CHAPTER 5

REBUILDING THE IRAQI OIL INDUSTRY: LEGAL AND CONSTITUTIONAL STRATEGIES FOR SUSTAINABLE, POST-SADDAM DEVELOPMENT

Introduction

The Iraqi people have lived under the shadow of totalitarianism and corruption during the three decades of Baath party rule. Saddam Hussein obscenely squandered Iraq’s natural and human resources on fruitless wars, while enriching his inner circle and close-knit members of his tribal group. Yet, few would question that oil is Iraq’s lifeblood.

Iraq sits atop the world’s third largest proven oil reserves (115 billion barrels), but only institutional and constitutional safeguards, including financial accountability and the equitable apportioning of its oil revenues, will guarantee Iraq’s economic health. Without a viable legal framework, Iraq will find it difficult to attract the investment capital necessary for sustainable nationwide development and petroleum production. To consider investment of large sums of money into Iraq, international oil companies (IOCs) require legal/constitutional protection for foreign direct investment (FDI), a stable security situation, and a functioning government. The lack of a legal framework generally leads to “resource curse,” a trait all too common among resource-rich developing nations.

Resource curse may be corrected by sound political and cultural infrastructures wedded to responsible policies, which cannot simply be willed into place. The principle of resource curse presumes that access to vast revenues, independent of taxation, provides perverse incentives for a “bad” leader to fulfill his innermost authoritarian fantasies without fear of significant checks and balances. A lack of fiscal transparency encourages corrupt officials to siphon funds from the government treasury. The refusal to equitably distribute petroleum revenues may precipitate violence, because different factions will struggle for ground-level control of the resources. It is possible that Iraq has experienced resource curse, not only in the unbridled passions of Saddam Hussein, but in the actions of regional...
warlords since Hussein’s fall from grace. Tribal and sectarian violence may already be reaching the boiling point, since ethnic Arabs, Turkmen, and Kurds are currently facing off over the fate of the oil-rich region of Northern Iraq known as Kirkuk.

This research presumes that Iraq’s successful attainment of post-Saddam recovery of its resources is significant for global stability, and that regional and ethnic interdependence will be the lodestar of the new state. This paper also focuses on strategies that all interested Iraqi factions—shareholders—may implement to create a viable petroleum sector, and to construct a constitutional and legal infrastructure as an integral part of a coherent national petroleum policy.

**Overview of Iraqi Oil Policy**

*Iraqi oil reserves and production history.* Iraq’s 115 billion barrels (bbl) of proven reserves amount to eleven percent of the globe’s proven total. Only 17 of Iraq’s 74 oil fields have been exploited, most significantly the Southern Rumayla field and Kirkuk in the North. Since little oil or gas exploration and development have taken place for years, Iraq may have more reserves than previously estimated. Some of the more prominent oil analysts believe that deep oil-bearing formations located in the vast untouched Western Desert region could yield up to a possible 100 bbl. A somewhat exuberant proclamation by the former Iraqi Oil Minister, Thamir Ghadban, flatly declared that Iraq had “unconfirmed or potential reserves of up to 214 bbl.”

Iraq reached its peak production shortly before the 1990 Kuwait invasion, with 3.5 million of barrels per day (mbd). After the invasion of Kuwait and the first Gulf War, production was significantly curtailed by international boycott, and dropped precipitously to about 500,000 barrels per day (b/d). The UN Oil for Food Program (UN Resolution 986), implemented in December 1996, allowed petroleum exports to start again. Between 1991 and 2001, Iraq averaged approximately 2.5 mbd of oil production.

During the start of the U.S.-led 2003 war, oil production ceased, but resumed after the official fall of the Baath regime. In 2004, production ranged from 1.9 mbd to 2.4 mbd; exports peaked at 1.6 mbd, but averaged considerably less as insurgents regularly attacked or sabotaged export terminals and pipelines.

If its development strategies were enhanced, Iraq could easily support expanded production, estimated to be up to three times its highest peak
production, at around eleven mbd. Amazingly, Iraq could rival Saudi Arabia’s mammoth production with expanded use of current geophysics and investment in field development and infrastructure. The cost of extracting Iraq’s oil is among the world’s lowest: when taken together, all these elements show that Iraq offers the potential for substantial production expansion in a few, high producing fields.

At the time of writing (2007), Iraq has 1,600 wells with the potential to produce up to three mbd. The U.S. Department of Energy’s Energy Information Administration (EIA) estimates that 90 percent of the country remains unexplored due to the years of sanctions and unremitting war.

The exploration that Iraq has carried out was conducted using antiquated, two-dimensional seismic equipment, instead of the latest three-dimensional models. The unexplored regions of Iraq are estimated to potentially yield up to 100 billion additional barrels of oil. Iraq’s easily produced petroleum reserves allow it to substantially increase its oil production through contemporary oil management techniques, the drilling of new wells, and infrastructure rehabilitation.

