# Current Drop in Oil Prices: Impact on Africa

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From a peak of \$112 per barrel (bbl) for Brent and \$105 per barrel for West Texas Intermediate (WTI) in June, 2014 the crude oil benchmarks fell to \$62/barrel and \$59/barrel, reepectively, in December, 2014, thus a drop of almost 50%. (1)

# **OPEC** Influence

OPEC<sup>1</sup> prevailing global market production share is about 30%, down from almost 50% since the 1970s, largely due to the growth of non-OPEC giants like the United States, Russia and Norway. (2)

For situations of declining prices in the past, OPEC would have normally stepped in to stabilise prices by cutting production. However, not this time; in an unprecedented move during the last quarter of 2014, the cartel decided not to intervene in its 30 million barrels a day quota. With over \$800 billion in foreign reserve assets at peak, Saudi Arabia, with the largest reserve capacity to bail out the OPEC group by production cuts, this time refused to intervene. (3)

In theory, OPEC's 12 member countries have equal voices when it comes to making decisions about output policy. In practice however, Saudi Arabia has the largest production and the loudest voice and can easily withstand lower prices compared to the other OPEC members.

# Impact of Low Oil Prices on Africa

With the price of Brent crude at its lowest since 2010, the budgets of a number of Africa's top oil producers, are being impaired significantly since more than 70% of their revenues stem from oil production and most would not have sufficient fiscal buffers to cope with the slump in oil prices. (4)

On the other hand, some oil companies hope that lower oil prices could calm down often inflated expectations by African governments over future oil and gas wealth. Unrealistic expectations by local authorities are often said to be a key road block to progressing projects. (5)

This paper discusses the impact of the relatively low oil prices on some selected countries in the sub regions beginning with northern Africa.

## **Northern Africa**

#### Algeria

Algeria earned \$60.15 billion from its petroleum exports in 2014. These revenues represented 95.5% of the country's foreign earnings, highlighting Algeria's significant dependence on petroleum exports.

With the relatively low oil prices, the country has deferred a number of key infrastructure projects, even though, the government says it has sufficient cash reserves to meet its development budgets for the next three to four years without any issues. Algeria's 2015 budget has been based on an oil price of \$60 per barrel. (4)

# Tunisia

Tunisia, however, is said to be going ahead with the development of its unconventional oil and gas resource despite the prevailing low oil prices as the country expects its first production by 2020 if the existing schedule is maintained, expecting that prices would have recovered by then. Nonetheless, declining oil prices could still threaten the shale oil development. (5)

Tunisia is a relatively small hydrocarbon producer. Production of petroleum and other liquids has been steadily declining from its peak of 120,000 barrels per day in the mid-1980s to about 60,000 barrels per day in 2013. (6) Thus the low prices are already worsening declining oil revenues due to the declining volumes.

# Libya

Libya also has about 26 billion barrels of shale oil resources (6). Low oil prices would, therefore, not be good news for shale oil exploration for a country already going through a civil conflict that has curtailed its oil production.

# Western Africa

# Nigeria

Nigeria faces growing fiscal challenges as oil accounts for more than 70% of

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The country through its national oil company - Nigerian National Petroleum Cooperation (NNPC) – operates oil joint ventures with multinational companies including Shell, ExxonMobil, Chevron, Total and ENI that account for around half of Nigeria's oil output. NNPC contributes about 60% of the funding requirement while the foreign firms provide the 40% balance. \$13.5 billion has been the level set for the joint venture budget and has been maintained in the past three years but oil revenues declined from about \$15 billion the previous year to \$13 billion in 2014 compelling the government to reduce its capital budget for the joint venture oil operations by 40% to \$8.1 billion for 2015, The initial budget was \$13.5 billion. (7)

Nigeria, being an OPEC member, has also been particularly badly affected by the shale oil boom in the United States. In 2007, Nigeria was supplying more than one million barrels per day of its light, premium-quality crude to the United States. By 2013, the average volume had decreased to 239,000 barrels per day, and in 2014, it was just 54,000 barrels per day. There was no Nigerian crude import in July, 2014 when the global oil price first slumped, thus it becomes the first casualty of the U.S. shale oil boom. (8)

#### Angola

The U.S. shale oil boom also altered oil trade with Angola. The country's exports to the United States fell to 4.9 million barrels per day in July, 2014 down from 21.9 million barrels per day in March 2007. (6). This drop in export revenue in addition to the revenue loss from the lower oil prices also means Angola will have to find other markets for its crude. Export revenue is projected to fall by over \$10 billion or 7% of GDP in 2015. (4)

#### Gabon

Gabon on the average produces about 241, 700 barrels of oil per day, a decline from almost 400,000 barrels a day in the 1990s. (9) The oil price slump is, therefore, already affecting the declining revenue from the oil sales.

