Breaking the mineral and fuel resource curse in Ghana

by

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In many countries, wealth in oil, gas, diamonds, gold and other minerals can be a curse rather than a blessing. When poorly managed, such natural resource wealth can result in poor economic performance, weak and unbalanced growth, poverty, conflict, environmental damage, and ineffective or authoritarian rule. In this chapter, the authors argue that the resource curse is not, however, inevitable. They provide a detailed account of how co-operation between Norway (a country with four decades’ experience of managing large oil reserves) and Ghana has helped the African country to manage its oil for the benefit of the population as a whole. Drawing on the experience of Norway’s Oil for Development programme and its principles of good governance, Ghana is striving to ensure economically, environmentally and socially responsible management of its petroleum resources. The Ghanaian government has focused on developing and improving relevant legislation, establishing and developing institutions, and building competence. Twinning arrangements between public sector institutions in Ghana and their sister institutions in Norway have ensured continuity, sustainability and a holistic approach. Placing emphasis on the principles of transparency, accountability and anti-corruption, the experience offers practical lessons that can prove useful for other countries.
It is a well-known fact that abundance in natural resources does not automatically translate into growth and development. In fact, in many countries, natural resources have become a curse rather than a blessing. If not well managed, wealth in oil, gas, diamonds, gold and other minerals may contribute to poor economic performance, weak and unbalanced growth, impoverished populations, aggravated conflict, environmental damage, and ineffective or authoritarian rule.

The reasons for this curse are numerous. Lack of democracy, accountability and transparency may foster rent-seeking. A focus on natural wealth may cause leaders to neglect the manufacturing and agricultural export sectors, making them uncompetitive (a problem called the “Dutch disease”). The notorious volatility of oil prices may destabilise an economy. Natural resource wealth can encourage corruption, impinge on the quality of institutions, promote excessive borrowing and lead to the subsidising of uncompetitive industries. In addition, unsustainable extraction of resources, without proper preventive and corrective measures, may seriously damage the environment. All of the above are permutations of the resource curse.

Nonetheless, the resource curse is not inevitable. Recent research has questioned earlier assumptions that abundance in non-renewable resources, notably oil, necessarily damages the growth prospects of developing countries (Luong and Weinthal, 2010). The determining factors here, as for other development challenges, are the quality of related governance mechanisms and institutions, and, ultimately, the mindset of a country’s leaders. Basic decisions taken at an early stage are crucial in determining whether the development of natural resources will benefit ordinary citizens. Essentially resources, infrastructure, governance, civil society and transparency need to be developed in parallel.

This chapter tells the story of two countries: Norway, which has 40 years’ experience of managing its oil wealth for the benefit of its citizens; and Ghana, which with Norway’s help is just starting out on the road towards responsible natural resource management.

**Forty years of oil management experience: lessons from Norway**

Oil was discovered on the Norwegian continental shelf in the 1960s. With daily production at more than 2.1 million barrels of oil, Norway is now the 7th largest oil exporter and the 14th largest oil producer in the world. Moreover, in 2009 it was the world’s 2nd largest gas exporter and 5th largest gas producer.

The Norwegian government derives around 25% of its total revenues from petroleum.
Norway has created a framework for using its petroleum revenues wisely to ensure the country's economic growth and for funding the welfare state (Box 9.1). Over more than 40 years, petroleum production has added some USD 1 600 billion to the country's GDP. In 2010, the petroleum sector represented 21% of the country's total value creation, and the government's income from petroleum amounted to about a quarter of its total revenues.

Norway's petroleum revenue is deposited in its Government Pension Fund Global. At the end of 2011, the fund was valued at well over USD 500 billion, or more than USD 100 000 per inhabitant. There is broad political agreement that, as a rule, Norway's structural budget deficit should not exceed the expected return on the fund's capital, estimated at 4% a year on average; the idea is to phase petroleum revenues into the economy sustainably, in the interests of future generations and regardless of price fluctuations.

Norway has spent USD 300 million on helping countries manage their oil revenues sustainably.

Four decades of experience in the oil and gas sector have provided Norway with unique expertise in the management of these resources. In the early 1980s, the government decided to share this experience with developing countries. This led to a development co-operation programme on petroleum-related issues, eventually including more than 30 countries; expenditure so far has been in the order of USD 300 million (Box 9.2).

