



2016

Diversification of a resource-based economy: Northern Cape Perspective

Economic Intelligence Report

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1. Introduction

In a large number of low or middle income economies, industrial production or exports, and often both, are heavily biased towards natural resources. Resource-based economies are often-although somewhat arbitrarily-defined as economies where natural resources account for more than 10 per cent of Gross Domestic Product (GDP) and often 40 percent of exports (Rudiger Ahrend). As commodity prices are often particularly volatile, a situation in which export revenues depend significantly on commodity price development implies that resource -based economies are particularly vulnerable to external shocks.

South Africa and the Northern Cape economies are both rich in natural resources' i.e. minerals and agricultural products. According to IHS Global Insight, in 2014, the primary sector contributed approximately 9.8% and 30.0% to GDP of South Africa and Northern Cape respectively. A comparison between 2009 and 2014 shows that primary sector contribution to total provincial exports has increased from 78.9% to 90.8%. This can be partly attributed to the mining expansion that took place, especially in the John Taolo Gaetsewe District Municipality.

Reliance on the primary sector can however put the province in a difficult position, particularly with the structural constraints that plague both the South African and provincial economies. These are electricity shortages and most recently drought both of which are detrimental to the primary sector. In addition, the recent announcements of retrenchments in the mining industry worsen the plight of the primary sector. Hence, there is a need to diversify the economy and to tap into other economic opportunities in various sectors to generate employment and income.

This economic intelligence report firstly highlights the pros and cons of having a resource-based economy, secondly explores the possibilities for resource based economy, particularly the Northern Cape, to accelerate the diversification of the economic structure.

2. Rationale for diversification

Diversification of the economy is critical for the long-term sustainable development in resource-rich developing countries. High level of export concentration makes these economies vulnerable to commodity price fluctuations that can result in abrupt contraction of public resources and / or create spill over effect in the rest of the economy.

Whilst having a rich natural resource base has its obvious advantages, it is the exploitation of these that is key. When properly exploited, natural resources provide a country with goods that can be traded and hence guarantee a certain revenue stream from exports. Further developing resource sectors- especially for exports- can be a

strong driver for economic growth and hence can significantly contribute to increasing incomes. Increasing incomes, in turn, usually leads to a strong expansion in a country's non-traded sector, i.e. principally in services.

Diversification is part of the development process and implies the emergence of non-traditional economic sectors, activities, industries, products and services. In addition it supports greater integration in the world economy. In a world of static comparative advantage diversification never happens, however, we live in a world of dynamic comparative advantages. The rationale for diversifying the structure of the economy is that the economy performs better in long run if it is competitive in range of sectors. Relying on one sector for example primary sector can lead to challenges in the economy especially if it depends on global demand, which is unstable at times. As we are currently experiencing with commodity prices and fluctuation of global demand in the mining industry. By and large, diversification is a strategy to "self-insure" against the large macroeconomic shocks transmitted to continue heavily dependent on a limited range of resource exports by wide swings in resource prices.

Moreover, diversification exposes producers to a wide range of information, including foreign markets and learn-by-doing gains that raise productivity and income. Capability in one sector, can open the way to others, especially those that use related knowledge. However, countries that are rich in mineral resources often find it difficult to diversify towards products that can open the way to acquiring capabilities in more advanced products that can support higher wages as the country moves up the technology ladder.

The process of diversification has taken many forms, the most prominent change has been the shift toward industry. In the 1960's, 80% of developing country exports were primary commodities, today almost 80% are industrial products (Alan Gelb, 2010). This massive transformation in export structure has been associated with the rise of major industrial power-houses, China most prominently, but also countries such as Korea, India, Brazil, Indonesia and Mexico. Most of these new industrial powers were previously primary-based economies. Today they are deeply integrated into global production networks across a wide range of sectors, participating in a rapidly growing south-south trade and in most cases rapidly upgrading the sophistication of their export mix. Recently, there is a growing trend of knowledge-based economies, where the approach points towards the productive role of knowledge and technology.

