

Michael Doyle

“The Revolution of Swaziland – an Executive Summary”

Email address: mike.doyle@waterford.sz

Contact number: +268 7602 6892

Table of Contents	Page
Introduction	3
Part 1: Swaziland up to 2015	4
1.1 Economic Challenges	4
1.1.1 Swaziland's reliance on SACU and AGOA revenues	6
1.1.2 Ease of doing business	8
1.1.3 Corruption perception index	8
1.2 Social development and political system	9
1.3 Aids and unemployment	11
1.4 Energy and technology	11
1.5 Broadband connectivity	12
1.6 Summary findings in 2015	13
Part 2: the years to 2025	14
2.1 Swaziland's policy revolution	15
2.2 Swaziland's energy revolution	15
2.2.1 Funding for energy	16
2.2.2 Solar	16
2.2.3 Bagasse	17
2.3 Tourism as a driving factor	18
2.4 Education in 2025	20
2.5 Redefining the Political System	20
Conclusions	21
References and web sources	24
Tables	26
Michael Doyle 19571380	

“The Revolution of Swaziland – an Executive Summary”

Introduction

“Africa is not really “poor” as portrayed: it is poorly managed and yet to be developed. Its inherent natural wealth is yet to be fully unlocked, leading many to expect a better future, and there is promise in this direction.” *Duncan Clarke, Africa’s Future: Darkness to Destiny*

In the Kings Vision, King Mswati III, stated that he wanted Swaziland to be a first world country by 2022. The year is now 2025. Swaziland has undergone many changes in the years since 2015 when this author first analysed the interacting components that constituted the ‘effective’ performance of Swaziland as a nation. In 2015 the social, technological, economic, environmental and political aspects of Swaziland were first analysed in terms of the local and regional contexts it found itself. Attention was also paid to Swaziland’s relationship with South Africa due to its close proximity and past history, and in particular its reliance on South Africa and the SADC region.

Swaziland is a small landlocked country of about 17,000 square kilometres. It is bordered by South Africa and Mozambique. Its terrain, often referred to as the Switzerland of Africa, is one which encompasses magnificent mountain scenery, with unique ancient rock formations. It has four topographical and climatic areas each with its own unique characteristics and extensive variety of biodiversity.

In analysing the 10 years that have passed since 2015 the author sought to examine the history of the regional framework in which Swaziland found itself at the start of this period, and whether the future proposed in 2015 has materialised. Ian Roderick was quoted in John Pontin’s book, *The Converging World*, (2008:142): “The Converging World concept goes beyond carbon trading, although this is a fundamental aspect requiring emergency attention. It is a vision of a world where everyone has a fair and equal share of all the resources that the earth can easily provide without jeopardising its potential to support life in all its diversity. It is also a world where everyone has a fair and equal share of, and access to, human created resources such as knowledge. The vision extends to an indiscriminate right, and equal access, to the functions of our institutions for justice, health, education and security.” Of

particular interest is whether the 'greener' revolution path that Swaziland started on in 2015 has had the necessary impact in the intervening years to 2025 to affect Swaziland as a whole, in its ambitions to become classed as a first world country with the elements suggested by Pontin and those of any social justice advocacy program. In a modern world whose economies are built on fossil based energy models, the question also asked was whether Swaziland was able to leap frog energy technologies into a carbon free economy, and whether this technological revolution in energy provided enough impetus to lead Swaziland into a steady state economy with full employment, political and social stability, and environmental credentials that makes it the envy of the modern world?

Part 1: Swaziland up to 2015

1.1 Economic challenges

[Table 1: GDP% growth](#), [Chart 1: GDP% growth](#)

Swaziland was faced with a number of challenges, not least of which was its high unemployment rate among the population of those over the age of 15. According to a Labour Force Survey, the unemployment rate at the end of 2014 stood at above 40%, the highest among the SADC countries (Swaziland Business Year Book (SBYB) 2015:144). Added to this was the high gender disparity which led the government to reviewing its Employment Act in an effort to address the problem.

Swaziland was also faced with the challenge of having the highest civil service ratio of civil servants per capita population in the world. Under the Fiscal Adjustment Roadmap Swaziland was challenged to reduce the size of its civil service from 35,000 to 28,000 jobs by 2015.

Swaziland's growth prospects for 2015/2016 were predicted to be marginally similar to high income economies growth, however, well below the average predicted for Sub-Saharan Africa. In the context of its relationship with its main trading partner, South Africa, its growth was predicted to be slightly lower, which was indicative of its economic relationship within the SADC region and the general poor performance the region experienced as a whole. In his Budget speech, South Africa's Finance Minister, predicted that South Africa's growth was not expected to reach 3% even by 2017 (Business Day Live 31 August 2015), which would have had a roll on impact for Swaziland.

If King Mswati III's vision was for Swaziland to be regarded as a 'first world country by 2022', then he needed to look to the growth prospects for Sub-Saharan Africa and not high income economies who had a much lower predicted growth. Furthermore, a reliance on its main trading partner, South Africa and the Southern African Customs Union was deemed unreliable due to the poor performance of their own economies.

Africa's economic history has developed a bewildering variety of economic modes over its history from earlier subsistence and slave trade based economies to colonization and Marxist style states. "Some almost constitute mega-states (for example, Angola, Sudan, the DRC, Ethiopia, Nigeria and South Africa) – all sizeable, all with modern industries and all with large populations." (Africa's Future: 2012:170). However, by the turn of the last century evidence reveals that all of these economies had underperformed and their dysfunction ran contrary to the myth that 'bigger is better'. The above six states accounted for nearly 60% of all Africans and all displayed varying degrees of classic stereotypical underperformance related to poor leadership, lack of governance, wars or rebellions and looting of state coffers and natural commodities by political regimes.

Many smaller states such as Swaziland, Lesotho and Liberia had also fallen on hard times and deep crises linked to poor governance and lack of diversified economies. Swaziland has few mineral deposits (besides small deposits of coal and iron ore) and as such had not been subjected to the resource curse faced by larger undiversified economies that had too much reliance on commodities in a dwindling world commodities market. It was however, unable to escape the problems related to poor governance and political instability that characterised so many African economies during the last and early parts around the turn of the century.

Duncan Clarke in his book *Africa's Future, Darkness to Destiny* (2012), talked of Swaziland's regression into crisis where 63% of the population lived on less than \$2 under the 'tutelage of the monarch and its various economic entities used to indulge in excess'. Clarke (2012:238) further stated that the ruler of Swaziland, King Mswati III, drew \$60 million during the 2011-12 state budget. There are further 'black box' funds that fall outside of control by parliament. These funds are regarded by opposition groups as the "feedlots for the king and the inner circle". This general redirection of state funds was further highlighted in the 2015 US Department of State Fiscal Transparency Report on Swaziland: "The budget and related documents are publicly available and provide a general picture of government revenues and expenditures. However, revenues and expenditures related to natural

Michael Doyle 19571380

resources are not included in the budget. Expenditures to support the royal family, military, police, and correctional services are included in the budget, but are not subject to the same oversight as the rest of the budget. The supreme audit institution audits yearly government financial accounts and produces publicly available reports. While the process for awarding natural resource extraction licenses and contracts is outlined in law, there is inconsistent application of applicable regulations and basic information on such awards is not publicly available. Fiscal transparency in Swaziland would be improved by including all expenditures and revenues in the budget; subjecting the entire budget to audit and oversight; consistently applying legal procedures in the awarding of natural resource extraction contracts and licenses; and making basic information on natural resource awards publicly available.” The report goes on further to add: “A key component in generating aid from foreign nations and in particular the United States program of USAid is a nation’s fiscal transparency. This is a critical element of effective public financial management, in order to help a nation build market confidence, and underpin economic sustainability. Transparency allows a nation’s citizens to hold its government accountable for not only the correct revenue spend, but also to ensure foreign aid is used for the purposes intended.”

