

# [Chapter Two]

KNOWLEDGE IN REGIONAL ECONOMIC DEVELOPMENT: THE ROLE OF THE PROVINCE



## chapter [2] Knowledge in Regional Economic Development: The Role of the Province

**Having outlined the major features of the Western Cape economy and its growth prospects, this section assesses the capacities of the Western Cape to engage effectively in the global knowledge economy. It then draws from international and national experience to propose an appropriate role for the PGWC in enhancing economic development, paying particular attention to the relationship of the PGWC with the private sector.**

### 2.1 Introduction

What is the point of wondering about the role of regional authorities in economic development given that we live in a globalised world in which:

- international trade and investment account for an increasing share of world output;
- multinational firms are constantly on the look-out to substitute existing plants with new, cheaper facilities in other countries;
- ‘new kids on the block’ like China or India make rapid inroads into markets for established products and services, while high-income countries either fight robust rearguard battles or aggressively invest in new, extremely complex and highly uncertain technologies;
- league tables on everything from technology achievement to human happiness suggest that countries are the appropriate agents of international competitiveness and, hence, economic development; and
- there seems to be a premium on size, scale, and global reach.

In other words, are regions not mere ‘takers’ as opposed to ‘shakers’ of economic development, and are they not guilty of punching above their weight class when they muscle into the global territory? The short answer to this question is, no. There is no reason for provincial authorities to accept the current position of their respective regional economies as given, immutable, and somehow only dependent on higher order influences, be they of national or international origin. That said, these external influences are indeed important, and although some regions can shape their future, not all will be able to do so. Just as, at national level, the availability of resources,

geographic factors, climatic conditions, and a host of other conditions differentiate between more and less fortunately endowed regions. History has dealt some regions a bad hand of cards, and it is clearly not always possible to alleviate this through regional interventions.

Chapter 1 has illustrated that the Western Cape, while facing numerous complicated development challenges, is fortunate in having a diversified economy with considerable potential. However, before we get to the specific circumstances under which the PGWC operates, it is worth elaborating a longer answer to the question posed above. The tension between globalisation and the continued importance of regional economies is not just an academic invention but has real content. The PGWC can make a

difference in terms of how this tension plays out. Chapter 1 has shown how, and why, globalisation is a powerful force to reckon with. This Chapter will show why there is no reason for despair, provided one avoids the pitfalls of how not to engage with the global economy.

### 2.2 Regional development in the global economy

In a fully globalised economy, resources flow freely between firms. A particular location offers only factors of production that could ultimately be substituted in a number of other places. Thus, when it becomes too expensive to manufacture microwave ovens in Korea or Taiwan, production moves to the Pearl River Delta in China. This is an example for competition in relatively low-wage, low-skill, and

low-sunk-cost manufacturing processes and select consumer services.

By contrast, in a fully territorialised economy, economic activities strongly depend on resources that are unmistakably local and not easily available elsewhere. This may be effect or cause – if a place controls key resources, producers may have no choice but to go there and stay put. Alternatively – and this is the case for clusters – producers get together because they benefit from proximity to one another, and at some point relation-specific efficiencies add yet more benefits for staying in the cluster. An example would be the concentration of automobile design houses in Northwest Italy, where Chinese vehicle manufacturers with global aspirations contract Pininfarina to draft the look of their urban runabouts. In sum, in territorialised economies competition is about high-quality goods, specialised services, and innovation-intensive activities (Storper 1997, Chapter 7).



Of course, the real world is a mixture of these two abstractions. It is beneficial for the Western Cape to orient its ambition toward the production of goods and services for which locally realised interdependencies – within the Cape as a place to live, work, and play – raise the incentives for expanding local economic activities instead of relocating them to other parts of the globe. What the Western Cape wants to become is a ‘sticky’ place – an above-average growth centre with the ability to attract and retain mobile capital and labour (cf. Markusen 1996). Referring to the two alternatives alluded to above, the Western Cape is neither the Pearl River Delta in China with its mass-producing factories churning out consumer goods nor Northwest Italy where design and execution competence characterise knowledge-intensive firms such as Pininfarina. Instead, the Province hosts a mixture of economic activities that ranges from traditional manufacturing to knowledge-intensive service activities. On balance the Province has over time become more competitive in activities where intellectual capital – as opposed to cheap labour – drives the agenda of firms and sectors. Hence, seen in this perspective, the often-raised spectre of China as a competitive threat is much less worrying if the Province manages to maintain a knowledge-intensive growth trajectory. Put differently, it is not the production of tangibles the world outsources to China but the intangibles China sources from knowledge-intensive regions in the world, that provide an inspiration to the MEDS.

### 2.3 The many faces of regional development

Regional economies with strong location-specific advantages differ in terms of what accounts for the core of their economic dynamism. Some host industrial districts, made famous by the dynamic and prosperous and typically small manufacturers of traditional products, from footwear and silk ties to ceramics and machinery in various parts of Italy, that rely on cooperation and competition among functionally specialised firms operating in the same value chain in relatively close proximity to one another. Others host broader innovative clusters such as Silicon Valley with its network-based industrial system. And sometimes it is entire regions where cooperative relationships between members of the system facilitate collective learning (see Moulart and Sekia 2003 for a brief overview).

Regional economic systems also differ in terms of how they are constituted, governed, and how they operate. Historically, successful regional growth poles often came about

through the strategic intervention by a regional or national authority. The Research Triangle in North Carolina, Sophia Antipolis in France, or the Hsinchu Science Park in Taiwan are pertinent examples. Some then evolve to systems where networks of firms, finance providers, education institutions, and public authorities operate at multiple levels to reach agreements on issues that more or less affect all participants. Others become much more market-driven systems with little external coordination. There is some, though as yet inconclusive, evidence from Europe that coordinated regional systems are more successful at diversifying their economic base away from over-reliance on a single or just a few activities, thus making themselves less vulnerable to the vagaries of uncertain technological trajectories compared to the limited adaptive capacities developed by more market-driven systems (Simmie et al 2004).

In developing and latecomer countries especially, leaving the fortunes of regional economies entirely to the market is rarely an option. Market failures are rampant in innovative activities and other areas such as human resources development, and either the National Government or a regional authority will have to intervene to help entrepreneurs carry the risk of uncertainty originating in incomplete information, and to help, occasionally against their will, both firms and the education and science sectors achieve the level of coordination required to advance mutually beneficial interests (Caniëls and Romijn 2004, Juma and Yee-Cheong 2005). This is also important to ensure that the fruits of technological advances actually benefit these countries and regions instead of being usurped elsewhere.

This leads to the question that lies at the heart of the process that gave rise to the MEDS, namely through which mechanisms a provincial government such as the Western Cape can influence the growth trajectory of the regional economy. Although international experience obviously differs widely in this regard, the sequencing often involves initially the identification of the region’s growth assets and how they might be harnessed, followed by the encouragement and coordination of collaborative processes in order to plan and implement change, and the instilment of a regional mindset favourable to the adaptation without which the change cannot happen, especially when new information or circumstances require that agreed strategies are revisited and modified (Gertler and Wolfe 2004).