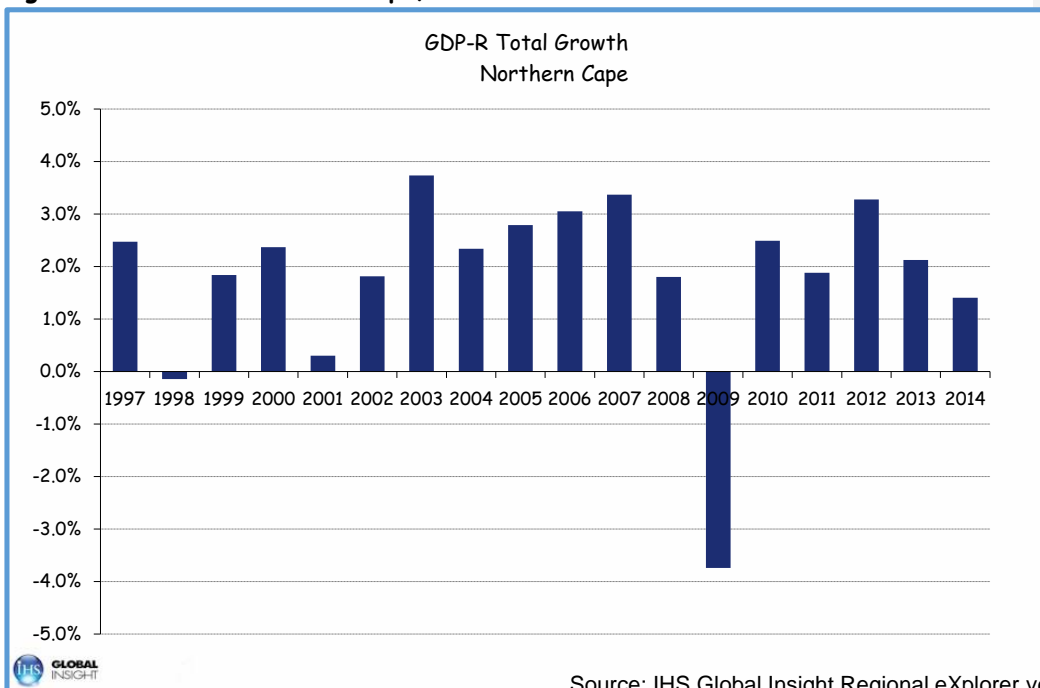
3. Economic and Trade Overview

The aim of this section is to briefly discuss Northern Cape economic overview and international trade information. This is important as we will be able to see which sectors are dominating and the performance of the economy in general. The information serves as a base line in considering diversification of the provincial economy.

3.1 Gross Domestic Product

Gross Domestic Product is one of the indicators used to measure economic growth and ascertain if the economy is performing well or not. Figure 3.1 depicts the annual Northern Cape economic growth rate from 1996 to 2014.