**Box 9.1. A roadmap for making the most of natural resource wealth**

Professor Paul Collier (Oxford University) has, together with an international team, developed a very useful Natural Resource Charter – a roadmap for how governments should deal with non-renewable resources. It contains 12 simple principles covering the entire development chain, from the decision to develop resources to, for example, revenue management choices that can benefit people at large. The Natural Resource Charter is supported by the Norwegian government although it was developed long after Norway discovered its oil. In retrospect, although mistakes were made (and amended), it is clear that Norway has largely complied with the Charter's precepts and indeed may have served as something of a model.


**Oil for Development**

Norway's current co-operation programme, Oil for Development, was launched in 2005. Its comprehensive approach covers resource, revenue and environmental management. Essential principles of good governance – transparency, accountability and anti-corruption – are emphasised throughout, and support is provided to government institutions as well as to civil society. The goal is to promote economically, environmentally and socially responsible management of petroleum resources while safeguarding the needs of future generations.

The Oil for Development programme co-operates with a range of international institutions, including the Extractive Industries Transparency Initiative (EITI), the International Monetary Fund, the World Bank – through its Petroleum Governance
Box 9.2. **Trends in aid: Mineral resources and mining**

The DAC definition of aid to mineral resources and mining includes mining and minerals policies and programmes, geology and extraction of metals, minerals and fuels. It does not, however, cover the full range of the “Oil for Development” approach described by Norway, which also includes interventions in energy generation and supply, industry (energy manufacturing including petroleum refineries), government and civil society (legislation) and general environmental protection.

The mineral resources and mining sector represents a small component of ODA, i.e. less than 1% of total sector allocable aid. In 2009-10, total annual average aid commitments to the sector amounted to USD 461 million. This lucrative sector attracts sufficient resources from private investors and companies and is not considered a traditional sector of intervention for aid agencies.

**Figure 9.1. Trend in aid to mineral resources and mining**

Commitments 1984-2010, 5-year moving average, constant 2010 prices

The fall in bilateral aid during the 1990s was due to the implementation of the “Helsinki Package”, which precluded the use of aid resources for commercially-viable projects and led to a considerable reduction in aid for infrastructure including mining. This did not affect multilateral flows to this sector which had always taken commercial viability into account and reserved aid in this sector for smaller projects with a poverty focus.

**Figure 9.2. Regional breakdown of aid to mineral resources and mining, all donors**

2005-10 commitments
Box 9.2. **Trends in aid: Mineral resources and mining** (cont.)

Over the period 2005-10, the Middle East attracted half of official development assistance flows, mainly due to projects on oil pipelines in Iraq in 2005 and 2008. The other large recipient of this aid was Africa receiving nearly 40% of total aid for mining and mineral resources.

Over the period 2005-10, the United States, IDA and Japan were the largest providers of official development assistance in the mineral resources and mining sector.

Among the 439 new commitments reported by DAC members under mineral resources and mining in 2009-10, only 9 activities were tagged as addressing climate change mitigation concerns. One of these, financed by France in Morocco, was noticeably large (USD 318 million), consisting of an ODA loan to finance a system for transport of phosphates.

Contributions to the Extractive Industries Transparency Initiative International Secretariat (EITI) are reportable as bilateral ODA under various sectors (mineral resources and mining but also governance, energy or trade). They can be separately identified in the DAC Creditor Reporting System (CRS) through a specific channel of delivery code introduced in 2009 and are included in the figures shown in Table 9.1.

