre, as well as an important aspect of their approach to customer service. Training seminars are also used for in-house staff training and product familiarisation.

SKF Zambia was established in 1959 as a retail branch office. Over the years SKF has grown to include a production workshop (1969) and a maintenance support centre (1990). SKF’s business model calls for a further evolution towards higher-value added through the provision of a more comprehensive and sophisticated array of support-services, particularly after-sales service of precision bearings. SKF’s precision products are for the most part state-of-the-art and correspondingly expensive in unit cost terms. SKF’s value-adding customer training and after-sales services are intended to ensure that their customers get value-for-money in a competitive market.

SKF expects the market for their products to grow as a direct result of mining sector privatisation, restructuring and reinvestment. However, reflecting the realities of both privatisation and globalisation, SKF’s customers are increasingly cost, quality and service conscious. SKF is in quest of the skills needed to respond to these market imperatives.

**Workforce: Composition and Pattern of Change**

SKF has a Group mandated policy of staff stability; they are expected to put in place a significantly reformulated business model and staff structure while maintaining the current overall level of staff. At present SKF has 83 staff: 40 skilled artisans in the workshop and in mobile “service teams”, 40 in management and administration, and three in the sales office in Lusaka. Service Teams are comprised of a senior technician (whose key skill is bearing inspection and analysis) and up to four skilled artisans specialised in bearing installation and maintenance. The emerging business model calls for an increasing number of the service personnel to be assigned to the customer’s place of business and work directly with the customers’ engineers, supervisors and artisans. These on-site senior service technicians need both technical skills and the complementary professional skills to function as a simultaneous member of both their SKF service team and of the customer’s work units where they are assigned.

Customer staff training and Service Teams are crucial aspects of SKF’s approach to adding value and increasing the focus on their core business. Customer training and after-sales service are intended to guarantee both “machine reliability” and long product life, and thereby to justify the high initial cost of their products. SKF’s methodology for delivering long life and reliability has two basic components; supply of high precision components and expert installation and after-sales service. After sales services have evolved over the years from a “fire brigade” approach to that of emphasising preventative maintenance through continuous on-site inspection and servicing. SKF is further refining this approach into a variety of service intensive products including a “service only” model. The service-only concept involves SKF retaining ownership of bearings installed in their customers’
machinery with customers paying only for installation, usage, maintenance and replacement services. Service contracts (both for after-sales service and service-only contracts) often include customer staff training as part of the service package.

SKF’s current business model has two key aspects, enhanced focus on customer care and a narrower focus on core business. SKF’s defines their core business as bearings and seals and bearing related products and services (e.g. heavy equipment gearbox refurbishment). Close-to-the-customer after-sales care is a long-standing SKF approach that is being intensified as a necessary aspect of maintaining SKF’s position as the market leader in an increasingly competitive market. The market is also increasing quality conscious. An additional aspect of SKF’s response is to seek ISO 9001 certification, a process they expect to complete this year. If SKF is to maintain competitiveness in the current market they will need to acquire an array of new and specialised skills and to raise the overall level of staff. They must do both without increasing staff numbers. Multi-skilling (largely within trades) and expanded in-house training are seen as “the way of the future” if they are to reach both objectives.

The principal constraint to applying their current business model is the shortage of the skilled staff needed to ensure the calibre of the existing Service Teams and to expand and deepen the array of sophisticated support services. If SKF is to expand value-added services they need to hire or train 5 - 10 technicians skilled in vibration analysis and “data logging” (i.e. on-site electronic gathering and reporting of the data needed to do vibration analysis). Accurate and timely vibration analysis is the basis for effective machine reliability and bearing life.

The management expressed the view that there are “perhaps four Zambians with the vibration analysis skills to work to SKF’s accuracy quality standards”. One of these four presently works for SKF. They hope to hire one or two of the others. Data logging is a much less sophisticated skill, but one that requires trainees to have good basic qualifications (i.e. a good technical school or university qualification) and “aptitude, attitude and the willingness to learn” if they are to learn to operate effectively on-site in the customers’ places of business. SKF is of the view that the reputed buyer’s market for technicians exists only in terms of “nominal paper qualifications”; i.e. good qualifications, practical skills and experience are all in very short supply. SKF is certain that they cannot meet their emerging requirements by hiring and that they will need to train many new hires on-the-job in data logging and vibration analysis.

EBT practices in use and planned

SKF has two distinct training approaches; 1) professionally structured specialised training in bearing installation and maintenance; and 2) unstructured essentially ad hoc general training of production and administrative staff. Specialised training is primarily focused on after-sales support of imported high precision SKF bearings and related products. Normal staff training is primarily focused on maintaining SKF’s in-house manufacturing capacity and acquiring the skills needed to adapt to new equipment and technologies. Specialised training is expected to continue essentially as currently structured. Staff training is expected to change considerably in order to meet the demands of SKF’s emerging market.

Structured specialised training is treated as a profit centre and delivered by senior staff and supervisors through a dedicated in-house facility with purpose-designed high quality training materials and equipment. SKF’s high quality structured training is both a commercial customer support “product” and to a much lesser extend a component of internal staff development. Specialised training is offered at both SKF’s in-house training centre and on-site at the customers’ places of business using SKF’s mobile training unit. Specialised training is a key component of SKF’s approach to value-added and
after-sales service. Normal staff training is ad hoc and unstructured and is delivered by foremen and artisans in the workplace place largely on-the-job. Normal staff training is wholly unstructured. None of those with training responsibilities have formal pedagogical qualifications.

Specialised training is income earning and is treated as a profit centre. Nonetheless, many of the direct costs of training (e.g. instructors) are large subsumed under various operational budget categories. Normal staff training costs are subsumed into various overhead and operational budget categories.

SKF has a 2,300 m² in-house training centre (TC) comprising a well-equipped classroom and a purpose-designed training workshop with multiple workstations and an array of specialised tools and equipment. The TC is tightly focused on bearing technology training. The TC’s facilities include a mobile unit (a purpose built trailer) that is used to deliver on-site training to customers.

The principal activity of the TC is a number of standard bearing technology courses for both customers and for SKF’s Service Team personnel. The standard course duration is four days: 2.5 days classroom theory and 1.5 days practical training in the workshop. Training concludes with testing and in most cases is followed by immediate on-the-job application, usually with follow-up assessment and support provided by SKF Service Teams.

