# From Aid Dependency to Shared Prosperity: Managing Cambodia's Oil and Gas Resources\*

This article includes the presentations on managing Cambodia's oil and gas resources by Douglas Gardner, United Nations resident coordinator, and H.E. Joseph Mussomeli, US ambassador to Cambodia, at the Cambodia Outlook Conference on 23 February 2007, with a brief overview by Dr Sok Sina of CDRI.

#### **Overview: CDRI**

According to the Cambodia National Petroleum Authority (CNPA), Cambodia possesses six offshore oil blocks (A, B, C, D, E and F) and an OCA block (overlapping concession area with Thailand). The area around the Tonle Sap also has oil and gas potential. This area is currently under investigation. UNDP and the World Bank estimate that annual revenue from oil and gas could be as much as USD2 billion, while the Cambodian government anticipates a much lower income, only USD100–300 million a year. Even though these estimates vary, it is generally agreed that income from the export of oil and natural gas could reduce Cambodia's reliance on overseas development assistance and be used constructively for economic development.

Experience, however, shows that some resourcerich countries are still underdeveloped despite huge revenues from the export of natural resources. Economists describe this phenomenon as a "resource curse", referring to the negative growth and development outcomes that can be associated with natural resource wealth. There can be many reasons for a resource curse, including "Dutch disease", an associated decline in the non-oil export sector. Other reasons can be wastage, corruption that causes a decline in investment and, in some developing countries, the potential for violent conflict. A "resource blessing", on the other hand, refers to a positive correlation between growth and development outcomes and natural resource wealth. Countries that have adopted timely and sound macroeconomic policies and used their oil revenues wisely overcome the risk of "resource curse".

Some negative effects can occur when oil and gas revenues are phased in without careful planning and management. Overall prices could increase and the riel could appreciate, weakening the competitiveness of exports of some agricultural cash crops and of garment products. A drop in these exports would subsequently push many out of employment, with serious consequences for the whole economy.

Activities and prices in non-tradable sectors like construction and services are likely to increase because of high demand and the strong purchasing power of the oil and gas sector. Prices of buildings, housing and land would all increase if demand for these goods increases, driven by oil money. Cambodia may, therefore, become a more expensive country in which to live and to invest.

While oil and gas revenue brings these risks, it provides at the same time a unique opportunity for the government to push economic development by investing in national roads, public facilities, education, health, rural roads, irrigation systems and services. Investment in these public goods will ensure long-term as well as short-term growth. The oil revenue could also be used to strengthen social safety nets by establishing social and pension funds. These investments potentially provide the most direct benefits to the Cambodian people and, therefore, serve the Cambodian Millennium Development Goals.

Oil revenue also provides a good opportunity for the government to speed up reform in the public sector by increasing salaries of government officials, building capacity through training and updating equipment and facilities. Oil revenues can also be used to provide technical and financial support to domestic industry and handicrafts; this, in turn, will reduce the reliance on imports and create jobs.

In short, oil and gas revenue will make a country more prosperous, but only under certain conditions. The revenue itself is not a curse, but the way in which it is used and managed may result in a curse or blessing. CDRI's vision is that oil and gas revenue will be wisely managed and used for the benefit of all Cambodians.

<sup>\*</sup> This article is composed by Dr Sok Sina, research associate, CDR. It reflects the speeches by H.E Joseph Mussomeli, US Ambassador to Cambodia, and H.E. Douglas Gardner, United Nation Resident Coordinator, at the Outlook Conference organised by the CDRI in collaboration with ANZ Royal Bank on the 22-23 February 2007.

## A Historic Opportunity to Achieve Shared Prosperity and Secure Long-Term Stability

By Douglas Gardner, United Nations resident coordinator

"Cambodia must learn from other countries, use oil revenues effectively and avoid an oil curse."—Prime Minister Samdech Hun Sen at the Cambodia Economic Forum, 17 January 2006.