Table 9.1. **Aid to mineral resources and mining by donor, 2005-10**

Annual average commitments, constant 2010 prices, USD million

<table>
<thead>
<tr>
<th>Donor</th>
<th>2005-06</th>
<th>2007-08</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>0.40</td>
<td>0.40</td>
<td>0.7</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.50</td>
<td>1.90</td>
<td>1.2</td>
</tr>
<tr>
<td>Canada</td>
<td>1.30</td>
<td>4.30</td>
<td>0.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.00</td>
<td>0.60</td>
<td>0.1</td>
</tr>
<tr>
<td>Finland</td>
<td>0.02</td>
<td>0.90</td>
<td>3.4</td>
</tr>
<tr>
<td>France</td>
<td>0.00</td>
<td>0.50</td>
<td>158.9</td>
</tr>
<tr>
<td>Germany</td>
<td>4.20</td>
<td>1.70</td>
<td>0.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.00</td>
<td>0.03</td>
<td>0.0</td>
</tr>
<tr>
<td>Italy</td>
<td>0.00</td>
<td>0.10</td>
<td>0.0</td>
</tr>
<tr>
<td>Japan</td>
<td>22.10</td>
<td>295.70</td>
<td>18.2</td>
</tr>
<tr>
<td>Korea</td>
<td>0.10</td>
<td>0.30</td>
<td>1.2</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.00</td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td>Norway</td>
<td>8.50</td>
<td>14.00</td>
<td>39.5</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.60</td>
<td>0.10</td>
<td>0.1</td>
</tr>
<tr>
<td>Spain</td>
<td>3.00</td>
<td>0.60</td>
<td>1.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.10</td>
<td>0.20</td>
<td>1.7</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.00</td>
<td>0.00</td>
<td>2.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>28.80</td>
<td>1.90</td>
<td>4.2</td>
</tr>
<tr>
<td>United States</td>
<td>478.20</td>
<td>14.80</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total DAC countries</strong></td>
<td><strong>548.00</strong></td>
<td><strong>338.00</strong></td>
<td><strong>236.00</strong></td>
</tr>
<tr>
<td>AfDF</td>
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<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td>Arab Fund (AFESD)</td>
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<td>0.0</td>
</tr>
<tr>
<td>AsDF</td>
<td>0.00</td>
<td>0.00</td>
<td>2.5</td>
</tr>
<tr>
<td>EU institutions</td>
<td>65.60</td>
<td>2.10</td>
<td>3.1</td>
</tr>
<tr>
<td>IDA</td>
<td>70.80</td>
<td>72.10</td>
<td>219.3</td>
</tr>
<tr>
<td>UNDP</td>
<td>0.03</td>
<td>0.50</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total multilateral</strong></td>
<td><strong>141.00</strong></td>
<td><strong>80.00</strong></td>
<td><strong>225.00</strong></td>
</tr>
<tr>
<td><strong>Memo: Total EU institutions + EU member states</strong></td>
<td><strong>112.00</strong></td>
<td><strong>25.00</strong></td>
<td><strong>214.00</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>689.00</strong></td>
<td><strong>418.00</strong></td>
<td><strong>461.00</strong></td>
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</tbody>
</table>

1. The memo line “EU institutions + EU member states” shows the sum of EU members’ contributions to developing countries and the outflows of “EU institutions” to developing countries.

StatLink: [http://dx.doi.org/10.1787/888932700295](http://dx.doi.org/10.1787/888932700295)
II.9. BREAKING THE MINERAL AND FUEL RESOURCE CURSE IN GHANA

Box 9.2. Trends in aid: Mineral resources and mining (cont.)

Examples of Norwegian contributions in the context of the “Oil for Development” programme as reported to the CRS

In this Chapter, Norway describes its “Oil for Development” programme, which is designed to capitalise on Norway’s expertise in this field and help developing countries with access to oil resources to maximise the developmental benefits.

- Year 2010: USD 15 million committed to support Ghana on a long-term programme within petroleum-related environmental management, with the participation of a large number of Norwegian public institutions.
- Year 2008: USD 11 million committed in Timor-Leste for assistance in management of petroleum resources.

Initiative and the Global Gas Flaring Reduction Partnership – and the African Centre for Economic Transformation. It also engages in international co-operation on environmental aspects, for example with the International Association for Impact Assessment.

There is considerable demand for Norway’s Oil for Development assistance among emerging petroleum-rich nations. Today, the programme is engaged in more than 20 countries worldwide; 14 of these are in Africa, with Ghana, Uganda, Sudan, South Sudan and Mozambique being the main partners.

The Norwegian-Ghanaian partnership is a good example of how the Oil for Development programme helps emerging producers, such as Ghana, to exploit their resources in a sustainable manner. We hope that the story of our co-operation can afford some practical lessons for other countries, and serve as an inspiration.

Ghana’s success story: A flagship of democracy in Africa

Ghana is no novice in handling rich natural resources. This emerging middle-income West African nation of some 24 million people remains one of the world’s top gold producers. In addition, cocoa, timber, diamonds, bauxite and manganese provide other major sources of foreign exchange earnings.