Figure 3.1: GDP-R Northern Cape, 1996 to 2014

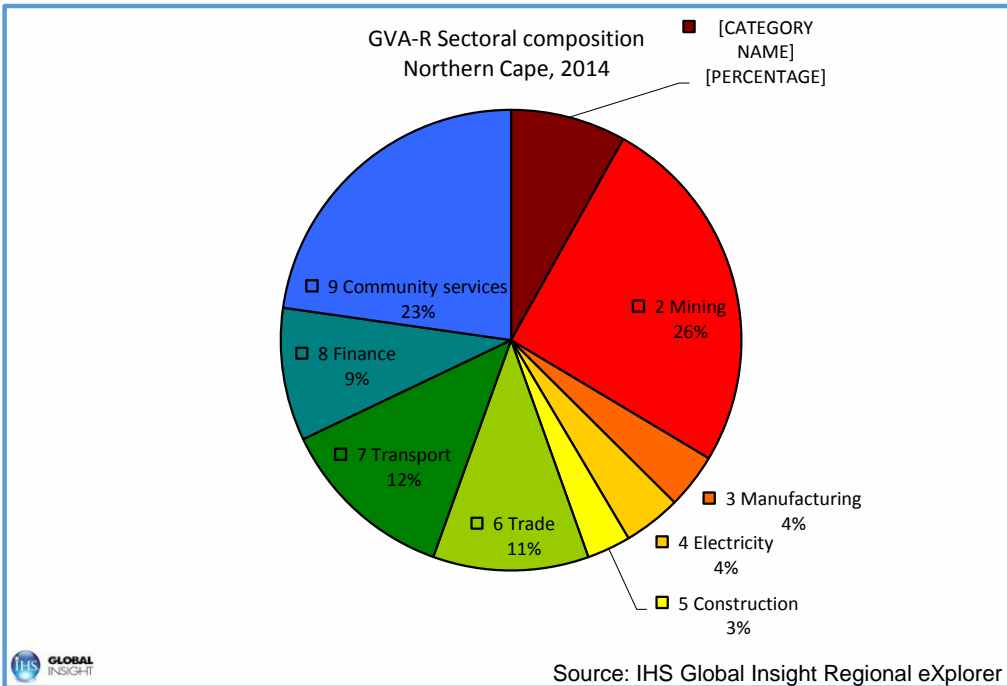


According to IHS Global Insight, Northern Cape experienced a positive economic growth rate prior to the global recession in 2009. The impact of the recession was severe in the province because of the reliance on global demand of primary sector commodities, especially from mining and quarrying activities. This is concrete proof that if the province does not diversify its economic structure then it will continuously experience macroeconomic shocks related to global demand of its exports. The recent retrenchments and closing of some mining operations is the result of fluctuations in the commodity prices and decreased global demand.

3.2 Economic structure

Figure 3.2 depicts Gross Value Added (GVA) sector composition of the Northern Cape economy in 2014.

Figure 3.1: GVA-R Sectoral Composition (Northern Cape, 2014)

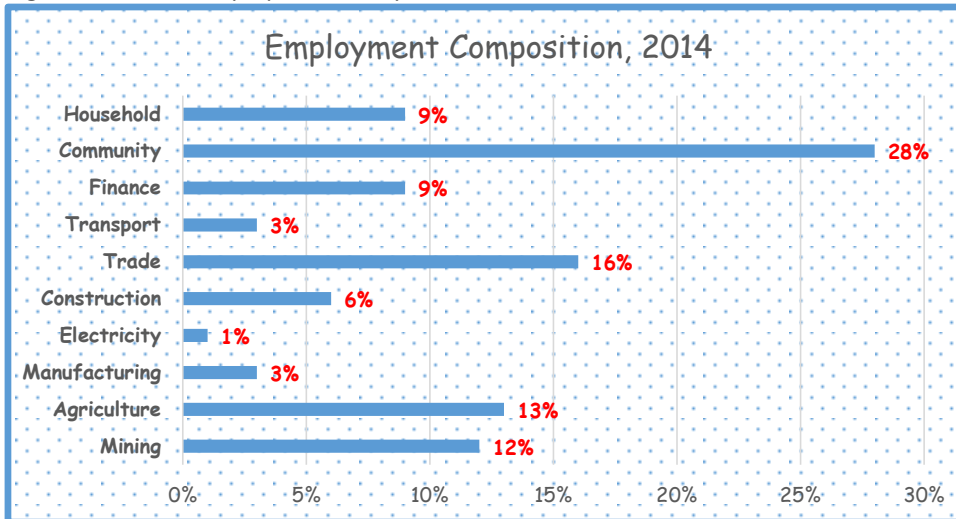


The primary sector contributed approximately 34% to the provincial economy in 2014; with mining industry contributing 26%. As can be seen in the above figure, the Northern Cape is a resource based economy. Furthermore, the secondary sector contributed only 11% to the economy and manufacturing accounting for approximately 4%. National and provincial government aims to support the growth of the manufacturing sector, in the process creating much-needed jobs and contribute to economic growth. Meanwhile the tertiary sector (services) is contributing the most to the economy of the Northern Cape, accounting for 55% of the Provincial GVA.