So far, the MEDS has mostly been about the first phase. Building on a vision articulated by the PGWC in conjunction with numerous stakeholders, it gathered information about core economic activities in the Western Cape and assessed

them in respect of their potential contribution to the aims and objectives of this strategy. Making the analysis public allows all stakeholders to familiarise themselves with what goes on in those sectors that currently account for the bulk of output and employment, and which strategies key actors in these sectors pursue. This is the first step toward reducing uncertainty about the collective performance of actors in the region which in itself enhances its innovative potential and is especially helpful when economic change is rapid or mainly takes place in complex activities associated with the knowledge economy (Sabel 1994).

What may happen of course is that entrepreneurs underinvest in learning (cf. Rodrik 2004). In this case a regional authority cannot simply provide the information (or organise for a more suitable body to do so, as the case may be) it thinks firms and other regional players should be interested in. It must in addition trigger the learning process. Likewise, regions may dispose of a rich knowledge infrastructure but fail to harness its individual elements toward achieving regional development goals. For example, in South Africa in general, higher education-industry relationships are woefully under developed (Kruss 2005). Our research on human resource development and on biotechnology illustrates that the Western Cape is unfortunately no exception. Finally, experience from regions in the EU and North America documents that visions for regional development – especially insofar as they entail ambitious departures from business-as-usual – do not fly unless they are shared and supported by economic actors and other relevant stakeholders (Gertler and Wolfe 2004).

## **2.4 The Western Cape in the knowledge and information economy**

### **2.4.1 The meaning of the knowledge economy**

Knowledge is an important contributor to technical change and innovation, two processes that contribute in major ways to economic growth and to human progress. This has always been the case. Although development is also partially the outcome of chance, the opposite of knowledge – ignorance – is of course the antithesis of the rational pursuit of human advance. Hence, historians and other people with long time horizons may be unfazed by the global infatuation of late with the “knowledge society” or the “knowledge economy”, both concepts that have been largely developed by, in, and for advanced countries, and that have become very popular over the last two decades or so, including in parts of the developing world (Landes 1998; Mokyr (2002).

Elements of the debate surrounding the knowledge economy, for example the focus on high-tech activities, are indeed faddish, and – when used inappropriately and uncritically – may distract from pressing bread-and-butter issues that concern the majority of the population in the developing world. But authorities in developing countries must confront the role of knowledge simply because a rapidly growing part of global production and trade is technology- and knowledge-intensive. Therefore having or not having access to knowledge assets influences the degree to which a country can tap into the sources of economic growth and, thus, catch up with more advanced economies.

The knowledge infrastructure in a developing country and the absorptive capacities of its firms influence the relative success with which external, global knowledge can be engaged. The existing stock of knowledge conditions the quantity and the rate at which new knowledge can be absorbed. Investments in R&D capability are therefore an important determinant of learning, both at the level of the individual firm and in the larger context of a national innovation system. These are the chief reasons for the wide discrepancy in catch-up among developing countries. While a few – largely thanks to good policy especially in the areas of education and training, capable implementation, and a healthy dose of good luck - have managed to institute knowledge-intensive production, most toil on the fringes of the emerging global knowledge economy.

For example, a novel feature of the global economy is that R&D, unlike in the past, is no longer pursued primarily in developed home countries. Multinational firms (MNCs) on the look out for talent and new markets have established R&D centres all over the globe, including in select developing countries. At the end of the 1990s, the foreign affiliates of US and Japanese MNCs performed nine and 10 times more R&D in the South than 10 years earlier, respectively. By 2002, almost one fifth of business R&D in the developing world was contributed by foreign affiliates. Yet while in 2004 roughly one in 10 R&D foreign affiliates was located in a developing country, the whole of Africa hosted just 1.5 % of them, or a total of four (UNCTAD 2005: 5,7).

The importance of the absorption of external knowledge for catch-up raises a number of questions that are pertinent for South Africa and the Western Cape in particular. The first concerns the international diffusion and local absorption of relevant technologies. The better we understand the modalities of diffusion, the easier it becomes to design policies



that support their positive impact. The second relates to the spatial and sectoral dynamics of innovative activities. The drivers of innovation vary from sector to sector, and the predominant systemic aspects of innovation can be either more regional or more national in nature. Effective policies in support of regional growth and job creation presuppose an appreciation of these nuances. The third involves relating answers to the first two questions to the economic reality faced by policymakers in the Western Cape. In essence, it asks what role knowledge plays in the technological catch-up of the Western Cape economy given the sectoral and skill composition of its output and exports.

#### **2.4.1.1 International technology: diffusion and absorption**

Productivity growth depends on making use of new machinery, adopting better production processes, or different techniques. Some technology is available at home but most of it is foreign and resides primarily with MNCs from advanced economies. This is true irrespective of whether we are concerned with developed or developing countries. No country in the world, however advanced, enjoys technological self-sufficiency; hence more advanced economies differ from relatively backward countries in that the distance to the technological frontier is on average lower and its technology-producing and -absorbing capacities are higher. But they, too, rely on exploiting technological advances pioneered outside their borders.

The fact that the pool of international technology is necessarily deeper than any national pool therefore underlines the need for catch-up economies such as South Africa to tap into it. This can take place through trade, foreign direct investment (FDI), or direct acquisition of disembodied knowledge. Imports of capital goods can improve production processes. Likewise, exports of products to demanding, technologically sophisticated buyers may expose firms to new technologies in the form of new designs or production techniques that are made available upstream so as to improve the entire value chain. Subsidiaries of MNCs may be recipients of technological information that improves how they operate. When their personnel change jobs and move on to local firms, they may take what they have learnt in the MNC with them – good practice then “spills over” to the domestic economy. Finally, local firms can purchase a license that gives them the right to exploit a certain technology (for a comprehensive recent review of the literature, see Hoekman and Smarzynska Jaworcik 2006).

Whatever the channel of technology diffusion, it is not so much the quantity as the quality of technology along with the local skills base and investments in R&D-intensive industries that make a difference to productivity in the host country. Of course, the adoption and adaptation of foreign technology is more difficult with increasing distance to the technological frontier. This implies that the capacity to absorb technology differs from country to country but, more importantly for policymakers, also from sector to sector and, within a country, from region to region. For example, innovation systems research underlines the importance of co-evolution of education and training and the business sector in order to facilitate learning and upgrading. Such positive dynamics often take place in geographically concentrated locations, which in the case of new technologies normally include universities or science institutes. Insofar as concentration of innovative activity is a condition for and a consequence of the absorption of international technology, policymakers may have a case for specific R&D subsidies to bring these dynamics about. It is important to be clear about the empirical evidence in support of such general policy support in favour of education, R&D or other public goods, as opposed to sector-specific policies whose effects are somewhat more ambiguous (Hoekman and Smarzynska Jaworcik 2006: 16). This does not mean that the latter never work, but it underlines the need to make a very convincing case why these are more likely to work than to fail, and at what cost, before support is granted. This emphasises the significance of the MEDS as an analytical process in support of evidence-based policymaking.