In the past SKF’s approach to staff training has been unstructured, ad hoc and reactive. Virtually all staff training has been problem-oriented rather that planned and delivered on either a personnel development or strategic plan basis. Management is well aware that this approach is not suited to their current needs. In-house EBT capacity will need to grow in scale and structure in order to meet their emerging requirements. Plans are being put in place to adopt a more pro-active needs based approach to staff training. Management expressed a particular need to help restore a “culture of craftsmanship” in Zambia.

SKF’s emerging skills requirements are highly specialised (e.g. vibration analysis). As such they anticipate that most general training and all specialised training will necessarily draw upon SKF (Zambia) and SKF Group resources and will be delivered using primarily EBT methodologies. SKF has very little direct interaction with either public or private sector local training providers. There was no reported inter-firm co-operation in training.

**HIV/AIDS: Impact and Response**

HIV/AIDS is a steady drain on SKF with an HIV/AIDS-related attrition rate of 4-5 (5-7% of the workforce) per annum. They effects of HIV/AIDS are principally felt in the loss of key personnel (machine operators, foremen, sales personnel); the costs and complications associated with increased sick leave and staff turnover, particularly the difficulty of finding replacement staff with the specialised skills needed; and the costs of various support measures. SKF offers a number of support facilities to affected staff (consistent with Group policy) and seeks to identify and pre-plan replacement of HIV/AIDS-related losses. SKF has an informal HIV/AIDS information and awareness programme.

**Methods of financing training**

SKF has two distinct methods of training finance. The principal source is income from the sale of the specialised training services delivered through SKF’s training centre. Most training centre instruction is delivered by SKF’s senior staff or by specialists sourced through SKF Group. The costs related to these critical inputs are not reflected as training costs. In-house staff training is largely unstructured and
ad hoc, essentially on an as-needed, when-needed basis. Staff training is funded as an overhead expense based on standard SKF Group guidelines. SKF Zambia’s principal external training linkages are within SKF Group. SKF Group provides access to Group training opportunities, access to SKF’s Group training centre in Europe and specialist trainers from both Group companies and the Group training centre. SKF’s management could not identify any significant sources of training support from outside SKF Group.

SKF was aware of and well-informed about the impending payroll-based training levy. While they agreed with the merits of a levy scheme in principle if “properly run”, they had little expectation that this would be the case in Zambia. They did not anticipate that the levy would be a useful source of training support due to poor administration, their highly specialised needs and the fact that they are “too small to run an apprenticeship school”.

D. SWARP Spinning Mills PLC (SSM)

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<tr>
<th>SUMMARY</th>
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<td>Workforce (Breakdown)</td>
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<td>Workforce Trend (Target)</td>
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| Training objective | Machine operating skills, skill upgrading for internal promotion, quality control, 24/7
t

Three-shift capacity |
| AIDS amelioration plan | ZHABS (condoms, awareness, peer counselling); recruitment and training |
| Financing model | In-house, embedded (EBT), SITRA, external for seniors |

Company Background

SSM is a largely family owned and locally managed Zambian company. There is a degree of equity capital participation and support from the UK’s Commonwealth Development Corporation (CDC) and others. SSM produces 12,000 tonnes of yarn annually in a modern well-planned factory sited on a 20-hectare estate located in Ndola’s industrial area in the heart of the Copperbelt. Following the collapse of the local textile market in 1984 SSM responded with an aggressive programme of quality enhancement, production expansion and export market promotion. By 1988 their export markets were well established and production had increased to 10 tonnes p.d. Production has risen steadily to its present level of 38 tonnes p.d. (c. May 2001). SSM operates three shifts p.d. 24/7 year round, shutting down only for three days over Christmas.

SSM is a “customised producer” of a “comprehensive range of carded or combed, bleached or dyed, cotton or polyester/cotton yarns”. Their range includes all “counts required by discerning textile producers in Africa, Europe and the United States (USA)”. More than 70% of the cotton used is from Zambia, with most of the balance from Zimbabwe. All cotton is purchased on the spot market. SSM identified drought as the only real threat to their sources of supply. SSM produces a wide range of high quality specialised products in timely fashion according to each customer’s individual specifications. SSM uses state-of-the-art textile machinery, sourced primarily from Germany and Switzerland.

SSM uses an “old-fashioned” close-to-the-customer approach as their main strategy for competing “in the face of globalisation and the emergence of powerful cartels dominating the market place”. They

34 Twenty-fours hours per day, seven days per week.
credit their success - despite global over-capacity and increasing competition from low-cost producers - to “state-of-the-art machinery, a high degree of (machine) operator training, tight management controls and continuous attention to customer service and quality control”. SSM is very quality conscious and strives with visible success to embed quality control at every stage of the production process. SSM was ISO 9000 certified in May 2001. SSM is currently (c. June 2001) adding a system of benchmarking system based on SITRA standards.

This approach has “carried SSM through the recent world textile recession and has resulted in SSM being one of southern Africa’s leading exporters to the European Union (EU)”. More than 95% of SSM’s production is exported to the EU, USA and Switzerland. The balance is exported to South Africa, Zimbabwe, Malawi and Mauritius. As a Zambian company SSM has unrestricted access to the EU.

**Workforce: Composition and Pattern of Change**

SSM is one of Zambia’s largest private sector employers with a workforce soon to reach 1,300. SSM is among a very small group of Zambian firms that is restructuring without retrenchments. For the most part SSM will uses “new tools but old skills”. In most cases where new machines result in staff redundancies the surplus labour is shifted to “expansion units”. As a result the labour force is largely stable in numbers and composition, with a moderate and carefully planned expansion underway. SSM has a flat organisation structure with clear and straightforward lines of communication and control. There are 40 management, administrative, training and technical staff (including “shift officers”) and more than 1200 machine operators (including supervisors). The machine operator cadre includes trainees, machine operators, senior machine operators and supervisors.

It is company policy to train and promote from within and to upskill or re-skill existing employees whenever retooling requires new skills. Virtually all senior operators and supervisors began as SSM trainees. The big step up in internal promotion is from supervisor to Shift Officer. Most managers, administrative personnel and senior technicians (e.g. textile technologists) are hired externally (in Zambia or overseas); Indian expatriates staff eight of these positions, the dye manager is South African. Zambians promoted through the ranks of the machine operators have replaced all expatriate supervisors.

