



# **NOG Seminar on Africa**

7th April 2005

Maya Forsberg,  
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## Foreword

The NOG seminar on the 7th of April gave an insight to Africa and its natural and energy resources, its social and political situation as well as its general development, especially in oil and gas producing regions.

The speakers were:

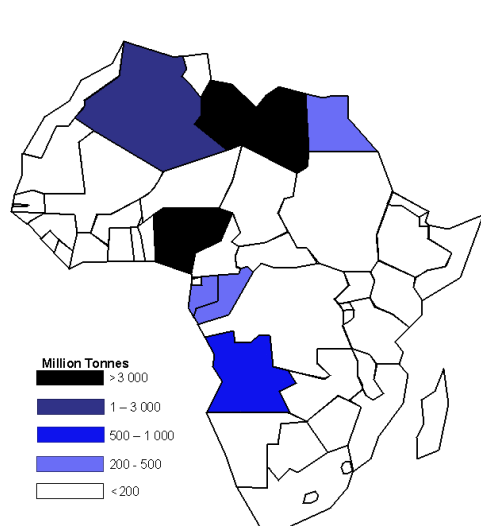
Christer Björklund, Senior Consultant, ÅF  
Dr. Shaun McCarthy, the Executive Director of NexTus Scenarios & Strategy Ltd.  
Anders Östman, Economist and responsible for Kenya and general issues concerning Africa, on behalf of Sida.

## Introduction

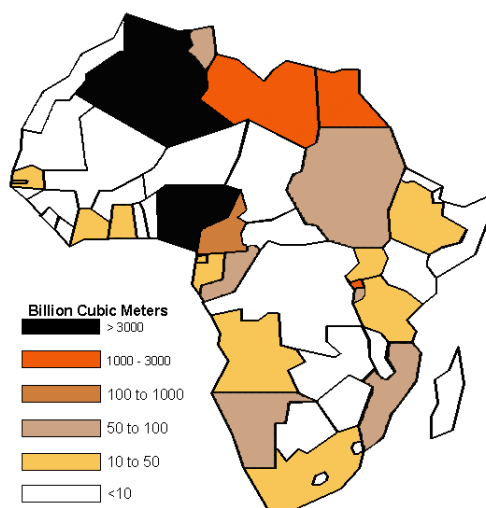
Christer Björklund, Senior Consultant at ÅF, is specialized in business, problem and risk analysis, and analysis of development opportunities.

## Oil and gas supply in Africa

Christer Björklund, ÅF, introduced by presenting general facts on Africa, focussing on some of the countries with the largest oil or gas reserves, such as Algeria, Angola, Egypt, Libya and Nigeria (see the map of Africa in figure 1, and reserves in figure 2 and 3). The quantities of gas and oil produced in the five countries are presented in table 1, which shows that Nigeria is the leading oil and gas producer with a production of 2 260 million barrels (bbl) oil and 15,7 billion cubic meters of gas per day. To a certain extent there exist oil and gas pipeline systems in the oil- and gas producing countries in Africa, but the infrastructure is limited. Algeria, Libya and Nigeria have LNG liquefaction facilities, in total with a capacity of 33,1 million tonnes per year, which corresponds to 23% of the capacity worldwide.



**Figure 1. Crude oil & liquids - proved recoverable reserves (end 1999)**  
Millions of Tonnes



**Figure 2. Natural gas - proved recoverable reserves (end 1999)**  
Billion Cubic Meters

Countries	Oil production, Mill. bbl/day	Natural gas prod, Bill. m <sup>3</sup>	Oil, proved reserves. Bill. Bbl	Natural gas proved reserves, Bill. m <sup>3</sup>
Algeria	1.52	80.3	13.1	4 739
Angola	0.74	0.53	5.69	80
Egypt	0.82	21	3.3	1 264
Libya	1 429	6.8	30	1 321
Nigeria	2 260	15.7	27	4 007

**Table 1. Oil- and gas production and reserves**

When looking at the oil- and gas situation, other important factors specific to Africa are also important to consider. In order to give a perspective on these five mentioned countries, Christer Björklund compared some of their facts with Sweden. As table 2 shows, all of these countries are between two and five times larger than Sweden and present facts very different

from Sweden's. Nigeria, for example, is twice as large as Sweden and has a 15 times larger population. However, the country is facing the challenge of having 5,4 percent of the population infected with HIV/AIDS and a GDP per capita which is almost 30 times lower than Sweden's, although their GDP growth is rising led by oil and natural gas exports. Some countries are also challenged by political instability, including the risk for violent conflicts, due to substantial income gaps and inequality.