Just as Nigeria and Angola, Gabon oil exports to the United States was also wiped out by the shale oil boom, and more so since the latter used to be Gabon's main export market. The oil industry contributes 50% of government revenue and 80% of exports. (4)

# Ghana

With average production of 100,000 barrels a day, oil has become a major source of revenue for the government of Ghana. Annual oil revenues had risen from \$709 million in 2013 to \$780 million in 2014 but is projected to drop to \$215 million in 2015 due to the low oil prices. (10)

Ghana officially commissioned its first oil from its only major commercial field – Jubilee, on 15<sup>th</sup> December, 2010. More production is expected from other fields neighbouring Jubilee in the medium to long term, the most prominent being TEN (Tweneboa-Enyenra-Ntomme) field where oil production is expected to commence by the close of 2016. The Plan of Development for TEN commenced in 2014 and the cost is estimated at \$4.5 billion. With the on-going development of the TEN field, average production is expected to exceed 150,000 barrels per day by the close of 2016, but with oil price below \$60 per barrel, the schedule of completion of the project is likely delayed since the project economics were based on an oil price of \$80 per barrel. (11)

# Niger and Chad

One of the major regions on the continent that the industry has largely neglected over the past decade is said to be the interior basins of West Africa. However, with the discovery of geological continuity between the landlocked states of Niger, Chad and South Sudan a lot of activity particularly by China is underway. China National Petroleum Corporation (CNPC) has made 77 discoveries from 99 exploration wells drilled in the region from 2009 to 2013, and most of the discoveries have been at depths of 1,300-1,800 meters, with costs under \$5 million per well. (11)

CNPC has been working in parallel on projects in Niger and neighboring Chad and wants the two countries to agree to construct a pipeline that would run from Niger to Chad to link up with a 650 km ExxonMobil-operated oil pipeline in Cameroon to facilitate export of the oil from their production fields. With the prevailing low oil prices, the project is likely to be delayed.

Crude production in Niger has risen from about 6,000 barrels per day in 2011 to the current levels of around 20,000 barrels per day. (4)

Crude oil production in Chad on the other hand, has been declining from about 115,000 barrels per

day in 2011 to current daily levels of about 97,000 barrels. (6) Falling oil prices would therefore worsen revenue generation for the country.

# **Eastern Africa**

Landlocked Uganda has found 6.5 billion barrels of oil near the border with the Democratic Republic of Congo (DRC), whilst about 600 million barrels of oil have been discovered onshore in northwestern Kenya. However, the region is severely lacking in infrastructure and logistical solutions to its impending oil production. Kenya and Uganda, therefore, are building a 1,500 km export pipeline to the Kenyan coast. The \$4 billion pipeline project commences this year (2015) and is expected to be completed by 2017 as the two countries plan to start commercial oil production by 2018. (11)

East African countries with oil have made developing regional oil infrastructure a strategic priority and the Uganda-Kenya pipeline could also provide an alternative export route for South Sudan's crude<sup>2</sup> while the DRC has also expressed an interest in the facility.

Reduced revenue due to the falling oil prices however, could stall the progress of the project by delaying its financial closure.

South Sudan could also be significantly affected by the falling oil prices. The country agreed in 2012 as part of the negotiations leading to its independence, to a fixed payment for the use of the pipeline that goes through Sudan. Thus falling oil prices would erode its profit margin.

The oil price slump is also compelling oil companies working on the Tanzania's \$30 billion LNG project to reduce exploration budgets for 2015 and consequently, delaying financial closure to the project. Tanzania's gas reserves are estimated at 50 Tcf following new discoveries since 2010 and the country is now considering exporting LNG in addition to other gas monetization options. (5)

# **Southern Africa**

South Africa is embarking on diversification of its primary energy sources to include shale gas<sup>3</sup>. It has commercially viable shale gas reserves which it intends to develop in the nearest future but any prolonged low oil prices could starve major oil developers involved in the project of adequate cash and consequently, affect any existing time schedule for the project.

