CASE STUDIES OF APPROACHES AND STRATEGIES FOR SECTOR DEVELOPMENT

February 2010

Dr Marcus Powell (Director – CEI)

Dr Johnny Sung (Senior Research Fellow – CLMS)

Mr John Lindsay (Policy Analyst – CEI)

THE CENTRE FOR EMPLOYMENT INITIATIVES

www.cei-international.org

ISBN: 978-92-2-124174-4 (web pdf), 978-92-2-124173-7 (print)

CONTENTS

Executive Summary

In today's globalized world, employer's demands for human resources and skilled workers are constantly evolving. In response governments must have successful and agile means of managing their national human resources and promoting development; the use of sector strategies based on labour market analysis has proved a successful option for many countries to do so. However, there is limited research on how countries at different stages of development create and deploy sector based policies. This study provides empirical evidence for the International Labour Organization's (ILO) Sector (SECTOR) department on how developed and middle income countries approach the whole process of sector based development.

There is no single approach that is applicable to sector policy development in all country contexts. In different regions of the world countries will implement sector approaches according to their own institutional and political structures. In the Anglo Saxon model the sector based approach is driven by more voluntary frameworks at the decentralised levels. This contrasts with the Continental European approach in which the sector based approach is entrenched in legislation and normally governed by national level agreements between development partners. Similarly, in the South East Asian model, involving the development state, sector development involves a much more top down, strategic, and pro-active approach being taken by the government. To better understand these differing approaches to sector policies this research explored six sector case studies: Clothing, textile and footwear (Indonesia), Water, sanitation and hygiene (South Africa), Automobile (USA), Tourism (Egypt), Retail (Singapore) and Construction (UK); and drew initial lessons from them.

Sector approaches, whether they consist of comprehensive national level policy frameworks or small scale initiatives at the localised level all provide a means by which governments can mobilise resources to support or prioritise development within a specific identified sector. Furthermore, what works in a particular country's context will not necessarily work effectively in another. The developed countries are more likely to experience successful implementation with their sector approaches due to their developed infrastructure and higher level of capacity. However, case studies from the middle income countries can still offer a number of important lessons for the implementation of a successful sector based approach. One fact remains constant, in all cases it has been shown that it is important to have a coherent national policy framework and a vision of where the sector is going, including details about how to achieve such a vision, if sector based development is to be successful.

There are a range of factors influencing sector development, which differ according to the level of policy formality. These policy factors range from those countries that have coherent systems with tailor made legislation and long term strategic plans, to those that have partial or no formalised frameworks for supporting sector based development. There are the developed economies, such as the USA, the UK and Singapore that have identified priority sectors and supported mechanisms for planning and implementation. Then there are the middle income countries which have partially developed sector based approaches, such as Egypt and Indonesia where the decision to focus on a particular sector is often based on comparative advantage. South Africa lies somewhere in between the two extremes since they are able to develop best practice sector frameworks, but for implementation this is not necessarily the case. However, even between countries at similar stages of development there are significant differences among the ways in which they approach sector development. The research showed that there is no doubt that the characteristics of the state, including the way in which the state develops is a major influence on sector development. Only by understanding how a particular state supports national development is it possible to identify how improvements could be made to sector planning or implementation.

Successful implementation is at the heart of any effective sector approach. For the public sector in the developed world, it is easier to establish a relationship between a national body responsible for policy formulation and those entities responsible for implementation, guided by a regulatory framework that defines who does what, when and how. In contrast, in the developing world the evidence highlighted that the relationship between national and local level bodies is problematic due to the whole decentralisation process. This results in the implementation agencies being given new responsibilities and functions, which in the majority of cases they don't know how to carry out. This is a vital area where support is required, particularly for regulatory mapping to help re-define roles, functions and responsibilities between national planning agencies and those at the implementation level.

1 Introduction

Governments around the globe are searching for the most effective and responsive means of managing their human resources. Following the acknowledged failure of manpower planning, the development of sector strategies based on labour market analysis has proved a popular and successful planning option amongst many countries. As sector planning is a relatively new tool, so far minimal evidence exists on how countries at different stages of development approach the process of sector development. The present study attempts to fill this void by providing empirical initial evidence on how developed and middle income countries approach the whole process of sector development. In presenting this evidence there are six interconnected sections. Following the introduction, the second section provides a justification for undertaking the present research. Then, the study turns to research objectives which are being addressed and the fourth section provides a brief outline of the methodology adopted to undertake this work, including why particular case studies were chosen and how the information was organised for purpose of analysis. Section five presents the six case studies and afterwards attempts are made to address the policy implications. Finally, section six provides a number of concluding comments based on our experiences undertaking this research.

2 Background and Justification

The ILO's Decent Work Agenda is a balanced and integrated programmatic approach to pursue the objectives of full and productive employment and Decent Work for all at global, regional, national and sector levels. By promoting the four Decent Work objectives – employment opportunities, rights at work, social protection and dialogue – employers promote conditions that encourage productivity amongst employees and business. This results in lasting stability and security across all levels and sectors. It is against this background that the ILO Sector department (SECTOR) sought to commission this research on the characteristics and effectiveness of sector based approaches, and through analysis provide constituents with improved and culturally sensitive tools to develop sector based policies and to advance the decent work agenda.

Statement of the research problem

There are two problems, or perhaps opportunities, associated with advancing the sector based agenda. First, SECTOR must convince constituents about the potential benefits to be derived from adopting a sector based approach to social and economic development. This should not prove problematic since governments around the globe are looking for alternative development models to facilitate development following the collapse of manpower planning, particularly in relation to supporting employment and economic growth. Against this background SECTOR must be able to provide constituents with case studies of sector approaches that have a positive impact on social and economic development. Not only will this help improve the legitimacy of SECTOR's activities, it can also provide constituents with proven approaches and tools that can be used to implement more effective sector based activities.

Second, it will be important for SECTOR not to assume that that one approach to sector development is applicable in all contexts. Indeed, the tools and approaches developed by SECTOR must take into account the specific cultural, historical and political context in which they are being implemented. That is to say in different regions of the world countries will implement sector approaches according to their own institutional and political structures, and it will be important for any tools to be sensitive to such nuances. For instance, in the Anglo Saxon world the sector based approach would tend to be driven by more voluntary frameworks at the decentralised levels. This would contrast with the continental European approach in which the sector based approach is entrenched in legislation and normally governed by national level agreements between development partners. Similarly, the South East Asian model, involving the development state, would involve a much more top down, strategic, and pro-active approach being taken by the government to implement a sector based approach. Each region around the world will approach sector based developments in their own unique way and it will be important for the ILO to ensure that their tools can match the circumstances under which they are being applied. The failure to do so will result in a disarticulation between the advice being provided by SECTOR and the needs of their constituents.

3 Overall Objective of the Research

The overall objective of the research is to develop case studies of best practice for sector based development in a wide range of countries and lay the groundwork for a typology of how different regions of the world implement sector based approaches.

Specific Objectives

The objective involves the development of six case studies of best practice for sector development. Each of the country case studies will:

- Document the socio-economic context against which this sector based policy is being implemented
- Provide the political rational for why the sector based approach is followed
- Outline the legislation, rules and guidelines governing the sector based approach
- Account for the institutional structures, funding modalities and other mechanisms for supporting the implementation of the sector based approach
- Discuss how decisions are made and strategies formulated for the implementation of sector based approaches, particularly with regard to the roles played by the state, employers, unions and other development partners
- Analyse the impact of the sector based policies, especially with regard to achieving their intended outcomes and their implications for socio-economic development

4 Methodological Approach

The methodology involved a number of distinct phases, including the selection of countries to be studied, the collection, collation and analysis of information, the write-up of the case studies and finally an identification of the policy implications of the findings (see table 1).

The selection of country case studies was based on the need to provide examples from: the public and private sectors, different industrial sectors covering services and manufacturing, and also representatives from the developed and developing nations. Adopting such an approach enabled the research to provide the ILO with an insight into the contrasting ways countries at different stages of development, along with their social partners, manage the complexities associated with sector development. Moreover, it will also help provide an initial understanding of how culture can shape how sector based approaches are developed and subsequently implemented.

Given the short time-frame to undertake this research, the choice of case studies was also influenced by the researcher’s knowledge of sector developments in the chosen countries. Access to information is recognised as one of the constraints facing researchers conducting international comparative research and through their own personal knowledge and experience of working in these countries they were able to ensure that this did not happen. Against these issues the case studies selected for the present study, include:

- Clothing, textile and footwear (Indonesia)
- Water, sanitation and hygiene (South Africa)
- Auto-mobile (USA)
- Tourism (Egypt)
- Retail (Singapore)
- Construction (UK)

Much of the research gathered for the country case studies was based on interviews undertaken during the past six months with government officials and stakeholders working in these countries, and by obtaining access to recent government documents and locally produced studies. This was supplemented by electronic on-line searches of the web and academic journal articles, but it should be noted that there appears to be limited academic research about comparative sector based research.

In order to facilitate the data collection and analysis, the research had to construct a framework to manage these processes. The guidelines for undertaking this research were determined by the study’s TOR, the researchers experiences of working in sector planning, documents produced on the subject and from discussions with colleagues at SECTOR. The purpose of this framework was to ensure a consistency with regard to the way in which each of the country case studies were produced, both in relation to the issues that were addressed and the quality of research.

The first stage to undertaking each of the case studies involved focusing on the sector's characteristics, in order to understand the socio-economic context against which the sector based policies are developed and implemented. Subsequently, for each of the case studies, the research investigated what are the most important factors shaping change within the sector. This helped the study to understand what factors are driving the process of sector development and how it may differ from context to context. Having provided an understanding of the sector for each study, the research analysed how drivers of demand impacted on employment and skills. For some countries this impact was easier to measure than in others. Finally the research identified the major obstacles facing development in the sector and analysed how these were overcome, particularly with regard to what strategies were being implemented to address such obstacles.

Through using this analytical framework the research was able to put together the six country case studies and also provide the basis to touch upon some of the policy implications. Amongst the issues to be addressed in this section are: how political and socio-economic processes shape approaches to sector development in different countries, what implementation experiences can be gained from the different country case studies and to identify how to carry forward this research.

Table 1: Analytical Framework to guide phase I of sector research

Selection of sector based country cases studies	Analytical framework to guide the construction of the six country case studies	Policy implications of the different country case studies
• Clothing, textile and footwear (Indonesia) • Auto-mobile (USA) • Water, sanitation and hygiene (South Africa) • Tourism (Egypt) • Retail (Singapore) • Construction (UK)	• Understand the characteristics of the sector (numbers employed, sub-sectors contribution to GDP, etc) • Document factors driving sector change (role played by government, economy, technology etc.) • Analyse the impact of these developments on employment and skills (determine how the change factors identified above have influenced employment and the implications for skills) • Determine the obstacles facing the sector and how these can be overcome	• Factors influencing sector development (analyze how the context or development characteristics influence different approaches to sector development) • What implementation lessons can be learnt from the different country case studies, particularly with regard to the differences between the public and private sector, as well as between developed and middle income countries. What are the research implications of the study's findings and how these can be build upon for further study.

5 Presentation of case studies

Case Study 1: The Clothing, Textile and Footwear Sector – Indonesia

The characteristics of the sector

The Textile Clothing Footwear (TCF) industry is one of the most critical sectors for Indonesia and over the past decade it has become a primary source of growth for manufacturing output, exports and employment. However, more recently the sector has moved away from labour intensive forms of production and towards capacity intensive ones. This shift has been encouraged by the government's restrictive legislation on severance pay and dismissals, both of which make it difficult and costly to get rid of workers. Unsurprisingly this has resulted in a situation in which companies have been forced to substitute machinery for labour.

Within Indonesia the whole supply chain of textile and clothing industry is divided into three production segments. The first consists of upstream industries, ranging from the fibre industry that produces natural and synthetic fibres, to the spinning industry which transforms fibres into unblended and blended yarn. There is the mid stream industry, consisting of the following sub-sectors: weaving, knitting, dyeing, screening and trimming. And finally, the downstream industry that encompasses: the garment industry and other finished textile products industry.