When the rate of international technology absorption in a country or region exceeds the rate at which the global technology frontier is being pushed forward, catch-up happens. The diminishing distance to the frontier – while in and of itself obviously welcome – introduces a new set of problems. For one, the demands on knowledge generation rise because pushing the frontier with new-to-world technologies is more difficult than learning about new-to-sector or new-to-firm technologies. In addition, the graduation into the illustrious club of technology leaders requires a switch from an investment- to an innovation-driven growth strategy. Laying out how this works in a stylised fashion is not difficult. But engineering it in practice is a major feat that presupposes, *inter alia*, strategic purpose, sufficient resources, and organisational capability both in the public and in the private sector. Singapore, by all accounts an economic success story, has been grappling with this problem for a number of years. In the search for alternative sources of growth and a reduction on the reliance of especially electronics MNCs, the country has been investing heavily in its innovation system. It is not alone in this endeavour; Israel, Ireland, Shanghai, Beijing, Seoul, and Bangalore are also competing for high-end global capital and talent (Koh 2006).

Economic development is thus like shooting at a moving target and running at the same time. The onus on policymaking is to analyse the rate of change of both dimensions and adapt the support instruments accordingly.

#### **2.4.1.2 Spatial and sectoral dynamics of innovative activities**

The relative importance of global as opposed to more localised forms of technological learning and R&D activities is contentious. In its crude form, the argument is not particularly helpful for policymaking because both clearly matter. On the one hand, firms clearly do increasingly rely on foreign centres of excellence to exploit external competences (see Lorentzen and Møllgaard 2006 for an overview). Therefore global knowledge flows are important. On the other hand, because national and regional systems host the network of relationships necessary for any firm to innovate and learn, especially insofar tacit knowledge is concerned, spillovers are often intensely local. This applies in particular to knowledge-intensive industries such as biotechnology or IT. In sum, regional and national systems continue to matter, and thanks to imitation, diffusion, and transfer of technology, they converge to some degree and become interdependent across countries. In other words, regional systems are important vehicles for inbound technology transfer and absorption (Carlsson 2006). For policymakers, “[r]egionalisation is [therefore] not a whether or not-question but an issue of more or less and how” (Fritsch and Stephan 2005). The quality caveat applies here as well: the depth of regional absorptive capacities and the terms of integration into global knowledge flows matter more than the volume of activities per se (Cooke 2005).

In sum, regions matter in spite and because of global knowledge flows. The question that remains then is whether innovative processes are primarily sector-specific or driven by regional dynamics. The relevance for policymaking is obvious. If intra-industry links are more important than interindustry links, support policies should target sectors (Malerba 2002). By contrast, if geographic proximity regardless of sectoral provenance is key for innovative activities, interventions must target regional capabilities. In practice, of course, policymakers might try to do both but it is important to realise that one can establish analytically, at least ex post, by how much the return to each policy differs. Rondé and Hussler (2005: 1163), in a meticulous analysis of French manufacturing industries, find that the innovation system is regional rather than sectoral. More specifically, they conclude that:

‘the engine of regional innovativeness seems to reside in the relationships developed between the actors within the territory. Actually, our analysis of the regional determinants of innovation highlights the significant impact of relational competences, and confirms the idea that networking capability is an enhancer of innovation. Indeed, the distinction between voluntary versus unintentional knowledge flows, allows us to show that deliberate actions are required in order to increase regional competitiveness significantly. [...] in other words, our empirical results suggest that a high level of qualification of the labour force and highly publishing universities are probably necessary conditions for regional innovation, but not sufficient ones when no systemic contacts are facilitated.’; (See also Box 2.1).

### Box 2.1 – [DO REGIONS MATTER?] An empirical analysis of innovative dynamics

Innovation systems research sees innovation as a social process of collective learning in an evolutionary perspective. This raises three questions.

- How important is the internal (i.e. within the firm) as opposed to the external (i.e. between firms, other sources of knowledge, providers of finance, etc.) dimension of learning?
- Is learning a deliberate process that requires “intended” spillovers or merely the outcome of “unintended” knowledge spillovers?
- Are the dynamics of this process rooted more within similar industrial activities, i.e. within a sector, or within a geographically related space, i.e. a region?

Answers to these questions shed light on the actual nature of a given innovation system and help policymakers decide at what level and with what instruments to intervene in support of regional innovation.

Rondé and Hussler (2006) provide such an analysis for the French manufacturing sector. They make use of the following information.

- A competence dataset. This consists of a 1997 survey of 5000 geographically identified manufacturing firms with more than 20 employees. The questionnaire enquires about 73 individual firm-level competences related to firms’ strategies for innovation which the researchers broadly grouped into those that reflect internal capabilities for innovation (e.g. technical and organisational competences) and those that allowed them to internalise knowledge coming from external sources. A regional level of competence is then simply the non-weighted sum of competences of firms located in a particular region.
- Information on knowledge flows. The competences described above constitute the intentional knowledge inputs that influence innovative activity in a region. Unintentional knowledge inputs – or “pure” knowledge spillovers – result from the regional stock of knowledge and are measured by the percentage of the population devoted to private or

public research, respectively. In addition, the researchers include the productivity of universities measured by the number of regional scientific publications per capita. The intention behind this variable is to capture if top universities have a beneficial impact per se, i.e. even in the absence of intended interactions.

- Regional vs sectoral innovation. The researchers study the relationship between innovative output in a given industry and a given region and compare competences mastered by firms in the particular industry but also by technologically similar firms (indicated by the co-occurrence of technological classes in patent documents) in the same region and by neighbouring regions whose firms are involved in the same industry. Knowledge flows can occur in two ways: inter-sectorally within the region, or inter-regionally within the same sector.

The analysis also takes industry characteristics (from low to high tech), the governance system (i.e. regional support to innovative activities), and openness to global knowledge flows (measured as brain drain/gain) into account. The study then estimates a knowledge production function with European patent applications between 1997 and 2000, involving at least one French inventor, as dependent variable.

The analysis shows the importance of the regional level for understanding innovative activity. What matters are the relationships between actors in a region; just “being there” is not sufficient. A highly skilled labour force and productive universities do not make much of a difference unless they are part of a system. In other words, networking is important. Relationships between technological neighbours in the same region are more important than those between firms in the same sector that operate in adjacent regions. Economic diversity is therefore an asset for innovative output. Which competences matter most depends, in turn, on sectoral characteristics.

In summary, this is a powerful argument for the centrality of space. But it also suggests that the given sectoral specialisation of a region qualifies in important ways how innovative activities are undertaken. This provides essential pointers for policymakers.

The single most important obstacle to replicating such an analysis for the Western Cape and South Africa is the absence of a microeconomic survey that systematically probes firm competences.

In summary, one of the insights regarding regional development is that while patterns of innovation may be sectoral, innovation dynamics are predominantly regional. The data required for an analysis such as that performed for France by these two authors exceeds the information currently available for the Western Cape. However, the usefulness of such an analysis emphasises the importance to build up information systems that would allow a better understanding of the scope and the targets of regional policymaking in the province. Pointing out what we do not yet know is an important, if unglorious, part of the MEDS process.