Country	Area, km <sup>2</sup>	Rel. SE	Population, millions	HIV/AIDS	GDP/cap, \$	GDP, real growth
Algeria	2 382 000	5.3	32	0.1%	6 000	7.4%
Angola	1 247 000	2.8	11	3.9%	1 900	1.5%
Egypt	995 000	2.2	76	<0.1%	4 000	3.1%
Libya	1 760 000	3.9	5.6	0.2	6 400	3.2%
Nigeria	911 000	2	137	5.4%	900	7.1%
South Africa	1 219 000	2.7	43	21.5%	10 700	1.9%
Sweden	450 000	1	9	0.1%	26 800	1.7%
USA	9 631 000	21.4	293	0.6%	37 800	3.1%

**Table 2. A country comparison of area, population, percentage with HIV/AIDS and GDP.**

-The focus on Africa is increasing, said Christer Björklund. One example is that Africa will be a priority during the UK's chairmanship of the G8 in 2005. In 2004, Tony Blair, the Prime Minister of Britain launched the Commission for Africa with the task to assess every area of policy on Africa and the challenges it faces and to get international agreement on an agenda for change. The findings were presented in a report called Our Common Interest: The Report of the Commission for Africa, on the 11 of March 2005.

Mr Björklund quoted the actions proposed by the Commission, which include:

- Getting Systems Right: Governance and Capacity-Building
  - Capacity - the ability to design and deliver policies
  - Accountability – how well a state answers to its people
  - Transparency in order to combat corruption
- Leaving No-One Out: Investing in People
- The Need for Peace and Security
  - Prevent and manage conflict
  - Early warning, mediation and peace-keeping
- Going for Growth and Poverty Reduction
- More Trade and Fairer Trade
- Where Will the Money Come From: Resources

The conclusion of the report is that in order to meet the challenges we have to leave our contractual and conditional approaches to the African countries and form new kinds of partnerships, based on mutual respect and solidarity. Christer Björklund added that the Commission for Africa will present its findings to the G8 Summit in July 2005. The intention behind this initiative can be discussed, but nonetheless it is a step in the right direction, concluded Christer Björklund.

## Introduction

Dr. Shaun McCarthy, the Executive Director of NexTus Scenarios & Strategy Ltd., a specialist in scenarios and crisis management, and former Group Intelligence Co-ordinator at Shell International, has broad experience ranging from global security to energy issues. He recently facilitated the creation of a joint scenarios project focusing on Africa's energy needs for the South African Shell and Council for Scientific and Industrial Research and was instrumental in the development of the governance model and strategy framework for the establishment of the South African National Energy Research Institute (SANERI)

## The Strategic Significance of Africa in Energy security

Shaun McCarthy's presentation consisted of:

- A brief macro overview of international geo-political framework for analysis in which he presented the latest in Shell's thinking based their global scenarios (in which he was involved).
- Africa and its new-found strategic significance in the light of the macro framework and energy security, from an OECD perspective
- And finally, he presented a perspective on Africa's energy needs from an African perspective, in order to look at the issue the other way round and to enrich the debate. This view was anchored around energy security, equity and efficiency, which he postulated as being interrelated

By way of introduction to the topic of energy security, he explained that Oil is notorious as a source of conflict. For example, he mentioned that oil was the reason why the Japanese attacked the Americans at Pearl Harbour in 1941, partly due to the decision by the United States to limit oil exports to Japan in 1941 in response to the Japanese invasion of Manchuria

Dr. McCarthy pointed out that the question of Africa's role in Energy security can be quite different depending on the viewpoint, and made a distinction between two perspectives. From an OECD point of view it is about security of supply through diversity – where issues such as the availability, transparency of regimes, good governance and stability are important. Whereas from an African or non-OECD perspective, issues such as Equity, Efficiency and Security are very important and interrelated.

He explained that in order to ensure energy security, greater equity or access to basic energy by an ever-increasing population in Africa is essential and also from a socio-economic/poverty-reduction perspective. Achieving energy efficiency through better utilisation of energy sources, best practices, knowledge transfer and through making the appropriate technology choices is a prerequisite in order to ensure wider access to energy sources by local populations.