There is a Training Manager with a current training staff of six. The number of in-house trainers will soon expand to ten, with a view to ensuring that there is at least one trainer on duty during each shift (i.e. 24/7). In all cases in-house trainers are promoted from the factory floor from amongst the ranks of the supervisors.

Production staff are organised into teams of between five and 43 workers. SSM’s HIV/AIDS amelioration programme, ZHABS (see below), includes a strong “peer counselling” element. Peer counsellors are drawn from within work groups, an approach that is thought to increase the effectiveness of the peer methodology.

SSM has recently revised their entry-level trainee machine operator profile. In the period up to 1998, when the labour force expanded from 1000 to 1200, staff turnover increased to 12 - 15% p.a. At this time their entry point expectation was Form V (high school). No work experience was expected; additional qualifications were not deemed an advantage. SSM prefers to train rather than re-train; they

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35 SITRA - South India Textile Research Association.
find it easier and more effective to add the skills they need form a modest base rather than attempting to change ingrained work habits acquired elsewhere. However, they concluded that the high turnover rate was due to school leavers taking temporary jobs while seeking access to tertiary education. As a result, since 1998 their entry-level qualification is to Form V plus seven years (i.e. ~ age 25), with work experience and additional qualifications optional but not an advantage. Their staff turnover has dropped as expected following this change.

Virtually of SSM’s staff are male; “SSM prefers hiring boys rather than girls”. While acknowledging both that the global norm was predominantly female machine operators and that “girls might be better workers”, they noted that the Zambia-Zimbabwe norm was the opposite and that the much lower male turnover rate more than compensated for their somewhat less diligent work habits. SSM’s strong focus on management oversight and embedded quality control is intended in part to compensate for this by ensuring quality work.

**EBT practices in use and planned**

SSM has a strong focus on training and on EBT, both to develop the specific skills they need to compete globally and to reduce the degree of expatriate dependency. They feel that the low level of available skills is the direct results of the virtual absence of a textile sector and the corresponding lack of a textile institute or college. There is no effective inter-firm co-operation in training, in part due to the limited and dispersed number of textile sector enterprises but largely due to the fact that technologically SSM is in a class by itself. Skill development is a responsibility that they have no choice but to address internally. This is not without its advantages; training is tightly targeted on their specific needs and they are at liberty to establish (and curtail) skills development linkages to suit their needs.

Most training, and virtually all operator training, is conducted on-the-job, much of it on-the-spot. The principal reasons for training are efficiency, consistency and quality control. Training itself is efficiently delivered. While the training staff have both classroom and on-the-spot training responsibilities most training is delivered on-the-spot by either trainers or supervisors. The bulk of the trainers’ time is spent on the shop floor assessing individual skills and checking the quality of production in close consultation with supervisors and Shift Officers. When shortcomings are found trainers deliver immediate on-the-spot “preventative” or “corrective” training.

SSM training is structured in it’s strategic orientation and planning though largely reactive in much of its direct implementation (i.e. on-the-spot training). In other words, it is structured to be reactive, largely as an aspect of SSM’s embedded approach to quality control.

Though the training programme is both structured and underpinned by a clear strategic vision few of the training staff have formal pedagogical qualifications. Only the recently appointed Training Officer has undergone formal pedagogical training (at Zambia’s technical and vocational teacher training college). The Training Manager holds a B.Eng. (Textile Technology) for the Chinese Textile University (Shanghai) and is member of the Chartered Institute of Textile Technology (UK). He has extensive experience in the textile industry, principally in Zambia.

As noted all trainers have been promoted from the factory floor. Selection for promotion is based on a combination of machine operating skills, self-selection and demonstrated capacity to identify skill-related production shortcomings and to assist colleagues with skills upgrading. The on-the-spot

36 More than 90% of textile sector workers in Zambia and Zimbabwe are reported to be male.
methodology calls for a good intuitive grasp of informal training needs assessment (TNA). In practice a degree of informal TNA skill is needed to enter the training cadre. SSM is considering the merits of basic pedagogical training for all trainers.

SSM’s informal TNA procedure is strongly product based. Assessment starts from a quality control inspection of production output and leads to an assessment of the causes of any identified quality shortfall. Customer feedback is an important part of SSM’s fault detection and correction procedure. There are two basic categories of faults: machine caused (in which case a technical or engineering solution is sought) and skills shortage caused (in which case a training remedy is applied). In most cases the remedy is immediate on-the-spot corrective training. In cases where an on-the-spot remedy is inadequate the problem is referred for higher level analysis. Secondary level analysis seeks to identify whether the shortfall is specific or generic. A generic shortfall might result in a training course or in all staff needing skills upgrading receiving on-the-spot training. No skill shortage problem is left unaddressed.

SSM is increasingly moving towards a team-based organisational structure. Most teams comprise a section within a shift. One aspect of this new operational mode is that skills development is increasingly focused on multi-skilling (within trades) in order to ensure that an adequate array of skills is available in all teams during all shifts (i.e. 24/7). SSM’s multi-skilling objective is that all machine operators will have the capacity to operate three different machines; one at senior operator level plus two additional machines at operator level.

Multi-skilling has the additional advantage that it results in multiple group membership and thereby greatly expands overall labour force flexibility. SSM has found that the costs of multi-skilling (reduced group solidarity; somewhat lower level of specialised individual expertise) are more than compensated for by the benefits.

SSM’s training programme includes two additional components; external training for senior staff (managers/Shift officers, technicians and in future possibly trainers) and an orientation course for new hires. The orientation course is entirely EBT, part classroom and part on the factory floor. SSM does not have a training “centre” as such. There is a simple modestly equipped classroom but virtually all training takes place on the factory floor. The orientation programme for trainee machine operations involves:

- 2 days induction (safety, health including HIV/AIDS, quality control, basic textile technology, a factory tour and induction administration),
- 3 days observation and initial hands-on experience (machinery cleaning only)
- 3 days departmental assignment, initial machine operation exposure (on the production line)

The initial 8-day period training is 20% simple theory and 80% practical. Thereafter training is entirely practical. There is a degree of both trainee termination and trainee resignation at this stage. If retained following initial training the trainee goes on to a three-month operator phase training:

- 3 month trainee operator phase; initial production targets set, machine-based on-the-job training intended to raise speed, accuracy and stamina.