Before mechanisms for regional economic development can be discussed, this is the time for some stocktaking. How does the Western Cape Province fare in the knowledge and information economy? Almost as well as Gauteng and much better than the national average, is an often-heard answer. But the comparison to Gauteng, let alone the other seven provinces, is not relevant for a province that strives to become a region with a strong slant toward knowledge-intensive activities. Instead, the relevant comparison must be with knowledge-intensive activities in other parts of the world. And in this regard, the data suggests that there is reason for concern. In what follows, we illustrate the Western Cape's performance in the knowledge economy, in information communication technology (ICT) diffusion, and in the global pool for talent relative to the rest of the world. To this end, we use available country comparisons compiled by international organisations and then draw this down to the provincial level.

#### 2.4.2 The Basic Scorecard of the World Bank Institute's Knowledge

##### Assessment Matrix

The World Bank Institute (WBI) has produced a Knowledge Assessment Matrix (KAM) that reflects major tenets of the knowledge economy, with data on 128 countries. It comprises 80 variables clustered under seven functional headings, namely:

- economic performance (e.g. growth, per capita income, human development and poverty indices, unemployment, country risk rating);

- economic incentive and institutional regime (e.g. investment, government finances, trade regime, intellectual property protection, stability of financial sector);
- governance (regulatory quality rule of law, press freedom, control of corruption, political stability);
- innovation system (e.g. FDI inflows, royalty and license fee payments and receipts, tertiary science and engineering enrolment ratio, R&D expenditure, research collaboration between companies and universities, availability of venture capital);
- education and training (e.g. literacy, Internet access in schools, share of professional and technical workers, 8th grade achievements in maths and science);
- information infrastructure (e.g. phones, computers, TV sets, radios, e-government); and
- gender equity (e.g. Gender Development Index, female literacy rate, female tertiary enrolment rate).

From this large dataset WBI has then derived a simpler, basic scorecard. It is based on 12 variables relating to four pillars of the knowledge economy – points 2, 4, 5, and 6 above – and two performance variables (point 1 above). The dataset makes it possible to compare country scores cross-sectionally and over time (see Table 2.1). A country's performance can get worse because its nominal score deteriorated. An example would be South Africa's Human Development Index, which declined from a value of 0.72 in 1995 to 0.67 in 2003. Table 2.1 shows that, by comparison with 1995, South Africa improved its performance in the nominal values of five indicators (trade and regulatory regimes, literacy, and telephone and computer coverage) and worsened in seven.



**Table 2.1: South Africa in the global knowledge economy: The World Bank's Scorecard**

VARIABLE	1995		MOST RECENT	
	ACTUAL	NORM.	ACTUAL	NORM.
<b>Performance indicators</b>				
GDP growth (avg. 1994-8; 1999-2003, %)	2.80	2.52	2.70	3.46
Human Development Index	0.72	4.55	0.67	2.70
<b>Economic incentive and institutional regime (index)</b>				
		3.74		4.55
Tariff & nontariff barriers	2.00	0.00	4.00	1.75
Regulatory quality	0.18	5.12	0.60	6.38
Rule of law	0.34	6.11	0.19	5.51
<b>Innovation system (index)</b>				
Research in R&D/million	254.00	3.72	193.33	2.44
Scient. and techn. journal articles/mil. pop.	54.19	6.61	47.93	6.30
Patent applic. granted by USTPO/mil. pop.	3.25	7.34	2.89	7.09
<b>Education and human resources (index)</b>				
		5.57		4.47
Adult literacy rate (% age 15 and above)	83.30	4.21	85.98	3.86
Secondary enrolment	95.40	7.73	86.42	6.09
Tertiary enrolment	17.51	4.77	14.63	3.46
<b>Information infrastructure (index)</b>				
		6.48		5.26
Telephones per 1000 people	110.00	5.08	470.20	5.63
Computers per 1000 people	27.86	6.25	72.60	5.17
Internet users per 10,000 people	118.00	8.13	682.01	5.00s
<b>Knowledge index (average of 3-5)</b>				
		5.98		5.00
<b>Knowledge economy index (average of 2-5)</b>				
		5.42		4.89

**Notes:** The scorecard is derived from the WBI's Knowledge Assessment Matrix (KAM). It normalises a country's score in 12 variables based on the four pillars of the knowledge economy, plus two performance indicators. The innovation variables are weighted by population. Due to economies of scale, populous countries tend to produce more knowledge. Hence, weighting under-reports the significance of countries such as India or China in the global knowledge economy. The highest (best) possible normalised value is 10. The reference group for the normalised values is the rest of the world. When a variable improves over time but its normalised value does not, the country's progress is slower relative to the rest of the world. For an explanation of the variables, see source.

Source: [info.worldbank.org/etools/kam2005](http://info.worldbank.org/etools/kam2005)

Since the country no longer lives in splendid isolation, it makes sense to compare the normalised values. Normalisation is a simple statistical procedure that in this case sets each country's performance equal in a base year (1995=100) so that progress across a group relative to that base year becomes evident. For example, if South Africa's nominal growth performance worsens from a growth rate of 2.8% in 1994-1998 to 2.7% in 1999-2003 but the rest of the world registers a sharper decline, South Africa's normalised score would improve not because it does especially well but because it does better than the rest of the world. This notwithstanding, the most striking insight the normalised values provide is that the country did relatively worse than the rest of the world in nine indicators, and better only in three (growth, trade and regulatory regimes).

This raises the question of whether the Western Cape is doing better than the national average. Presumably, one of the country's premier metropolitan regions must do better than lesser urban congregations, let alone rural hinterlands. But the question is by how much, and whether the difference suggests that the Province travels on a knowledge economy trajectory closer to that of similar city regions in the world or closer to its own backyard. Since the WBI analyses countries, this report can only attempt an approximation of the Western Cape's knowledge economy profile (see Table 2.2). Table 2.2 replicates the scorecard populating it with actual values where possible. It shows that the Western Cape almost certainly does better than the national average. Information about the innovation system is not readily disaggregated to the provincial level. But with one major university, select other tertiary education institutions and a range of science councils present in the Province, it is a reasonable conjecture that the Province performs better than the country as a whole. The only area where the Province scores below average is in secondary school enrolment.

In sum, the Western Cape can take little solace from the fact that it is, together with Gauteng, the most highly educated Province (Census 2001, Figures 17, 18) and that it outperforms the country as long as the country over time performs worse relative to the rest of the world. The critical question is if the Western Cape manages to counter this trend. It is a question whose answer would depend on making the missing data in Table 2.2 available and calculating the normalised values. This would be a valuable exercise not just once off, but on a more continuous basis in order to monitor progress of the MEDS against its goals in respect of its capacities to partake effectively in the global knowledge economy.