3.2 Employment structure

The aim of this indicator is to show employment distribution per economic sector, and with that we can tell which sector is employing the majority of the people in the Province.

Figure 3.3: NC Employment Composition, 2014



Source: (Global insight, 2014)

According to Figure 3.3, Community and social services employ the most workers (28%) in the province, followed by trade (16%) and agriculture (13%). The tertiary sector employed approximately 65% of the total labour force whereas the primary sector was the second largest employer; accounting for 25% of employment in the province. The mining industry employed 12%, and with the planned retrenchments the employment contribution will change.

3.3 Location Quotient

A specific regional economy has a comparative advantage over other regional economies if it can produce the same good more efficiently. The location quotient is one way of measuring this comparative advantage by taking into account production and employment. If larger than one for a specific sector and regions, then that region has a comparative advantage in that sector.

Table 3.1 shows the location Quotient of the Northern Cape between 2009 and 2014.

Table 3.1: NC Location Quotient

Sectors	2009	2014
Agriculture	2.94	3.26
Mining	3.01	3.02
Manufacturing	0.26	0.29
Electricity	1.26	1.10
Construction	0.84	0.76
Trade	0.79	0.74
Transport	1.06	1.25
Finance	0.57	0.45
Community services	0.96	1.00

Source: (IHS Global Insight, 2016)

Based on Table 3.1, Northern Cape has a comparative advantage in the primary sector (mining and agriculture) with location quotient above 1 in the two periods. The province however does not have comparative advantage in manufacturing, this is shown by location quotient of 0.29 in 2014. In the secondary sector, the province has comparative advantage in Electricity. In the tertiary sector Northern Cape has comparative advantage in Transport and to some extent community services. As a start, diversification of the provincial economy should consider the mentioned sectors in which it has comparative advantage (location quotients greater than 1).

3.4 International trade (Export vs Import)

The aim of this sub-section is to briefly highlight the direction of trade (export vs Import) and to show which sub-sectors are strong in terms of exports volume and lastly to indicate the most important trade partners (i.e. countries which the Northern Cape export most products to).

Table 3.2: Imports Totals (Northern Cape, 2010 - 2014)

Imports (R1000)	South Africa	Northern Cape
2010	609,111,997	558,099
2011	743,755,998	734,322
2012	856,569,997	1,234,172
2013	1,000,928,997	5,033,266
2014	1,072,463,997	3,403,822

Source: Global insight, 2016

The volume of imported goods by the Northern Cape has dramatically increase since 2010, although in 2014 it started to decrease. In 2013, metal products and machinery accounted for 74.7% of Northern Cape imports, this is not surprising because of mines in the region. However, in 2014 imports of metal products and machinery decreased to 44.9%.

Table 3.3 shows exports volumes for South Africa and the Northern Cape from 2010 to 2014.

Table 3.3: Export volumes (2010-2014)

Exports (R 1000)	South Africa	Northern Cape
2010	668,855,998	6,188,130
2011	794,742,999	5,685,586
2012	825,024,999	6,046,559
2013	932,587,999	6,753,605
2014	1,003,825,998	13,649,207

Source: (Global Insight, 2016)

Based on Table 3.3, export volume from the Northern Cape to the rest of the world has been increasing slightly in recent years. In 2014, the provincial share of exports of

total national exports was a mere 1, 4% denoting that Northern Cape share of national exports is still far less when compared to other provinces. This implies a need for the province to promote and make businesses aware of opportunities in various export markets and entrepreneurs must participate in international exhibitions and export promotions championed by the Department of Trade and Industry (DTI) and relevant export promotions agencies.

Table 3.4 shows Northern Cape exports per economic sector in 2014.