Over the years, Ghana has developed a robust democracy, including the rule of law and well-functioning institutions. The country’s fifth democratic election since the end of military rule in 1992 took place in 2008; it stood out as the best-managed and most peaceful election in African history. John Atta Mills won the presidential race by a very small margin; commendably, the losing party accepted the voters’ verdict. This was the second time the opposition had taken power in Ghana (the first time was in 2000), confirming the country’s position as a flagship of democracy in Africa.

Ghana stands out as an African success story, both politically and economically.

Yet Ghana stands out as an African success story in more than just political terms. The economy has grown vigorously for many years, and continues to do so, with a growth of 13% in 2011. This is accompanied by a decline in population growth and in the proportion of people living in poverty. More than 90% of all Ghanaian children of school age attend school and access to electricity today stands at more than 70%. Life expectancy has risen and child mortality has fallen.
II.9. BREAKING THE MINERAL AND FUEL RESOURCE CURSE IN GHANA

Sustainable and equitable oil management

Ghana’s oil reserves should earn the country more than USD 1 billion in revenues every year.

In 2007, significant oil discoveries were made in Ghana’s offshore Jubilee field. In fact, Jubilee was the largest single discovery in the world that year. The field’s recoverable reserves are estimated at more than 700 million barrels, with a maximum potential of 1.8 billion barrels. Commercial production started in December 2010 with average production in 2011 at about 78,200 barrels of oil a day. Ghana’s oil revenues are expected to exceed USD 1 billion every year from 2012. In comparison, total international development assistance to the country in 2010 was USD 1.7 billion. Even so, Ghana’s oil reserves are relatively small on a global scale. Even if its reserves turn out to be at the upper end of estimates, they will only put Ghana approximately 50th in the world ranking of proven oil reserves, significantly below major oil producers such as Nigeria, Angola and Norway.

When the Jubilee discovery was made, Ghana’s method of mineral extraction was rather unsustainable. With this in mind – and to avoid the oil curse – former UN Secretary-General and Ghanaian citizen Kofi Annan approached Norway about Oil for Development co-operation. In February 2008, the Ghanaian government signed a Memorandum of Understanding (MoU) with the Norwegian government, with an initial focus on managing the Jubilee field. Under this MoU, Norway’s Ministries of Petroleum and Energy, and of the Environment, its Petroleum Directorate, the Oil for Development Secretariat, and Petrad (a training agency) agreed to assist the Ghana National Petroleum Company (GNPC), the Office of the President, the Ministries of Energy (MoE), and of Environment, Science and Technology, and the Environmental Protection Agency in various ways to prepare the ground for sustainable development.

A major initial step was the publication of a white paper on Ghana’s petroleum policy; this provided the basis for new legislation and for developing a petroleum master plan. After the 2008 election, the new Ghanaian government decided to intensify Oil for Development co-operation with Norway. Ghanaian officials, led by the Minister of Energy (co-author of this article) and the Minister for Environment, Science and Technology, travelled to Norway for a series of seminars and visits to Norwegian institutions. More Norwegian institutions became involved, such as the Petroleum Safety Authority, the Directorate for Nature Management, the Climate and Pollution Agency, the Mapping Authority, the Institute of Marine Research, the Coastal Administration and the independent research institution SINTEF.

Ghana’s EITI listing reflects the transparency and accountability of its extractive industries.

In the second half of 2010, just weeks before the start of oil production at the Jubilee field, Ghana qualified as EITI-compliant in its oil and gas activities (the mining sector had already qualified), laying the foundation for transparency and accountability among oil companies, the government and civil society.

In December 2010, two five-year agreements were signed for institutional co-operation on resource and environmental management, respectively, between Ghana and Norway.
These agreements directly address the challenges of managing the sustainable development of Ghana’s deep-water petroleum discoveries. In particular they seek to support:

- sustainable exploration, development and production of Ghana’s oil and gas endowment;
- judicious management of oil and gas revenues for the overall benefit and welfare of all Ghanaians;
- indigenisation of related knowledge, expertise and technology to increase local ownership.