The likelihood of significant oil and gas revenues being generated off the coast of Cambodia beginning sometime in 2010 presents a truly unique opportunity to secure the country's long-term growth, substantially reduce poverty, increase equity and consolidate the country's hard-won stability.

This opportunity is unique for several reasons.

First, because most of the oil and gas are offshore, no private landowner or group of landowners can claim to own it. As an offshore natural resource in Cambodian waters, it truly belongs to all Cambodians.

Second, offshore oil and gas are new and uncomplicated by recent history. Therefore, this oil and gas offer considerable flexibility and freedom for the government to improve the well-being of the vast majority of the people.

Third, early indications are that the offshore oil and gas fields are likely to yield significant financial revenues for the government, sufficient to improve substantially access to quality health and education, fuel rapid progress towards the Cambodian Millennium Development Goals (CMDGs), help secure the economy's long-term growth and consolidate the country's long-term stability.

#### **How Much Oil Is There?**

The amount of commercial reserves is still to be confirmed, but preliminary evidence is promising. The amount of offshore commercial reserves in Block A is currently being assessed by Chevron. Solid estimates should become available around mid-year. Very preliminary and tentative figures released last year suggested as much as 700 million barrels of oil in Block A alone.

At world oil prices averaging \$60 per barrel, this level of commercial reserves could annually generate net new revenues to the government in the order of USD1.7 billion. This latter amount represents some three times current official development assistance (ODA) levels, nearly three times current budget revenues and more than 50 percent of merchandise export revenues.

But even under more cautious assumptions, with only half of such revenues generated, this would still leave some USD0.85 billion to be disbursed into the government's general budgetary process. This would contribute to a doubling of current budget revenues and

expenditures, and allow for a near quadrupling of current expenditures on health and education, while still enabling significant growth in all other budget lines.<sup>2</sup>

#### **Blessing or Curse?**

While expected oil and gas revenues present perhaps the single biggest emerging opportunity facing Cambodia, socio-economic research supported by UNDP in collaboration with the Supreme National Economic Council (SNEC) and CNPA during 2005–06 also strongly suggests that it may be the single biggest threat to the country's well-being and longer term stability.

These conclusions are also strongly reinforced by experiences in many other low income developing countries over the past 40 years. More oil- and mineral-rich developing countries than not have been negatively impacted by oil and mineral revenue booms, and some even destabilised.<sup>3</sup>

In general, research indicates that long-term growth rates of oil- and mineral-rich developing countries have been 30 to 50 percent lower than growth rates for oil- and mineral-poor developing countries. Moreover, mineral-rich countries have under-performed mineral-poor developing countries on a variety of other economic, social and political indicators.<sup>4</sup>

#### Global Experience on the Resource Curse

A review of experiences by developing countries plagued by a resource curse over the past 40 years reveals some of the main warning signs leading up to serious resource curse outcomes.

These include a sudden surge of foreign currency revenues generated from the extraction of non-renewable natural resources combined with:

- lack of financial transparency;
- weak financial governance;
- fragmented and porous public finance systems;
- a weak and narrow tax base;
- strong evidence of significant corruption;
- a predatory state in which officials maximise personal gains through misuse of public office;<sup>5</sup>
- weak macroeconomic management capacity resulting in "Dutch disease"6;
- · significant borrowing against oil reserves.

#### Ingredients of a Blessing

The minority of oil/gas/mineral-rich countries that achieved an oil blessing also share common features.<sup>7</sup>

These include an expected surge of oil revenues generated from extraction of non-renewable natural resources combined with:

- advance planning to govern, manage and invest effectively the resulting financial flows;
- a high degree of transparency;
- a high degree of participation and meaningful decision making by the parliament or national assembly;
- well-developed and effective public sector institutions;
- relatively low corruption, with a functioning legal and judicial system;
- a healthy civil society;
- effective macroeconomic management capacity;
- aversion to debt accumulation;
- effective management and investment of the revenues to avoid overvaluation of the exchange rate and promote economic diversification;
- a rate of investment expenditure that ensures intertemporal efficiency and equity within the capacity limits of the state and absorption capacity of the country (typically back-stopped by a well-designed and transparent natural resource fund).