**Table 2.2: The Western Cape in the global knowledge economy**

VARIABLE	WESTERN CAPE	SOUTH AFRICA
<b>Performance Indicators</b>		
Growth (GDP(R), annual avg. 1999-2003,%)	3.9	3.1
Human Development Index 2003	0.77	0.67
<b>Economic Incentive and Institutional Regime</b>		
Tariff and nontariff barriers	uniform	uniform
Regulatory quality	uniform	uniform
Rule of law	uniform	uniform
<b>Innovation System</b>		
Researchers in R&D/million	LAA	193.33
Scient. and techn. journal articles/mil./pop.	LAA	47.93
Patent applic. granted by USTPO/mil./pop.	LAA	2.89
<b>Education and Human Resources</b>		
Adult literacy rate (% age 15 and above)	94.6	86.9
Secondary enrolment, % of total pop./15+	7.3/10.2	9.2/13.7
Tertiary enrolment, % of total pop.	108	1.7
<b>Information infrastructure (index)</b>		
Households with fixed line and/or mobile phone, 2001, %	63	42
Households with computers, 2001, %	18.2	8.6
Internet users per 10,000 people	LAA	682.01

Source: Census 2001, DST (2004), UNDP (2003), WCPT (2005), World Bank (online).

### 2.4.3 UNCTAD's ICT Diffusion Index

Information and communication technologies are enabling technologies with a wide range of applications across all economic activities. Therein lie their importance for developed and developing countries alike. In developing countries, the central issues concerning ICTs are an understanding of what they are about and to what use they can be put; what sort of infrastructure is available, and at what price (and, thus, to whom) to make them work; and if the people have the requisite skills to master their operation. Depending on how these issues are being addressed, the existing digital divide between the developed and the developing world, and between the information rich and the information-poor within developing countries may get better or worse.

To be sure, should it get worse, the likely result is not just benefits foregone but further marginalisation in a global economy in which technological change in some areas appears to be accelerating.

In a benchmarking exercise of ICT diffusion around the world prepared by UNCTAD, Sub-Saharan Africa dominates the very bottom of the rankings. Not surprisingly, there is a strong relationship between levels of income and telecommunications development. Worse, while many developing countries have improved their performance over time, Africa has on the whole worsened. Levels of inequality in access to ICTs dwarf those in income inequality, and are particularly pronounced with respect to the availability of Internet hosts and the diffusion of PCs (UNCTAD 2005).

UNCTAD's benchmarking exercise is a composite index based on:

- connectivity
- access
- policy

Connectivity describes how wired a country is. It refers to physical infrastructure, namely the hardware one needs to participate in ICT activities. It includes:

- number of PCs per capita.
- number of telephone mainlines per capita.
- number of mobile subscribers per capita.

Access is about the soft issues. Infrastructure by itself is no good if people cannot use it. Access hence refers to:

- number of Internet users (hence, an ex-post measure of realised Internet access).
- literacy (most content is text-driven).
- cost of local call (telephone charge plus ISP charge).
- GDP per capita (Internet usage is highly income elastic).

Policy refers to:

- presence of Internet exchanges (to facilitate traffic exchange between ISPs and to ensure that valuable bandwidth on international lines not be wasted by exporting within-country traffic).
- competition in the local loop.
- competition in the ISP market.

The average scores in these three fields are combined into the diffusion index. Table 2.3 shows how the world's regions have been doing over the last 10 years. The information in the table shows the average score for a country grouping, its top performer, plus a country with a noticeable increase in its score value over time. Again, bluntly put, countries such as Mexico, Mongolia, China, Egypt, and Botswana score lower than South Africa. But more significantly, they have made great strides toward bridging the digital divide, while South Africa has not. Brazil overtook South Africa. What these comparisons show is that it is indeed possible to escape from marginalisation and increasingly participate in the global knowledge economy. They also reiterate the insight from KAM, namely that South Africa is doing worse over time if one compares its performance to a reference group of both lower and middle-income peers. This is not good news.

Table 2.4 attempts to verify if the Western Cape's performance is performing any better than the rest of the country. Not all the information used by UNCTAD for the country comparison was available at a more disaggregated level. But for all indicators it was possible to find close substitutes. In sum, the Western Cape is much more wired than the country as a whole. It also scores better on the access measure, with a 60% higher Internet usage than in Gauteng. At first sight, the differences between the variables appear significant except, of course, where provincial conditions do not differ from the national situation, notably in the lack of competition in both the fixed-line and ISP market and the resulting exorbitant call charges. This is important to note - while it does not diminish provincial achievements in realising a higher literacy rate, it does suggest that there are limits to ICT diffusion that hamper the Province but that the Province, at least in a direct sense, can do very little about it.

**Table 2.3: [South Africa] In The Global Information Economy:**

Country rankings in UNCTAD's ICT diffusion index					
RANKINGS	1995	1999	2000	2001	2002
<b>OECD</b>	27	23	24	22	23
<b>US</b>	2	1	1	1	1
<b>MEXICO</b>	116	76	79	71	73
<b>EE&amp;CIS</b>	78	80	84	86	82
<b>SLOVENIA</b>	27	25	26	27	23
<b>MONGOLIA</b>	159	113	97	87	89
<b>LAC</b>	81	80	77	78	80
<b>BARBADOS</b>	52	36	39	41	34
<b>BRAZIL</b>	78	66	62	62	57
<b>EAST ASIA</b>	75	94	95	87	88
<b>SINGAPORE</b>	15	12	10	12	9
<b>CHINA</b>	147	135	134	134	118
<b>ARAB STATES</b>	89	86	90	87	88
<b>UAE</b>	33	27	23	26	20
<b>EGYPT</b>	154	115	117	117	112
<b>SOUTH ASIA</b>	112	107	120	120	107
<b>MALDIVES</b>	86	52	55	56	50
<b>SSA</b>	117	132	131	126	130
<b>MAURITIUS</b>	39	51	53	51	52
<b>BOTSWANA</b>	97	84	82	82	80
<b>SOUTH AFRICA</b>	65	59	65	61	66

**Note:** The index of ICT diffusion is a composite measure of the average achievements of a country in three dimensions, namely connectivity, access, and policy. For more information, see text and source. Source: UNCTAD (2005)

#### 2.4.4 The global competition for talent

A knowledge-intensive province needs highly skilled people. A province that wants to become knowledge intensive needs people with high skills to settle there. This suggests that the MEDS should consider both stocks and flows of people in the Province. How many highly skilled people do we have and how many more are

we likely to get? is a key question. Identifying who are highly skilled is fraught with difficulties. An often-used method is the categorisation of occupations developed by the International Labour Organisation (ILO n.d.), which makes it possible to separate creative professions from all others. The ILO assigns all occupations into 10 major groups. The first consists of legislators, senior officials, and managers. Of relevance in the South African context, it also includes traditional chiefs and heads of villages. The second involves professionals such as people with science or engineering training, architects, academics, teachers, lawyers, and religious professionals. The third comprises technicians and associate professionals. The major difference between Groups 2 and 3 lies in the length and depth of their training. Experts differ as to whether Group 3 should be included in the creative professions. In the interest of completeness, we use both methods.