Thereafter, the trainee is either terminated or promoted to operator with normal production targets. The orientation period is a period of selection and self-selection. A significant part of overall labour turnover occurs during the orientation phase.
There are two principal external training modes: Commonwealth scholarships and SSM paid study. SSM has sent approximately 20 senior staff on Commonwealth scholarships to the South India Textile Research Institute (SITRA). Twelve of these 20 remain with SSM. The SITRA course is a three-month course in textile process engineering, production management and quality control. SSM has replaced all expatriate supervisors and Shift Officers with SITRA training Zambians. They hope to make further use of Commonwealth scholarships to send staff on SITRA courses, which they rate highly. A number of supervisors have been sent on courses at the Council for Industrial and Scientific Research (CISR) in South Africa.

SSM has no statutory apprentices and no operational linkages with either other enterprises of public sector training institutions. SSM’s training policy and training programme have been developed internally and respond almost exclusively to internally determined imperatives. SSM was not familiar with the details of the forthcoming training levy and offered no view on its potential problems or usefulness.

**HIV/AIDS: Impact and Response**

SSM has a steady but declining rate of attrition due to HIV/AIDS. The anecdotal evidence suggesting that this is in part due to awareness training, counselling and behavioural change. SSM has adopted the ZHABS programme that they described as “mandatory due to the involvement of CDC”. The ZHABS programme is seen to have made a contribution to HIV/AIDS amelioration.

Peer counselling takes place outside of working hours and hence does not cause a loss of production time. Against the norm SSM is expanding its labour force. Hence, HIV/AIDS losses are not “hidden” or difficult to identify due to downsizing. Due to a number of practical and cultural constraints HIV/AIDS-related staff losses are not formally identified as such. The ZHABS programme contracts local clinics and through them provides (voluntary) testing, counselling and medical support. All testing is anonymous. Based on this testing ZHABS will soon report sexually transmitted disease (STD) and HIV/AIDS comparisons rates for SSM, the Copperbelt and Zambia generally.

Multi-skilling and team-working help to ameliorate the effects of HIV/AIDS by increasing and dispersing machine skills within and among teams, rather than concentrating them on individuals. This, however, is not seen as a principal reason for adopting these practices. Multi-skilling and team working have been adopted to increase efficiency and quality and to ensure that there is adequate skilled staff to support 24/7 three-shift production.

The direct impact of HIV/AIDS is measured in terms of staff losses and staff turnover (including increased training), person days lost due to increased sick leave, reduced productivity and the direct costs of an array of benefits (e.g. company medical plan and clinic; paid sick leave).

**Methods of financing training**

SSM has an intense but efficient training programme. Most training costs are borne directly by SSM and either recording as expenses of the training programme or subsumed under an operational expense category.

There are two sources of external training for senior managers and technicians; Commonwealth scholarship paid textile technology courses at SITRA and to a much lesser extend company paid commercial courses at CSIR in Pretoria. SSM did not anticipate that the forthcoming training levy
would prove a useful source of training support or encouragement.
E. Mponge Development Company

### SUMMARY

<table>
<thead>
<tr>
<th><strong>Workforce (Breakdown)</strong></th>
<th>865 (47 management, including 8 expatriates; 103 clerical and supervisory; 715 general staff); plus extensive use of part-time, seasonal and sub-contracted labour</th>
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</thead>
<tbody>
<tr>
<td><strong>Workforce Trend (Target)</strong></td>
<td>Further reduction (~700)</td>
</tr>
<tr>
<td><strong>Influencing factors</strong></td>
<td>Restructuring guidelines (from CDC) emphasising improved productivity, improved profitability and increased flexibility</td>
</tr>
<tr>
<td><strong>Training approach</strong></td>
<td>EBT; expanding internal training capacity (principally among skilled staff); outsourcing; emerging emphasis on a more “structured” approach to skills development</td>
</tr>
<tr>
<td><strong>Training objective</strong></td>
<td>All staff to be capable of performing multiple tasks related to both machine operations and modern agricultural practices</td>
</tr>
<tr>
<td><strong>AIDS amelioration plan</strong></td>
<td>ZHABS; medical and financial support</td>
</tr>
<tr>
<td><strong>Financing model</strong></td>
<td>Objective oriented (previously fixed budget based)</td>
</tr>
</tbody>
</table>

### Company Background

The Mpongwe Development Company (MDC) is located 120 km south west of the city of Ndola along the Kafue River. With 66,000 hectares of land MDC is Africa’s largest arable agricultural company. MDC grows maize, wheat, soya beans and coffee on four separate farms. The company is the country’s largest producer of soya beans, wheat and maize. More than 95% of the coffee crop is exported. Maize, wheat and soya beans are consumed domestically.

The Commonwealth Development Corporation (CDC) started MDC and remains the principal shareholder. CDC was established in 1948 as a British development parastatal, principally to make long-term investments in developing countries. In 2000 CDC was privatised and began restructuring and shedding unprofitable investments in order to focus on providing equity capital to enterprises in emerging markets, especially in the least developed countries. Where appropriate CDC also provides management and technical expertise, as is the case with MDC. CDC’s portfolio of investments is increasingly expected to operate on commercial principles. In keeping with its broader strategy CDC’s goal is to become and “equity partner” in MDC rather than its owner-manager, with a view to increasing MDC’s value and eventual divestiture. MDC’s business model and operational practices are being restructured with these objectives in mind.

Two basic approaches have been adopted: reducing costs and increasing productivity. In order to achieve these objectives MDC focuses on technology upgrading of agricultural machinery, improved farming and management practices and “right-sizing” the labour force.

### Workforce: Composition and Pattern of Change

In May 2000 MDC had 865 employees a reduction from approximately 1200 in 1999. There are 47 senior and middle-level managers, including seven senior Zambian managers, eight expatriates and 32 in middle management, along with 103 supervisory and clerical staff and 715 unionised general staff.
In addition, there are large numbers of part-time and season workers and increasing numbers of sub-contractors. MDC right-sizing plan call for further staff reductions to about 700.

Right-sizing has three principal components: voluntary redundancies; outsourcing non-core functions; and a more structured approach to skills acquisition and development with the primary emphasis remaining on EBT. Due to slow progress with labour union negotiations emphasis has shifted from involuntary redundancy to a recently developed “package” of approaches. This “package” is very much a work in progress. The current range of right-sizing approaches includes ongoing negotiations with the trade unions; voluntary redundancy; natural attrition; retraining and enterprise development support for redundant staff; and unbundling and outsourcing.