#### **Outlook for Cambodia?**

Clearly, an oil blessing will not be automatic. Fortunately, international experience provides valuable guidance.

Equally fortunately, Cambodia's constitution provides an effective road map towards achieving an oil blessing. The constitution instructs that a "precise plan" be devised by the state for managing such resources as oil and gas, and that such a plan be decided upon by the people through their voice in the National Assembly, Senate, government and judiciary.<sup>8</sup>

Such advance planning and broad participation of the people in decision making has proven to be an important ingredient to oil blessings in some of the more successful oil-exporting countries.

Moreover, given the current institutional and development context of Cambodia, international experience would suggest that a number of important policies and legal and institutional safeguards be put in place well in advance of oil revenue flows to ensure that Cambodia avoids an oil curse and enjoys an oil blessing.

On the policy front: There is a need for clearly defined policy on how potentially substantial oil and gas revenues will be governed and managed; transparent policies on how oil and gas concessions should be allocated to maximise benefits to the country as a whole; transparency in the various types and amounts of financial payments and financial flows generated by oil and gas licensing, exploration, development and extraction; and, more generally, clear policies on the degree of transparency in the sector as a whole.<sup>9</sup>

Offshore oil and gas are the patrimony of all the people of Cambodia, so better informing and broadening the public debate on future use of oil and gas revenues would appear essential. In order to maximise both efficiency and benefits accruing to the country as a whole, the allocation of oil and gas concessions to foreign companies would best be done through a competitive bidding process.

The broad terms of production sharing contracts outlining the various production sharing arrangements and various types of financial flows to the country should be made easily available to the general public (e.g. gazetted or posted on a public web site) to inform public debate, related planning and effective decision making.

On the legal front: There is a need for a well-designed petroleum law to govern the sector, based on a rational division of responsibilities within the state and between the state and the non-state sectors. There is also a need to ensure legal clarity and coherence with other laws (e.g. on taxation, environment etc.).

On the institutional front: Given the current stage of institutional development in Cambodia, there is a case to be made for a well-designed and transparent petroleum fund to ensure inter-temporal efficiency and equity of related investment expenditures through the government budget at a rate that minimises the risk of Dutch disease and other resource curse outcomes.

As is done in some countries that have avoided the curse, financial flows generated by oil and gas could first be deposited in such a well-designed transparent fund before being disbursed to and through the government budget process to finance planned investments within the NSDP at a rate that would enable efficient and effective investments within the limits of the country's still developing institutional and absorption capacities.<sup>10</sup>

In general, a further strengthening of public financial systems and management will clearly be important to avoid a resource curse. The government's ongoing efforts in public financial management reform are even more critical in the light of the potential for an oil and gas revenue surge beginning in 2010.

There is also a need to ensure a rational division of institutional responsibilities and related capacities within the petroleum sector. The capacity of the CNPA needs strengthening in a range of technical areas, and the division of responsibilities with other government bodies may need further definition.

### Investing in Shared Prosperity and Long-Term Stability: Advancing the CMDGs

Another challenge facing Cambodia is how to allocate expenditures through the budgetary process and NSDP so as to minimise the risk of a resource curse and maximise the likelihood of a blessing. Preliminary findings from

ongoing UNDP-supported research in collaboration with SNEC, CNPA and the Overseas Development Institute are illuminating.<sup>11</sup>

These findings generated by quantitative simulations of the Cambodian economy under varying oil and gas scenarios strongly suggest that the most effective way for Cambodia to minimise the risk of Dutch disease and other resource curse outcomes would be to invest a substantial share of future oil and gas revenues into rural development, especially human resource development through much improved basic education, training and extension services as well as in rural infrastructure, especially rural electrification, roads and irrigation. These requirements are largely due to the existing low capital intensity in most of rural Cambodia. Such ruralbased human capital and infrastructure investments also appear to offer the greatest scope for economic diversification, generating jobs and incomes in agriculture and manufacturing, and sustaining healthy growth rates over the long term.