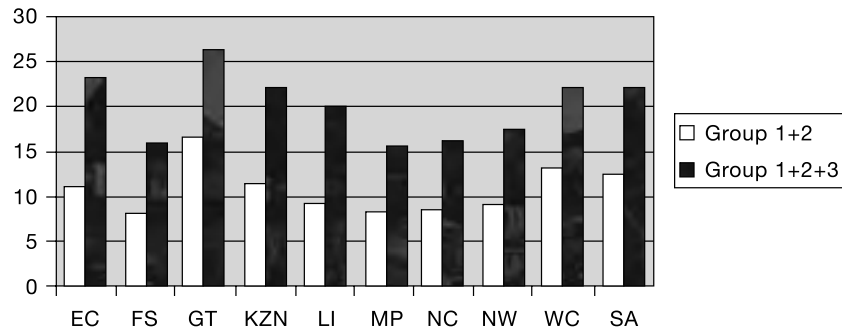
Figure 2.1 is about stocks. It shows that the Western Cape has merely an average share of the country's creative workforce. Provided census data is reliable, in this respect the Western Cape is not that different from the blue-collar province KZN. This implies that the knowledge-intensive province is an aspiration more than a reality. Changes over time underline that at least between the most recent censuses, the Western Cape's creative professions actually diminished in size. Cape Town registered below average in Groups 1 and 3 and actually lost professionals to a higher degree than the metropolitan average in the country (see Figure 2.2). Since what is being compared here is the stock in 2001 at the end of a period (1996-2001), it is possible only to conclude that the Western Cape trailed the other aspiring smart province in terms of the share of the workforce that had a creative occupation then. It would clearly be desirable to have more updated information, and also to disaggregate the categories so as to differentiate more meaningfully between which occupation is or is not creative.

**Table 2.4: The Western Cape in the Global Information Economy**

	WESTERN CAPE	SOUTH AFRICA
<b>Connectivity</b>		0.1277
Internet hosts per capita		Provincial = national
PCs per capita (Households with computer,%)	18.2	8.6
Fixed lines per capita (Households with telephone%)	50.5	24.4
Mobile subscribers per capita (Households with mobile phone, %)	41.4	32.3
<b>Access</b>		0.4798
Internet users (% who accessed Internet last 4 weeks)	11.7	8.9
Literacy	94.6	86.9
Cost of a local call		Provincial = national
GDP per capita (\$1995 ppp)	13.790	9.133
<b>Policy</b>		0.3333
Presence of Internet exchanges		Provincial = national
Competition in local loop/domestic long distance		
Competition in ISP market		
<b>Diffusion (avg. of 1-3)</b>		0.3038

**Note:** Composite index calculations for South Africa from UNCTAD (2005). Not all information available nationally can be disaggregated to provincial level. Hence, indicated variables used by UNCTAD to calculate ICT Diffusion Index indicate close substitutes used here. The statistic for the Internet access refers to the people in Cape Town's metropolitan area, and to the weighted average of the country's nine principal metropolitan regions (eThekweni, Joburg, Ekurhuleni, Tshwane, Nelson Mandela, Buffalo City, Mangaung and Msunduzi), respectively. Source: SA City Network, UNCTAD (2005), UNDP (2003)

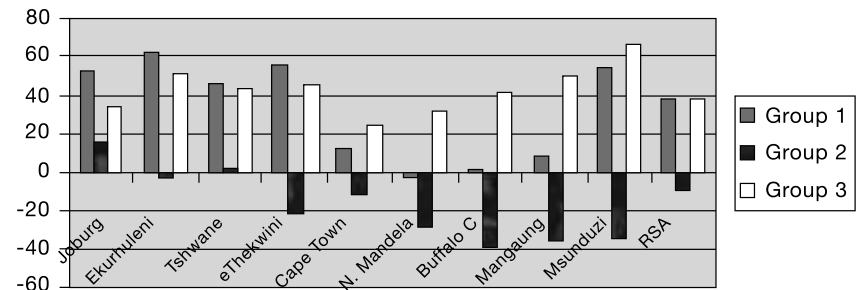
**Figure 1. - Creative professions in 2001, %**



**Note:** Group 1 = legislators, senior officials, and managers. Group 2 = Professionals. Group 3 = Technicians and associate professionals. Categorisation of “creative” differs from country to country, e.g. ILO does include Group 3, US excludes it. Source: Census 2001

Overall, the Western Cape is unambiguously the country’s most attractive province. Figure 2.3 shows that for every person leaving there are four others coming in. But in light of the evidence presented here, the character of the in-migration dilutes the knowledge intensity of the occupational profile of the Province’s workforce. So far this discussion has been confined to domestic talent or, at least, it neglected its sources. But of course the global pool of talent is deeper than any domestic pool, and in the face of worldwide skill shortages it is important to understand what linkages exist between a host country and internationally mobile professionals. There are no direct indicators on this but it is possible to approach the question indirectly. Table 2.5 shows the geographic distribution of students from the world’s most important knowledge economy in their studies abroad. What emerges is that Europe, Canada, and the Middle East are losing in importance, while Oceania and all developing regions, including Africa, are gaining.

**Figure 2. - The rise of the creative class in major cities, 1996-2001, %**



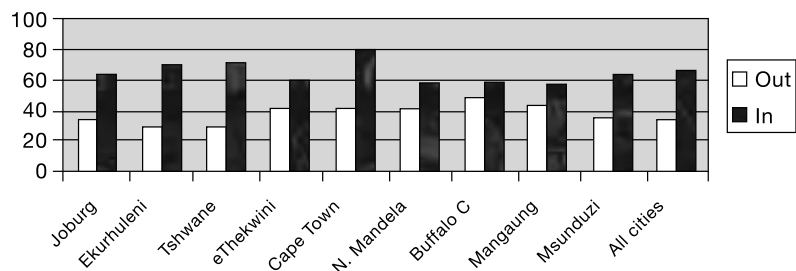
**Note:** Group 1 = legislators, senior officials, and managers. Group 2 = Professionals. Group 3 = Technicians and associate professionals. Categorisation of “creative” differs from country to country, e.g. ILO does include Group 3, US excludes it. Source: SA City Network

Numbers of US exchange students to South Africa – among the top 20 destinations – are on the rise, which is not reflected here because overall numbers of students deciding to pursue studies abroad have increased. The Western Cape attracts probably at least a quarter of the total. A smart region needs students, including from outside the country, and it would be helpful to track these trends regularly for all major source countries, and to analyse which provincial knowledge assets are the biggest draw card for international students (and scholars).

Finally, it is instructive to compare where foreigners across South Africa come from. Table 2.6 differentiates foreigners born in high-income countries from those born in low- or middle-income countries.



**Figure 3. - Relative attractiveness of major urban centres, migration ratios, 1996-2001**



**Note:** Migration ratios measure the share of people leaving or settling in a Province of the total in and out movement. Hence, by definition they sum to 100.  
 Source: SA City Network

Income is taken here to be a very rough proxy of skills, i.e. residents from OECD countries are presumed to be more highly skilled on average than residents from developing countries. This is a somewhat crass but not entirely unreasonable simplification and employed here mostly to illustrate two points. Firstly, the Western Cape's share of people born outside South Africa is twice as high as the national average. Furthermore, the ratio of high- to low- and middle-income home countries is highest by a big margin. Secondly, in international comparison the country as a whole has an extremely low share of (legal) residents from outside the country. So does the Western Cape when looked at as an international metropolitan region or more specifically as a medium-sized knowledge

hub. Its stock of residents is nowhere near as cosmopolitan as that of other primary or secondary world city regions. In fact, it is not clear that the current stock of locally available talent is sufficient to sustain the effective insertion into the knowledge economy.