In 2015 Swaziland was also primarily a subsistence economy as evidenced by its large poor, rural population (World Bank: 78.8%).

1.1.1 Swaziland’s reliance on SACU and AGOA revenues

Table 2: SACU Revenues, Chart 2: Declining SACU Revenues. Source: Swaziland Business Year Book 2015

The primary goal of the world’s oldest custom union, the Southern African Customs Union (SACU), was to promote economic development through regional coordination of trade. SACU dates back to the 1889 Customs Union Convention between the British Colony of Cape of Good Hope and the Orange Free State Boer Republic. A new agreement, signed on June 29, 1910, was extended to the Union of South Africa and the British High Commission Territories (HCTs), i.e. Basutoland (Lesotho), Bechuanaland (Botswana), and Swaziland. South West Africa (Namibia) “was a *defacto* member, since it was administered as part of South Africa” before it became a *dejure* member.

Currently SACU is made up of Botswana, Lesotho, Namibia, South Africa, and Swaziland. The Economic structure of the Union links the Member states by a single tariff and no customs duties between them. The Member States form a single customs territory in which tariffs and other barriers

Michael Doyle 19571380

are eliminated on substantially all the trade between the Member States for products originating in these countries; and there is a common external tariff that applies to nonmembers of SACU.

Revenue from SACU contributed to Swaziland revenues in 2009/2010-76%, 2011/2012-40.1%, but dropped in 2010 and was expected to continue declining over the next decade. A windfall in SACU revenues in 2012 prevented the need for Swaziland to take out international loans, however the declining revenues continued. This had the result that the gap in government expenditure and revenues continued to expand with government spending predicted to reach 45.8% of GDP in 2018 (Swaziland: Southern Africa's forgotten crises. 2013:8). The global recession has been blamed, but according to Khaled Ahmed of the Health Economics and HIV/AIDS Research Division at the University of KwaZulu-Natal in South Africa, the decline in SACU tariffs and revenue collection was part of a policy shift towards freer trade within the region that was likely to continue.

According to Derek von Wissell, Director of the National Emergency Response Council on HIV/AIDS (NERCHA), rather than put aside some of the additional revenue generated by SACU while it was plentiful, the Swazi government went on a spending spree and ignored warnings from the International Monetary Fund (IMF) that its public sector bureaucracy was bloated far beyond the needs of a small country of one million people. As was stated by von Wissell: "Today we sit with no savings or new receipts. We've dug ourselves into a pretty deep hole, according to the IMF. It's serious, very serious."

The percentage of revenues generated through SACU revenues showed a downward trend which was reflected in the general drop in GDP of the region.

A report in The Star, Business Report, June 25, 2015 suggested that the arrest of Brazil's leading businessman and politically connected, Marcello Odenbrecht (CEO of Petrobras), on corruption charges could deepen Brazil's economic recession, the worst in 25 years. This according to Christopher Garman, head of country analysis for Eurasia, based out of Washington. This has implications for other BRICSA (Brazil, Russia, India, China and South Africa) members. A contraction in the economy of one BRICSA member has implications for other members, particularly the smallest economy, that is South Africa. The cascade effect meant that in addition to SACU declining revenues, Swaziland was also faced with the contraction within BRICSA members and particularly that of South Africa.

Added to the fiscal problems related to declining SACU revenues and the potential fallout due to the contraction in the BRICSA economies, Swaziland was also faced with the withdrawal of the potential revenues available through the Africa Growth and Opportunities Act (AGOA). In a statement, released by US Embassy spokesperson Ruth Newman she said: “the United States Government deeply regrets the decision made by the Government of the Kingdom of Swaziland not to take the required steps to promote and protect worker’s rights which would have allowed Swaziland to remain part of the AGOA family. Based upon the recommendation by the United States Interagency Trade Policy Staff Committee, President Obama has deemed that Swaziland repeatedly failed to demonstrate measurable progress towards the guarantee and protection of internationally recognized workers’ rights, including the right to freely speak, associate and assemble without police or government interference. The Swazi government made sovereign decisions not to make the reforms necessary to retain AGOA eligibility, despite clear communications from the United States Government as far back as 2010 concerning what actions needed to be taken.” (Times of Swaziland, 28 June 2014).

1.1.2 Ease of doing business

Table 3: Ease of Doing Business

According to the World Bank Group’s Ease of Doing Business rankings, in 2014 Swaziland sat at a ranking of 110 out of 189. Economies are ranked on their ease of doing business. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm. As evidenced in Table below Swaziland ranked very low on the Ease of Doing Business, however an improvement was made compared to its neighbor, South Africa. Datasets for prior years were not comparable due to a change in methodology by the World Bank. However, Swaziland showed an improvement from a low of 114 in 2008 to 110 in 2014, a net gain of +4 in the rankings. This was seen as a general improvement particularly in light of the negative -11 that its main trading partner, South Africa, experienced in the same period. Swaziland also experienced a high of 124 in 2012. The 2014 figures showed an improvement of +14 places, indicative of the government’s anti-corruption drive.

1.1.3 Corruption Perceptions Index

Table 4: Corruption Perception Index, Chart 3: Corruption Perception Index

According to Transparency International “Corruption is the abuse of entrusted power for private gain. It can be classified as grand, petty and political, depending on the amounts of money lost and the sector where it occurs. Transparency means shedding light on shady deals, weak enforcement of rules and other illicit practices that undermine good governments, ethical businesses and society at large. Corruption corrodes the fabric of society. It undermines people’s trust in political and economic systems, institutions and leaders. It can cost people their freedom, health, money – and sometimes their lives.”

Swaziland made strides in the years leading up to 2015 with a climb of 54 places since its lowest ranking of 121 in 2007. In 2006 The Swaziland Legislature promulgated The Prevention of Corruption Act of Friday, July 14th 2006. This had an immediate impact and continues to do so up to 2025.

1.2 Social development and political system

Table 5: UNDP Human Development Index Trends, Chart 4: UNDP Human Development

In terms of the United Nations Development Program (UNDP) and the UN Development Reports Human Development Index Trends (1980-2013) Swaziland fell into the less developed countries category. Topping the index was Norway. According to the UNDP definition: “Human Development Index (HDI): A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living.” Swaziland’s performance on the index saw its indicators showing a decline from 1990; however, it remained stable in the three years prior to 2014. This was primarily due to the initial years of devastation wrecked by the HIV/AIDS epidemic, that is, the measurement a ‘long and healthy life’, as well as the work by NGO’s in conjunction with the Swaziland Ministry of Health to combat future infections and manage those already affected.