In some areas, these agreements provide for co-ordination of activities with other development partners. The main elements of the co-operation include:

- **Policy and regulatory advice.** Effective policies and regulations are crucial for ensuring sustainability in resource management and fairness in revenue distribution. To this end, the Norwegian Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate, together with external Norwegian experts, are providing extensive advice on resource management to the Ghanaian MoE and GNPC. Furthermore, Norway has helped with implementing Ghana’s recently-approved Petroleum Revenue Management Act. This is modelled to a large extent on its Norwegian equivalent, exemplifying the benefits of learning from others. It took Norway 25 years to establish the Government Pension Fund Global, whereas for Ghana, it took approximately 25 days from the start of oil production to establish a similar fund. More legislation is required to improve the investment environment whilst securing national control. To this end, a revised Petroleum Exploration and Production Bill is in the final stages of preparation. Norway is also helping Ghana to draw up regulations for spatial and land-use planning in western Ghana, where most of the petroleum exploration support facilities will initially be located. The objective is to ensure that the development of the region is socially, economically and environmentally sustainable.

- **Capacity strengthening.** Seminars for the Ghanaian Parliamentary Committees on Energy, Environment and Finance have been held both in Ghana and in Norway. The seminars were designed to deepen the knowledge of legislators and to give them the opportunity to scrutinise proposed legislation so as to ensure that the nation’s resources are exploited sustainably.

- **Technical assistance.** The Norwegian Petroleum Directorate has helped Ghana to establish the National Petroleum Data Repository and provides technical assistance and training in geological, geophysical and sub-surface issues and data systems. This has helped to build the government’s capacity to supervise offshore activities. The World Bank will complement this effort by funding the procurement of technical equipment. The Norwegian Ministry of the Environment is advising its Ghanaian counterpart on environmental and legal matters and is also assisting the Ghana Environmental Protection Agency with organisational development, strategic environmental impact assessments and emergency preparedness. Finally, technical assistance has been provided to help in identifying baseline data for environmental monitoring of oil exploration activities.

- **Institution strengthening.** Following advice on the drafting of legislation, Ghana established a Petroleum Commission along similar lines to the Norwegian Petroleum Directorate; the Commission has also visited Norway for training. Assistance provided to the National Gas Task Force, appointed by the President to support the use of natural gas.

*It took Norway 25 years to set up an oil fund for the future: Ghana did this in 25 days.*
from the Jubilee field, paved the way for the establishment of the publicly-owned Ghana National Gas Company in 2011.

- **Industry support.** In January 2011, Norad (the Norwegian Agency for Development Co-operation) signed a three-year agreement with SINTEF to help Ghana develop its petroleum-related supplier industry. Ten Ghanaian companies will participate in a programme to boost their capacity to win contracts related to petroleum activity. SINTEF is also working closely with companies, research institutions and universities in Ghana to increase the viability of the Ghanaian petroleum industry.

Ghana is determined to use its oil wealth for the development of the country and its people.

This story highlights the clear importance the Ghanaian government gives to developing and improving legislation, establishing and developing institutions, and building competence in managing its oil industry. It is making optimal use of lessons from the Norwegian experience, adapting them to the Ghanaian context. Twinning arrangements between public sector institutions in Ghana and their sister institutions in Norway are helping to ensure continuity, sustainability and a holistic approach.

Thanks to its firm foundation in Ghanaian-Norwegian co-operation, Ghana’s new oil age is off to a good start. While much remains to be done and with many challenges still to be met, Norway is deeply committed to helping Ghana improve the lives of Ghanaians by ensuring local ownership of and participation in the oil industry, and by supporting the development of infrastructure, health care, education and living standards in general.

**The way forward**

There are many other developing countries blessed (or cursed) with abundant mineral or petroleum wealth. The Norway-Ghana collaboration holds many useful ideas for these countries. What distinguishes Ghana from many other nations in Africa and the rest of the developing world is the consensus and commitment of its leaders to use the country’s oil wealth for the development of the country and its people. Such unity of purpose, coupled with the non-political support of developed countries like Norway, will make it possible for countries like Ghana to escape the natural resource curse and ensure prosperity for all their citizens.

**Notes**

1. For more information, see [www.norad.no/en/thematic-areas/energy/oil-for-development](http://www.norad.no/en/thematic-areas/energy/oil-for-development).

2. The Extractive Industries Transparency Initiative (EITI) increases transparency over payments by companies from the oil and mining industries to governments and to government-linked entities, as well as transparency over revenues by those host country governments. To be listed as EITI-compliant countries must complete at least one reconciliation report checking revenues paid by companies to governments.

**Reference**

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