Table 3.4: Exports per economic sector, 2014

	South Africa	Northern Cape
Agriculture and hunting	4.6%	13.0%
Forestry and logging	0.1%	0.0%
Fishing, operation of fish farms	0.1%	0.0%
Mining of coal and lignite	5.6%	0.0%
Mining of gold and uranium ore	5.1%	0.0%
Mining of metal ores	19.4%	27.2%
Other mining and quarrying (incl 22)	2.4%	50.5%
Food, beverages and tobacco products	6.0%	1.4%
Textiles, clothing and leather goods	1.6%	0.1%
Wood and wood products	2.3%	0.2%
Fuel, petroleum, chemical and rubber products	12.3%	0.6%
Other non-metallic mineral products	0.7%	0.1%
Metal products, machinery and household appliances	18.4%	1.9%
Electrical machinery and apparatus	1.3%	0.1%
Electronic, sound/vision, medical & other appliances	1.9%	0.1%
Transport equipment	10.9%	1.7%
Furniture and other items NEC and recycling	6.6%	2.9%
Electricity, gas, steam and hot water supply	0.6%	0.0%
Other unclassified goods	0.0%	0.0%
Total	100.0%	100.0%

Source: (IHS Global Insight, 2016)

Based on Table 3.4 above, Northern Cape main exports consist of primary sector commodities, predominantly mining and quarrying (50.5%), mining of metal ores (27.2%) and agriculture and hunting (13.0%).

Table 3.5 list Northern Cape's important trade partners (countries) in terms of exports.

Table 3.5: Major trade partner (Exports)

Countries	Value of Exports (Rand)
China(including Hong Kong)	972 203 548
India	698 675 318
Russia	562 343 199
Spain	512 387 545
South Korea	451 808 400
Netherlands	333 845 060
Japan	301 282 191
Australia	249 532 915

Germany	208 472 034
Ukraine	189 598 808

According to global insight, majority of Northern Cape products are exported to China followed by India, Russia, Spain and South Korea. As previously mentioned, the Northern Cape is exporting most of mining and quarrying commodities including mineral ores.

Table 3.6 shows countries which the Northern Cape imports most of their products from in 2014.

Table 3.6: Major Trade partners (imports)

Countries	Value of Imports (Rand)
Spain	1 183 270 265
Austria	446 001 963
Netherlands	407 635 411
Chile	184 670 798
United States of America	132 345 208
Germany	124 768 706
Bahrain	87 631 376
Turkey	79 619 480
Switzerland	78 821 315
Italy	64 708 823

Source: (Global Insight, 2016)

Based on Table 3.6 above, in 2014 the Northern Cape imported most of products from Spain. This is not surprising as there is a strong presence of Spanish companies in the Northern Cape operating in the renewable energy industry. According to global insight, the Northern Cape main imports consist of Metals products, machinery and household appliances, followed by fuel, petroleum, chemical and rubber products and electrical machinery and apparatus.

4. Challenges facing the primary sector

The aim of this section is to briefly discuss some of the challenges facing the primary sector hence a need to diversify our economy and avoid relying on one particular sector as source of economic growth, revenue and job creation.

4.1 Retrenchments in the mining industry

The mining industry has played an important role in the economic growth and development of not only South Africa but the Northern Cape, since the earliest discoveries of minerals in these economies. Mining remains one of the significant sectors of the economy by providing employment, contributing to the GDP, community social responsibility projects and building relationship with international traders.

The sharp decline and volatility in the iron ore price over the past year (2015), has been a significant factor for Kumba and the mining industry in general (Kumba Iron Ore

Limited, 2016). China's slowdown in investment expenditure has weighed particularly on prices for metals and minerals. As a result, 2015 marked a year of much weaker demand growth. Iron ore fundamentals deteriorated on the back of declining global demand and growth in low-cost supply, particularly from Australia.

The index iron ore price at the beginning of the financial year was \$71.25 per tonne, falling to a low of \$38.50 per tonne in December 2015, due to the strong growth in supply and slower crude steel production growth in China (Kumba Iron Ore Limited, 2016). Mines operating in the Northern Cape announced in 2015 the intention to retrench thousands of workers due to reduced global demand and slump in commodity prices. Some of the workers have already been retrenched while others are awaiting the consultation process between the mines and relevant stakeholders like government and labour unions.