The Swazi Observer, Tuesday 7 July, 2015 reported that a financing agreement was signed with the European Union under the 11th EDF (European Development Fund). R810 million over the next five years (to 2020) was to be used in developing agro business with a focus on high value and horticulture crops as well as the development of a social protection system. European Ambassador, Nicola Bellomo, stated that cooperation should be directed towards sustainable development centred on the human person, who is the main protagonist and beneficiary of development: this entails respect for and promotion of all human rights. Social Justice Advocacy would require that a society should

Michael Doyle 19571380

hear from a plurality of interests – economic, ethnic, occupational, educational, ideological, etc. According to the authors of *Advocacy for Social Justice* (Cohen et al, 2001:7) the definition of advocacy is: “Advocacy is the pursuit of influencing outcomes – including public policy and resource allocation decisions within political, economic, and social systems and institutions – that directly affect people’s lives.” The Swaziland system of government in 2015 was that of the last remaining Absolute Monarchy in Africa. This meant that citizen’s lives were centrally controlled by a system designed to facilitate both western and traditional styles of government. Within this system was a structure known as Tinkhundla, which enabled citizens to elect candidates to be their parliamentary representatives, however no allowance was made for different political parties. Ultimate power was vested in the king, who appointed two thirds of the Upper House of parliament, the final decision making body in Swazi government. Further political structures such as The Swazi National Council (the traditional side of government) were headed by the King and Queen Mother. In terms of traditional law, all Swazi males were entitled to offer advice and council on matters pertaining to traditional law and custom. This system of government not only placed inordinate powers in the hands of the King and his advisors, but, in terms of Social Justice Advocacy, marginalized citizens politically, in particular women. Of particular note is that since the 1970’s fifty-seven countries around the world have removed or shed authoritarian governments. For example: the Philippines (1987), Bangladesh (1991 and 1996), South Africa (1994) and Indonesia (1998) (Cohen et al, 2001:33). This decade saw the ‘Arab Spring’ in which dictatorships were toppled. Furthermore, it was noted by Cohen et al that a pattern emerged in that authoritarian governments did not yield power willingly, but did surrender political power when faced with the pressure of mass movements and mobilization. In July of 2015 President Barack Obama of the United States of America issued a stern warning to African leaders. His warning was that “the continent’s economic progress rested on a “fragile foundation” and its governments were not fully prepared for “the enormous undertaking” of providing opportunities for a demographic bulge of young people who would need to find work.” (The Star, Business Report, Wednesday, July 29 2015).

Surowiecki (2014) in his book *The Wisdom of Crowds* researched in depth that the best decisions were made by decentralizing the decision making process, and solutions based on collective wisdom were more effective than centralized decision making. What was further evident in his research, however, was that together with decentralization was the concept of ‘aggregation’ whereby a strong government body would aggregate all the alternatives and ensure the best solution was acted upon. This type of government would fall under the banner of ‘direct democracy’ rather than ‘representative

democracy', a system which to many has flaws, particularly when the elected representatives fail to, or have no intention of carrying out their mandate. Suttner (2015:234) in a series of essays in his book *Rediscovering Democracy in South Africa*, referred to this same theme: "We, too, need to think beyond powerful individual leaders and, indeed, look also to ourselves in the various institutions, associations and organizations where we are located. We must use our power to find ways of reversing the current devaluation of democratic power and recover, rebuild and enhance the hard-won rights we need so badly to build our future." Suttner (2015:218) went on further to add..."we should not devalue democracy by regarding it as instrumental, as a 'good' enabling us to secure other rights. When Aristotle said 'man' is a political animal, he articulated the need for human beings to realise themselves fully. One way of doing this is for men and women to participate fully in deciding on what is most important in their lives." In other words, Swaziland needed to move from the notion that an Absolute Monarchy was in the best interests of the people, as opposed to a form of direct democracy where the people governed themselves.

In her book *The Social Construction of Difference and Construction*, Tracy E. Ore (2006:637) stresses that there are a variety of ways in which to transform systems of oppression and wisdom, however that it is difficult, and 'perhaps dangerous, to try to establish the best one. This would support the work of Surowiecki (2014), as Ore (2006:637), notes that regardless of the strategies chosen to use in the formation of positive social change, the 'building of coalitions and work across categories of difference' are important. In Swaziland's case, the Monarchy and government needed to heed this advice and start a much more in depth consultative process with its citizens, with a view to a restructuring of the economy, the political system and general upliftment of the nation.

1.3 AIDS and Unemployment

[Table 6: % unemployment](#), [Chart 5: % Unemployment](#), [Table 7: Leading causes of death and co-producing factors](#)

Two of the biggest problems facing Swaziland in the years leading up to 2015 and beyond were unemployment and solving the AIDS epidemic problem. Declining SACU revenues and a depressed world market were reflected in a declining GDP and an increasing unemployment rate which remained stable at 40% during the period 2005-2015. The prevalence of those adults living with HIV stood at 26.5% according to UNICEF. Multiple programs were in place through partnerships with the Swaziland Ministry of Health and NGO's such as the Centre for Disease Control (CDC) and UNICEF. According

to the CDC, in 2012, antiretroviral (ARV's) reached over 85% of those eligible for treatment. The University of Washington's Institute for Health Metrics and Evaluation compiled statistics for the top ten leading causes of death in Swaziland up to 2012. Table 7 below indicates the causes and possible co-producing factors, many related to the HIV epidemic. The loss in quality of life and loss in productivity affect both the spiritual and economic welfare of the nation.

1.4 Energy and Technology

In order to drive its economy forward, Swaziland's government understood the necessity to improve its electricity supply to all parts of the country, however it found itself financially constrained to develop the necessary infrastructure. In 2015 there was an inadequate electricity supply. Research from the United States Energy Association (USEA) and the Swaziland Electricity Company (SEC) showed the overall electrification rate was approximately 27%. It was estimated that only 40% of urban areas and 4% of rural areas were electrified. Swaziland Electricity Company (SEC) installed capacity was at 69.4 MW which contributed 14 - 24% of the country's energy needs with the remaining 80% sourced from ESKOM (South Africa) and EDM (Mozambique).

In a study published in 2013 by the University of Cape Town's Energy Research Centre it was found that nuclear plants were not needed and would not be cost effective for 15 to 25 years, based on a projected cost of \$7000 (R87, 500) per kilowatt installed. This worked out at R87.50 per watt versus R18 per watt for solar photovoltaic. This meant that Swaziland was faced with potentially crippling electricity future energy costs were it to continue being a net importer of energy. This, assuming that its main supplier, Eskom, was actually able to construct and more importantly, fund its nuclear program. An article in the Swazi Times, Tuesday July 7, 2015: "Nuclear power: Who'll foot the bill? 'There appears to be a simple-minded assumption that countries such as China or Russia will provide cheap plants and offer financing. That's an illusion'." (Steve Thomas. Professor of energy policy at the University of Greenwich).

The main identified barriers identified by the SEC (regulatory and others) preventing the electrification of Swaziland included:

- Difficulty of mobilizing funding for investment, which would lead to severe delays in project implementation.

- The small size of the local energy market in which revenues from the sale of electricity were insufficient to finance a country-wide infrastructure rollout.
- Limited natural resources such as coal for coal fired power, natural gas and water for hydro-power.
- Diminishing power capacity in the Southern African region.
- Swaziland imported the bulk of its commercial energy from neighboring countries.
- The fact that investment flows were insufficient.

1.5 Broadband connectivity

In terms of its broadband connectivity Swaziland ranked 186 out of 198 countries with a broadband speed of only 2.47Mbps in limited areas. This compared poorly to the top country in the world, Singapore, with a speed of 131.69Mbps (www.netindex.com). In an article by Forbes magazine (www.forbes.com) 26 August 2012) a report, conducted jointly by Ericsson, Arthur D. Little and Chalmers University of Technology in 33 OECD countries, quantifies the isolated impact of broadband speed, showing that doubling the broadband speed for an economy increases GDP by 0.3%. A 0.3% GDP growth in the OECD region is equivalent to USD 126 billion. This corresponds to more than one seventh of the average annual OECD growth rate in the last decade. The study also shows that additional doublings of speed can yield growth in excess of 0.3 percent (e.g. quadrupling of speed equals 0.6 percent GDP growth stimulus)".