MDC, in keeping with the broad global trend, is actively seeking opportunities to outsource non-core functions. A number of functions have been successfully outsourced and many more are under consideration. Many outsourced activities are labour intensive which accounts in part for the large recent reduction in the staff complement. In some cases, particularly with unbundling, training support is provided to sub-contractors.

MDC is intensifying its efforts to acquire a smaller but more flexible and more highly skilled workforce. Since 1996 MDC has increased the level of education and skills required of new staff. More recently they have adopted a more “structured” approach to skills development in order to build on the improved base and to help ensure that emerging skill needs are identified and met.

The skills and range of skills needed by individual employees has changed as a result of the restructuring of MDC’s internal operations. MDC is now operations-focused rather than trade or department-focused. Titles are being change to reflect new responsibilities and the new organisational structure and to highlight MDC’s new “commercial culture”. Overall the previous compartmentalisation of tasks and high level of job specialisation has been replaced with a more integrated and flexible system. The goal is a working environment where a team of 5-10 people employees can with very little supervision carry out all aspects of an operation such as preparing and planting a field. A main feature of the team approach is creating a culture of collective responsibility.

Four broad staff trends are evident: 1) a reduction in the overall number of employees, 2) a change in the basic composition of staff to reflect increasing levels of skills and education, 3) a new organisational structure and institutional culture with corresponding changes in the levels and range of skills needed, and 4) a more intensified and structured (though not yet fully implement) approach to HRD and EBT.

**EBT Practices in Use and Planned**

Since 2000 MDC has embarked on a broad-based and increasingly structured programme of staff upgrading. Staff upgrading is now led by the Human Resources Manager and supported by an expatriate technical adviser contracted from Velcourt, a British farm management company. Initially the focus was on upgrading agricultural practices and machine operation skills and on replacing obsolete equipment and machinery.

However, it soon became apparent that a major obstacle was the highly compartmentalised way in which most work was organised. Most functions were addressed by staff and supervisors who were each largely limited to a single specialised function. Collaboration between groups was limited, with inefficiency and low productivity the result. It was clear that better skills, a broader array of skills and a more co-ordinated application of skills were all needed. These needs underpin MDC’s approach to skills development and EBT.
The main features of staff training are cultural change, familiarisation through practical training, and multi-skilling (both within and across trades). Cultural change has two main aspects; acquiring team-working skills, which is required of all staff, and adapting to the changes that have resulted from reorganising work and restructuring responsibilities and job titles. Not all staff have proven able to make the necessary cultural changes.

All members of staff have some involvement in practical work. All staff must in a literal sense “get their hands dirty”. Practical work is intended to break down white-collar/blue-collar barriers by getting all managers, supervisors and foremen working alongside operators and thereby making all staff more knowledgeable about the practical workings of commercial farming.

Multi-skilling, particularly in ensuring that operators are competent ‘lay mechanics’, is a major focus of EBT. Formerly a mechanic only performed repairs and maintenance on specific types of vehicles or equipment. Increasingly, mechanics are taught several aspects of many different types of machines and implements, such as basic hydraulics and auto-electrics. As a result many categories of staff now undertake tasks that before were reserved for specific employees. In technical fields such as pump and engine repair training is EBT-based, hands-on and increasingly structured and in-depth, all with the aim of increasing the range and level of practical skills.

Part of the on-going EBT is the form of guides and “flash cards”. For each machine a Flash Card has been developed. This card outlines daily and regular maintenance routines such as oil checks, and start up and shut down procedures. All operators have Flash Cards in their toolboxes to help rectify minor faults on-the-spot while constantly refreshing basic skills.

There is as yet no overall needs assessment or training plan. In the past MDC did not have a specific department with overall responsibility for staff upgrading. Training was on an ad hoc “as needed” basis, largely a departmental responsibility within fixed budgetary guidelines. MDC is rapidly adopting a more comprehensive and strategic approach, though one that will remain largely decentralised in practice. In May 2001 a Training Co-ordinator was appointed under the Human Resources Manager. It will be the task of the Training Co-ordinator to undertake a formal TNA for each employee and to draw up a company-wide long-term training programme.

Most aspects of cultural change, practical training, multi-skilling are addressed through EBT. MDC has made extensive use of local and international consultants and training providers (including equipment suppliers). They have, during the process of right-sizing, identified many existing staff with existing or potential training capacities. Part of MDC’s new EBT approach is to multi-skill key staff in pedagogical skills, particularly in areas where on-going or periodic training is needed. By so doing they hope to both increase EBT intensity while increasing overall training efficiency. The trend in training is that responsibility for general staff and operator training rests with Supervisors and Farm Managers. In future most operators will also be expected to assume some training responsibilities within their teams. Presently none of the training staff have formal pedagogical qualifications. This, however, is expected to change through the increased focus on training, necessitated in part by substantial investments in new machinery and in part by the need to constantly upgrade agricultural practices. Though MDC does not yet require that managers, supervisors and operators have training responsibilities and pedagogical qualifications they are making clear steps in both directions.

MDC has very little current or planned interaction with public sector training providers, beyond recruiting TVET graduates strictly on an “as needed, when needed” basis (consistent with their policy of upgrading basic skills and education at the entry point). MDC shared the widely expressed view that most employees would need to acquire most work-related skills on-the-job and that this is a
company level responsibility. In general their expectation at entry point is “trainability” and adaptability, rather than specific skills.

There are no current formal (statutory) apprentices nor are there any plans to taken any on. MDC shared the widely held view that there was a surplus of most basic trade skills. Hence, they have little incentive to work with training institutions to develop such skills.

**HIV/AIDS: Impact and Response**

MDC reports a recognised HIV/AIDS problem, with the direct impact measured in terms of staff losses, person days lost due to increased sick leave, reduced productivity and the direct costs of an array of benefits (e.g. paid sick leave, funeral expense support). There is a steady yet manageable rate of attrition due to HIV/AIDS. This is estimated to be 3 - 7 persons per annum (<1% of the workforce) but is hard to identify accurately due to cultural barriers and on-going downsizing. Identified HIV/AIDS losses are currently declining.