When accepting global indicators for the knowledge and information economy as meaningful benchmarks, South Africa does not look all that good. The provincial data at our disposal is not sufficient or readily available in order to conclude that the Western Cape is doing significantly better. But a solid, regular assessment is paramount to monitor progress against objectives and to analyse what the causes might be when developments are not as hoped or when unforeseen problems are encountered. In short, the Province needs more and better information.

**Table 2.5: South Africa and the worldwide competition for talent: Host regions of US students studying abroad**

HOST REGION	1985/85	1995/96	2001/02	2002/03
Europe	79.6	61.8	62.6	62.9
Latin America	7.0	15.4	14.5	15.3
Oceania	0.9	4.4	6.8	7.3
Asia	5.4	6.4	6.8	5.6
Multiple Regions	1.0	4.0	4.9	5.1
Africa	1.1	2.3	2.9	2.8
South Africa			0.9	0.9
North America	0.9	0.7	0.8	0.7
Middle East	4.0	2.1	0.8	0.4

(Source: HE (2005))

**Table 2.6: The Western Cape and the global pool of talent: residents from high-income (skill) countries (2001)**

	EC	FS	GP	KZN	LI	MP	NC	NW	WC	RSA
High-Income Countries										
<b>Europe</b>	0.185	0.115	1.283	0.395	0.040	0.153	0.100	0.108	1.124	0.509
<b>North America</b>	0.007	0.005	0.047	0.395	0.014	0.005	0.006	0.005	0.053	0.020
<b>Oceania</b>	0.003	0.002	0.023	0.395	0.008	0.001	0.002	0.003	0.025	0.010
<b>Total</b>	0.195	0.122	1.353	0.417	0.046	0.161	0.108	0.115	1.202	0.509
Low and Middle-Income Countries										
<b>Africa</b>	0.294	1.629	3.701	0.536	1.415	2.449	1.354	2.211	1.003	1.628
<b>Asia</b>	0.039	0.046	0.231	0.056	0.048	0.028	0.020	0.053	0.132	0.091
<b>Latin America</b>	0.012	0.012	0.067	0.017	0.004	0.009	0.015	0.011	0.025	0.028
<b>Total</b>	0.345	1.687	3.999	0.609	1.467	2.486	1.389	2.275	1.160	1.747
Memo										
<b>Non-nationals</b>	0.540	1.809	5.352	1.026	1.513	2.647	1.497	2.390	2.362	2.336
<b>Ratio (1):(2)</b>	0.565	0.072	0.338	0.685	0.031	0.065	0.078	0.050	1.036	0.337

(Source: Census, 2001, Table 2:10 Country of Birth by Province)

## 2.5 Regional intelligence for a reflexive Province

Section 2.4 showed that information needed to position the Western Cape vis-à-vis the rest of the world is incomplete even though we only looked at composite indices for the knowledge economy, ICT diffusion, and some trends in highly skilled human capital. Of course, information about the global economy relevant to the Western Cape is both richer and more complex than that and, in addition, can be retrieved, packaged, and disseminated in many different ways. The key insight is that the Western Cape should collect information about what goes on in the world, as comparative analysis is a strategic activity in the context of regional development. The collective potential of the Province can only be harnessed if both the point of departure and the goals inspiring growth and job creation targets are clear. And the information required here clearly goes beyond what firms collect as business intelligence, namely data about the products, processes, markets, and tech

nologies that define their business and that define useful pointers for their management processes.

Much broader information is needed. In the context of a provincial economy whose backbone is SMEs, with limited resources for extensive business intelligence gathering, regional intelligence is effectively a public good that showcases everything from new ideas to innovative practices and thus provides individual firms and emerging regional networks with an opportunity to look at collective efficiencies and joint action (Schmitz 1999). Hence, regional intelligence is not merely the sum of business intelligence established by the firms in the Province, but an informational nexus that allows those with access to it to view themselves as part of a larger regional whole, and to develop competitive strategies accordingly. Regional intelligence is obviously not one-size-fits-all but closely related to the profile of economic activities it is meant to support. But although it differs in terms of content, coverage, accessibility, and so on, it tends to incorporate a basic portfolio of informational modules that identify, analyse, and disseminate information intended to be of use to specific target groups (Komninos 2004). More specifically, it incorporates information relevant to understanding the following questions

- What's new? This concerns the dissemination of R&D outcomes, novel applications, patents, and so on, primarily from within the region. It directly addresses the need to foster science-industry interaction by improving the information flow between the two sectors.
- Who's playing how? This is about competitors – be they individual firms, entire sectors, or even regions – and how they perform relative to one's own performance. Regional benchmarking is of relatively recent vintage but has led to interesting insights in the US and in Europe. It monitors over time and across regions inputs (what resources do we have?), outputs (what innovative activities do they give rise to?), and impact (what difference does it make?).
- What's happening? This is a broader market and technology observation that relays trends and presents innovative activities and products. This is done by specialists who sift information sources, enter relevant information into a database and evaluate it regularly, and alert interested target groups about newsworthy developments.
- When's the future? This reflects the maturing of the MEDS – as economic development changes in the Province, expectations about what may happen in individual sectors or across economic activities will also change. The strategy

needs to be updated, and regional foresight exercises must perhaps validate the initial strategic thrust of the MEDS. Validation requires wide participation of stakeholders to address the following minimum set of queries: (1) Where are we heading? (2) What's good and bad about this, and for whom? (3) How does this influence our strategic decision-making?

Elements of building blocks for such a regional intelligence system already exist. The department of economic development has done commendable work in its attempt to better understand the dynamics of a wide range of sectors in the Province. It has covered activities that are already important and those that are of marginal significance but with potential for the future. It has engaged over many years with sector associations or – where they did not exist – helped establish them so that sector support could be designed in conjunction with industry. Through these interactions it has also in a number of instances come up with growth targets that the department in conjunction with private sector stakeholders felt are realistic in an appropriate, supportive environment.

The approach can be improved upon and made more systematic. In particular, an internally networked region relies on seeking interdependencies across sectors, between industry and the education and science sectors, and so on. A biotechnology start-up can only benefit from learning about what goes on in the medical equipment sector. Wine growers, in turn, will want to keep up with biotechnological developments not only because they might make use of some of them. Importantly, as a user industry they have an interest not just in exploiting commercialised ideas but also in suggesting what researchers should look for in the first place. We know that innovation is increasingly also user driven and thus does not just depend on what producers decide to put into the pipeline.

In sum, there is a considerable body of knowledge and emerging institutional capacity upon which to build. For sectors as diverse as boat-building, flori-culture, and furniture, an inventory of key role-players, past initiatives, and current challenges exist. We know in considerable detail about the make-up of sectors in terms of both narrow economic and broader social issues. We also know where National Government intervention exists and what its limits have been to date as perceived by the firms. To be sure, a fully fledged regional intelligence system will need much more work but at the same time it is clear that such an initiative would build on much prior thinking, experience, and – importantly – goodwill.