Further analysis by Tim Worstall, a fellow at the Adam Smith Institute in London, found that a doubling of broadband speed beyond 2Mbps (Swaziland currently has speeds of 2.47Mbps) did not necessarily result in an increase in economic performance. His findings concluded that broadband coverage at 2Mbps were far more important to economic growth than higher speeds. The infrastructure spend require to allow access to this service would be enormous; however, use of mobile telephony would solve this problem. The only cell phone provider in Swaziland was MTN which did not provide data roaming to all its subscribers. Better data coverage would allow for a more conducive business environment. An added advantage to better data coverage is the access to research it would allow to students in education.

1.6 Summary findings in 2015

Michael Doyle 19571380

The 2015 analysis was well summed up in the words of President Barack Obama in his July 2015 trip to Africa in which he addressed the continent's political leaders: "Time is of the essence. The choices made today will shape the trajectory of Africa and therefore the world for decades to come. The continent's leaders had to do more to strengthen democratic institutions, educate youth including women, combat a culture of bribe-taking and barriers to starting new businesses, and overcome ethnic and tribal strife." (The Star, Business Report, 29 July 2019).

Swaziland was running the risk of falling into the pool of what is traditionally known as a failed nation state. The Monarchy and government understood the need for a radical restructuring of the nation in terms of how it functioned. It also understood that to become a success it needed to not necessarily follow the prescriptive formula that institutions such as the IMF and World Bank required.

It had the courage to develop a unique formula that worked for it and to serve as an example that poorer nations could follow. That is, Swaziland chose to revolutionize itself in the battle against Climate Change.

Part 2: the years to 2025

In addition to Pontin's (2008) Converging World concept (which is successfully being implemented between the UK and India), a wealth of research literature and already implemented systems exist for alternative, sustainable and economically viable options for countries to operate by. Some of these include:

- George Monbiot's (2004) call for a World Parliament, International Clearing Union and a Fair Trade Organization whereby traditional forms of economic power are revised and less developed countries are allowed the same opportunities, such as import tariffs, to develop their economies, in the same manner that more developed countries developed theirs at the expense of 'the third world'.
- Greg Mills' (2010:459) call for development aid to be more wisely spent on developing the agricultural sector of Africa via strategies that develop extension services for farmers, and better domestic policies and practices.
- Michael Lewis and Pat Conaty (2012), where it is suggested that countries should be working towards reducing economic growth and reducing carbon emissions, while at the same time maintaining economic stability. As an alternative to economic growth, or growth imperative, both John Stuart Mill and John Maynard Keynes argued that that a steady decline in the workweek hours compensated for by improving productivity, as well as increasing worker ownership of productive assets. This could also be coupled with restructured property rights which would reduce the cost of living. In other words, nations should seek to address the 'growth dilemma and productivity trap' faced by nations.
- Moeletsi Mbeki's (2009:162) call for: "Another important and necessary innovation is new financial institutions independent of the political elite that will address the financial needs not only of peasants but also of other small to medium scale producers. These could be co-operatives, credit unions or savings banks. Besides providing financial services they would undertake technical services, which are not currently being provided by the political elite, such as crop research, extension services, livestock improvement, storage, transportation and distribution, all of which would contribute to making agriculture in sub-Saharan Africa more productive."

Swaziland chose to adapt a mix of traditional frameworks and some of the strategies these writers researched.

2.1 Swaziland's Policy Revolution

“Infrastructure is not just essential for economic growth and higher employment. It also promotes inclusive growth, providing citizens with the means to improve their own lives and improve their own incomes. Infrastructure is essential for development.” (South Africa’s National Development Plan). South Africa’s development performance on infrastructure and reflected in Swaziland’s own performance is well summed up by Bonginkosi Dhlamini, South Africa’s IFP Gauteng caucus leader: “...the negative effect of a rundown infrastructure is as large as that of crime, corruption and unemployment. The benefits of infrastructure as envisioned by the NDP continue to elude the people of this country whose lives are yet to be changed as they continue to struggle for life enablers of modern life such as energy, water and work.” (The Star, Business Report, June 25, 2015)

In the 10 years to 2015 Swaziland sought to cement long term strategic partnerships with a variety of organizations, including foreign governments, multinational corporations and many non-governmental organizations. This also entailed drafting the necessary policy documentation that provided its partners with security for their funding role in developing the country.

In seeking to address the social (unemployment and AIDS), technological (energy and broadband), economic, environmental and political problems, Swaziland looked to advances in technology - particularly energy, education - particularly tertiary, and tourism and its various contributing factors. Swaziland’s small size was seen as a constraint by other countries, however, this small size also offered the opportunity to easily effect the necessary changes required for advancing the nation. The primary focus has been on the opportunities that the substantial move to renewable and sustainable energy has afforded.

In seeking to boost export earnings, the Swazi government also focused on industries that required little investment as opposed to manufacturing industries which required high investment. The focus became ‘intangible’ products such as energy, intellectual capital and tourism earnings.

2.2 Swaziland's Energy revolution

[Table 8: Carbon Emissions.](#) [Table 1: GDP% growth.](#) [Chart 1: GDP% growth](#)

In 2015 Swaziland was heavily reliant on South Africa and Mozambique for its power requirements. Due to lack of governance and investment in necessary infrastructure and maintenance, Eskom, South Africa's power utility found itself with a shortfall in supply capacity, with the resultant impact on development and the economy.

Taking cognizance of the potential future crippling costs of imported energy and lack of guaranteed supply, in 2015 Swaziland legislated its Renewable Energy and IPP Framework Policy. This opened the power market to independent power providers (IPP's) through well-structured power purchase agreements. According to the 2012 electricity consumption statistics supplied by the SEC, 1.2GWh were required by the nation. However, with only 27% of the country electrified, this was expected to grow substantially to at least 3.1GWh (after energy efficiencies were put into place).

2.2.1 Funding for energy

Table 9: Carbon Tax calculations

Funding for renewable energy roll out projects over the 10 years to 2025 has been provided by IPP's, however, the biggest funding commitment came from the European Union through its 12th EDF funding program, and some of the wealthiest/highest carbon emitters in the world, in which they sought to offset their member states carbon emissions. This followed on from these nation states commitment following the Paris Accord signed after the Climate Change convention in Paris, France in November 2015. This investment accounted for only one year of the offsets required by these countries, however, Swaziland sold the full 10 years' worth of carbon credits generated over the payback period of the project.

2.2.2 Solar

Initial investment by solar companies Wundersight and IBC Solar proved highly successful in their three pilot projects which generated 202MWh. These successful projects galvanised international companies to not only invest their own funds (backed by PPA's from the SEC), but to also train an extensive network of skilled local technicians to install and maintain the solar systems. Large scale private solar PV plants have been built around the country, taking advantage of the country's approximately 6.58 hours of sunshine per day. At a cost of R18 per watt to install solar PV, Swaziland

has seen foreign direct investment of R18 billion over the last 10 years. This has allowed solar PV to supply 1GWh of power to the national grid.

This was however insufficient to stimulate the economy to the extent required nor to make them independent in terms of energy. Swaziland therefore looked to leveraging the fact that its carbon emissions per capita were very low in comparison to more developed countries. The 12th EDF funding program and wealthy/large emitters provided an annual solar energy fund of \$19.4 billion US dollars for the period 2016-2025. This has allowed Swaziland to develop solar PV capacity of 10 gigawatts with a net excess supply of 7 gigawatts which it supplies to neighbouring states, thus generating substantial export revenues.