In terms of size, small and medium size firms dominate about 50% of firms in the country's textile industry, with 70% of them located in the clothing industry and 55% in the footwear industry. The number of firms has declined significantly over the 1995 to 2005 period, especially in the clothing and footwear industry. Local owned firms are mainly small and medium scale enterprises, while foreign owned firms (minority, majority and fully foreign ownership) are medium to large firms. Interestingly, the employers recruiting the largest number of employees are shifting. Over the 1992 to 1995 period the largest numbers of people working in the textile and footwear industry were employed by foreign owned firms, or by those which had a majority foreign ownership. However, from 2000 to 2005, a minority of foreign owned firms tended to employ the largest number of employees. The number employed by these firms in 2000 was almost double their number in 1995 across all sub-sectors. From the perspective of foreign direct investment, Indonesia has a large, well established vertically integrated industry. It also has an abundant supply of labour, a large domestic market, and a proven capacity to produce quality mid to high end textile and garment products for export. For mid to high end products, supporters of the sector argue that Indonesia can beat even China for price, quality, and compliance (with regards to the working conditions and labour rights) and service (flexibility, able to meet deadlines and experience with foreign buyers).

On the downside the sector is dominated by old technology, with a recent survey finding that 57% of the technology is over 15 years old, 18% between 10 and 15 years old, and the remainder between 5 and 10 years old. The survey covered nearly 5000 companies operating in the CTF sector and it found that over 770 companies need to replace machinery that had become obsolete. Given the increased global competition for CTF products this is a serious concern that needs to be addressed if producers want to maintain their competitive edge against foreign companies who are investing in the Asian region.

The development of the sector

Since the mid 1980s CTF has been one of Indonesia's prime exports and the government still anticipates that the growth rates could continue at around 10% until 2015, with the potential to increase the number of jobs in the sector by 485,000 per year. However, critics argue that this estimate is very optimistic, especially in the light of the capital intensive strategies being pursued by firms. The signing of a number of bi-lateral and free-trade agreements has helped to eliminate privilege access to certain markets and dampened international demand for Indonesian CTF products. According to a recent WTO report, China's share of garments exports to the USA will rise by 50% following the end of the quota system. The second largest winner of this liberalisation will be India whose share of the European market will double to nearly 10%.

On the supply side, Indonesian exports also suffer due to bureaucratic custom clearance procedures, stringent labour regulations, creeping protectionism in the form of new import duties and import licensing system, and other bottlenecks caused by poor infrastructure. However, as outlined earlier, the most significant impact has been the movement towards capital intensive forms of production which has reduced the elasticity of demand for employment in all sub-sectors. In the past, the TCF industry concentrated on the garment sector, but now there is greater focus on producing fibre and spinning yarn, both of which are capital intensive. The footwear industry which requires a more labour intensive form of production, but as outlined above this has seen a decline in production. The government needs to take a more active role in supporting the restructuring of the sector and help it move towards other opportunities, especially in terms of responding to the growing demand from the middle class in the domestic economy and the global demand for ethnic clothing.

Factors influencing change

Economic factors have been major contributors of change within the sector. The depreciation of the rupiah following the crash of 1997 has helped companies become more competitive in global markets, but it has also had a detrimental impact on their costs due to the fact that the textile sector imports more than 80% of its raw materials, cotton, that is used in the production process. Understandably, domestic demand has also fallen as a result of these higher prices. Other factors have also been driving up production costs, particularly with regard to energy costs. For instance, a kilo watt of electricity in Indonesia costs 8 cents, compared with a much lower figure of 3 cents per kilo watt in Bangladesh and Egypt.

Inward investment used to be one of the country's prime drivers of economic growth, but since the 1997 crash it has fallen to around 15% of the country's growth in GDP. Many investors have complained about the lack of legal certainty and the poor state of the country's infrastructure. Since the decentralization of political decision making there has been an increase in the number of local regulations, taxes and levies imposed on businesses. Some argue this has impeded regional economic development and contributed towards higher costs. The banking sector has compounded the problem by refusing to lend to the CFT sector due to the perceived high risk. The bankers have argued the industry is over dependent on a quota system and the American market, and unless progress can be made in shifting to other markets, they will be unwilling to resume their lending. Against this background, many of the foreign companies from Japan and South Korea have started to shift production to China and Vietnam, where they can benefit from improved infrastructure, a better investment climate and higher productivity.

The government is influencing the direction of the sector through their Medium Term Development Plan, but the extent of this impact is difficult to judge. Under this plan emphasis has been given towards labour intensive manufacturing sectors, including clothing and textiles. The government anticipates that this will reduce unemployment levels to around 9% by 2010. The plan focuses on a broader framework, including the importance of supporting: research and development, enhancing the skills and competencies of the workers, improved information on access to markets for Indonesian products, the importance of facilitating FDI and the need to upgrade the country's infrastructure. Subsequently, each of the line ministries within the country is responsible for implementing the broad vision outlined in the plan. However, in reality the implementation does not appear to follow a coordinated sector based approach. The evidence suggests that certain Ministries, more than others, have made a concerted effort to support the clothing and textiles sector. A case in point is the Ministry of Industry which has issued a decree to limit textiles imports in an effort to help local industry. The thinking behind this decree is that it will help the reduce competition by limiting the quantities of cheap imports1, especially from China. These measures are to be welcomed, however what is equally

[1] Decree No.732/2002 signed by the Minister Soewandi stipulates that the importation of textile products can only be made by local producers.

worrying is the large scale dumping of illegal imports that is occurring across Indonesia. The government is also aware of this problem and has attempted to improve the capacity of their customs. It is also hoped that with the increased liberalisation of trade there will be a reduced incentive for Chinese producers to dump illegal products.

A number of other mechanisms are being used by the government to help encourage the sector. For instance, the government has increased number of trade delegations to improve market access for CTF products from Indonesia, including the recent East Europe Export Push, as well as targeted missions to other countries. Another important project being implemented by the government is processing pine-apple flax into fibre flax, in an attempt to make textile manufacturers less dependent on expensive imported cotton.

Besides attempts to improve the investment climate and facilitate market access, the government has emphasised the importance of raising the quality and productivity of the country’s human resources. Within the Medium Term Development Plan (MTP) the government proposed to achieve this through the following measures: the development of competency standards and certification for workers, strengthening the National Agency for Certification and Professions, increasing the professionalism of training and enhancing the infrastructure for training institutions. Evidence from recent ILO work indicates that significant progress has been made in relation to the development and improvement of the system, but significant problems continue to exist with regard to implementation. At present the country does not have an accepted national qualification framework and as a consequence there are no universally recognised qualifications or central institutions responsible for this process. The consequence of this deficiency is that qualifications are produced that don’t necessarily serve the needs of industry. It is difficult to understand the precise implications for the CTF sector, but it is clear that without a set of competencies or standards it is difficult, if not impossible, to respond to the skill needs of domestic producers. For instance, there is a clear lack of research and development capacity within the CTF sector, and as consequence most of the local manufacturers are dependent on technology and higher level skills from overseas.

However, there are other aspects of government policy that have a negative impact on the sector, particularly with regard to the 2003 labour law on dismissal procedure and severance pay. Originally, this law was design to protect and improve the quality of workers life. However, instead of benefiting the workers, the law has actually inhibited employment creation since now employers prefer to recruit contract based workers to avoid the costs associated with redundancy during quiet periods.

A final factor to impact on the CFT industry is the changing tastes and purchasing power of consumers, both within Indonesia and overseas. The growing demand for Moslem clothes and those with ethnic designs represent major new markets for Indonesian manufacturers. There is also the internal high street fashion market within Indonesia and the large number of middle classes, most of whom have tended to rely on imported products. These represent new market segments that should be targeted by Indonesian producers with facilitation by the government.

Employment and skills implications

The implication for skills and employment depends on which of the industry’s sub-sectors you are talking about. The heterogeneous nature of the sector means that it is impossible to make generalisations about the overall sector. The skills and employment implications of the developments discussed previously will depend on whether you are talking about upstream industries, midstream industries or downstream industries. For instance, as the upstream industries become more capital intensive, fully automated and geared towards large scale production processes, they will tend to require more skilled technicians to maintain the machines and competent managers to oversee the production processes. In contrast, the mid stream industries are less capital intensive and don’t rely on such advance technology and tend to employ more people. Therefore, within this sub-sector there is a tendency to hire workers who have an understanding and preferably experience of operating sector specific machinery, suggesting senior or vocational high school as the minimal requirement. Finally, the downstream industries are much more labour intensive and although entrants should have a junior school certificate, there is a preference for workers to be hired for their vocational skills, as opposed to their educational qualifications.

The degree to which present provision is responding to the varied skill needs is difficult to assess, but the present capacity of vocational providers, both in the formal and non-formal system, is limited both at a quality and quantity level. Moreover, at the higher level the lack of domestically produced skills has resulted in an increasing reliance of expatriate personnel, both for managerial and technical positions. This is a worrying trend within the sector, especially if the government wants to move the sector into higher value added production.

Government legislation is having a significant impact on employment and skill levels in the sector. The labour law 13 of 2003 permits employers to recruit workers for a significant period of time (KWT-Kerja Waktu Tertentu) of no longer than two years. Employment may only be extended for the same contract once and the period must be no longer than one year. Under such a system employers in the sector prefer to hire workers on a specified time agreement since this is the only way for companies to compete with cheaper imports and illegal dumping of LTE products. As a result of this piece of legislation workers in the CTF sector have reduced opportunities for career development and are continually faced by insecurity. Such regulation discourages new investment for employment creation and skill development.

Obstacles and ways forward for the sector

The preliminary analysis has provided a picture of the main constraints and obstacles facing future development and employment in the CTF sector. Overall, the government has a vision for the sector which will continue into the next Medium Term Development plan. This is welcomed since it gives direction for future activities, but the problem lies in the actual implementation. The individual line ministries are responsible for implementation and this is becoming much more complex with the process of political decentralisation whereby actual decision making processes are taken by departments at the provincial level. Therefore, under the present system the country's central planning agency Bappenas can continue to create the vision for the sector at the national level, but it does not have the teeth needed to support implementation at the localised level. Moreover, when initiatives are implemented by line Ministries they tend to be reactive in nature. That is to say individual Ministries respond to crisis when they occur, such as illegal dumping and cheap imports, instead of implementing the vision for the sector, as outlined in the Medium Term Development Plan.

Despite the above difficulties the sector continues to offer opportunities for inward investment and local producers. In part this reflects the growing size of the country's middle classes and their increased purchasing power. Nevertheless, the government must start think of concrete ways to encourage a the implementation of more coordinated sector based approach instead of relying on individual line Ministries to carry out implementation, or not as the case may be. Given the present institutional structures and political realities this may prove difficult. Nevertheless, one of the avenues for a sector based approach could centre around the existing vocational institutions, most of whom are still funded and under the authority of Central government Ministries. However, this would depend on the successful implementation of the government's vision of HRD, as outlined in the MTD, including the setting-up of an accepted national qualification framework, the development of unit standards for the sector and the setting-up of appropriate mechanisms of accreditation and certification. Most of these issues are being discussed by government and there are tentative proposals to incorporate them into the next Medium Term Development plan, but only time will tell if they are ever implemented.

Case Study 2: Automotive Sector – United States

The Characteristics of the Sector

Despite the need for major restructuring in the 1980s and the recent economic crisis in 2008-9, the United State's automotive manufacturing (including automobiles, parts and equipment) sector continues to be one of the largest employers in the country contributing significantly to the national output. In 2008, the automotive and parts industries employed 732,800 workers directly, and out of that figure, the Big Three (General Motors, Ford and Chrysler) automobile manufacturers employed 240,000. The other US based foreign-owned automobile manufacturers accounted for 113,000 workers with the remaining working in the smaller manufacturing firms and parts suppliers.