A large-scale retrenchment can have significant impact on communities, local businesses dependent on the patronage of workers and their families, can be hard hit as well. The effects of company downsizing on secondary and tertiary enterprises can lead to wider unemployment throughout the local economy. Socio-economic impacts can be especially severe in cases where a company is the main employer in the area or where local communities have grown dependent on the company not for their livelihoods but also for social services and facilities such as health care, housing, education etc.

Many of the workers that are or going to be retrenched in the Northern Cape are being housed by mining companies and it will mean they will have to look for alternative accommodation after being retrenched. Areas like Kathu and Postmasburg are dominantly mining towns and other economic activities depend on the mining industry, meaning if the mining companies downsize it will have a severe impact on local business as well. Therefore, it is imperative to have a diversified economy so that the province does not rely on one particular sector to generate employment and income.

4.2 Droughts and other challenges in the agricultural sectors

The agricultural sector in the province employs over 37 000 workers. In 2015 the country experienced one of the severe drought in years and the impact is still trickling down the economy even in 2016. Some of the hardest affected regions include, Northern Cape, North West, Limpopo and Free State.

The most immediate consequence of drought is a fall in crop production, due to inadequate and poorly distributed rainfall. The shortage in various crops will then through multiplier effect affect the prices of those crops. This increment in food prices affect the poor households the most, as their diet mainly comprised of starch food. In recent months, government collectively rolled-out projects to cushion the impact of the drought on farmers by offering them financial and non-financial support.

Other challenges affecting the agricultural sector include the mechanisation of the production process; which then lead to job losses. In addition, most of farmworkers earn very little income therefore it makes it difficult for them to raise above the scourge of poverty. This is some of the challenges the agricultural sector is facing and hence there is a need to diversify our economy and grow other sectors the economy in order to be able to absorb the unemployed population in the province

5. Value-addition

Although this report advocates for diversification from resource-based economy, it must acknowledge the reality that the country and the province still produce a lot of minerals and agricultural produce. There is a need thus to increase value-addition of those primary commodities. This will create more jobs and increase revenue. For the purpose of this report we will briefly discuss agro-processing and industrialisation as a strategy for diversifying our economy.

5.2 Agro-processing

South Africa's R49 billion agro-processing sector plays a significant role in terms of job creation and sustainability in the economy (The Department of Trade and Industry , 2015). It presents key opportunities in the global value chains in the food and freight industries. Both the New Growth Path (NGP) and the National Development Plan (NDP) identify agro-processing as a sector with high growth potential to help realise overarching macroeconomic objectives.

According to IPAP, a key characteristics of the agro-processing sector is its strong upstream and downstream linkages. Upstream, the sector links to primary agriculture across a wide variety of farming models and products. Downstream, agro-processing sector output are both intermediate products (to which further value is added) and final goods that are marketed through wholesale and retail. It also supplies, a diverse array of restaurants, pubs, shebeens and fast food franchises. The "organic" link with primary agriculture, makes agro-processing critical for employment creation and poverty eradication.

5.3 Industrialisation

Majority of countries have attained rapid and sustained growth and high income level through industrialisation. The IPAP requires the country to pursue an industrial development path that is characterised by increased participation of previously marginalised citizens and regions of our country. In addition, there is a need to strengthen and increase black participation in the mainstream economy which remains concentrated in the white minority. It is in this context that the Black Industrialist Programme was introduced.

The Black Industrialist Programme prioritise the following sectors amongst other:

- Mining and mineral beneficiation
- Manufacturing
- Financial services
- Services
- Creative arts
- Construction

Furthermore, the predominance of medium to high-tech products in global trade signifies that more efforts should be directed to value-addition and improving efficiencies along manufacturing value chains. More importantly, new advanced manufacturing processes need to be promoted and accumulated industrial capabilities enhanced. Advanced manufacturing is generally characterised by relatively high levels of skills and technology requirements and encompasses sectors such as; automotive, aerospace, electronics and nuclear energy (DTI, 2014).