## Scenario Development: What are key issues and identifying critical uncertainties as drivers of change?

Creating scenarios is a systematic process used to develop plausible, future alternate views of the future and to understand how critical uncertainties may unfold. It is a way of identifying potential opportunities and risks and to model how these uncertainties may develop over time. In creating scenarios, we develop contextual backgrounds against which scenarios can be used to either develop or test strategies for robustness. The scenario is built up by exploring the key issues, concerns and predetermined factors as well as the critical uncertainties.

## Where is the world going in terms of drivers?

In 2001, Shell developed a view of the global environment which challenged the conventional view of the world as characterised by monopolies and boundaries. They identified three important driving forces of change: the forces of globalisation, liberalisation and information technology, expressed in terms of TINA (standing for 'there is no alternative'), which were changing the old world order and which gave rise to a bi-polar or two-worlds perspective, as expressed in the form of two scenarios, 'Business Class' and 'Prism':

Business Class was a world of globally interconnected elites, who sought to achieve market efficiency and promote the concept of a free and global economy, underpinned by the principles of the 'Washington Consensus' model of economic development. In this world, globalisation was regarded as an inevitable and unstoppable phenomenon.

Prism, on the other hand, was viewed as a world where societal norms, values and group identity prevailed. It was not necessarily a world in which market efficiency was rejected, but rather a situation where communities and entities did things their way, individualism was key and the principle of equity was paramount.

However, subsequent events soon challenged this new world view, producing a new set of driving forces and among them the backlash against globalisation as an unstoppable phenomenon was to be severely challenged as witnessed by the demonstrations in Seattle, Cancun and Gothenburg. The 'Washington Consensus' was challenged by a more egalitarian set of principles, sometimes referred to as the 'Washington Contentious' model. In addition, two significant events the terrorist attack against the USA and World Trade Centre on September 11, 2001 and the Enron scandal, followed by further instances of corporate misbehaviour resulted in what Shell described as the dual crises of security and trust. These events brought on a need for new legislation and security measures, stronger fiscal controls, transparency and ethics including governance and compliance – the ability to veto the government and corporations. In the aftermath of 11th September and Enron and other corporate scandals, populations are now looking towards the State to ensure their safety and to regulate the market – thus helping to guarantee their physical and economic safety, said Shaun McCarthy. The overall consequence was the re-emergence of the importance or the role of the State.

Other society expectations identified in 2004 included:

- a changed view on globalisation; that it should be harnessed as a force for the common good rather than pure economic collaboration
- trust was still a key driver in 2004, but it remained low although companies made an effort to regain confidence.

This led Shell to review its global view of the world and the result was the development of a new framework, modified with respect to these observations. It resulted in three new scenarios:

*Low Trust Globalisation*; a 'prove-it-to-me-world', a legalistic world of courts, lawyers and auditors, intrusive security checks and controls. It is about managing in a world fraught with regulatory change and compliance risk

*Open Doors*; a pragmatic world of alliances and greater degrees of trust, one where the State acts through incentives rather than coercion. It is about managing through building reputation, brands and alliances.

*Flags*; a world of managing country risks, factions and causes. A world where the government uses the concept of nationalism and loyalty to rally divided societies. A world of laptops and lederhosen and the politics of patronage.

The scenarios provide a framework against which the trade offs between Market Efficiency, Security and Societal Cohesion (equity) can be explored. When analyzing a specific country in this context, it can be found influenced by these three forces and is in a state of dynamic tension, he explained.

### **Scenarios for Africa**

With the context of the three global scenarios as backdrop, Shaun McCarthy moved from a Global to a regional perspective, and looked at what this framework could mean for understanding the challenges in Africa, focussing on Sub-Saharan Africa. The key drivers to be considered in relation to Africa are:

- The increase or gradual spread of democracy
- A move towards deregulation
- The spread and devastating impact of HIV/AIDS
- Ongoing conflict and violence
- Calls for Governance and Transparency
- Strategic significance – but prevailing economic marginalisation in the face of globalised markets

Dr. McCarthy gave a brief background on the oil situation of Sub-Saharan Africa today. Nigeria and Angola produce substantial quantities of oil. Gabon, Equatorial Guinea and Congo-Brazzaville are also producers of oil, but are dwarfed in terms of magnitude by Nigeria and Angola. Angola and Congo are slowly emerging from devastating civil wars, while Nigeria is sporadically affected by conflicts and unrest in the oil-producing region of the Niger Delta and the country is regularly ranked as one of the most corrupt countries in the world. Despite earning over \$100m a day from oil exports, Nigeria and Angola are ranked among the 30 poorest countries in the world. To date, Nigeria has failed to utilise its gains from oil to diversify its economy.