The significance of the US automobile industry should not be understated as it can also exert a major influence on other industries in terms of its demand for raw materials such as steel, rubber, plastics, glass, and electrical parts. The industry is also closely related to a wide range of sub-contracting systems and employment in retail dealerships, repair and maintenance facilities, petrol stations, road construction, automotive parts, accessories, insurance and financing businesses. Thus, in terms of the multiplier effect, the automotive industry is estimated to be closely linked to 7 million other jobs in the US. Furthermore, around 6% of the national wages earned are attributed to the automotive and related sectors.

The United State's automotive industry is an interesting and evolving story. Just after the Second World War, the US automotive industry was dominated entirely by domestic manufacturers, large and small. More than half of all vehicles were produced by General Motor alone. Volkswagen was the only foreign manufacturer producing a small volume of luxury and sports cars in the USA.

Today, the picture has changed drastically. The dominance of the Big Three is no longer secure and the Big Three now account for less than 60% of all new vehicles produced in the US. Although US manufacturers still lead niche markets such as light trucks and sports utility vehicles (SUV), their business model, employment relations and approach to vehicle design are increasingly challenged by the entrance of the foreign transplants from primarily Japan, Germany and South Korea and by the changing demand for vehicle designs that are more in tune with the contemporary concern for environmental friendliness.

As a result, US-based foreign manufacturers have replaced most small domestic US manufacturers. Chrysler has become a subsidiary of DaimlerChrysler, a German-owned company. Furthermore, the Big Three have been in continuous legal battles with the US authorities since the 1990s on issues such as emission limits, fuel economy standards and safety (e.g. seatbelt) requirements. Critics say the Big Three have chosen the wrong strategy that has placed them on the wrong side of every issue relevant to the future of the automotive industry. The implication is that, while the US automotive sector as a whole remains strong, future growth is likely to be the continuing expansion of US based foreign automotive manufacturers, not within the Big Three manufacturers.

The Development of the Sector

There are a number of important developments that are crucial to the future of the automotive industry, the first of which has been the steady growth of the industry in the face of the previously mentioned obstacles.

While the United State's manufacturing sector as a whole has been experiencing a gradual decline over the last 30 years, employment in the automotive industry has been growing steadily. For example, in the 1990s and 2000s, employment growth in manufacturing stayed 'flat' while automotive employment grew by 25%, or 250,000 jobs. This means that the automotive industry is still demanding more and more people with the right skills to work in the industry. There is also the potential for further converting of workers with other manufacturing skills to join the automotive industry as the industry expands.

Another trend affecting the US automotive sector is the changing structure of the sector. Steady growth has had an uneven impact on the different automotive manufacturers in the US. There is a clear tension between foreign transplant companies and the Big Three, each with their very different approaches to product philosophy, employment practices and visions about the future development of the industry and their workforce. Evidence, such as their increasing of market share, favours the foreign manufacturers. There is also concern that while the demand for vehicles globally is expanding, US manufacturers (the Big Three) have been slow to capture this growth. The question is: "What change do traditional US manufacturers have to introduce in order to compete globally?" Changing business models may consequently lead to changing workforce skill sets.

Just as the business models between domestic US manufacturers and foreign owned manufacturers have diverged, so have their employment and work practices. The Big Three concentrate their production in the state of Michigan while the transplanted foreign owned units established themselves elsewhere, mostly in the south. These different locations also reflect their differences in their employment practices. For example, the Big Three are still heavily unionized with the United Auto Workers (UAW) representing all workers in the Big Three and their suppliers. The transplants have few unions and have developed their own supply networks. Although with the union's cooperation, the Big Three have managed to downsize their workforce in the 1980s and 1990s losing 600,000 jobs, big differences in work practices and flexibility between the two groups of manufacturers still exist. Some argue that the different employment and work practices are not just a source of tension, they also form a source of competitive advantage for the transplanted foreign manufacturers.

Factors Influencing Change

In terms of skills needs, the challenges and obstacles facing the sector, especially the Big Three domestic automobile manufacturers reflects the need for change. Indeed, practices such as lean production and quality assurance are commonplace these days amongst all automotive manufacturers. However, for public workforce policy, the specific skills and training relevant to in-company production are not their current area of concern. What is influencing public policy on workforce skills training is the need to mobilize new and surplus workforce from other sectors to meet the growing needs of the automotive industry.

In the context of the US, public workforce training is heavily influenced by two important factors. The first is the federal-state, two-tier political system. This means that each state within the United States can determine their education and training policy and provision independently. This also means that it is extremely difficult to design and coordinate the kind of umbrella national workforce training system we can observe in many country's one-tier political systems.

Much of the workforce intervention at the federal level is therefore based upon a national 'career and job search' system, which has been deemed to be not interfering within the state's jurisdiction, and is capable of incorporating different local implementations and workforce needs such as the Workforce Investment Act.

The second important factor is the prevailing policy on market mechanisms. When addressing market mechanisms, training should be employer-led and should be primarily funded by employers. Thus, where intervention takes place, it is always undertaken when there is an understanding that it is a case of market failure where intervention becomes necessary. Clear examples here are the demonstration programs under the High Job Growth Training Initiative (HJGTI). Under this Initiative the Department of Labor provides the seed funding and administrative facilitation to bring employers and stakeholders together with a view that they can see the common benefits by cooperating with each other. The end results are the establishment of the various employer-led workforce training partnerships. They tend to primarily provide apprenticeship training, early career training and training leading to basic skills sets required by the industry.

Employment and Skills Implications

The automotive industry is one of the largest industries in the US. Direct jobs in the automotive industry are projected to grow between 11% to 14% between 2002 and 2012, though the recent recession implies that these figures may need adjustments. However, the underlying importance of the industry remains as strong as ever.

Much of the recent workforce development policy in the United States is underpinned by two factors: (1) the use of the Workforce Investment Act (WIA) to create a 'one-stop shop' system encompassing career advice, job matching and training; (2) the need to foster employer-led training partnerships for rapid growth sectors which include the automotive manufacturing and related industries.

In the US, a specific sectoral training system did not exist until the introduction of the WIA in 1998. Soon after that, sector-based training was further augmented by the High Job Growth Training Initiative (HJGTI) in 2003. In particular, under the HJGTI, twelve sectors, including automotive manufacturing, have been identified as industries that will experience significant growth in output and employment between 2003 and 2017. The challenge then is for public workforce development agencies at the different level to plan for the provision of the projected skilled personnel in the different areas of skills required by the automotive industry.

However, it is important to point out that the WIA was not established to set up a sectoral approach to skill development. Sectoral training began to appear under the WIA in the form of specific partnerships in certain localities in the US in the late 1990s. In general, WIA partnerships can take many forms. Many have no sectoral emphasis at all. The majority of the partnerships under the WIA are targeted at specific unemployed groups such that they can re-establish sustainable employment for themselves, e.g. youth, long-term unemployed, low-income and disadvantaged groups.

Since the WIA was not primarily a sectoral approach, in 2003, the High Job Growth Training Initiative (HJGTI) was announced. HJGTI was an additional scheme to the WIA with separate objectives and funding. HJGTI differs from the WIA in that the HJGTI has little focus on tackling unemployment other than treating the job-seekers as one of the potential sources for new recruits and linking its recruitment mechanism to the WIA workforce infrastructure, e.g. the One-Stop Centers. The HJGTI works in an interesting way in the case of the automotive industry. The following is an example of one of the partnerships.

Initially, an Executive Forum for the automotive industry was formed comprising 19 industry CEOs, including the Big Three and US-based foreign manufacturers, such as BMW, Toyota, Honda and Nissan to discuss critical workforce issues facing the industry. Critical issues that the industry wanted to tackle included the appropriate image towards and job-seekers' awareness of the industry, better diversity of the workforce, certification of instructors, and standardizing training and qualifications to be compatible with the requirements of the National Automotive Technician Education Foundation (NATEF).

In 2003, an Automotive Industry Workforce Solution Forum comprising 28 senior human resource vice presidents was formed and met for the first time to tackle the industry issues identified and possible next steps in the form of partnerships. This process is not a one-off. The Business Relations Group (BRG) within the Employment and Training Administration, Department of Labor (DoL) coordinates the progress for Forum discussion throughout. In 2004, the Solution Forum became much larger (80 members) involving other stakeholders such as education institutions, economic development agencies, and military and public workforce system representatives. At these meetings, specific models and partnerships were explored and proposed. As an example of these partnerships, the following is an example of the "Upgrading the Nation's Automotive Programs to Industry Standards" partnership:

Subject	***Details***
HJGTI Grant	$900,000
Grantee	Gateway Technical College.
Key Partners	Snap-on, Inc., Wisconsin Automobile and Truck Dealers Association, Automotive Youth Educational Systems (another HJGTI partnership), Melior Institute, National Coalition of Advanced Technology Centers, the public workforce system including Job Corps, One-stop Centers and other stakeholders.
Leveraged Amount	$2,110,000 (incl. vehicles and parts) from partners.
Location of Activities	Nationwide.

Main Challenge	Building capacity and standardizing industry training and education to that established by NATEF.
Addressing the Challenge	Gateway Technical College and its partners will develop a blended training approach with online, classroom, and train-the-trainer methodology that are accessible to any automotive and collision repair program interested in NATEF certification. Will also train and update secondary and postsecondary instructors serving as evaluation team leaders throughout the nation.
Outcomes	a) An increase in training and education capacity for the automotive services sector. b) Certification for more industry-standard training programs offered by NATEF. c) Technical and program assistance to Job Corps automotive technician programs. d) Dissemination of information/ guidance on industry standards to over 500 instructors through participation as evaluators.

One common feature of these training partnerships is the employer-led nature of the scheme and the inclusion of public and private educational institutions, technology companies, and the WIA One-stop Centers (and/or private sector employment agencies). In some cases, funders such as community and charity bodies also become partners, as they see the opportunities to provide job and career opportunities to locally unemployed or specific disadvantaged groups.

The above example is a classic case of a partnership being formed to tackle specific training/skills issues identified by the Industry Forum. There are other partnerships which deal with other issues, ranging from sales, servicing, and recruitment from the inner city and Hispanic communities. A few schemes are nationwide but most are regionally based.

Training under these partnerships is specific, as defined by the HJGTI grant proposal. The relevant skill sets are also specified by the Forum. But unlike competencies in other national sectoral systems, the skill sets in HJGTI are more traditional, ranging from apprenticeships, diplomas to associate degrees. The US system is different and has not gone down the competency-based qualification route, as witnessed elsewhere.

Another feature of the automotive training partnerships is that they tend to be relatively small covering a few commute-to-work localities (e.g. counties). The idea is that the partnerships ought to be agile enough to deal with specific training/skills issues that are the concerns of the local employers, educational institutions and other stakeholders. Thus, it is a national scheme but implemented in the form of various types of local partnerships.

Obstacles and Ways Forward for the Sector

There are a number of challenges for sectoral training within the US automotive industry. Firstly, in order to supply adequate skilled workers to the automotive industry, it has been argued that the reliance on the WIA system is insufficient. The weakness is due to the way the WIA and its One-stop Centers work.

With the number of workers trained under WIA declining steadily in recent years – decreasing from 313,000 in 1998 to 141,000 in 2002. Compared to the WIA's predecessor, the Job Training Partnership Act (JTPA), training opportunities under WIA in 2008 were 17% lower. The decline in WIA training opportunities is due to partly the reduction in federal funding and partly to the WIA rules - i.e. the Work First requirement in 2003 and sequential requirement of the three services offered by the One-Stop Centers, namely counselling first, then job search second and finally training as a last resort. Under this scheme, training is not necessarily the first port of call.

The next challenge is the nature of the employer-led partnerships in that they have been implemented on an ad hoc basis. They have not been introduced uniformly at every locality and indeed, the skills issues that they tackle vary from place to place. This makes other related elements for national workforce development a difficult area to develop such as the need for a national qualification system. Although, at the moment, the general skills in the automotive industry are governed by the use of the NATEF standards, these standards do not relate to similar occupations found in other sectors. So mobility across sectors can be an issue.