This is not the place to design such a system. Suffice it to say that it must be sophisticated and regularly updated, yet easy to use and accessible to

everybody who will potentially benefit from it. For example, for as long as dial-up remains the primary means of connecting to the Internet, it is not advisable to overload web-based applications with content so as to avoid slow operation. By contrast, if the establishment of a broadband network discussed by the City of Cape Town became a reality and if it were rolled out throughout large parts of the Province, access would be much less of a constraint, and more importantly a matter of choice rather than privilege.

## 2.6 The way forward

Nobody said it would be easy. Failures and shortcomings are bound to happen. There is no sure-fire recipe for regional economic development. The most important thing is not to avoid mistakes altogether – an impossible undertaking – but to acknowledge them, analyse why they happened, and learn from them. Indeed, avoiding the risk of making mistakes at all costs implies foregoing the potential benefits of policy experimentation. Yet when solutions to problems appear intractable – and, to be sure, solving the unemployment problem in the Western Cape is a challenge of enormous proportions for which neither historical experience nor economic theory or current international practice suggest an obvious or easy solution – we need the courage for experiments, along with the hope that mistakes made along the way will eventually be vindicated by successes (see Box 2.2). Since the MEDS is an iterative process, as time goes by, all stakeholders have the opportunity to improve how they impact the Provincial roadmap and, by implication, how the MEDS affect their activities in turn.

Acknowledging that mistakes will be made does not preclude trying to minimise their incidence. One way to do that is to do a few things well rather than running the risk of doing many things not so well. Like provinces in South Africa in general, the Western Cape has never really had to take its regional fate into its own hands. Therefore policymakers cannot make use of institutional memory that somehow suggests what is good and bad practice. Likewise, the private sector traditionally knew National Government as a source of protectionism with a very unbalanced industrial policy, and not as a champion of intelligent openness vis-à-vis the rest of the world with everything that it implies. In addition, networking and other forms of cooperative relationships aimed at harnessing international competitiveness – as opposed to more familiar patterns of collusion and rent-seeking behaviour – between firms, sectoral associations, business service providers, education institutions, and various levels of government are relatively new concepts in South Africa.

### **Box 2.2 – The Ilo's Take on Youth Unemployment**

South Africa is not alone in having too many young people without a job. But according to projections by the International Labour Organisation (ILO), by 2015 the number of young people looking for work in sub-Saharan Africa will increase 28% - proportionately more than in any other region of the world. Not offering them jobs is not just a waste of productive talent.

It is also a strain on the public purse and endangers the social stability of societies. Without jobs, the widespread poverty will remain a pipe dream. For many young people in developing countries there is no transition from school to work, as many drop out of school early or never attend and they do not have jobs. According to a survey in urban areas of Zambia, 70% of young men and 83% of young women in the 15-19 age group indicated they were "doing nothing". The majority of young women in this age group said that they were "relying on the goodwill of their parents or friends" as their source of livelihood. A notorious barrier for young people seeking to get a decent job is their lack of work experience. Many are caught in a conundrum: they can't find jobs because they lack work experience and they can't gain work experience because they've never had a job. Said one young woman graduate from Ethiopia, "I think I didn't get the kind of work I want because I don't have the experience required by employers. . . I asked in one organization if I could be an intern. They told me to first finish my undergraduate programme. So I did that and asked them again if I can be an intern. But they sent me a reply that I have to be

enrolled in a second degree programme". According to a recent survey, 22% of jobseekers in Indonesia and 38% of young male jobseekers in Vietnam felt that "no work experience" was the main obstacle in finding a decent job.

Is the situation hopeless? It may seem so on the surface, but an ILO report on youth employment prepared for the International Labour Conference cites a number of regional and national initiatives that are creating pathways to decent work for youth. A coherent integrated policy approach – incorporating provisions for the creation of quality jobs for youth – is required in order to meet the youth employment challenge. This calls for interventions at the macro- and micro-level, focusing on labour demand and supply, and addressing both the quantity and quality of employment. For example, the Youth Employment Law of 1997 in Uruguay, promotes internships or apprenticeships in an enterprise for a maximum of one year, so that young people can overcome the work experience requirement. The same law also foresees grants to increase employment generation opportunities for low-income youth.

The Province may want to study the Uruguayan experience. And it may want to complement the nationally driven learnership programmes with a provincial initiative in subsidised work experience projects, especially for the many small firms in the Western Cape that do not qualify for measures under the National Skills Development Strategy.

*Source: Youth: Pathways to decent work, report VI, International Labour Conference, 93rd Session, Geneva 2005.*

Hence, the MEDS is an ambitious departure from what the PGWC has traditionally done. For the first time, there is an outline of a plan, plus the resources to turn it gradually into reality – gradually, because the MEDS is going to be a long haul. The socio-economic problems of the Western Cape will obviously not be solved overnight. This means that the MEDS needs the motivation and the institutional stability that can guide it through this and future administrations. The more the MEDS is recognised as a forum for discussion, vehicle for action, and platform for change by the people in the Western Cape, the better it will weather the inevitable vagaries of day-to-day politics. In other words, the more people engage with the MEDS, the likelier the long-term success. With time, the collective competence of the region will hopefully grow, and with that the remit of the MEDS can expand as well. But especially in the beginning it is important not to take on too much.

Collective endeavours, such as the MEDS, presuppose that stakeholders take each other seriously and have a measure of trust in each other's actions. At the present time, many stakeholders do not even know each other. This has got to change. The real change in terms of interfirm cooperation, business-science networks, and government-sponsored innovative activities is going to materialise the slow and the hard way. Certainly in the beginning, this is going to require a lot of explaining, motivating, and coaxing on the part of the PGWC, and an appropriate institutional and organisational framework will need to be devised to make this possible.

To be sure, the onus is equally on business. Leaders from the business community in the Western Cape must engage with the complicated socio-economic challenges facing the

Province, regardless of whether their individual company is directly affected by poverty, unemployment, and other forms of economic exclusion in the short term. For in the long term, we are all affected. Rising to the challenge is about securing our joint future. And to this end, business leaders must seek the dialogue with government. They might also agree to host government personnel on secondment to deepen the understanding of business dynamics among civil servants. The ties these initiatives create will contribute toward a more dynamic relationship between the private and the public sector and, as in some Asian economies, help create effective partnerships that sponsor growth projects and see them through.

It is necessary, of course, that the various parts of government get their act together, both horizontally and vertically. At the level of the PGWC, the MEDS and the other provincial initiatives it relates to (see Chapter 3) must not become departmental turfs where jealousy rules supreme and where a not-invented-here syndrome prevents the necessary integration of what ultimately is one endeavour to turn this Province into a better place to live for all. Given the importance of the Cape Town metropolitan area in the Western Cape, it is also paramount that Province and City Government integrate their plans. Failing to do so would not only result in inefficiencies, but even worse, some initiatives simply would not happen at all. It is for this reason that we advocate the institution of a government forum on industrial policy, under the auspices of the Province, that involves local and National Government (see Chapter 3).