-Sadly, Oil has rarely helped promote peace, progress or prosperity in Africa, said Shaun McCarthy. Just like its other valuable resources, Gold and Diamonds, it has always been a source of conflict – witness Nigeria, Cote d' Ivoire and Sudan.

Moving on to the topic of energy, he emphasised that energy is recognised as vitally important in Africa's development. The New African Partnership for African Development (NEPAD) and the African Union (AU) recognise that energy is the dynamo essential for socio-economic development in Africa. However, energy resources are unevenly spread across the continent. According to NEPAD, access to reliable and affordable energy supply by the continental population must be increased from 10 to 35 per cent over the next 20 years. Furthermore, environmental degradation due to use of traditional fuels must be reduced.

Africa's energy needs were thereafter analyzed in terms of three interdependent aspects Energy Security, Energy Equity (access to energy) and Energy Efficiency.

### **Energy Security and Access to Energy**

For most Africans, energy security cannot be divorced from access to energy and a fair share - Equity. Wealth is very often in the hands of small minorities with larger sections of populations economically disenfranchised. And for many, energy security cannot be separated from efficiency as a means to improve quality of health and to prolong the use of sources of energy. Limited liquidity means that Africa needs to be innovative in applying technology for energy. Political and social stability, transparency, governance and socio-economic development are integral elements necessary for growth and investment in energy systems across Africa.

As a developing continent, Africa has a two-fold strategic and security significance. Firstly, it can offer an alternate source of energy supply, given instability in the Middle East as well as the vulnerability of various oil transit routes around the world, such as the Bosphorous, the Malacca Straits, Panama and Suez canals. Nigeria is also the fifth largest supplier of oil to the USA today. It is also an important source of energy for China. Secondly, given its large Muslim population in the north, it may provide a source of stability in the war against terror.

Outside South Africa, less than one ten people in Sub-Saharan Africa have access to electricity; 530 million people do not. Even in growing countries such as Uganda it will take 200 years to achieve full electrification at current rates.

### **Energy & Equity in Africa**

In several areas of the developing world, especially in Sub Saharan Africa and South Asia, biomass is used for domestic energy. The consumption will probably not reduce and it will most likely be the predominant source of energy for many communities for the next 30 years.

Moreover, in developing nations, women are responsible for the collection and use of biomass. The WHO estimates that 2.5 million women and young children die prematurely each year from breathing the fumes from indoor biomass stoves (World Bank, 2004).

Hence, the manner in which biomass is used, makes it urgent to increase the efficiency of biomass usage. The energy demand is projected to go from 723 Mtoe in 2000 to 788 Mtoe by 2030 (IEA, WEO 2002). The main drivers are demographics, economic growth, commercial energy use and alternative fuel prices.

There is a very big potential to improve energy efficiency in the use of biomass, through the introduction of modern appliances and technologies. Less efficient devices imply that households will use up the existing resources more quickly, potentially creating tensions over this different – but not less striking – security of supply issue.

In many mega-cities in developing countries, as some research in Lagos indicated, the situation is already tense: with a projected population of over 23 million by 2030 the pressure on gathering of fuel sources will be huge. The link between biomass use and available supply is not very well understood, as overall numbers are subject to uncertainty; nonetheless the trends that are emerging in many developing countries, the ongoing marginalisation of many inhabitants from basic energy sources, call for urgent action. This necessitates the need for foreign direct investment but a requisite will be increasing transparency and good governance to instil investor confidence, a condition which unfortunately many countries still have a long way to go to accomplish.

### Introduction

Anders Östman is an Economist and has lived and worked in Africa 15 years in total. His assignments have included being in charge of the Swedish Development Corporation's (Sida) office in Uganda and Mali and working as Head for UNICEF in Rwanda. Today, he is responsible for Kenya and general issues concerning Africa, on behalf of Sida.

### Africa in the world

Anders Östman, gave a presentation titled Africa in the world, where he gave more in-depth information on different aspects of its present situation, economic development and the effects of aid.

### Africa - rich in resources, but still very poor

Anders Östman started off by underlining that the African continent is gigantic. Within its surface a number of countries can be fitted; China, USA, India, the whole of Europe, Argentine and New Zealand. It is the human birthplace and it has a wealth of natural resources, such as oil, minerals water and land. At the same time it has gigantic problems, such as the spread of HIV/Aids. The African continent is also the one for which it will be hardest to achieve the Millenium Development Goals targets (from UNDPs Multiannual Guidance Programme), hardly any of the countries are expected to reach the aims. -But Africa works! said Anders Östman.