Case Study 3: The Water, Sanitation and Hygiene Sector – South Africa

The characteristics of the sector

Unlike other products or services, access to clean drinking water and basic sanitation services are essential for every human being's health, growth and development; they are also critical components of community and national development. In the context of South Africa the increased demand for basic services has followed the end of apartheid and the commitment by the ANC government to redress the imbalances of the past and provide free basic services to all. This has been given momentum by increased urbanisation and the country's mass house building programme.

In South Africa the responsibility for water and sanitation rests with the Department of Water and Environmental Affairs. However, following the recent implementation of the government policy of decentralisation, the new responsibility for implementation has shifted to the municipalities and districts who perform the functions of Water Service Administrators (WSAs) and usually as Water Service Providers (WSPs). In theory the water provision services could be contracted out to the private sector, but in reality many of the municipalities or districts prefer not contract these services since they would lose one of their major potential sources of revenue.

Besides actors involved in supplying water services there are a significant number involved in supporting capacity development in the sector. The main formal capacity building institutions are the sector education and training authorities (SETAs). Under the direction of the Department of Labour, the primary SETAs working on capacity building in the sector are the local government SETA (LGSETA) and the Energy SETA (ESETA). In the SETAs much of the emphasis is given to workplace learning and involves learners completing unit standards of a national qualification framework through learnerships in workplaces.

There is limited data on the characteristics of the sector, but according to the SETAs around 200,000 people work in the sector, out of whom around 23% can be categorised as highly skilled, and the remainder are semi-skilled (39%) and un-skilled (38%). There is also a gender imbalance within the sector, with women occupying 35% of the highly skilled positions, against a figure of 65% for men.

The development of the sector

South Africa has a unique political, historical and social background which accounts for the challenges facing the water and sanitation sector. Much of the development over the past decade has been guided by the country's constitution and the need to provide basic services to all. The starting point for this commitment came in 1994, following the country's first democratic elections and the implementation of the Reconstruction and Development Programme, which had the objective of reducing the back-log of services to previously un-served and underserved communities.

More recently, the development of the sector has been guided by the internationally agreed commitment to the Millennium Development Goals (MDGs), especially goal 7c which calls for countries to halve by 2006 the proportion of people without sustainable access to safe drinking water and basic sanitation. Large scale construction has helped the South African government to achieve major progress towards such goals and access to basic water services has increased from 59% of the population in 1994, to 94% of the population in March 2007. Nevertheless, the provision of sanitation services has persistently lagged behind provision of improved water services. This can in part be explained by the lack of political will and also the technical complications of providing such services. Indeed, more often than not water-born sanitation services are promised by politicians, but the local authorities are unable to provide sustainable services over the long-term due to the high costs of running and maintaining the facilities and the lack of water.

Within the sanitation and water services sector there is the constant problem of operating and maintaining existing services. The government has focused on the building of infrastructure to increase access to services and not given enough attention to how these services will be maintained. This raises the question of whether the government can provide quality services sustainably over the longer term. One of the main reasons for the lack of emphasis given to maintenance is due to the lack of institutional and human capacity within the WSAs and the WSPs.

Factors driving change in the sector

Besides the country's constitution and the commitment to MDGs, one of the other most significant factors influencing the development of the sector has been the Strategic Framework for Water Services which has been approved by the cabinet. This provides a comprehensive implementation framework for the subsequent 10 years. Under this framework the Department of Water Affairs shifted its functions, away from being a provider and towards a regulator involving the provision of support for the different implementation agents. This involved delegating more autonomy and responsibility for implementation to the country's districts and municipalities, especially with regard to the activities performed by the WSAs and the WSPs. These changes had a drastic impact on the new functions to be performed by the districts and municipalities, and correspondingly on the skills that people require to perform their jobs effectively. As we will see in the next section this has created a situation of a shortage of capacity in the sector and this is beginning to have a negative impact on service delivery.

There are two other policy documents which are likely to influence the shape of developments in the water sector, the first is a new integrated water strategy which is about improving partnerships between central and local governments, as well as between the public and private sector. The second more recent strategy proposes that providers and delivery agents should place more emphasis on the environment and how to ensure that water services become more environmentally sustainable over the long term. Once again both of these strategies will have serious implications for those working in the sector, including the need for new management skills to facilitate new working relationships between partners, and more advanced technological skills to implement environmentally friendly practices in the workplace.

Economic drivers are having an equally important impact on the sector. The large scale construction boom, including that associated with the continued house-building and infrastructures associated with the 2010 World Cup, is having a large direct impact on the water and sanitation sector. This large demand has sucked in personal and professionals to work on the large scale infrastructure projects. As a consequence of these developments the local municipalities are increasingly unable to match the salaries and benefits paid by the private sector to recruit engineers and other technical staff. Indeed, there is a general recognition that the private sector will continue to outstrip the supply, with an estimated 4000 additional professional engineers needed for infrastructure projects over the next couple of years.

A final factor influencing the sector has been the HIV/AIDs epidemic. According to statistics collected a in a number of local authorities around 30% of the staff have been displaced due to illness or death. It is difficult to identify the precise numbers that have been infected, but there is no doubt that this infection is having a negative impact on capacity levels. Another equally significant social factor concerns the influence of the employment equity legislation and the fact that older, more experienced and skilled personal are retiring from the sector and little succession planning has taken place to deal with the significant drain of skills and experience from the sector.

Implications for employment and skills

There are a number of significant implications from the developments analysed above. There is no doubt that there is a large demand for different types of professionals to work in the water and sanitation sector, both in relation to skills at all levels, and across all occupations. A number of different studies have helped quantify the precise effect of this shortage, particularly in terms of identifying those occupations where it is difficult to find suitable people. One of the most significant shortages is for professional engineers, consequently companies are unable to recruit people with the desired attributes or qualities. However, at the same-time there a significant number of engineers coming out of the education system, some of whom are unable to find employment. The apparent contradiction in demand and supply occurs due to the fact that many engineering graduates in South Africa lack the appropriate employability skills.

Beside the shortages of engineers there is a large demand for managers, HR managers with an industrial relations background and legislators. According to predictions undertaken recently the future demand for human resources will tend to focus upon managers and semi-skilled personnel, as opposed to engineers. Part of the explanation is that the large number of future infrastructure projects will rely on semi-skilled personal and will require mangers to oversee such operations. However, what is more significant is the fact that there are 8000 vacant positions for legislators at the municipal or district level. Clearly, with the lack of such professional people, the Water Service Administrators or Water Service Providers will have difficulty in interpreting national legislation or determining how to implement the new strategic framework for the sector, all of which will further impede the effective delivery of services at the decentralised levels. The need for HR managers with industrial relations backgrounds might appear to confirm that municipalities and districts are looking at how to improve the performance of their workforce, but it is more a response to the growing strikes and industrial unrests at the decentralised levels due to poor pay and working conditions.

Obviously, the nature and extent of the skills shortage will vary from geographical area to geographical area, but the important question is to what extent are education and training providers responding to the changing nature of these demands. One analysis recently sponsored by DFID sheds some light on this situation. The government has invested a considerable amount of resources in infrastructure in order to help expand enrolment levels in degree programmes. For instance, in 2003 only around 15% of students enrolled in accountancy programmes leading to degree level or higher qualifications, but by 2007 this figure had risen to nearly 70%. Similar rises can be observed for people studying civil engineering and electrical engineering, all subject areas that have an identified skill shortage in the sector. In absolute terms the enrolment levels for African students have increased in programmes that correspond to high demand in the water sector, especially for accounting, civil engineering and public administration. However, enrolment levels remain very low for women. Nevertheless, what is more worrying is the fact that the numbers obtaining degrees or level qualifications in key subject areas has increased, but this has occurred at a much slower rate than the rise in enrolment levels, rising serious questions about the efficacy of the present system. Many critics also argue that the low pass rates can be explained by the fact that many universities have lowered their entry requirements in order to raise enrolment levels.

With regard to non-formal training the government is very committed to raising the skill levels in the sector and progress is being made by the different government SETAs to address shortages in the sector. However, much of the existing provision is very reactive in nature and is responding to pieces of legislation, such as the Municipalities Finance Act, instead of becoming more strategic in nature and helping to build the longer capacity of those engaged in water administration and provision. Under the present scenario it would appear that there are not enough skilled people to meet the sector’s requirements. This is made worse by the fact that the private sector is able to pay higher rates than can be offered by municipalities and districts. The only recourse left open to local authorities and municipalities is to employ people who are not qualified to perform their jobs. A recent report by DFID confirmed that a significant proportion of posts were being filled by people who were not qualified to do the job.

Another related problem facing the sector is the lack of institutional capacity at the district and municipality level and the general failure to put in place the necessary systems and procedures to enable people to carry out their jobs in an effective manner. It is very much like a chicken or egg situation in which the municipalities and districts are unable attract the appropriate skilled personal due to the simple fact that they don't have the necessary systems and human resource practices to attract them, and at the same-time they lack the necessary qualified personal to develop such systems. Clearly, the government must do something to break this circle and improve capacity, both at the human and institutional levels.

Challenges and responses facing the sector

The water and sanitation sector in South Africa is very complex. There is no doubt that the country has comprehensive legislation and a coherent framework that is comparable to most developed countries in the world. However, it is questionable whether the structures exist to support implementation and many of the problems stem from the legacies of apartheid, especially with regard to the negative impact on the capacity of public institutions at the decentralised levels. As a consequence those institutions involved in the administration and delivery of water services are unable to attract high calibre professionals, and in turn this low level of human resource development prevents any capacity building from taking place. The government is aware of these problems and has invested a considerable amount of resources to improve human capacity levels, including increased enrolment levels in targeted subjects at the formal education system and support for skill upgrading of those already in the workplace.

There is no doubt that improved service delivery can only be achieved through a combination of support for institutional building and continued investments in human resource development. This will help ensure that appropriate institutional structures exist and that the necessary systems and procedures are in place to support effective service delivery, and provide people with the skills to support the continual development of such systems. However, this must be accompanied by measures for improved co-operative governance to ensure that civil servants perform their functions in line with specified job descriptions, that municipalities deliver services in accordance with their legal mandates, and in doing so ensure public resources are utilised for their intended purposes. The failure to adhere to such principals of cooperative governance will result in the country ending up in the dilemma where the lack of institutional building prevents human resource development from taking place and lack of human resource development prevents institutional building.

The National Capacity Building Framework for Local Government can help resolve this chicken or egg situation facing the sector, improving their capacity to deliver services that are sustainable. However, it must be remembered that the Capacity Building Framework is only in the early stages of implementation and critics argue that a number of serious systemic barriers continue to exist. Moreover, unless these systemic problems are addressed, it will be impossible to build capacity and improve service delivery.

Case Study 4: Retail Sector – Singapore

The Characteristics of the Sector

The retail sector in Singapore is a sub-sector within the service industry. It is diverse and dominated by small firms (i.e. less than 10 employees). The sector employs a wide range of occupations such as packers, checkout staff, sales, store supervisors, merchandisers, and operations managers. As a key sector of the Singaporean economy, the retail sector employed some 6.2% of the total workforce (or around 109,000 people) in 2007. The retail sector thus contributes around S$3.5 billion (or around 2%) of Singapore's annual gross domestic product (GDP).

Of the 19,700 retail establishments, 90% are small firms, though they account for only 60% of the total employment in the retail sector. The larger establishments which are dominated by the chained department stores, supermarkets, fashion and garment retail outlets and furniture retailing account for 40% of employment in the sector.

There are a number of labour force characteristics that create specific challenges for human resource development in the retail sector. For example, around 1 in 7 employees in the retail sector work part-time. This is twice as numerous as the service industry as a whole. The majority of the workforce is in sales or service jobs and many of these workers, around 80%, have only secondary or below secondary education. Skills gaps are a persistent feature amongst this labour force that also suffers from high turnover. As a result, more than any other sub-sector within the service industry, the retail sector requires lots of training in order to plug the skills gaps and to ensure new entrants into the sector have sufficient basic and job-specific skills to do their jobs.