By 2020 Swaziland became a net exporter of electricity and by 2025 was generating annual foreign export earnings of R25 billion from the sale of its renewable energy surplus to neighbouring states. The net foreign revenues continue to be invested in infrastructure and resilience building programs in sustainable agriculture and education. This injection of Foreign Direct Investment into Swaziland's Renewable Energy program has allowed Swaziland to grow its economy at an average 6.62% for the period 2015-2019. Thereafter surplus funds were fed into programs as outlined below to stimulate education and employment.

2.2.3 *Bagasse- supplying base load*

A further development during the period 2015-2017 was the investment by the Cane Growers Association in power generation. In 2015 the sugary industry produced 650,000 tonnes of sugar per annum. A by-product of sugar production is bagasse. The bagasse by-product amounts to 6.5 million tonnes. This bagasse was previously utilized by poorer communities as feedstock for cooking and heating or was used by the sugar industry to generate its own power. Advances in technology enabled the conversion of bagasse into highly efficient fuel pellets which are able to take the place of coal as a heat source in steam driven electrical turbines.

In research conducted and presented to the Parliamentarian Forum on Energy Legislation and Sustainable Development, Cape Town, South Africa, Dr Kassiap Deepchand supported this energy alternative: "A number of countries, in particular those devoid of any fossil fuel, have implemented energy conservation and efficiency measures so as to minimize cogenerated energy (steam and

electricity) utilized in cane processing and to export excess electricity to the grid. In Mauritius 10 out of 11 factories are exporting electricity to the grid during crop season out of which three are using coal as a complementary fuel to export electricity during the intercrop as well. All the power plants are privately owned. This development has been possible through the participation of all the stakeholders (corporate and small planters) with Government providing appropriate policy guidelines, legal framework and incentives.” This Sugar Sector Action Plan by the Mauritian Government lent credibility to the call for the Cane Growers Association of Swaziland to become an IPP. The subsequent approval of the IPP Policy framework by the Swazi parliament allowed the Cane Growers Association members the security they required for the investment they needed to make. The benefits of this new technology were three-fold.

1. The nation was able to develop a secure base load power supply that renewable energy in Swaziland is unable to supply. A total potential of 722GWh existed with 2015 conversion efficiencies.
2. Smaller sugar cane growers were paid for the yield their bagasse provided to the new Cane Growers power company. This resultant increase in income for the smaller growers allowed further investment by them, as well as allowing new entrants into the market for relatively little investment.
3. By products of the process such as molasses, cellulose, lignin and wax were used to start new businesses with the resultant positive impact on employment and social upliftment.

Following the lead of the success in Mauritius, and in order to generate and stimulate the sugar industry and employment therein, more emphasis was also placed on

1. The production of specialty sugars which fetch a price premium;
2. The increase in yields through introduction of improved irrigation techniques, and adoption of mechanization;
3. Research to increase productivity in field operations coupled with the introduction of high yielding varieties; and
4. The improved use of by-products such as molasses which will help to diversify revenue basket sources and reduce industry’s vulnerability to sugar price shocks.

With the sugar cane industry contributing about 10% to the national output, it was seen as a vital component of the economy and the diversification thereof strongly supported the sustainability of the industry.

2.3 Tourism as a driving factor

As opposed to competing with its neighbours for foreign tourists, Swaziland sought to cooperate with them in developing the region around Swaziland as a viable and desirable tourist destination. With a lot of the required infrastructure already in place, a decision was made that one of the main focuses in developing the industry was to increase average night's stay. The Swaziland Tourism Authority (STA) obtained funding from the Climate, Community & Biodiversity Alliance (CCBA) to establish the northern HHOHHO region of Swaziland into a Big Five Game Park. This allowed Swaziland to drop its border with South Africa's Kruger National Park and increase the size of the existing Transfrontier Park. In 2014 international tourists accounted for R277 million in revenues. However, the average stay was only 2 nights per person, with many tourists only passing through the country (Swaziland Business Year Book). Under the rules of the The CCBA, Swaziland was able to obtain funding for the development of a sustainable tourism program that simultaneously addressed climate change, supported local communities and conserved biodiversity. These Standards included:

- *Identify projects that simultaneously address climate change, support local communities and smallholders, and conserve biodiversity.* This combined with its renewable and alternative energy program allowed Swaziland the opportunity to develop a more comprehensive and strong justification for funding.
- *Promote excellence and innovation in project design and implementation.* Swaziland partnered with South African and European tourist agencies to develop this region and the standards that foreign tourists would expect.
- *Mitigate risk for investors and offset buyers and increase funding opportunities for project developers.* By providing the funding and governance the CCBA provided the necessary expertise and training for future sustainability of the industry.

In addition to the development of HHOHHO the STA was able to partner with South Africa and Mozambique in developing a tourism route that reached from Kwa-Zulu Natal's Cape Vidal to Maputo to Mbabane.

Swaziland also saw the conversion of three of its private neighboring game parks into an amalgamated rhino haven. Again, the methodology here was that co-operation rather than competition worked better. In addition research facilities were installed to allow foreign and local scientists and researchers ease of access to the natural environment. This coupled with the HHOHHO game park gave unprecedented field research facilities to researchers.

The net result of this was that the average stay of a tourist went from 2 nights to 5 nights, with a tripling in revenues, increased employment and the resultant social development.

A project that is currently in proposal stage is for Swaziland to become the world's first nation biosphere, which will see it become a model for humans and nature living in harmony.

2.4 Education in 2025

According to the www.4icu.org web source the University of Swaziland (UNISWA) had a ranking of 2720 out of 11,300 universities worldwide. The primary reason for this was the lack of funding for world class facilities which would be necessary to attract the necessary expertise required for delivering curriculums of excellence. Swaziland is not lacking in academic talent, however the opportunities for graduates post qualification didn't exist in 2015. The graduates from the top school in Swaziland, Waterford Kamhlaba United World College, generally left Swaziland to pursue university education in South Africa, the UK or the USA. Unfortunately, many of them never return.

With its 11th EDF funding (education focus), combined with revenues generated through the Energy Revolution funding, the government was able to allocate the required funding to turn UNISWA and The University of Technology into world class institutions, with a focus on sustainability, energy and natural sciences. This also meant that the required expertise for the continued expansion of the programs highlighted above came from Swaziland. Swaziland has thus been able to maintain and nurture its human capital.

2.5 Redefining the Political System

The issue that has surrounded the political system in Swaziland has historically been a highly contentious one, and has often been decried by opponents. King Mswati III understood that in order to achieve his vision and to be recorded in the annals of history as a great and visionary leader, required

a restructuring of the political system. In order to answer his critics, the King needed to change the Swaziland system of political governance into a form that was wholly inclusive, totally transparent and was based on a system that reflected the rich history of the monarchy in Swaziland. The King was also cognizant of the political play history delivers and that the world is a changing place with 'globalization' taking place at an unprecedented pace.

One of the first things done, was the allowing of opposition political organizations to voice their concerns and to participate fully in the decision making process. Due to the small geographical size and general rural population, Swaziland was able to easily install a form of direct democracy. The country is divided into four geographical regions which allowed for an equal decentralization of power. As opposed to allowing citizens to vote for representatives to represent them in parliament, citizens engage now in participatory democracy, whereby they vote on policy, laws and initiatives that might affect the particular region within which they live. This system has similarities to the 'canton' system of Switzerland. Issues of a national nature are addressed via a national referendum. Appointed regional representatives, whether royalty or elected by the people, serve as messengers to deliver policy proposals and decisions to firstly a regional structure which acts on regional issues, and then to a central form of government. The central structure is not to vote on issues, but rather to aggregate and centralize the decisions of the people in order that solutions or proposals are acted on in the interests of the people. The King continues to serve as the head of this central enactment structure and is tasked with ensuring the will of the people is heard.