Recent rapid staff reductions (in MDC and Zambia generally), high unemployment and a perceived surplus of trade level skills in the Copperbelt all serve to insulate individual enterprises from the broader effects of HIV/AIDS. The direct impact of HIV/AIDS is most critical in the loss of key artisanal and management staff. Both multi-skilling and team-working help to address skills and staff losses due of HIV/AIDS by increasing and dispersing critical skills within and between teams, rather than concentrating them on individuals.

MDC’s approach to HIV/AIDS involves: 1) acknowledging the problem and assessing it’s extent within MDC; 2) adopting training and operational practices such as multi-skilling; 3) adopting to the ZHABS programme of information, awareness and counselling (using “peer educators”); and 4) assisting affected staff with medical and financial aspects of dealing with HIV/AIDS.

**Methods of Financing Training**

MDC’s training costs are either financed from a central budget or subsumed under normal operational costs. MDC is moving towards a more planned approach to assessing and addressing training needs and a more structured approach to training itself. Training goals will be become more strategic and much less ad hoc. Training budgets will reflect this strategic orientation, be budgeted accordingly and implemented on a more decentralised basis. Training costs of have so far been financed as part of the central HRD budget. It is expected that in future training costs will be allocated and to a degree managed as part of the operational costs of individual units. Virtually all training costs are borne by MDC directly.
F. Zambia Railways Limited

Notes: Zambia has two railway systems; the national railway, Zambia Railways (ZR) and the Tan-Zam Railway (TAZARA), a joint-venture with Tanzania. This case study looks at ZR only.

Zambia Railways (ZR) is a parastatal corporation. ZR is included here because the ZR case offers useful insights into the effects of private sector HRD thinking on privatisation and parastatal reform.

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**Company Background**

Zambia Railways (ZR) is one of Zambia’s largest parastatal corporations. ZR is not a candidate for privatisation. ZR will remain a parastatal corporation, but with management and operations scheduled outsourced on a “concession” basis.

ZR is suffering from the combined effects of years of mismanagement, neglect of the line and rolling stock, over-staffing, out-dated technology, low traffic and an inappropriate business model. ZR is both in crisis and facing heavy competition from road transport, despite many deficiencies in Zambia’s road transport system. In order to address ZR’s many problems and develop a competitive heavy haulage alternative ZR is undergoing a comprehensive restructuring. As part of this restructuring ZR will modify their approach to HRD, training and EBT. HRD restructuring is, however, not a current priority.

Restructuring (of all aspects of ZR) is in its early stages. The initial stage, currently underway, calls for a “transition management” team to prepare ZR for “concessioning” under the Short Term Operations Implementation Plan (STOIP). The STOIP team, comprised of five expatriates, began work in January 1998.

The priorities of the transition team are 1) downsizing, 2) cost-reduction, and 3) rolling stock rehabilitation. Concessioning will be put out to tender in late 2001, with separate concessions awarded for passenger traffic and freight traffic (and perhaps for workshops). To a large extent the
restructuring of HRD policy and practice will await concessioning. Notwithstanding this the broad direction of change is readily discernible.

**Workforce: Composition and Pattern of Change**

In 1998 ZR had a staff complement of more than 5000, approximately three times that needed. Since the inception of STOIP downsizing has been a priority. Staff levels were reduced to 3144 by 31 December 2000, with further downsizing following concessioning projected to reach 1800 in 2002.

ZR is poorly qualified at mid-senior management and senior technician levels. In mid-2000 there were only 24 university graduates,37 A number of whom have since been retrenched consistent with the cost-reduction and performance-based criteria of STOIP driven downsizing.

ZR is not currently hiring (though hiring is expected to resume following concessioning). Skills shortfalls are currently addressed through reassignment, short-term re-training and outsourcing. The combined effect of these efforts falls far short of current and projected needs.

**EBT Practices in Use and Planned**

HRD is in a state of transition, with future practice neither fully conceptualised nor clearly planned. As a result training is *ad hoc*, short term (i.e. less than one month) and low-level, reflecting its current low priority, and largely reactive, reflecting the wish to address only current pressing problems.

Few assumptions have been regarding training policy after the transition period. Nonetheless, the shape of future training is beginning to emerge. Training has been and is expected to remain “structured” though less rigidly so. There will be less emphasis on qualifications and certification and greater emphasis on responding to emerging skill needs (e.g. customer care and information technologies) and on problem solving (e.g. reducing derailments).

There are three key characteristics of the current direction of change:

- A change in emphasis from qualification-based (emphasising testing and certification) to a competency-based (emphasising flexibility and efficiency).
- A significant reduction in the scale of in-house training infrastructure and staff, complemented by greater outsourcing and use of regional training resources.
- Better integration of training and training staff with production.

STOIP’s HRD component calls for a training needs assessment, with the initial focus on accounting systems and rolling stock rehabilitation. The STOIP needs assessment is expected to provide the formal basis for a shift towards a more flexibly structured and strategic approach to training. If the needs assessment is consistent with the current pattern the emerging approach to training will focus on problem-solving (e.g. derailments) and competencies (rather than qualifications), and on strengthening areas where critical skills shortages have been identified (e.g. introducing information technologies), and on multi-skilling. Multi-skilling is expected to focus on six to ten key areas (e.g. signals, locomotive drivers, diesel electric maintenance) and result in a leaner, more efficient and more flexible

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37 Distributed among mechanical and electrical engineers at Head of Department level and business administration, public administration and economics graduates in management and administration. Some departments, e.g. Signals and Telecommunications, have no university graduates.
Training will itself become leaner and more flexible during restructuring. Prior to the inception of STOIP in 1998 ZR had a large in-house Training Centre. The training centre included two main “wings” (operations and technical), 25 full-time lecturers plus administrative and support staff and full hostel and kitchen facilities. Most training was conducted in-house in the Training Centre away from the workplace. There was little direct interaction between production and service departments and the Training Centre. The emphasis of training was on qualifications and certification (i.e. trade testing).

The training centre approach has been largely abandoned, albeit largely due to short-term cost-cutting pressures rather than strategic or pedagogical ones. There is, however, a clear (if not yet formalised) sense that training needs to be better integrated with production and more directly responsive to current production and customer service needs. In quest of these objectives, approximately half of the former training staff has been retrenched with the balance reassigned to various production departments. Most of those reassigned to production retain training responsibilities. The intention is to upgrade, expand and embed training capacity while reducing both the size and the overall cost of narrowly specialised training facilities.