Iraq’s current oil production. With Saddam’s fall in 2003, oil production resumed and increased after a virtual standstill. However, damage to the wells, lack of materials, and security concerns impeded the ability to get production quickly online. In the oil fields of Kirkuk, refinery constraints and attacks on transportation caused local refineries to strip extracted oil of its gasoline and re-inject the leftover into the wells. This has led to some amount of uncertainty in determining the total amount of production.

Iraq’s former oil minister, Ibrahim Bahr al-Uloum, dramatically set corruption reduction as one of the new goals of the Oil Ministry during his term, along with increased availability of fuel, the reduction of insurgent attacks on the oil infrastructure, and the reestablishment and strengthening the Iraqi National Oil Company. As of yet, there have been notable difficulties in reaching these goals.

As of May 2006, Iraqi oil production was averaging approximately 1.9 mbd, which is substantially below its current potential of 3 mbd; the EIA estimates, however, that the total gross production was about 2.1 mbd. Iraqi production remains relatively low due to the lack of sophisticated equipment (3D Seismic, directional or deep drilling, gas injection), insufficient spare parts, and inadequate foreign investment. Because Saddam-Era Iraq utilized inferior production techniques such as over-pumping, the oil infrastructure remains in great disrepair. Simply by instituting modern oil field management techniques and developing new
fields, Iraq has the possibility of significantly increasing its production yield by millions of barrels.

![Iraq's Oil Production and Consumption, 1980-2007E](image)

**Figure 5.1 Iraq’s Oil Production and Consumption**

Under normal petroleum industry practices, reserve oil may take between five to ten years to reach production. Investment in the Iraqi oil sector must begin as rapidly as possible, so that adequate revenue inflows can be generated by the early 2010s. It is estimated that an investment of five to six billion USD will be needed to bring the upstream oil sector (exploration and production) and downstream (refining, export, and distribution) on par with the pre-invasion production capacity.  

Further investment of approximately $35 to 40 billion USD will be needed to boost production up to five to six mbd. It is essential that the new investment monies be directed to expanding capacity, and not merely to damage control and security. Every dollar spent on oil field security is a sunk cost that diverts crucial money away from capacity development.  

**Challenges to capacity expansion of Iraqi fields.** Iraqi fields are greatly impaired due to underinvestment, previous sanctions (prohibitions for importation of new technology), war damage, sabotage, and inferior extraction techniques. Iraqi fields may have already suffered irreparable damage. During the Second Gulf War, the oil fields were little affected; however, after the fall of the regime, there was widespread looting that caused significant damage. According to the EIA, the chaos that ensued may have accounted for up to 80 percent of the total oil infrastructure damage.  

One of the major problems with current efforts to increase production capacity is Iraq’s previous use of the highly destructive “water cut” process to increase production. A Saybolt International report in 2000 on
the state of Iraqi fields reported that the Iraqi Northern Oil Company (INOC) and the Southern Oil Company (SOC) increased their production rates through highly destructive processes, such as injection of refined oil products into crude reservoirs. Further damage to Iraqi fields comes from constant attacks of insurgent sabotage (sometimes reaching almost five or six times a day). Iraq is averaging one to two significant attacks per week against its oil infrastructure. Even though the U.S. and Iraqi governments have made protecting the oil infrastructure a top priority, they have not successfully prevented the insurgents’ efforts to cut off the oil tap. In the face of this chaos, former Iraqi Oil Minister, Issam al Chalabi, insisted that there should not be an effort to meet or match Iraq’s prewar oil production level of 2.8 mbd. Instead, Chalabi held that Iraq should “cap oil production at a maximum two mbd, export no more than 1.5 mbd, and start immediately on subsurface work to assess and repair damaged reservoirs in its oil fields.” Chalabi contended that Hussein reached such high production levels due to a lack of concern about the irreparable damage to Iraq’s fields, coupled with an eye for short-term gain. Chalabi argued that Iraq should focus on renovating the fields and installing modern oil field management techniques. According to many Iraqi oil officials, Kirkuk and the other reservoirs suffered damage as the result of “13 years of sanctions, mismanagement, overproduction, and last, but not least, reinjection of various products, including hydrocarbon wastes.” Chalabi estimates that out of Kirkuk’s proven remaining 8.7 billion barrels, 1.48 billion is attributable to reinjected crude oil from as early as 1991.

**Legal and Constitutional Issues**

Saddam managed Iraq’s oil fields based on a centralized model that did not take into account the actual geographic locations of the oil and gas fields vis-à-vis established administrative borders. However, the new constitution incorporates a significantly decentralized, federalist model that considers the locations of the fields and the respective regions vested with administrative control.