The monarchy continues to serve as the national representative of the nation and together with an elected body of advisors from the regions addresses issues of international concern. These issues are also transmitted back to the regional structures for the consultative process to take place.

One of the biggest criticisms the monarchy faced was the size of, and lack of transparency of, the royal budget. In order to address this issue, the royal household was allocated a budget that was deemed fair and equitable to maintain the integrity of the royal brand, considering its importance in the history of the country. A further budget is allocated annually based on the real costs the monarchy incurs in the delivery of its national and international duties. This has been a contentious issue and led to much discussion. The important thing to note, though, is that the discussions take place in a free and open manner.

Conclusion

Swaziland has undergone a dramatic transformation in the ten years to 2025. This transformation was primarily through two major revolutions. Firstly, the opportunities that the energy revolution offered in terms of the source of funds it provided to the country and its cascading impacts, and secondly the restructuring of the political environment which allowed the energy revolution to take place and to directly impact the citizens of the nation.

Some of the results are:

- The huge increase in foreign export earnings due to energy sales to the region. This amounted to an annual R24 billion in revenues which continue to be used to develop programs in combating health issues such as AIDS, development of a world class biodiverse nation, continued expansion of small to medium enterprises where the focus is on higher value items, and the continued development of an education system that fully develops the human capital potential of Swaziland. This has seen the continued climb in rankings on the Human Development Index.
- The continued economic growth of the country due to the reasons outlined above. This growth has allowed the unemployment levels to dramatically drop to 2.5%. A steady state of 14.3% for GDP has been attained. Due to the economic growth the majority of citizens have moved closer to the middle income band. This has resulted in lower population growth and combined with the continued work by NGO's in combatting the HIV/AIDS epidemic has seen population levels stabilize.
- The continued improvement in the anti-corruption fight has seen Swaziland attain a very respectable position of 20 on the Corruption Perception Index.
- The educational system improvements have resulted in many more students continuing their education within Swaziland. This has resulted not only Swaziland retaining its intellectual talent, but also in retaining the revenues that were previously sent abroad for studies. The improvement in university education has also resulted in an inflow of foreign students with the associated foreign revenues being generated.

- The hard work in establishing Swaziland's game parks, and partnerships with neighbouring countries has resulted in an influx of foreign tourists and researchers, with the associated positive impact on foreign earnings.
- The alternative political system of combining the monarchy with direct democracy has provided an alternative political system that while not perfect, is a system that works for the Swazi Nation. It has brought political stability to the country which has made foreign nations more receptive to international co-operation.
- Swaziland has attained the status of the first nation in the world to become carbon neutral and is recognized internationally in serving as a model for a sustainable future.

Swaziland continues to grow in its diversity and develop world class examples of how Africa can operate effectively without having to follow western style forms of government and economic structures.

Swaziland is now demonstrable proof that Africa is not poor – it is properly managed and fully developed.

References

African Economic Outlook 2015

CCBA. (2013). *Climate, Community & Biodiversity Standards*

Clarke, Duncan. (2012). *Africa's Future, Darkness to Destiny*. Profile Books Ltd

Cohen, David. De La Vega, Rosa. Watson, Gabrielle. (2001). *Advocacy for Social Justice: A Global Action and Reflection Guide*. Oxfam America and Advocacy Institute.

Conaty, Pat and Lewis, Michael. (2012). *The Resilience Imperative: Cooperative transitions to a steady-state economy*. New Society Publishers.

Deepchand, Kassiap (2005). *Sugar Cane Bagasse Energy Cogeneration – Lessons from Mauritius*. Mauritius Sugar Authority

Forsyth Thomson, Christina. (2015). *Swaziland Business Year Book*

Mills, Greg. (2010). *Why Africa is poor*. Penguin Books (South Africa) Pty Ltd.

Mbeki, Moeletsi. (2009). *Architects of Poverty: Why African Capitalism Needs Changing*. Picador Africa.

Monbiot, George. (2004). *The Age of Consent*. Harper Collins Publishers.

Ore, Tracy E. (2006). *The Social Construction of Difference and Construction*. McGraw-Hill

Pontin, John (2008). *The Converging World*. Piatkus Books

Surowiecki, James (2014). *The Wisdom of Crowds*. Doubleday, a division of Random House Inc.

U.S. Department of State FY 2015 Fiscal Transparency Report

Vandomme, Christopher, et al. (2013). *Swaziland: Southern Africa's Forgotten Crisis*. Chatham House. The Royal Institute of International Affairs.

World Economic Outlook Update, 9 July 2015.

Web sources

Forbes www.forbes.com

Institute for Health Metrics and Evaluation. <http://www.cdc.gov/globalhealth>

Net Index www.netindex.com

Southern African Customs Union: SACU www.sacu.int

Swaziland Electricity Company www.sec.sz

Michael Doyle 19571380

Trading Economics: World Bank. www.tradingeconomics.com

Transparency International <http://www.transparency.org>

United Nations Development Reports <http://hdr.undp.org/en/content/table-2-human-development-index-trends-1980-2013>

UNICEF www.unicef.org

United States Energy Association (USEA) www.usea.org

World Bank: Doing Business <http://www.doingbusiness.org/rankings>

World Bank: Economic Prospects <http://www.worldbank.org/en/publication/global-economic-prospects/data>

Tables

Table 1: GDP% growth Sources: (1) World Bank: www.tradingeconomics.com (2) World Bank

	2006-2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
High Income Economies	-	2.0%	2.4%	2.2%	3.0%	3.0%	3.0%	3.2%	3.5%	3.5%	3.5%	3.5%
Sub-Saharan Africa	-	4.2%	4.6%	5.0%	5.5%	6.0%	6.0%	6.5%	7.0%	7.5%	7.5%	7.5%
South Africa	2.9%	2.0%	1.9%	1.9%	2.0%	2.5%	3.0%	4.0%	5.0%	5.5%	5.5%	6.0%
Swaziland	2.1%	3.0%	2.9%	3.3%	4.7%	7.9%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%

GDP 2015	14,258,000,000	2.01%
Net energy revenues		% of GDP
2015	137,264,151	0.96%
2016	132,010,613	0.93%
2017	190,935,363	1.34%
2018	383,406,166	2.69%
2019	833,391,369	5.85%
2020	1,758,730,424	12.34%
2021	3,537,823,557	24.81%
2022	6,822,692,035	47.85%
2023	12,730,413,690	89.29%
2024	23,166,971,291	162.48%
2025	26,357,262,944	184.86%

Table 2: SACU Revenues

Date	2009/2010	2011/2012	2012/2013	2013/2014	2014/2015 (estimate)
% Revenues	76	40.1	58.7	55.7	52.5

**Table 3: Ease of Doing Business. Source: www.doingbusiness.org.
www.tradingeconomics.com**

Country	Overall ranking (2008/2013/2014)	Highest ranking	Improvement since highest ranking	Starting a business (2014)	Getting electricity (2014)
Singapore	1/1	1 (2008-2014)	0	6	11
South Africa	32/37/43	43 (2014)	-11	61	158
Swaziland	114/111/110	124 (2012)	+14	145	140

**Table 4: Corruption Perception Index. Source: www.transparency.org.
www.tradingeconomics.com**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Denmark (lowest)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
South Africa	69	72	67	69	75	72	70	70	64	60	55	52	50	47
Swaziland	88	82	67	65	62	60	58	57	50	43	36	30	25	20
Somalia (highest)	174	175	174	174	174	174	174	174	174	174	174	174	174	174