Moreover, quantitative simulations also indicate strong positive impact on equity indicators, thereby further underpinning long-term social stability.

In sharp contrast, the risks of Dutch disease and loss of competitiveness in agriculture and manufacturing appear to rise as increasing shares of future revenues accrue to urban areas. In this scenario, equity indicators appear to deteriorate rapidly, boding ill for long-term social stability and human well-being. This scenario also tends to further exacerbate already high land concentration and related inequalities.

Similarly, early simulations suggest that striking a safe balance between consumption and investment expenditures will also prove critical. Dutch disease effects increase sharply as increasing shares of new revenues are used for consumption. The impact is especially negative on private sector competitiveness and investment. Imports also rise to unsustainable levels.

The government's Rectangular Strategy and the NSDP both place heavy emphasis on rural development and achieving the Cambodia Millennium Development Goals. While the NSDP does not specifically factor in the possibility of substantial oil and gas revenues, the realisation of such revenues would allow for an NSDP+ scenario fuelling rapid growth and poverty reduction in rural areas, as well as rapid advancement towards the other CMDGs.

In short, substantial investments funded by future oil and gas revenues in rural people and rural infrastructure, coupled with governance reforms, would appear to be the most effective way to avoid a resource curse and ensure that the outlook for Cambodia and its people becomes increasingly bright over the coming decades.

#### **Endnotes**

- Calculation based on world oil price of USD60 per barrel and extraction costs of \$20 per barrel with some 60 percent of gross revenues accruing to government based on a sliding formula in production sharing agreement with Chevron. Blocks B, C, D, E and F could of course add further to future revenues.
- 2. If very preliminary indications of natural gas reserves in Block A (some 3–5 trillion cubic feet) are factored in, this could mean as much as another \$350 million per annum would accrue to the government based on the production sharing contract with Chevron, further reinforcing the above preliminary financial implications.
- 3. Hence the term "resource curse" defined as "a phenomenon whereby a country with an export-driven natural resource sector, generating large revenues for government, leads paradoxically to economic stagnation and in some cases political instability". A resource curse can have several dimensions, including overvalued real exchange rates, thereby undermining the competitiveness of non-resource sectors, particularly agriculture and manufacturing; wastage; corruption/predation; and reduced incentives for accountability by governments to their people.
- 4. The most striking examples are many of the oil- and mineral-poor Asian tigers compared with many of the oil- and mineral-rich countries in Latin America and Africa, many of which are among the poorest and most indebted in the world. Among the more publicised resource curse experiences are those of Nigeria, Angola, Liberia, Sierra Leone, Equatorial Guinea, Ecuador, Venezuela, Trinidad and Tobago (quite recently), Kazakhstan, former Zaire, the Philippines in the 1970s–80s and many others.
- 5. Often cited examples here include former regimes in Nigeria, Liberia, Sierra Leone and former Zaire.
- 6. "Dutch disease" is an overvaluation of the real exchange rate and substantial loss of competitiveness in non-oil tradable sectors, especially agriculture and manufactures., thereby narrowing the base of economic activity, increasing unemployment and reducing incomes. The reduced diversification of the economy and increased reliance on the commodity sector leave the country more vulnerable to economic instability resulting from volatility in the specific commodity market concerned.
- 7. The most cited countries that managed to achieve a resource blessing are Norway, Canada (Alberta), USA (Alaska), Australia, Chile and Botswana. Timor-Leste is often cited as a developing country that has incorporated in its approach to offshore gas the most important lessons learned by other countries over the past 40 years, and hence may also serve as a model for Cambodia.