6. Knowledge-based economy

South Africa's and Northern Cape prospects for improved competitiveness and economic growth rely, to a greater degree, on science and technology. The government broad developmental mandate can ultimately be achieved if South Africa takes further steps on the road to becoming a knowledge-based economy, in which science and technology, information, and learning move to the centre of economic activity.

The knowledge-based economy rests on four interconnected, independent pillars:

- Innovation
- Economic and institutional infrastructure
- Information infrastructure
- Education

The national innovation system supported by the higher education network and centres of innovation such as the CSIR, HSRC and related institutions. More importantly the Technology Localisation Unit in the Department of Science and Technology (DST) should ensure a regional or provincial presence in order to stimulate innovation. It should be noted the new economic activities that have grown scale and have reached critical mass such as the renewable energy industry and the Square Kilometer Array (SKA) presents opportunities

Transformation towards a knowledge-based economy in the country and Northern Cape, will need investment in skills development and promotion of emerging entrepreneurs in knowledge economy. SMMEs are major provider of jobs in the knowledge-based industries which will bring relief to the already bloated government wage bill and a solution to youth unemployment.

Comment [S1]: Which of these sectors/sub-sectors, two at most, should the NC target and is going to result in quick-wins given the structure of the provincial economy?

Comment [S2]: Isn't the establishment of SPU investment? The increase in NSFAS allocation is a further demonstration. The actual challenge is the poor performance at school level in Science, Technology, Engineering & Mathematics (STEM) subjects and this needs to be addressed urgently. I notice the matter is addressed in the next paragraph.

7. Human capital Formation

The productive capabilities required to produce goods and services in ~~and an~~ ever more globalised economy are becoming increasingly sophisticated. Competitive advantages is greatly enhanced by strengthening linkages between tertiary institutions and industry. Improvements on the technical front require a much larger pool of school leavers with university entrance in mathematics and science. This implies purposive efforts to improve the cadre of school leavers necessary for a modern and increasing knowledge-driven economy.

8. Conclusion

The report aims to provoke thoughts around the issue of diversifying Northern Cape economy. Diversification of the economy is critical for long-term sustainable development in resource-rich developing countries. As commodity prices are often particularly volatile, a situation in which export revenues depend significantly on commodity price development implies that resource-based economies are particularly vulnerable to external shocks. A good example of this is the recent retrenchment in the mining industry due to reduced global demand and lower commodity prices.

The process of diversification has taken many forms, the most prominent change has been the shift toward industry and more recently towards knowledge-based economy. There is no harm for the Northern Cape and the Country to pursue both industrialisation and knowledge-based economic strategies. The challenge for the province is to develop or align policies in support of development of industrialisation and knowledge-based economies. It is imperative though that the education system (primary, secondary and tertiary) start producing the outcomes that will be supportive of human capital formation in the industries that are in dire need of this. This will also include human capital formation, capacitating the people of the Northern Cape in skills relevant to growing industries. The promotion of diversification strategy will contribute to reduction in unemployment, particularly among the youth and increased economic growth.

9. Recommendations

- Provincial government must align provincial policies to support industrialisation and knowledge-based economies
- Private sector and Government must provide non-financial and financial support to emerging industrialists and knowledge-based entrepreneurs
- Investigate the possibility of re-skilling former mineworkers to participate in manufacturing activities and also knowledge-based economies

- Raise awareness among emerging entrepreneurs regarding export opportunities in various countries and ensure they also participate in the DTI export promotion events abroad and locally
- Encourage learners to enrol for maths and science at high school and upon completion successful learners from disadvantaged families must be given support to enrol at higher learning institutions
- NYDA and relevant stakeholders must intensify roadshows on career-exhibitions in the province to raise awareness of skills required by industry
- Relevant SETA's must ensure that qualifying youth and school leavers are afforded opportunities to participate in apprenticeships and internships, particularly in the private sector

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