Table 5: UNDP Human Development Index Trends

Country	Rank 2012	1980	1990	2010	2011	2012	2013
Norway	1	0.793	0.841	0.939	0.941	0.943	0.944
South Africa	118	0.569	0.619	0.638	0.646	0.655	0.658
Swaziland	148	0.477	0.538	0.527	0.530	0.529	0.530
Sub Saharan Africa	-	0.382	0.399	0.488	0.499	0.502	-

Table 6: % unemployment. Source: www.tradingeconomics.com

	1995	2000	2005	2006	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Swaziland	22	34	40	40	40	40	37.5	35	30	25	20	15	10	7.5	5	2.5
South Africa	30	30	26.6	25.5	25	27	27.5	28	27	25	22	20	18	17	16	15
Singapore	3.2	3	3.1	3.1	1.9	1.5	1	1	1	1	1	1	1	1	1	1
Zimbabwe	50	50	80	85	95	95	94	85	80	75	70	65	60	55	50	45

Table 7: Leading causes of death and co-producing factors. Source: Institute for Health Metrics and Evaluation

	Cause of death	%	Possible co-producing factor	Possible co-producing factor
1	HIV	37		
2	Lower respiratory infections	6	HIV	
3	Diarrheal diseases	5	HIV	
4	Cancer	5		
5	Stroke	4		
6	Tuberculosis	4	HIV	
7	Interpersonal violence	4	Unemployment	
8	Diabetes	3	Diet	Unemployment

9	Ischemic Heart Disease	3	Diet	Unemployment
10	Chronic Obstructive Pulmonary Disease	2	HIV	

Table 8: Carbon Emissions, Source: www.data.worldbank.org

European Union Member States	Swaziland (.90 CO ² e per capita) CO ² e per capita per annum*	Population (million) *	Country emissions (tonnes)
Austria	7.80	8,534	66,565,200
Belgium	8.80	11,225	98,780,000
Bulgaria	6.70	7,226	48,414,200
Croatia	4.80	4,236	20,332,800
Cyprus	6.70	1,153	7,725,100
Czech Republic	10.40	10,510	109,304,000
Denmark	7.20	5,639	40,600,800
Estonia	14.00	1,313	18,382,000
Finland	10.20	5,463	55,722,600
France	5.20	66,201	344,245,200
Germany	8.90	80,889	719,912,100
Greece	7.60	10,957	83,273,200
Hungary	4.90	9,861	48,318,900
Ireland	7.90	4,612	36,434,800
Italy	6.70	61,336	410,951,200
Latvia	3.80	1,990	7,562,000
Lithuania	4.50	2,929	13,180,500
Luxembourg	20.90	556	11,620,400
Malta	6.00	427	2,562,000
Netherlands	10.10	16,854	170,225,400
Poland	8.30	37,995	315,358,500
Portugal	4.70	10,397	48,865,900
Romania	4.20	19,910	83,622,000
Slovakia	6.40	5,418	34,675,200
Slovenia	7.50	2,062	15,465,000
Spain	5.80	46,404	269,143,200
Sweden	5.50	9,689	53,289,500
European Union Total Emissions			3,134,531,700

"Carbon Tax" (US Dollars)	10
Total value of 'carbon tax' (USD Billion per annum)	31,345

Wealthy nations/high emitters

United Kingdom	7.10	64,510	458,021,000
USA	17.00	318,857	5,420,569,000
China	6.70	1,364,270	9,140,609,000
Canada	14.10	35,540	501,114,000
Australia	16.50	23,490	387,585,000
Qatar	43.90	2,267	99,521,300
Brunei	24.00	423	10,152,000
UAE	20.00	9,445	188,900,000
Kuwait	29.10	3,479	101,238,900
Total emissions			16,307,710,200
"Carbon Tax" (US Dollars)			10
Total value of 'carbon tax' (USD Billion per annum)			163,077

Total potential funding per annum Billion US Dollars	194,422
--	---------

Table 9: Carbon Tax calculations

	Cost per KW	Annual Consumption	Installed capacity (Renewable/sustainable)	Net import/export (power)	Net revenue (rands)
2015	1.11	1,200,000,000	250,000,000	950,000,000	- 1,054,500,000
2016	1.25	1,320,000,000	375,000,000	945,000,000	- 1,180,068,750
2017	1.40	1,452,000,000	562,500,000	889,500,000	- 1,249,608,516
2018	1.58	1,597,200,000	843,750,000	753,450,000	- 1,190,789,464
2019	1.78	1,756,920,000	1,265,625,000	491,295,000	- 873,525,149
2020	2.00	1,932,612,000	1,898,437,500	34,174,500	- 68,357,750
2021	2.25	2,125,873,200	2,847,656,250	- 721,783,050	1,624,219,771
2022	2.53	2,338,460,520	4,271,484,375	- 1,933,023,855	4,893,593,037
2023	2.85	2,572,306,572	6,407,226,563	- 3,834,919,991	10,921,931,939
2024	3.20	2,829,537,229	9,610,839,844	- 6,781,302,615	21,727,452,339
2025	3.60	3,112,490,952	10,000,000,000	- 6,887,509,048	24,826,207,768