- 8. Article 59 of the constitution indicates that the state will establish a precise plan for the management of resources like oil and gas, and manage these for the improved welfare and standard of living of its citizens. All power belongs to the people, and such power is exercised through the National Assembly, the Senate, the government and the judiciary.
- The government has initiated a working relationship with the Extractive Industry Transparency Initiative to assist in this process.
- 10. For example, even if only half of the aforementioned \$1.7 billion of annual revenues were initially placed in a well-designed and transparent petroleum fund (as exists in a number of successful oil-rich countries), this would still leave some USD0.85 billion to be disbursed into the government's general budgetary process. This in turn would contribute to a doubling of current budget revenues and expenditures, and
- allow for a near quadrupling of expenditures on health and education, while still enabling significant growth in all other budget lines. In the meantime, the funds deposited in the proposed petroleum fund would continue to grow at a healthy international rate of return, allow for continued improvements in health and education beyond the eventual depletion of oil reserves and better secure financial and socioeconomic stability.
- 11. In light of the need to plan well in advance for the various possibilities, this ongoing research is aimed at simulating and quantifying the socio-economic implications for Cambodia of various oil and gas scenarios using a first ever computable general equilibrium model of the economy. The draft research findings will be released in the coming months for consultations and enrichment.

## Avoiding the Resource Curse: Managing Cambodia's Extractive Industries By Joseph A. Mussomeli, US ambassador to Cambodia

Excellencies, ladies and gentlemen.

Thank you for allowing me to participate on this panel. This session, "Managing Cambodia's Oil and Gas Resources", is certainly timely. Within the next three years, Cambodia's extractive industries—oil, gas and various types of mining—could more than triple the annual revenue received by the government of Cambodia.

A UNDP study stated that future oil revenues alone could provide over three times the country's official development assistance received in 2005.

This should be wonderful news. And indeed, for some poor countries, extractive industries have been an economic saviour, rescuing them from seemingly intractable poverty. They can also be an economic saviour for Cambodia. But that future is not yet certain. We all know from our own lives that many apparent blessings turn out to be curses. In America, a year does not go by when you don't read about some lucky person who won millions of dollars in a lottery and then ends up poorer and unhappier than ever before. Sudden wealth is as hard for people to cope with as sudden tragedy. For many countries, the wealth acquired through the extraction of resources has been a horrific curse, rendering the population destitute, while a small corrupt elite siphons off revenue that should go to improving the welfare of all the people. Over time, this corruption and the increasing disparity between the few "haves" and the many "have nots" inexorably lead to social unrest, political instability and violent conflict.

How will Cambodia navigate this critical voyage from being an "aid dependent" to a "resource rich" country? Will Cambodia be able to maximise wealth and cast off the social, political and psychological shackles of the Pol Pot regime? Will Cambodia emerge as a 21st century Asian dragon, implementing international best practices while pursuing its own path to economic prosperity and political stability? In order for the answer to these questions to be "Yes", Cambodia will need above all else political will. All the planning and training and good intentions will get Cambodia exactly nowhere if your leaders lack the political will to demand that the revenues from these extractive industries be used solely for the improvement of the country. In his open and eloquent speech yesterday, Prime Minister Hun Sen showed his intent to demonstrate just such political will. You must develop a transparent policy framework and establish comprehensive institutional structures that will prevent anyone, no matter how powerful, from misusing these revenues.

Before providing specific policy recommendations, I would like to highlight the pitfalls of the "resource curse," into which too many other nations have fallen. Contrary to expectations, discoveries of large reserves of natural resources have not always resulted in economic or social growth, and in some countries the general population is actually worse off after 30 years of oil revenues. The curse begins when government "deal makers" do not get the best price for the non-renewable natural resources. These people usually use non-transparent processes that focus on short-term wealth at the expense of long-term national development. They also usually have only a limited technical understanding of the business complexities and arrangements of the extractive industries.