The Development of the Sector

There are three main business challenges that are driving future development as well as influencing skills and training policy in the sector. The first challenge is due to increased business competition and rising operating costs. The retail sector in Singapore has a significant external focus. For example, the retail sector supports the tourism industry. As a highly developed city state, Singapore's shops and malls form part of the local attractions brining in huge amounts of foreign earnings. Thus, the growth challenge of the retail sector is always framed within the discussion of globalisation, meaning that the retail sector has to be more competitive than their perceived competitors, e.g. Hong Kong, Bangkok and increasingly Chinese cities such as Shanghai. Price is always a factor. However, as a small country short of land, containing cost is not easy. Instead, much of the recent emphasis on retail competitiveness comes from providing 'quality service'. This is one area where training can have a huge impact.

Changing consumption patterns have also been influencing the development of the sector. Recent research in Singapore suggests that local Singaporeans are increasingly spending more abroad (referred to as the leakage) relative to their spending at home. This represents a loss of revenue for the industry. At the same time, the average tourist consumption in Singapore has dropped by 17% in the last 10 years. There is no reliable analysis of the reasons behind these trends, though it is probably related to the development of similar higher-end retail in other Asian cities. However, the problem represents a significant challenge for the retail sector as a whole.

The Singapore Government has recently identified the need to improve the sector's efficiency. It learned that its retail sector is only half as productive as the retail sectors in the USA, Hong Kong and Britain when the value-added per worker figures are compared. Four main strategies have been proposed to enhance efficiency: (a) establishing research; (b) increasing innovation; (c) raising standards and professionalism; and (d) enhancing human resource investment and practices.

Factors Influencing Change

There are a couple of important factors that are responsible for changes in the human resource development system within which training for the retail sector is a part. The first is the state-led approach to economic development in Singapore. This means that the skills content of the workforce is a key policy instrument to achieving economic objectives. Within this framework, vocational training is sub-ordinate to lead economic agencies such as the Economic Development Board (EDB) and the Ministry of Trade and Industry (MTI). These lead agencies spearhead the growth process, especially in relation to inward investment. The volume and types of inward investment in turn significantly influence the formation of the skills policy in Singapore.

The second factor is the new workforce development system that was established in the last 7 years under the leadership of the Workforce Development Agency (WDA). This new system is a comprehensive training system for all sectoral training in Singapore, including that for the retail sector. The WDA is tasked to deliver the necessary skills training for achieving the macro objectives.

The next section therefore explains how retail training is driven by the wider WDA sectoral training system.

Employment and Skills Implications

The previous Singapore vocational training and education (VET) system was primarily driven by a levy called the Skills Development Fund (SDF) which in effect was a tax on low-skilled employment. The idea was that if an employer embarked upon using employees who earned low wages, S$1,200 a month was used as a proxy for low-skilled, then they would have pay a SDF levy. The levy then formed a resource for all sorts of VET training with variable proportions of government subsidies. The more important or needed skills would get a higher rate of government subsidies, even up to 90%. In principle, the SDF would benefit retail sector training because of the high proportions of low-skilled workers with relatively low levels of education. However, this did not turn out to be the case, as much of the SDF training was not tailored specifically to any particular sector. Employers are not usually all that keen on general training.

Furthermore, the SDF framework was found to be passive in the sense that training activities would only take place if the employer wanted it. In other words, the government did not have an effective means to push for a particular level of training activities, and without which it was also hard to assess whether training was meeting employers' needs, or whether the training content was appropriate. As a result, the SDF operated with a significant level of surplus over the years.

In 2003, soon after the previous Asian financial crisis, the Economic Review Committee, led by the Prime Minister, launched a top level strategic review in order to steer the Singaporean economy towards a different path, which previously had relied heavily on manufacturing. In the face of competition from China and other developing countries, the heavy reliance on manufacturing was deemed to be too narrow to be sustainable. A number of strategic or growth sectors were identified and with them there was an increased emphasis on the internal economy. The criticism was that the previous reliance on manufacturing and exports meant that the home-grown enterprises became weak vis-à-vis multinational corporations. The internal economy was consequently too small to provide another dimension of safety when the external economy experiences difficulties, e.g. SARS led the tourist industry to a complete stop. The new emphasis on the internal economy meant that one of the key areas for development was the expansion of the retail and service sectors at home.

The Review led to huge changes and reform within the VET sector, especially for those industries identified for future expansion. Key to the reform was the construction of a Continuing Education and Training (CET) Master Plan. It had four elements which led to the current system of VET. The first change was the adoption of a formal competency-based VET system that is sectorally oriented. This changed the nature of the previously SDF-driven system which was primarily concerned with general skills and basic education. The second reform established that each sector is driven by a number of CET Centres which carry out a wide range of sectoral activities, ranging from initial counselling, matching, recruitment for training, training, assessment, certification and after-training monitoring for impact and progress assessments. The third reform established a comprehensive competence-based VET qualification framework, called the Workforce Skills Qualifications (WSQ) System, supporting the training and certification of the CET centres which took 5 years to complete. The fourth reform was designed to increase the level of training activities and the funding mechanism needed to change. Instead of using the 'punitive' levy such as the SDF, a separate Lifelong Learning Endowment Fund (LLEF) was created. The LLEF reached S$3 billion in 2008. The availability of the LLEF means that most of the WSQ training is 90% subsidised and many are 100%. In addition, there is an absentee payroll which pays for the wages of trainees when they are not at work.

As mentioned, the retail sector is dominated by small firms which found it hard to embark upon training and skills upgrading because of their size and lack of access to necessary resources. The new system provides a huge incentive for both employers and employees to come for training. After all, the training is specifically geared to the skills needs of the retail sector with qualifications awarded to reward the learners[2].

What changed from the previously passive system is the way that the CET system is put together. For the retail sector, there are a few CET centres supporting the training for retail workers. A business approach is adopted to ensure that the CET centres are pro-active in finding the learners, engaging the employers with their skills needs and monitoring the outcomes. What this means is that a CET centre is a business unit with an income stream which is tied to the number of successful learners and the level of learning (WSQ qualifications). A CET centre will do well in business terms if the learners keep coming back for more/higher learning and if the employers are happy with the result of training and send even more employees to the CET centres.

Some CET centres have become reliable recruitment agencies for employers, so that they form a virtual one-stop shop support which is also known as the Place and Train model. This practice embeds training automatically within the context of job matching. A lot of the employers, especially those in the high turnover sector such as retail, have found this practice very useful and have worked very closely with the CET centres. The end result is a pro-active approach to training and higher levels of training activities.

Should a learner drop out, fail to achieve a qualification or fail to hold down a retail job for less than 6 months, the normal rule is that the government will not pay the CET centre. The loss of revenue is exactly equal to the market fees charged. So in effect, the government is paying a market rate for a successful training place. One can see that there is a built-in mechanism to make CET centres the linchpin of success with a high level of financial backing from the government.

There is also a specific Industry Skills Training Council (ISTC) for each sector. The ISTC looks after the strategic skills needs and liaises closely with employers. The Retail ISTC has a strategic plan which underpins the work of the CET centres. In brief, the strategic plan identifies training priorities and implements retail WSQ courses at various occupational levels. It establishes a generic set of service skills standards and benchmarks to raise the professionalism of the retail industry. It develops and implements a comprehensive engagement and leadership development strategy for retail management. It develops a coherent strategy to address the needs of SMEs and to increase the training participation rate. It develops strategies to ensure non-English speaking workers and those with low literacy levels can participate in retail WSQ training. It establishes and implements capability development measures to support the quality delivery of retail WSQ courses for in-house and external training providers. It promotes participation in WDA's Train-the-Trainer programmes. It develops best practices and provides benchmark examples of good practice in training and human resource management. It develops and implements a comprehensive outreach, communication and promotion strategy for the Retail CET Framework and courses. It finally develops a robust evaluation tool to assess and review the outcomes of retail WSQ training and delivery.

Although the CET system was launched in 2003, it was not fully functioning until 2007-2008 because of the needs to fully map out the competence-based Retail WSQ. However, looking at the progress of some of the CET centres for the retail sector, some interesting achievements can be noted. For example, within the first year of operation, the Singapore Institute of Retail Studies (SIRS), one of the retail CET centres, secured 300 retail organisations to take part in customised training for their staff. These covered very large retail employers as well as small enterprises such as flower stores and boutique garment shops. By 2007, 1 in 20 (or 6,500) retail workers had been trained by SIRS. The target is to achieve at least one third of the total retail workforce.

[2] Note that the discussion here applies to the retail sector as well as to other sectors, as the CET centres are governed by the same statutory framework, irrespective of their origins, e.g. a private sector training provider, a statutory board or a tertiary educational institution. There are currently 42 CET centres.

Another CET centre, the Retail Academy of Singapore, found new ways of providing training to the small shops located in shopping malls throughout the country. These small shops are hard to reach, mainly because the shops are looked after by often one and sometime two employees. The Retail Academy sends in trainers to each shopping mall early in the morning to do an hour of training before the shops open for business, using the shopping mall as the training centre. This has become very popular with many shopping mall owners who are concerned with the lack of training opportunities for the small shops, and therefore losing out to the malls with large employers where training opportunities are better.

Another significant achievement of retail training under the CET system is the expansion of VET training going beyond the front line staff. The CET training provision also covers training/education at the professional, managerial, executive and technical levels (also known as PMET training). Under the previous system this was absent.

Obstacles and Ways Forward for the Sector

The CET system has some particular challenges to overcome. Some of these are rather ironic, as they are actually a consequence of Singapore's success. For example, most workers in Singapore are very familiar with VET training because of repeated waves of different VET initiatives since the late 1970s. Some employers and workers have been reported as confused by all the changes and are finding it hard to appreciate the differences between the new system and the old. This of course may not enhance the decision making ability amongst some workers and employers. So there is a problem of policy fatigue.

Secondly, the newly established SWQ qualifications system is still recent. Most employers in the retail sector are not particularly aware of specific VET qualifications for their sector. Hence, there is much work to be done in order to cultivate the understanding of the qualifications in the retail sector.

Thirdly, and this applies to the retail sector and other sectors where migrant workers may be present. The funding rules for CET training exclude workers who are on work permits. Of the population of 4.98 million in Singapore in 2009, only 3.77 million are either citizens or permanent residents. Hence, there are a lot of temporary/migrant workers who are not captured by the system. Many of these migrant workers have relatively low education, and they work in the retail, service and construction sectors. The Singapore Government does recognise that there is a case to be made for training the migrant workers in order to benefit the economy as a whole. However, the high levels of subsidies mean that politically it is a difficult decision to make.

Case Study 5: Tourism – Egypt

The characteristics of the sector

Over the past 20 years the tourism industry in Egypt has seen remarkable growth, growing faster than any other industry in Egypt and growing faster than tourism worldwide. Tourism in Egypt now accounts for 15% of Gross Domestic Product (GDP), accounts for the greatest amount of foreign currency earned of any industry with 23% of exports and accounts for 13% of employment.[3]

The world's modern tourism industry was born in Egypt during the second half of the nineteenth century. For the subsequent 150 years, tourism revolved around visiting Egypt's one-of-a-kind cultural monuments. Recently this has been shifting, with tourism in Egypt becoming more focused on leisure and resort tourism based around Egypt's Red Sea coast. Tourism in Egypt is now split between these two destinations, with an ever increasing share going towards leisure over cultural destinations.

The tourism industry, as defined by Egypt, is comprised of two official sectors. The first sector consists of Hotels and Restaurants; the second sector consists of Tour Agents/Agencies, Tourist

[3] World Tourism Council. Travel and Tourism Economic Impact Egypt 2009

Commodities/Bazaars and Diving/Water Sports. The transportation sector: air, road, rail and water; is also significantly impacted. Because of the wide range of goods and services involved, traditional methods of enumeration often understate the impact of tourism. This can be seen in the GDP numbers with the official tourism sector industry's impact on Egyptian GDP as 8% of GDP while the impact of tourism across all sectors is 15% of GDP. This is because tourists touch all sectors of the economy, also consuming significant goods and services outside of the two official tourism sectors. Consequently, when considering the impact of tourism on the economy, it is necessary to look at the complete picture, not just the two tourism sectors; this holds true for the constraints on tourism as well.