# Impact on Renewable Energy Deployment in Africa

The impact of the lower oil prices could also have a negative impact on commercial scale deployment of renewable energy technologies, particularly in Africa. Wind power may still remain competitive but sustained lower oil prices could stall a number of solar power projects. For instance, levelised cost of grid-quality solar photovoltaic electricity varies from 18-30 cents per kilowatt-hour or unit of electricity for most cases depending on the solar insolation and the location. At \$60 per barrel oil price, light crude oil-fired thermal power translates into 11-13 cents per unit of electricity depending upon the plant's efficiency and configuration. Equivalent diesel power plant costs are 15-17 cents per unit of electricity. (12)

## **Discussion/Viewpoint**

Even though, OPEC is not intervening for now, the prevailing low oil prices are also hurting economies of its members since the group needs an average oil price of at least \$100 per barrel to balance their annual domestic budgets.(4) Saudis might be taking direct aim at the U.S. shale industry and indirectly maintaining pressure on other high-cost non-OPEC production but there is a risk of oil glut that could sink the already low prices further if OPEC fails to cut production during the Spring season when oil demand is usually low. Secondly, Saudi Arabia failing to act,risks collapsing the petroleum cartel which had at times swayed into politics in support of a member state in its over 50 years of the group's existence. The Saudis could be seen as unprepared to sacrifice when some members of the block are in dire need and could also put the credibility of OPEC at stake making it no more relevant.

In any case, some of the OPEC members see \$60-\$70 per barrel as a reasonable price for producers and consumers. (7) However, for most emerging oil producing countries particularly in Africa where the resource is largely in deep waters, OPEC not intervening may not go down well. (3)

Some advanced economies also have not escaped the impact, however, those of the West appears to be less concerned since oil revenues comprise less than 40% of their economies. In fact, the OECD<sup>4</sup> member countries which include the West are taking advantage of the low-price environment to increase their strategic stocks. IEA says OECD stocks could, by middle of 2015, come close to the all-time high of 2.83 billion barrels reached in August 1998, shortly before WTI prices sank to an average monthly low of \$11.22 per barrel. (13)

Unfortunately, for most African countries, they have not developed the infrastructural capacity to stockpile in such times of low oil prices.

Also, unlike the West, Russia has more than 50% of its GDP based on oil revenues and for that matter is highly negatively impacted.

The West apparently standing aloof is also directly linked to the on-going crisis in Ukraine where Russia is supporting the insurrection in the east of the country whilst the West is on the side of the pro-Europe group in Kiev. The West might see this as an opportunity to weaken the Russian economy in addition to economic sanctions in already place against the country.

Russia however is a major player in the international economy and politics. In 2013, EU accounted for 57% of Russian exports and 46.5% of Russian imports, making the Union by far Russia's most significant trading partner. EU admits that its standoff with Russia is definitely affecting the economies of the two neighbours and it is in their mutual interest to seek a peaceful and timely resolution to the Ukrainian conflict. (14)

Thus, the stand-off between the West and Russia is affecting growth of both major economies and contributing to the slowing growth of the global economy as well. Should the low prices be sustained in the medium-to-long term however, economies that are able to re-structure would overcome, shale oil output would fall, and some African countries would regain their original markets.

## Conclusion

In summary, the prevailing global situation puts energy supply security, geopolitical sensitivity and price volatility on the international energy agenda. The stand-off between the West and Russia, the major economic and political powers over the Ukrainian crisis is doing the global economy no good, contributing to its slow growth. Declining global economic growth however is reducing demand for oil culminating in a significant drop in prices. Prevailing low oil prices are hurting African countries and some advance economies as well.

#### **Footnotes**

<sup>1</sup> Organisation of Petroleum Exporting Countries.

<sup>2</sup> South Sudan currently relies on a pipeline through its northern neighbour, Sudan, from which it broke away after a 22-year civil war. Continuing disputes between the two countries have disrupted flows.

<sup>3</sup> The country is facing electricity shortages that are crippling economic output and leading to increased political pressure to come up with alternative sources of energy.

<sup>4</sup>Organisation for Economic Cooperation and Development.

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