Africa receives lots of financial aid, and in order to understand its effects it is important to know how the African society works.

-Africa functions differently from what we expect, or from how we imagine it to work. The bonds between the family and the local community are strong, and the way they relate to each other is crucial for their survival. Also, beside the formal structure exists an informal structure, the Neopatrimonial system. It is the traditional chief society adapted to the modern system, and it is important to understand how it functions.

### Poverty in Africa

600 million people live in Africa, of which 400 million are living below the poverty line. About one sixth could be considered chronically poor (or extremely poor).

What is poverty? There are many definitions on poverty. They include the aspects hunger, thirst, right to life, home and illiteracy, lack of ability, security and possibilities – or in other words, everything that make it possible to live a dignified life.

According to the UNDP Human development Index 19 of the 20 world's poor countries are in Africa. The reason to this is according to Anders Östman the lack of economical growth the last 30 years. Between the years of 1981-2001 the growth per capita in Sub-Saharan Africa decreased with 0,7 per cent per annum. This can be compared with East Asia, which during the same period had a growth of +5,9 per cent per annum. Turning the situation involves braking patterns that prevent growth and making people who previously were not participating in the economy take part of it.

Sub-Saharan Africa is the only region where poverty is increasing and where the average average life expectancy is not increasing. More people die from starvation than from all other diseases, such as HIV/AIDS, tuberculosis and malaria. In Sub-Saharan Africa 34 per cent of the population suffers from malnutrition, which is twice as much as in other developing countries. 44 per cent of the population is less than 15 years old. The average income per capita is about eight times larger in Latin America, and five times larger in northern Africa.

## **How can economic growth be stimulated in Africa?**

Reducing poverty is closely related to increasing economic growth, however it is not the only means. There is also a great need to invest in hospitals, schools and infrastructure for the people to be able to participate in the economy. Other factors that play a great role for a country's development are the governance quality, wars, transport costs and literacy. The transport costs in Sub-Saharan Africa are twice as high compared to in Asia, for example.

A large part of the population lives from farming for their own needs. Therefore, in order to increase the economical growth, a modernisation of the agricultural sector is essential. For example, today 4,6 per cent of the land in Africa is irrigated, while the corresponding proportion in Asia is 38,4 per cent. Furthermore, the productivity and the diversification of products are low.

Since the mid 70's (the oil crisis) the private cash flows has almost seized and been replaced by aid, which is one of the reasons why the economical growth stopped. 40 percent of the foreign investments are directed to oil and minerals and a large part, about 60 per cent, of the foreign investments is directed to three countries; Nigeria, Angola and South Africa. In order to stimulate growth in other African countries, more foreign investments are important. Another important factor is that the rest of the world opens itself for trade with Africa.

## **Effects of aid on economic growth**

Aid has become the main source of financing development in Africa. Africa receives about 20 billion USD in aid yearly and the equivalent of about 5 per cent of GDP in Sub-Saharan Africa is aid. An average country receives about 13% of GDP (excluding South Africa and Nigeria).

Like the first speaker, Christer Björklund, Anders Östman also mentioned that Africa will be one of the priorities during the G8 Summit in Scotland in July 2005. One of the actions proposed is to increase aid from 25 to 50 million USD per year. Anders Östman agrees that it should be increased, but stresses the importance of recognizing aid as part of Africa's problem with low economical growth.

-Today, countries that go through reforms and manage to increase their economic growth and reduce their poverty are not given any more aid. Aid has been seen as a way to reward countries that perform. However, countries that do perform are not given more aid than those that are non-performing, he said.

During recent years, improvements have been seen in economic growth and governance, but reform must be accelerated, according to Anders Östman. Weaknesses in capacity and accountability remain. He believes that aid should be increased, but the corruption, political clientelism and rent-seeking that is going on warrant that some conditionality linked to governance should be applied in advance. It is important to make governments feel responsibility to their own people.

-In many cases the governments have a responsibility towards us and not to their own citizens, said Anders Östman. There is a need to increase their capacity and to enhance the investment climate by modernizing the agricultural sector, improving conditions for self-employed and for women and young people to take part in the economy, preventing and managing conflicts that modernization creates and by investing in schools, hospitals and infrastructure.