The Egyptian tourism industry has seen remarkable growth this decade, growing from 5.1 million foreign arrivals in 2000 to 10.2 million foreign arrivals in 2008. The majority are Europeans with 70% originating from Europe, Arab nations contributed 18% with the remaining 22% from the rest of the world. The tourism industry is growing by other measures as well. The number of hotels has increased reaching almost 200,000 total rooms, which are some of the most competitively priced in the region. The number of tour agencies/agents has been increasing as well as the number of tour guides. The numbers of restaurants, tourist bazaars and diving centres have all also increased.

The main constraints on tourism's growth have been the low level of human resource development (HRD) in Egypt and the inadequate state of infrastructure. These constraints manifest themselves as poor service delivery within service businesses such as hotels, restaurants and shops and poor transportation facilities making travel difficult.

The development of the sector

This significant shift in tourism in Egypt, increasingly to leisure and resort destinations on the Red Sea coast, away from cultural destinations has not happened accidentally. On the supply side it has been driven by continued liberalization of regulations by the government and targeted government development support. While tourism has always been an industry in Egypt, it is policy changes since the 1980s that have allowed the industry to grow significantly. Previously Egyptian industries had been nationalized and remained almost under strict government control until the 1970's when the economy was slightly opened. It continued to gradually open but it was not until the 1989 passing of Law No. 230/1989 (allowing full foreign ownership in tourism, guarantees against expropriations and against the deprivation of operational licences) that tourism began to significantly grow.

The Egyptian government continued to liberalize the Tourism industry throughout the 1990s with the passage of Laws No. 7/1991, No. 38/1994 and No. 8/1997 that allowed for the establishment of the Tourism Development Authority, comprehensive plan for tourism development including the coasts, unrestricted repatriation of profits and capital, protection of brand names and intellectual property, and legal and fiscal privileges for tourism businesses with defined minimum standards.[4] With every successive act of liberalization, there has been a responding increase in both tourist arrivals and investment in the tourism industry. It is these policy changes that have been by far the most important factor affecting tourism in Egypt.

On the demand side, there has been continued strong dominance of Western Europeans as the primary foreign tourists entering Egypt. Additionally there has been significantly increasing demand from emerging markets especially Eastern Europe and the Gulf countries. The high levels of demand from Europe are due to Egypt's good weather during the winter, the proximity of Egypt to Europe, European's familiarity with the Mediterranean region, a long-running historical interest in Egyptian culture and most significantly, the relative weakening of the Egyptian Pound against the Euro, which has made Egypt increasingly affordable compared to other Mediterranean destinations.

Factors influencing change

[4] Thomas Richter, Christian Steiner. Sectoral Transformations in Neo-patrimonial Rentier States

The continued development and rise to prominence of the Tourism industry in Egypt has been a direct result of supply side government policies manifested as a series of removals of constraints on the industry. Previously, Egypt had been maintaining an inefficient socialist system through reliance on significant foreign exchange from the Oil and Gas industry and remittances from migrant workers abroad. However, with the crash in world oil process, the subsequent reduction in Egyptian migrant workers in the Gulf countries, and policy liberalization schemes tied to foreign assistance, Egypt was forced to move to a more market oriented economy. In response the government has undertaken a planned and purposeful liberalization of their economy with the tourism industry in the forefront as the most liberalized industry. Tourism is now seen as Egypt's key route to increasing foreign exchange and it is these policy changes that have had, and continue to have, by far the largest direct impact on the Tourism industry. The direction and extent to which the tourism industry will continue to grow in Egypt will be largely influenced by future government policy decisions.

In 2006 the government began the 5-year Tourism Sector Development Plan. This plan supports the up-grading of the quality of tourism services, the introduction of quality standards, the strengthening of marketing abroad, product diversification (beaches, diving, safari, golf, shopping, conferences, medical, retirement) and encourages US$1.4bn in private investment in the tourism industry. These plans have been quantified as goals to increase the number of tourists to 14 million, increase the number of tourist nights to 140 million, increase capacity by 15,000 rooms annually, increase the average nights per tourist to 12, and create 200,000 new jobs yearly. The next step is the National Sustainable Tourism Plan (NSTP) which guides the industry through 2022 during which time the government is planning to continue liberalized policies and grow tourism to between 25 and 30 million foreign visitors a year.

Egypt has a cultural legacy that assures a constant flow of tourism money however the government now sees cultural tourism as 'maxed-out' without significant room left to grow. This has led to the diversification of tourism which is now split between cultural tourism and leisure tourism. The Egyptian government is continuing to push this diversification through further liberalization of the industry and the development of policies to support another two new tourism destinations: first, the expansion of long-term tourism through the development of second home and retirement communities on the Mediterranean coast, and second, building non-conventional tourism such as adventure, religious and medical tourism.

Other than regulatory change the government is influencing the sector through the sale of land to developers at very low prices by identifying land along the coasts and in select desert areas and then selling that land to developers at highly discounted rates. Upon completion of the sale the value of the land jumps by around 100%, this land is then used as collateral for a loan to develop the property. In addition the government has instituted tax holidays for tourism development. Coupled with the policy liberalization related to foreign ownership and repatriation of profits, this has led to significant growth in the leisure destinations. Investment in the tourism sector is being led by domestic investors with considerable foreign investment coming from the Gulf States.

Leisure tourism, centred on Egypt's Red Sea coast has become the primary destination for foreign arrivals. This has been a huge boost to the tourism industry and significantly diversified the sector. However, the government's belief that the cultural destinations are 'maxed-out' and primary promotion of leisure tourism can be questioned. The reality is probably not that cultural tourism is 'maxed-out' but that the constraints facing those cultural destinations are harder to overcome, than the promotion of new leisure destinations. By far the main constraint on tourism, especially to cultural destinations, is the lack of human resource development resulting in service industries such as travel, food, lodging, retail, where a significant proportion of workers, including management, are not 'service minded'. This further leads to the situation where there are unfilled jobs and high unemployment simultaneously since the necessary skills are hard to find in the labour force. Leisure tourism has so far been more protected from these constraints as the majority of tourists now come to Egypt as part of a leisure tour package where often the tourists do not leave the cocoon of the resort and tour operators.

The promotion of the two new nodes of tourism in Egypt, long-term tourism through second homes and retirees, and non-traditional tourism will be affected by these constraints more severely than leisure tourism. Consequently we must ask the why it is assumed that the constraints facing the cultural destinations are assumed to not face theses two new destinations. Egypt's Mediterranean coast has long been underserved by transportation infrastructure which is not reliable or user-friendly for foreigners. Under these conditions it is hard to foresee significant demand from long-term foreign tourists until this is addressed. Long-term tourists will also be much more in contact with all sectors of the Egyptian economy where HRD and service orientation have long been significant constraints. Any efforts to upgrade skills in the tourism industry alone will not improve these prospects. The second new node under development, non-traditional tourism will also be highly dependent on transportation and the greater Egyptian service economy. Under current conditions it will also be highly constrained in growth prospects. To continue to grow tourism in cultural, long-term and non-traditional areas, the government must undertake significant country-wide skills upgrading measures.

The World Economic Forum's 2008 Travel and Tourism Competitiveness Report highlighted this noting that substandard quality of service was one of the main factors discouraging travellers from returning to Egypt and ranked Egypt 81st for human resources. Development of HRD in Egypt has long been supply driven with government institutions producing graduates with skills disconnected from the real needs of employers. In addition, the formalized nature of Egyptian bureaucracy and society drives students away from courses that can produce employable skills and towards those that award the 'highest' certificate available. Traditionally employment and life outcomes had been determined by the level of certificate obtained, with certificates in technical and vocational areas seen as less desirable even though those skills are currently in high demand. 80% of new, unemployed job-seekers in Egypt hold University degrees. The Egyptian Minister of Tourism, Zoheir Garranah, has also acknowledged this is a serious problem for Egypt's tourism industry admitting that there is an overabundance of graduates with management degrees and a severe shortage of those in trained technical labour.

When asked how to best improve tourist spending in Egypt, Minister Garranah simply responded, "Through better service". The government has realized that the HRD gap is one of the most serious constraints facing growth in the industry and is attempting to raise the quality and productivity of the country's human resources. The government is addressing this by reforming the technical and vocational training system through the joint Egypt-European Union TVET Reform Programme. The objective of the TVET Reform Programme is to improve the competitiveness of enterprises and support the development of human and institutional capacities by developing Public-Private Partnerships (ETPs) in which business and TVET providers work together to bridge the gap between the demand and supply of skilled labour in Egypt. This programme is a significant development as it goes around vocational schools that have not been demand orientated. However, the implementation is fragmented, led by the Ministry of Trade and Industry, with limited buy-in from other key ministries such as the Ministries of Manpower, Education and Higher Education. Furthermore there is still incomplete coordination between the sectors and the local implementation of skills training or upgrading programmes. It remains to be seen if this fragmented approach will have a significant impact on HRD and skills. This issue is compounded by the fact that half of all tourism dollars are spent outside of the tourism industry. Any skills and capacity upgrading within the industry will only impact half of those interactions. What is needed is a greater, country-wide service industries awareness raising initiative. The government has recognized this and is beginning limited programmes, such as the one with AMIDEAST to provide basic English language training to 3,000 workers dealing with foreign travellers.

Employment and skills implications

The implication for skills and employment depends on which of the industry's sectors, sub-sectors or other affected areas you are talking about. The diversified nature of the industry means that it is impossible to make generalisations about the overall industry. The skills and employment implications will depend on whether you are talking about cultural tourism, Red Sea resort tourism, Mediterranean long-term tourism or non-traditional tourism. For cultural destinations tourism growth is flat, so these destinations will not require significant numbers of new employees, however they will require significant investment in upgrading the 'service skills' of those engaged. Cultural destinations tend to involve more interactions with other sectors of the Egyptian economy and will require a broader base of HRD upgrading, improved technical skills in all service industries (in and out of the tourism sector) and the transportation sector.

In contrast, the Red Sea resort destinations are expecting continued growth in the near future and will require additional employees at all levels to staff the new and still expanding facilities. For these destinations, tourists tend to be more wrapped-up in package deals and have less interactions with other areas of the economy therefore employment will be expanding throughout all skill levels though largely limited to the specific tourism industries.

Finally, the two new tourism destinations, long-term and non-traditional tourism are still in their infant stages and will require continued nurturing and skills development from the government. They will both face similar issues as cultural destinations and will require significant new skilled vocational workers as the infrastructure expands. These areas have the potential to have the broadest impact on all sectors of the Egyptian economy and the broadest impact on employment, from construction, to retail, to transportation, to medicine, to banking, etc. Consequently, a nationwide skills development programme is the only mechanism through which there will be a sufficient supply of skilled workers here.

Obstacles and ways forward for the sector

This initial analysis has provided a picture of the main constraints and obstacles facing future development and employment in the tourism industry. Overall, the government has a vision for the sectors in the National Sustainable Tourism Plan through 2022. This is welcomed since it gives direction for future activities, but the problem lies in the actual implementation. The individual ministries are not coordinated in their approaches to nationwide skills development which is crucial to grow the tourism industry. Therefore, under the present system the country's Ministry of Tourism can continue to create the vision for the sector at the national level, but it does not have the capability to overcome the current and future HRD constraints. Moreover, when skills development initiatives are implemented by ministries they tend to be supply sided and provide skilled workers to the labour market without properly taking in to account the current needs of the industries that are looking for workers.