The recently restructured training department has a current staff complement of 14, including training co-ordinators and planners, support staff and a small cadre of lecturers specialised in training-of-trainers. ZR’s evolving approach to training will draw extensively on skilled production staff with training skills, expand this cadre of artisan/trainers, and supplement in-house training with outsourcing (both by hiring-in specialised trainers and by sending staff out for training). Future plans call for further downsizing in-house training capacity and greater use of outsourcing (e.g. by using the government College for Management and Development Studies to train trainers).

ZR is shifting from a qualification-based approach to one focussed on developing the multiple competencies needed to keep pace with current production needs. ZR’s evolving approach is similar in many respects to the “ILU” model used by Boart Longyear (see Chapter II, B)\textsuperscript{38}. ZR’s notion of multi-skilling has two distinct thrusts: multi-skilling within trades for technical and artisanal staff and multi-skilling across trades for administrative and support staff.

Overall, EBT will remain the principal method of skills acquisition, but with training better integrated with production and more strategically focussed on current production/maintenance and “customer care” priorities.

Uniquely among the sample surveyed ZR draws upon the training capacities of sister enterprises (e.g. Trans-Namib Railways), trade associations (e.g. SARA, the Southern Africa Railway Association) and SADC transportation institutions. Training co-operation with both SARA and Trans-Namib is largely EBT-based. ZR intends to increase the intensity of their inter-enterprise and association-based training co-operation.

ZR’s emerging approach to HRD and training is driven by its internal restructuring priorities. ZR was not familiar with recent TEVET reforms. Little future interaction was anticipated with public sector

\textsuperscript{38} The “ILU” Concept: I L U is a graphic device representing three key stages in staff development:

“T” - basic operating skills

“L” - intermediate operating skills + machine setting skills

“U” - advanced operating skills + machine setting skills + training skills
(including newly autonomous) training institutions, beyond drawing upon training-of-trainers capacities. No opinion was offered on the merits of the forthcoming training levy.

HIV/AIDS: Impact and Response

ZR has a pronounced HIV/AIDS problem. HIV/AIDS losses were reported to be “quite high”, with system wide losses estimated to be “four or five employees per month”. There is a marked concentration of HIV/AIDS losses at ZR’s five main stations (Kabwe, Kitwe, Livingstone, Lusaka, Ndola) but, no apparent HIV/AIDS concentration within skill areas or job categories. The effects of HIV/AIDS are felt in staff and skill losses and in the attendant staff support and skills replacement costs. Multi-skilling is in part a response to the HIV/AIDS crisis though this is not seen as a primary motivation.

HIV/AIDS rates and losses are probably understated due to cultural barriers, a related resistance to testing with a corresponding lack of sound statistical evidence, the tendency for retrenchment to conceal HIV/AIDS losses (poor health is a factor in retrenchment) and “low management awareness until recently”. ZR initiated its first anti-HIV/AIDS programme in October 2000 when it adopted a programme offered by the Zambia Business Coalition on AIDS (ZBCA). The ZBCA programme includes information and training materials, information/behavioural change seminars and guidance on counselling. ZBCA training materials have been incorporated into most in-house ZR training programmes.

The effects of the ZBCA programme are difficult to assess in that the programme has only recently been implemented. A noted weakness of ZR’s current approach is that most HIV/AIDS awareness training is subsumed into skills training courses (rather than generalised) and thus tends not to reach those not undergoing skills training.

Methods of Financing Training

Training costs are largely internally funded, with a degree of support provided through restructuring funds provided by donors and development banks. Additional support is sourced from *inter alia* SARA and from ZBCA. Internal training costs are budget-based with an historic norm of 1-2% of the “operating budget” allocated for training. The training budget is seldom used due to both the strong focus on cost reduction within ZR generally and the current low priority given training. In the past the administration of training was highly centralised. In anticipation of higher priority being given training following concessioning plans are being formulated to decentralise most aspects of training including needs assessment, budgeting and administration.
III. FINDINGS and TRENDS (Zambia)

“All learning mechanisms have an impact on productivity. However, on-the-job training has relatively the biggest impact … in firms of all sizes including very small firms and microenterprises.”

Tyler Biggs et al
Technological Capabilities and Learning in African Enterprises
World Bank, 1995

A. Findings

This study has sought to identify thinking and practice among leading enterprises in the Copperbelt, rather than to identify common or normal practice among all enterprises. Findings and implications should be seen in this light. A number of discernible patterns and trends emerge from the survey sample. These are presented below, in: a) two tables that summarise and compare the surveyed firms, and in b) the notes following each table.

Table 1 (below) summarises and compares the training approach of surveyed enterprises in relation to two factors, a) whether their EBT practices stress skills development within trades or across trades and b) the relative degree to which training is “structured” \(^{39}\). In each case the direction of change if apparent is indicated (\(\uparrow\)).

<table>
<thead>
<tr>
<th>Table No. 1 - EBT Training Approach</th>
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<tr>
<td>Direction of Change (\uparrow)</td>
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<td>Across Trades</td>
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<td>MDC</td>
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\(^{39}\) “Structure” is a subjective assessment of the degree to which training reflects a policy basis, needs analysis, HRD planning, orderly and careful delivery and monitoring and assessment. In many cases structure is derived from or mandated by parent enterprises or agency relationships. External, public sector or trade union policy was not found to have a noteworthy effect on training “structure” (or content) with the marked exception of training related to HIV/AIDS.
Table 1 NOTES

- Boart Longyear (BL) – carefully structured training targeting a) “right-sizing” b) multi-skilling within trades, and c) steady improvements in production efficiency.

- KCM - rapidly expanding large-scale carefully structured training stressing a) multi-tasking and b) addressing medium and long-term skills requirements at all levels.

- MDC - embryonic training programme intended to a) enhance team work within operational areas; b) help introduce new technology and practices; c) reduce equipment and machinery down-time; expand multi-skilling (within and across trades)

- SKF - two distinct training “models”: a) carefully structured specialised training in bearing installation and maintenance as internal staff development and as a “product (for fee-paying trainees and for customer support); and b) unstructured ad hoc general training of production and administrative staff.

- Swarp Spinning (SSM) - Structured training within trades focusing on a) quality control and b) ensuring adequate availability of the skills needed to maintain full-time (i.e. three-shifts p.d. 24/7) operations.