Charts

Chart 1: GDP% growth. Source: Trading Economics

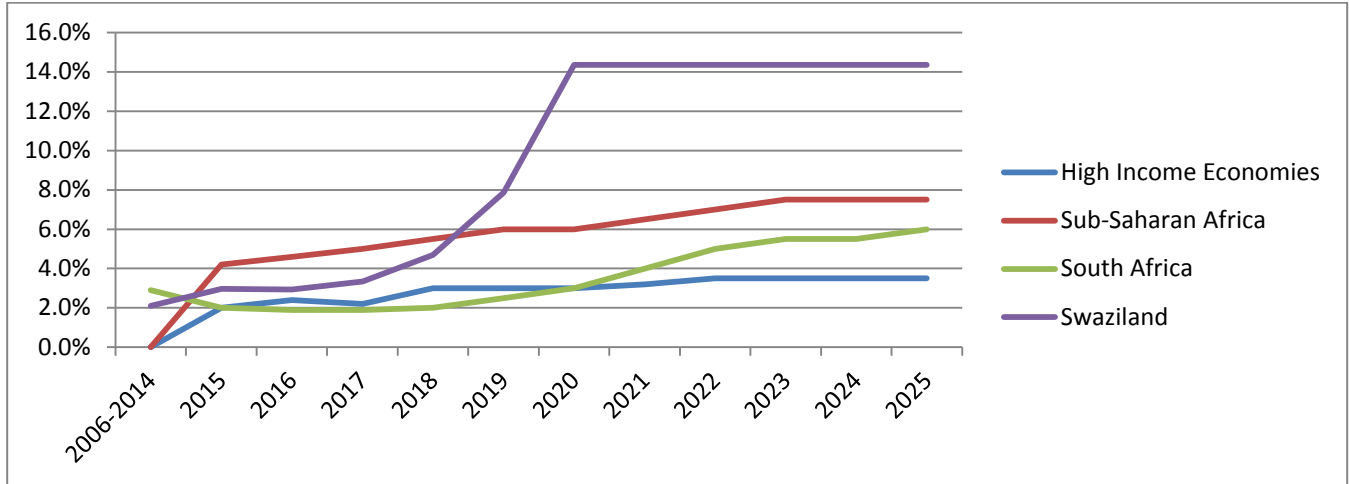


Chart 2: Declining SACU Revenues. Source: Swaziland Business Year Book 2015

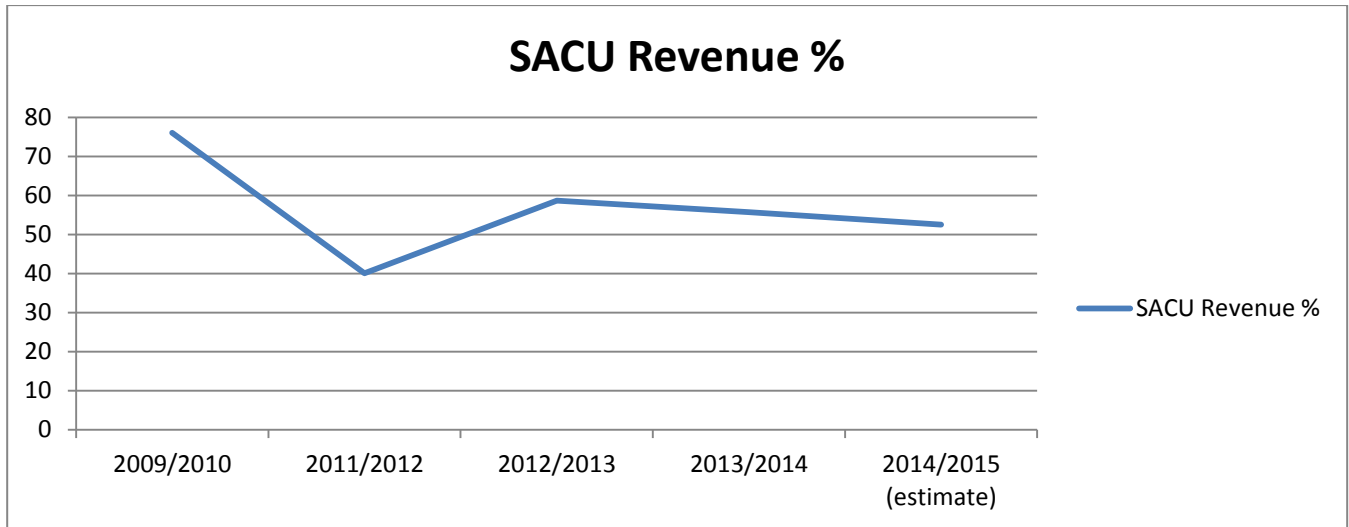


Chart 3: Corruption Perception Index

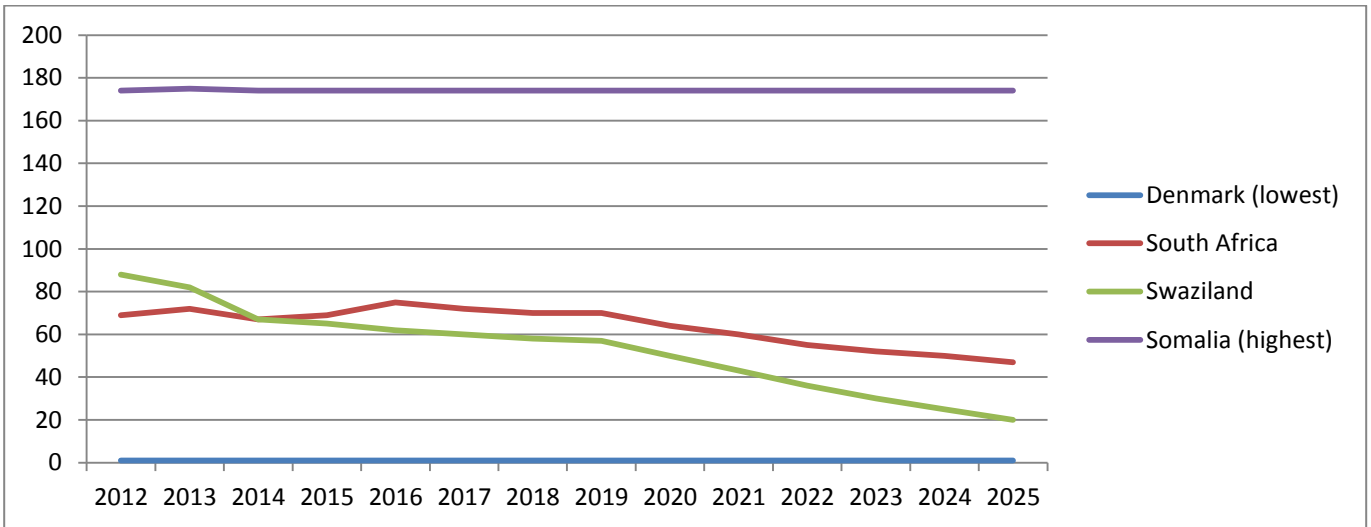


Chart 4: UNDP Human Development Index

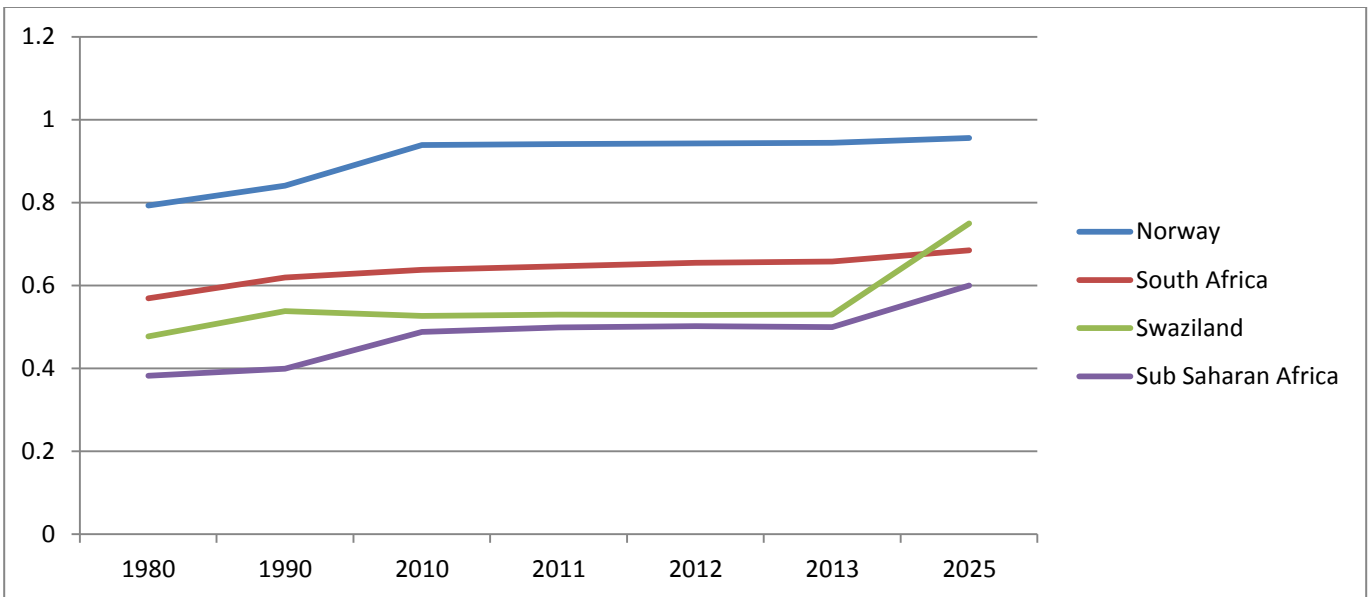


Chart 5: % Unemployment. Source: www.tradingeconomics.com