Despite the above difficulties the sector continues to grow and offer opportunities for bringing in significant levels of foreign income. In part this reflects the growing size of the country's leisure industry and the relative weakness of the Egyptian Pound. Nevertheless, the government must start to think of concrete ways to overcome the existing HRD obstacles and encourage the implementation of a more coordinated demand-oriented nationwide skills development programme. Given the present institutional structures and political realities this may prove difficult. Nevertheless, one of the avenues for a sector based approach could centre around the TVET Reform Programme which is supporting the creation of the ETPs which are attempting to establish those necessary links between employers and skills development institutions based on sectors, including tourism. Success however would depend on the coordinated implementation of the government's vision of HRD, including not just the implementation of the current TVET Reform Programme but of more buy-in from all levels of government and ministries, not just the Ministry of Trade and Industry.

Case Study: 6 Construction – United Kingdom

The Characteristics of the Sector

The construction industry is one of the largest economic sectors in the UK. Until the recent financial/credit crisis, the construction sector had experienced continuous growth in the post-war years, mainly due to the shortage of residential housing and the rising demand for commercial premises. In 2008, the output of the industry was worth £123.24 billion which represented about 8% of the UK economic output. Over two million people are now employed in the industry – of which, 1.7 million workers are directly employed in the construction and the sub-contracting sectors. The remaining 320,000 are employed in the professional and support services sectors.

The majority of the construction enterprises are small, with 90% of them employing less than 10 people or no employees at all. There is also a significant number of self-employed workers, some 767,000 workers are self-employed as sub-contractors which is 38% of all sub-contracting employment in the UK. Self-employment is particularly prevalent in the craft trades, e.g. wood works, brick-laying, plastering, painting and decorating. In terms of occupation, manual workers are the largest group, representing 60% of the total workforce. The remaining 40% cover non-manual, managerial, technical and professional employees.

Another characteristic of the construction industry is the significant presence of migrant workers. This group of workers makes up around 6% of the workforce. However, in certain areas such as London, workers coming from outside the UK represent a significant proportion of the workforce at 26%. In general, the UK suffers from an inadequate supply of trades skills (e.g. electricians, plumbers, etc.). To meet this need many experienced trades workers from Eastern Europe enter the construction workforce via the Highly Skilled Migrants Programme.

The Development of the Sector

Following the recent financial/credit crisis, starting in 2008, construction activities began to decline across the four main sub-sectors of the construction industry, namely: residential house building, infrastructure, industrial construction and commercial construction. In 2009, the decline became a double-digit contraction, especially in residential house building and commercial construction. The industry experienced a less dramatic decline in infrastructure construction mainly due to on-going construction work for schools, hospitals and big public projects such as the London Olympics. The negative impact of the current economic crisis is expected to continue till 2012. But ironically, the downturn has provided an unexpected relief to the on-going skills shortages which had constrained the growth of the construction industry in the last 15 years or so.

Against this macro backdrop, there are also other factors which may be relevant to the future development of the construction industry. For example, the UK Government is committed to solving the residential housing shortages, especially in the case of affordable housing, which in the UK is also known as social housing. Some studies have suggested that there is likely to be a divergence between the social housing market and the private market. The social housing sector is already showing signs of recovery recently, as projects had been committed to prior to the crisis. The private housing market is expected to recover much later.

Factors Influencing Change

The current economic crisis will eventually blow over. So it is important to look at the fundamental issues that are the key drivers influencing changes in the sector. In the United Kingdom the sector bodies are the Sector Skills Councils. According to ConstructionSkills, the Sector Skills Council for the construction industry, the most significant drivers for the industry are now mostly skills related.

These skills related drivers touch many aspects of the UK construction sector. Recent experience has shown that the current skills profile is likely to be a constraint to future expansion of the construction industry and its performance. Skills shortages are likely to cover all occupations ranging from craft through to professional, management and leadership occupations. Another factor in this sector is the tendency for the industry to adopt low-skilled approaches which in turn leads to barriers to adopting new technology and to achieving productivity improvement.

There are several needs within the sector. There is the need to adopt a more client-driven business model which will in turn demand new skills and knowledge to support that demand. There is also the need to respond effectively to emerging challenges such as energy-efficient housing and the UK government's Sustainable Development Strategy.

The UK construction industry needs to achieve a balance between 'flexibility' (as provided by the significant numbers of self-employed workers) in the industry and the need to increase investment in skills and qualifications. This can be seen in the fact that the achievement of National Vocational Qualifications (NVQ) levels 2 and 3 is still below expectation.

Furthermore, recruitment into the industry remains an on-going problem. The industry needs to consider new ways to recruit new entrants into the industry. The reliance on migrant workers will only delay finding a long-term solution to skills shortages. Connected to this shortage of qualified recruits is the persistent shortages of employers who are willing to provide training placements which have led to limited opportunities for college trainees to practise their skills.

As many of the above drivers are skills related, the following sections will focus on how skills are delivered in the UK construction sector.

Employment and Skills Implications

In the UK context, sectoral training in the construction industry should be understood within the wider national system of 'Sector Skills Councils' (SSCs). Since 2002, a UK-wide system of 25 SSCs has been established to oversee training and skills development activities across the different industries, covering about 85% of the workforce. ConstructionSkills is one of these 25 SSCs.

All SSCs have four mandatory strategic objectives:

1) To assess and address issues concerning skills gaps and skills shortages;
2) To enhance organisational performance through skills;
3) To improve training and learning opportunities for all;
4) To improve skills supply through apprenticeships, higher education and occupational standards.

In addition, all SSCs are mandated to be employer-led such that they are expected to have 'key employers' appointed to their boards as directors and working closely with employers' bodies to identify the relevant issues facing their particular SSCs. By law, the board should also include at least one trade union or worker representative.

Two key strategic documents govern the strategic development of these councils. The first is the Sector Skills Agreement (SSA). The SSA identifies the relevant skills priorities within the sector and how action should be carried out in conjunction with education and training (ET) partners. Using the relevant information from the SSA, an SSC has to draft a second strategic document – known as the Sector Qualifications Strategy (SQS). With an SQS, the council will work closely with the relevant qualification awarding bodies and regulatory agencies the right to develop and establish an appropriate qualification and accreditation framework.

The above is the general framework for all SSCs. However, not all SSCs are at the same stage of development. ConstructionSkills is one of the earliest SSCs to have developed all the key strategies because of its well-established sectoral training structure, inherited from the days of the Industrial Training Boards in the 1960s. By examining the SSA and the SQS, one can get a clear overview of how ConstructionSkills works and where the skills and training priorities are within the construction industry.

The Sector Skills Agreement of Construction Skills

One of the top priorities in the ConstructionSkills' SSA is the need to raise employers' commitments to training and skills investment. To achieve this, the plan is to target areas of industry that have not had a high profile of training activities. From past experience, these areas tend to be associated with the sub-contractors which include the recruitment of migrant workers. The SSA specifically targets major construction projects as useful opportunities to involve both main and sub-contractors in the training process. Thus, many of the ConstructionSkills' activities tend to be project focused. It follows that one of the most important areas for attention is to get agreements with all the stakeholders, ranging from the public sector, industry and education institutions to offer significant training commitments that include their supply chains.

The objectives of the SSA have been translated into four skills challenges for ConstructionSkills with specific interim targets set for 2010. The first skills challenge is to raise training investment amongst small and medium sized (SMEs) construction firms threefold. This is done through a number of routes. The first is to use the Investors in People Standards (which is heavily subsidised by the government) as a framework to help SMEs to align their systems, procedures and practices with organisational performance through appropriate skill investment. The second involves greater training in areas such as management development and leadership training. The third area is to take on the challenge of lifelong learning and support action learning, continuing professional development programmes and more recently, the adoption of the Approved Graduate Training Schemes.

The next challenge is enabling 250,000 construction workers to achieve the NVQ level 2 qualifications[5]. Again, this includes a number of different projects. The first is to expand the existing Qualifying the Workforce initiative in order to cover over one million construction workers. The initiative provides a framework of agreement and licence to practice. Under this agreement, all workers involved have to be qualified to NVQ level 2. Secondly, working with product manufacturers, ConstructionSkills is developing a flexible training and qualification structure for specialist occupations. Some of these go above the level 2 qualifications. Lastly, a special programme has been put in place to enable migrant workers to improve their English. Studies have found that whilst migrant workers are experienced in their occupations, health and safety practices can be compromised because of inadequate English ability.

The third main challenge is to increase recruitment of new entrants to the sector by almost 500,000. In light of the current economic crisis, these figures may have to be revised. However, the underlying problem of persistent skills shortages means that many of the initiatives will be continuing which are vital to supporting the up turn of the construction sector. The relevant initiatives include: (a) Better promotion of career opportunities amongst potential new entrants; (b) Improving apprenticeships completion rates and greater availability of placements; (c) Promoting workforce diversity (e.g. greater representation of women and minorities) through local employment and training projects with the unemployed; (d) Enhancing applications' quality through employers' sponsorship of £1m each year, supporting applicants to achieve construction-related degrees.

The final challenge is improving ConstructionSkills' own capability to support industry priorities. Within this, the area that needs further improvement is skills intelligence. Skills intelligence is the ability of ConstructionSkills to map out the skills profile of the industry which is vital for future strategic operations. This means strengthening ConstructionSkills' own research capability.

The Sector Qualification Strategy of ConstructionSkills

Many of the SSA driven training activities need the support of appropriate qualifications. Hence, improving the qualifications structure for the construction industry is another area of important activities for ConstructionSkills. This has a number of priorities which are mentioned briefly here.

[5] It is important to point out that ConstructionSkills is not a training delivery body but a strategic organisation. Specific training is carried out at local further education colleges, employers' placements and through apprenticeship schemes.

The Construction Qualifications Strategy (CQS) addresses six areas of priorities concerning construction and related qualifications: (a) the development and approval of qualifications, including new ones, e.g. environmentally friendly construction techniques; (b) monitoring the learning provision that are valued by employers; (c) improving linkages with qualifications before entry into the industry; (d) employers' feedback for rationalising qualifications and learning provision; (e) use of qualifications for regulatory practices; (f) workforce trends and forecasting vis-à-vis qualifications needs.

Obstacles and Ways Forward for the Sector

The current economic recession is likely to dampen the training activities in the construction industry as well as ConstructionSkills' ambitions for a little longer. However, as a sectoral training body, ConstructionSkills' achievement is one of the most readily recognised. ConstructionSkills' 'success' is partly due to its long history of sectoral training that had been well established before the arrival of the current SSC system in 2002. So it has a lot of expertise and a well-tried training infrastructure involving both employers and educational establishments. Partly, its success is due to strong support amongst large employers in the industry.

However, it can be seen from the previous discussions that the major skills challenges come from engaging the smaller companies and the vast numbers of 'one-man bands' sub-contractors. Other challenges include the high drop-out rates of apprenticeships and the lack of training placements with employers which is difficult to overcome due to the vast numbers of small firms (under 10 employees). Lastly, to increase training investment, it is important to ensure that both employers and new entrants into the job market understand the value of qualifications within the construction industry. Getting the message across and changing attitudes may take time. Hence, there is still a lot more to do for otherwise a very successful sector training body.

6 Policy implications of the case studies

The penultimate section of the report addresses the main policy implications of our findings by providing a generalisation of the most significant factors influencing approaches to sector development, what implementation experiences can be gained from the different country case studies, and finally how this research can be carried forward.

Factors influencing sector development

From the six country case studies there are a vast range of factors influencing sector development and it is only possible to highlight some of the most important ones. For starters it is useful to clarify sector approaches according to the level of formality, ranging from those that have developed coherent systems with tailor made legislation and long term strategic plans, to those that have partial or no formalised frameworks for supporting case based development. At the one extreme are the developed economies, such as the USA, the UK and Singapore that have identified priority sectors and supported coherent mechanisms for sector planning and implementation. At the other extreme are middle income countries which have partially developed sector based approaches, such as Egypt and Indonesia. Within such countries the decision to focus on a particular sector is often based on comparative advantage, which is often based on natural resource endowment, geographical location or even historical circumstances. It could also be argued that South Africa lies somewhere in between the two extremes since they are able to develop sector based frameworks that are exemplars on international best practice, but in terms of their implementation this is not necessarily the case.