Sometimes governments simply fail to plan for the inevitable revenue shocks associated with the constant ebb and flow of world oil, gas and mineral prices. Often governments find themselves remaining dependent on financial institutions that loan funds to cover budget shortfalls, which can lead to excessive debt and inflation.

Most fundamentally, some countries have made the irritatingly human decision to use the resource surpluses to relax fiscal discipline. Like children who never think about the long-term consequences of the choices they make, they act as if the revenue will never stop flowing and they need never act responsibly. This ultimately causes a downward economic spiral fuelled by increased public consumption at the expense of local production, causing domestic inflation and undermining the economy's productive sectors.

What does this mean for the Cambodian situation? Inflation can lead to higher prices to produce Cambodian agricultural and manufacturing products, thus reducing their competitiveness in the world market. Stated simply, if the extractive industries revenue is not properly managed, the Cambodian garment industry, which currently employs 334,000 Cambodians who earn \$292 million a year in wages and \$2.6 billion in exports in 2006, could be undermined and ultimately collapse. This is an unattractive scenario that can be avoided. Many within the government recognise and have been working to manage responsibly Cambodia's extractive industries.

The world community has gained a good deal of experience over the last several decades in how to manage the risks and realise the rewards of oil, gas and mineral development. Cambodia has the opportunity to learn from the failures of some countries and build on the successes of others.

We would recommend the following policy considerations.

First, we applaud the government for considering the Extractive Industries Transparency Initiative (EITI), and we hope that Cambodia will soon become an EITI implementing country. This would be a welcome step to demonstrate the government's commitment to establishing transparency in the extractive industries contracting system.

Second, the government should improve laws and regulations relating to disclosure and oversight of government revenues to ensure extractive industry revenues are openly tracked and allocated to implement the current Rectangular Strategy.

Third, the government should review its revenue management policy. The policy should provide answers to important questions such as "what to spend", "what to save" and "when". What will be the rules by which revenues flow into the treasury? Will Cambodia follow the Nordic example and establish savings funds for future generations? If so, what percentage of revenue will be made available for annual expenditures to support the education and health systems, rural infrastructure, preservation of tropical forests and other development priorities?

Fourth, the government's work to develop a new petroleum law should be expedited to ensure an efficient and transparent regulatory framework.

Fifth, the proposed amendment to the Law on Taxation that introduces clear and efficient petroleum industry taxation provisions should be endorsed and forwarded to the National Assembly. In order to implement the revised tax system, the Ministry of Economy and Finance's Tax Department will need to be strengthened to include specialists on extractive industry tax administration.

Sixth, the National Assembly should take immediate action to enhance its ability to serve a viable oversight role, including establishment of a permanent commission that has the specific responsibility for oversight of extractive industry revenue flows.

Seventh, the government should expedite the passage and implementation of a freedom of information law, which would codify the basic democratic principle that the work of the government should be conducted in a transparent and open manner so that leaders can be held accountable for their decisions and actions.

Finally, the government should pass and implement an anti-corruption law that will establish an independent body that can investigate corrupt practices throughout the government.

In closing, I would offer the observation that after living in Cambodia for a year and a half, I have discovered that there are few things all Cambodians agree on. But there are two things that they all consistently believe, regardless of their age, their political party or their economic status. First, they all speak with pride about the great Khmer civilisation that flourished many centuries ago. And second, they all speak longingly about how, only 50 years ago, Cambodia was the envy of all of south-east Asia: how Cambodians were better educated, had better health services, had a more lively and open cultural atmosphere than any of their neighbours.

I like to think that the revenues that Cambodia will soon obtain from its natural resources will be a "second chance". A second chance to regain the prestige of its ancient civilisation and a second chance again to be the envy of all its neighbours. This is an especially auspicious year to begin this "second chance". We all just celebrated the ushering in of the Year of the Golden Pig. My understanding is that the year is particularly

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