- Zambia Railways (ZR) - a) training structure and intensity greatly reduced (as an aspect of the early stages of a significant restructuring), b) with planned emphasis on upgrading skills within trades (in part to facilitate down-sizing); and c) integrating in-house training capacity with line production.
Table 2 (below) identifies and compares the characteristics of in-house staff with training responsibilities in terms of two aspects, a) the relative degree to which training staff have formal pedagogical qualifications and b) the extent to which they are specialised training staff (i.e. primarily engaged in training) as opposed to having skills transfer responsibility as an additional or informal duty. The direction of change if apparent is indicated (►). 

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<th>Table No. 2 - EBT Training Staff characteristics</th>
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<td>Direction of Change ►</td>
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<td>Pedagogical Qualifications</td>
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<td>Additional Duty</td>
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<td>MDC</td>
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<td>BL</td>
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<td>SKF</td>
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<tr>
<td>No Pedagogical Qualifications</td>
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<td>Primary Responsibility</td>
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<td>ZR</td>
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<td>KCM</td>
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**Table 2 - NOTES**

- **Boart Longyear (BL)** – Two complementary patterns: a) longstanding use of pedagogically qualified senior HRD and production staff; and b) increasing use of skilled production staff as trainers.

- **KCM** – Two complementary patterns: a) formal training facilities with a rapidly expanding cadre of fulltime trainers and b) most skilled and key staff to be given training responsibilities and basic pedagogical skills. Emphasis on training qualifications at all levels.

- **MDC** – Increased use of skilled staff for training purposes; plans include giving key skilled staff basic pedagogical skills.

- **SKF** – Training an additional duty of key management and production staff. No formal pedagogical qualifications.

- **Swarp Spinning (SSM)** – Increasing use of fulltime trainers with the goal of having trainers on duty at all times (i.e. during every shift). Few pedagogically qualified trainers, most have “risen through the ranks” of production staff.

- **Zambia Railways (ZR)** – In the process of converting most fulltime trainers into production staff with training responsibilities. ZR’s training centre has been scaled down; the intention is to better integrate training with production while greatly reducing training infrastructure and staff.
Overall, the survey sample revealed a trend towards increasing emphasis on training reflected in attention to “structure”, emphasis on upgrading both specific skills and the general learning “base”, and a trend towards multi-skilling (both within and across trades with multi-skilling within trades more the norm) (see Table 1).

No clear pattern emerged in relation to training staff qualifications and the level of training responsibilities, beyond a general trend towards increased EBT. The small survey sample revealed a variety of customised approaches (see Table 2).

B. Trends

Trends in EBT Practices

Five of the six enterprises surveyed were either starting new training programmes (MDC, KCM), refining existing training practices (BL, SSM) or in the process of planning major changes (ZR. Hence, many of the trends noted are new and not well-established practices. As a result the points that follow better reflect the current direction of change rather than standard or common practice.

- Both competitive pressures and the high level of self-reliance create strong incentives to upgrade internal training capacities; private sector practice is largely driven by internal or company group level imperatives with these in turn determined by current market forces.
- EBT is the most common form of skills training, in part due to the limited array of options; training is strongly focused on the rapid development of the specific skills currently needed.
- There is very little inter-firm co-operation in training.
- Public sector TEVET policy has little influence on the training practices of individual enterprises; there are few linkages among enterprises and public sector training institutions.
- The pronounced weaknesses of local training institutions and the lack of strong industry or sector associations place the burden of training on individual enterprises. The narrow range of training options highlights EBT while favouring enterprises with strong company group linkages or the resources to access external support.
- There is an identifiable shift, reflected in more “structured” approaches to training, away from ad hoc approaches towards more strategic training models.
- Training is concentrated on senior and key staff.
- Surveyed enterprises had little expectation of hiring skilled employees. Most assumed that the specific skills needed would be imparted by and within enterprises. This perspective generates little incentive to co-operate with public sector training institutions.
- Most enterprises are raising entry-level qualifications due to the high level of “trainability” required by new management practices and technologies.
- Downsizing is the prominent effect of broad-based restructuring. However new investments, new technologies and competitive pressures all create the need for increased and improved training for the remaining workforce.
- Downsizing and outsourcing alter enterprise-level training needs in several ways; those needing training is reduced while the sophistication of training needed often increases.
• Training is increasingly competency-based consistent with the demands of individual enterprises.
• Only one of the enterprises surveyed (SKF) treated its current training capacity as a marketable “product”.
• All enterprises surveyed sourced some training services from specialist providers.
• HIV/AIDS is a recognised problem with a significant negative impact on firms. Most firms offer awareness training, counselling and limited forms of financial support. Of the firms surveyed ZR was conspicuous for both its tardiness in reacting to the HIV/AIDS crisis and the modesty of its current response.

Trends in the Broader Training Environment

Following recent TEVET reforms many public sector training institutions have a high nominal degree of operational autonomy. While this has resulted in significant changes in financing and governance arrangements it has not yet led to substantive changes in training practices or markedly increased effective interaction with the private sector. Trainee intake, curriculum, schedules, training duration et al all continue to follow long-established and increasingly lamented public sector patterns. A recent internal EC report found that “technical education and vocational training (in Zambia) is … supply-driven, with poor linkages with the employment sector; … under-resourced … not cost-effective, unable to meet the new demands of the economy”. There is little awareness among the Copperbelt business community of the newly autonomous status of TEVET institutions. For the most part the business sector does not use TEVET institutions as a training resource.

Overall there is a distinct trend towards continued disengagement from public sector training provision and oversight. Private sector EBT and public sector training policy and provision are increasingly worlds apart. Despite clear evidence of both growing need and significant training activity (i.e. a growing training market) there is little effective interaction between public sector training institutions and formal sector enterprises. Four aspects of this disengagement bear noting:

1. the weak relationship between national training policy and day-to-day practice in enterprises,
2. the lack of engagement with and use of formal training institutions (at present largely limited to the hiring of school leavers and graduates if needed),
3. the virtual disappearance of statutory apprenticeship, and
4. the limited interest in and regard for trade testing.

None of these reflect a decline in attention to training per se. Quite to the contrary training efforts are intensifying within enterprises (despite outsourcing, unbundling and downsizing) in response to economic reform, new technologies, new enterprises, “re-engineering” and restructuring within enterprises (including state-owned enterprises

41 Because of the very limited degree of change in training practices TEVET institutions are deemed “public sector” for the purposes of this study