Nevertheless, even within developed countries there are significant differences between the ways in which nations approach sector development. On the one hand in the Anglo Saxon speaking countries such as Britain and the USA the market is primarily used as a vehicle to direct sector based approaches. In contrast in Singapore any sector based approach is led and directed by the state. It is useful to highlight some of the difference between the two contrasting approaches to sector development. In the Anglo Saxon countries government intervention normally occurs when there is a market failure. The examples from the UK and the USA highlight that national governments invested in a particular sector when there was a need to support employment and skills development. This involved the provision of seed money to set-up the Sector Skill Council in the UK and the Partnership Approach in the USA. The rationale behind these approaches is that initial government support can facilitate a successful sector based approach and this will be replicated by the private sector in other locations. However, it is important to note that in the case studies from the UK and the USA there were strong employer representation in both sectors. Moreover, the employer groups in both countries had access to large resources, were able to identify their own needs and work with other development partners to implement change in their sector. Without such strong employer involvement the market or employer-led approach will not necessarily stand a good chance of being sustainable over the long term.

The case of Singapore contrasts with the Anglo Saxon based employer approach, in that the state directs what approaches are used for sector development, including which sectors are given priority and which are not. Moreover, the Singaporean state provides financial incentives to raise skill levels in specific sectors so that individuals can acquire as much training as they require regardless of costs. However, the same individuals are required to pay back the costs of their training if they do not use their skills in the workplace. There are lesson of this state directed approach, especially in terms of identifying sector priorities and in linking skill formation to economic outcomes, but it is questionable whether such approaches can be replicated in other countries.

Within the large middle income countries selected for this study the whole process of sector development needs to be addressed against political change. This is important since the success of most sector based approaches in middle income countries appears to be tied up with this process. In Egypt, Indonesia and South Africa the sector based approaches are strongly influenced by the process of decentralisation and the devolvement of decision making from national to local governments. Within this changing landscape sector based policies in the three countries are now facing a number of common challenges. Perhaps the most significant of these constraints is how to translate sector based policies formulated at the national level into practice at the localised level. The experience of the present research illustrates that this translation of sector policies into practice is not always occurring. Part of the explanation for this situation is that the new roles and responsibilities between national and local government are not necessarily clear, particularly regarding the whole area of delivery, capacity development, revenue generation and funding. Another related challenging facing such middle income countries is the lack of institutional or human capacity to implement sector based policies at the localised level. Once again this results from the new demands being placed on people’s jobs, and corresponding the lack of skills at this level to cope with such changes.

This evidence shows that the characteristics of the state, including the way in which it develops has a strong influence on how a country approaches sector development. At present the research has only pointed to broad differences with regard to how nation states in different parts of the world approach this process. Clearly, more detailed analysis is required to develop a more complex typology of state-sector relationships. However, it is important to realise that this is not an academic exercise. Indeed, only by understanding how a state in a particular context supports state development is it possible to identify how improvements could be made to sector planning or implementation, especially with regard to what tools SECTOR require to support such activities amongst constituents in different parts of the world.

Lessons and implementation experiences

So what lesson can be learnt from the different country case studies? There is no doubt that sector approaches, whether they consist of comprehensive national level policy frameworks or involve small scale initiatives at the localised level , provide a means by which governments at different levels can mobilise resources to support development within a sector, or to ensure that certain sectors receive priority over others.

The lessons are varied and depend on the context in which the sector approach is developed and implemented. That is to say what works in a particular context will not necessarily work effectively in another context. The developed countries are more likely to experience successful implementation with their sector based approaches due to their developed infrastructure and higher level of capacity. However, the case studies from the developed world, as well as those from the middle income countries, can still offer a number of important lessons for the implementation of a successful sector based approach. One of the important messages to emerge from some of our case studies was the importance of having a coherent national policy framework and a vision of where the sector is going. There is no doubt that the water and sanitation sector in South Africa has a clear vision of where it is going. Any sector policy or approach also needs to be constructed in light of developments that are occurring in other sectors. The nature of such a relationship will depend on the individual sector. For instance, in the water and sanitation sector there needs to be synergies with sector policies for housing (public works) and skills.

Within the private sector the linkages between different sectors are equally important. A case in point is the textile sector in Indonesia where there was a need to improve synergies with the country's trade and investment policies, as well as those relating to skills. Examples of good private sector linkages were apparent in Singapore, where explicit linkages were made between the country's macro-economic framework and any policy or approach for sector development. Most countries appear to have such frameworks, but the problem occurs with the actual implementation. This can be attributable to the ambitious nature of a policy and to an issue identified previously, namely the lack of institutional or human capacity at the implementation level.

The whole process of successful implementation is at the heart of any effective sector approach. For the public sector in the developed world, it is easier to establish a relationship between a national body responsible for policy formulation and those supporting implementation. Normally, this relationship is guided by a regulatory framework that defines who does what, when and how. This is normally reinforced by a funding mechanism which encourages implementation agencies to provide public services according to predefined criteria. In contrast, in the developing world the evidence highlighted that the relationship between national and local level bodies is sometimes problematic due to the whole decentralisation process. As mentioned previously, this results in the implementation agencies being given new responsibilities and functions, which in the majority of cases they don't know how to carry out. This is a vital area where support is required, particularly for regulatory mapping to help re-define roles, functions and responsibilities between national planning agencies and those at the implementation level.

Besides sector policies within the public sector it is equally important to highlight a number of implementation lessons from the private sector. Obviously, the state continues to play a significant role in the development of national frameworks for all countries, but there appears to be significant differences between how governments in the developed and developing worlds influence changes at the sector level. For instance, the case studies from the USA and the UK highlighted that national government's provide incentives for social partners, especially employers to behave in certain ways. In contrast the evidence from the middle income countries showed that governments lack the necessary resources to provide such incentives and continue to rely on legislation to indirectly influence the behaviour of social partners. In a number of instances this legislation was introduced to protect workers in that sector, but unfortunately it had a negative impact (as occurred with the labour legislation in South Africa and Indonesia). Clearly, additional work is required to understand what are the most suitable and appropriate ways for encouraging change amongst social partners within a particular sector. Obviously, finance and funding can play an important role in determining how social partners behave, but in other instances it may be more suitable to rely on legislation.

A final point worth noting is the role played by information or knowledge in supporting improved sector based approaches. Not much attention was given to this topic in the present research. Nevertheless, it could be expected that information plays an important part in helping to understand sector development, including the performance of the sector, what interventions are required to remove certain bottle necks and the possible impact of certain interventions. In addition, knowledge can provide constituents with valuable information, such as whether to invest in a particular sector, or information about the potential employment opportunities for working in another sector. Clearly, the issue of knowledge management and dissemination are important areas for further investigation

Research Implications

The findings from this study provide a foundation and highlight the need for further research into comparative sector analysis. Further research would be to develop to a coherent series of typologies to understand regional approaches to sector development around the globe (see table 2). In order to carry forward the present work it is necessary to help identify which countries should be chosen for further research and why. Countries could be drawn from a selection from the following regions: the Anglo Saxon countries, Continental Europe, Latin America, the Middle East, Scandinavia, the former Soviet Union, Sub-Saharan Africa and South East Asia. Obviously, the specific selection of countries will also be determined by costs and access to data[6]. At this stage it difficult to identify the precise nature of the information that should be collected, but it could be expected that the issues covered would be similar to those addressed in this study. Nevertheless, it will also be necessary to obtain a much deeper understanding of some of the existing issues and also to investigate new ones.

Besides the selection of the countries it will also be equally important to determine which sectors should be chosen for further research. For instance, emphasis could be given to those sectors that have already been addressed studied. This might be a good idea since it would facilitate access to data and make it easier to address the concrete policy implications of the findings. Alternatively, emphasis could be given to other employment areas that are becoming increasingly important, such as the media and retail sectors. It might also be important to tackle social sectors that are vital for the well being of people and economies, especially water, electricity or health.

After the information has been collected for further research, the next study would analyse how countries in different regions support sector development. This study has already revealed some findings about this area, including how the national government in different countries facilitates and encourages sector based policies. Nevertheless, more analysis is required to understand how national governments act in different contexts, including those relating to the different regions proposed in the table below. Another significant aspect that needs more careful understanding is the role played by social partners and consumers. Evidence from our study illustrated the conditions that were necessary for successful employer based sector approaches. However, once again the research needs to have a better understanding of how the Anglo Saxon approach contrasts with the continental European one visa-a-via sector development. The role of consumers will also need to be tackled. Adopting such an approach will help move towards the development of a typology of how countries in different regions of the world address sector based policies.

[66] Note: An alternative approach could involve the decision to focus the research on the sector implementation experiences of the BRICKS. This would have an advantage of providing more in-depth analysis and unravelling the experiences of countries who are embarking on significant reforms to their sector policies, all of which would have policy implications for other developing countries that are attempting to develop or reform their existing sector policies.

Table 2. Strategies for further research

Selection of country case study	Collection of data on specific industrial sectors	Analysis of collected country case study data	Start to identify policy issues for phase III
Select case study from: Anglo Saxon, Continental Europe, Latin America, Middle East, Scandinavia, Former Soviet Union, Sub-Saharan Africa, South East Asia.	Develop a template to ensure that there is consistency with regard to how data is collected. A means of data collection with have to be identified, either involving local researchers.	Construct a typology to understand how sector based approaches are carried out in different regions around the globe.	Start to analyse the policy implications of supporting sector based developments, particularly with regard to: characteristics of state, the role played by social partners and the implications for workers and employment.

7 Concluding comments

This study had the objective of undertaking case studies of how countries at different stages of economic growth approach their sector based developments. This was a quite an ambitious task to undertake within the specified time period and with the available resources. Nevertheless, the research managed to produce six country case studies, enabling us to understand how these countries approach sector development and the problems or obstacles that they face. This enabled the study to highlight the complex nature of these processes and the most significant issues raised during the research included the following:

- Countries at different stages of development approach the process of sector development in very different ways. Each sector based approach is not necessary better than another, and each represents a political way of managing change at the sector level.

- Nevertheless, there appears to be certain characteristics with regard to the way in which countries in different parts of the world carry out their sector based development activities. For instance, with regard to the Anglo Saxon world the emphasis appears to be on employer based market approaches to sector development. However, such approaches are only successful when there are strong employers and organisation within the sector.

- In the case of South East Asia, as highlighted by Singapore, it is the state and not social partners or employers that are responsible for driving the sector agenda. Much of the emphasis for sector development was linked to the country’s medium and longer term economic goals.

- Most of the large middle income countries analysed in the case studies share similar approaches and constraints regarding their approach to sector based development. There is a tendency for approaches to be strongly directed by the state and in the majority of cases this appears to be related to outdated socialist forms of centralised planning. However, this is breaking down and countries, such as Indonesia and Egypt are moving towards decentralised and market driven approaches. A similar transition from a centralised to a decentralised approach is also occurring in South Africa. This is to be welcomed, but this is having a detrimental impact on the delivery of sector policies at the local level due to the lack of local human and institutional capacity.

- There are certain lessons to be learnt from the case studies from the developed world and where intervention is required in middle income or developing countries, especially with regard to where SECTOR or ILO can support the more effective planning and implementation of sector based policies. Nevertheless, more research is required in order to help determine what common constraints are faced by countries in specific parts of the world regarding the way in which they develop and implement sector based approaches.
- Further research of the sector based research will help develop an improved understanding of the issues identified above and enable the study to develop the typology outlined in Table 2. Through adopting such an approach is it possible to start to address the policy implications of these findings.

About CEI

The Centre for Employment Initiatives (CEI) is a not for profit making organization that has been providing technical and advisory services in the field of Employment and Human Resource Development for over 15 years. Much of CEI's current work focuses on providing policy oriented advice to governments, donors and development partners around the globe. The key philosophy underpinning CEI's approach is that successful labour market reform can only be achieved through inclusive practices, good governance and accurate and up to date information. For more information about CEI's work please go to www.cei-international.org.