With its birth amid chaos and the self-interested scrambling for levers of political power, the 2005 Iraqi Constitution became a magnet for adverse criticism, much of it related to the document’s ambiguity and the emphasis on decentralization. Although an almost legendary vagueness may have expedited its passage, the Constitution created seemingly insolvable problems. Many of the IOCs are hesitant to invest in the
country, forming a paradoxical situation whereby Iraq is sitting on massive amounts of oil, and yet lacks access to modern oil field techniques.

The new constitution is an abrupt departure from previous strong central management girded by weak regional subsidiaries to a heavily decentralized method, in which a weak central authority is tolerated by strong regional offices. The strength of the central authorities is expected to diminish further in the future, as output from current fields depletes and new exploration and development is undertaken in new fields.41

Operating in an uncertain legal environment. Prior to Saddam’s fall, Iraq had concluded several multi-billion dollar petroleum contracts with foreign oil companies, the majority from China, France and Russia:42 a Deutsche Bank estimate states that Iraq signed up to $38 billion in contracts to develop new fields. This would potentially raise production capacity to 4.7 mbd, if all the contracts proceed normally.43 With the toppling of the regime and the election of a new Iraqi government, all of the previously signed contracts are stranded in legal limbo, thus increasing the legal uncertainty that all IOCs wish to avoid.

Iraq still owes Russia, with which it has had a historically strong relationship, billions of dollars for previous arms deliveries. In 2001, Russia signed a 23-year $3.7 billion contract for rehabilitation of Iraq’s aging fields, with a specific focus on the West Qurna field.44 Shortly before the coalition-led invasion, the Iraqi Oil Ministry made an announcement in December 2002 that it was negating the contract signed with the Lukoil consortium on West Qurna, due to the company’s failure to abide by its contract stipulations.45 The Iraqis argued that Lukoil had failed to invest the contractually-stipulated $200 million over three years. To resurrect the contract, Lukoil began training Iraqi oil personnel in its facilities in Western Siberia.46 In February 2006, Lukoil announced that it wished to begin negotiations with the new Iraqi government and work on the West Qurna restoration.47 France negotiated an even larger contract through its state owned TotalFinaElf Company to explore the Majnoon field, estimated to contain between 20 to 30 billion barrels of reserves. Prior to the French-Iraqi Agreement, China National Petroleum Company (CNPC) had a substantial reconstruction contract for a portion of the Rumayla field, which suffered substantial damage during the 1991 Gulf War.48 The viability of the Saddam-era contracts is dubious because the Iraqi Oil Ministry announced in June 2006 that it would renegotiate existing oil development contracts with France’s Total, as well as the Russian and Chinese firms.49 These renegotiations will of course have a direct bearing on any future development undertaken by the large IOCs, in
order to strengthen legal guarantees.

The issue of regional licenses: Constitutional clarity. A vital problem facing Iraq is whether licenses granted by the regional authorities are valid, and whether Baghdad will recognize them. The Constitution grants licensing rights to Baghdad and the regional governments. Ratified on October 15, 2005, the Iraqi National Constitution is quite an ambitious document, which fails to ban regional governments from issuing drilling licenses in their own right. Nature, of course, abhors a vacuum, and the Sunni and Shiite Arabs stand poised to oppose any move towards regional autonomy in granting oil licenses.

The Iraqi people accepted the Constitution in a popular referendum on October 25, 2005. Section 2, Article 112 of the Iraqi National Constitution declares:

The federal government, and the governments of the producing regions, and provinces together will draw up the necessary strategic policies to develop oil and gas wealth to bring the greatest benefit for the Iraqi people, relying on the most modern techniques of market principles and encouraging investment.

Article 112 (2) suggests that certain sub-sectors will be opened to FDI, but it fails to set specific jurisdictional parameters. Because Article 115 of the Iraqi constitution, which enumerates the separation of powers, does not specify otherwise, observers construe it to mean that new fields, or fields not properly exploited, are under the regional authority’s mandate. Conflict reigns, not only as to the separation of powers, but also as to which entity has the legal authority to negotiate petroleum contracts. In a hurry to sign new contracts, Kurdish leaders cite Article 115 as authority to negotiate new contracts. In June 2004, the Kurdish Regional Government (KRG) signed an exploration and development deal with the Norwegian oil and gas company DNO, and entered into exploration deals with Canada’s Heritage Oil and Britain’s Sterling Energy.

Differences in Constitutional Construction between the Federal and Regional Government

Former Iraqi oil minister Thamir al-Ghadban contended that the Constitution vested the central government in Baghdad with ultimate power to approve oil contracts with foreign corporations when he said
any future oil research or development project on oil fields in Iraq that would be undertaken in cooperation with foreign companies must be approved by the future [Iraqi parliament’s] Council of Representatives...."52

The newly appointed oil minister, Hussein al-Shahristsani, reaffirmed the government’s position when he argued that “all oil production, exports or exploration should be handled by the [Baghdad] Ministry of Oil.”53

Reading the same document, Ashti Hawrami, the KRG’s Minister of Natural Resources, contended that Section 1, Article 112 vests the KRG with authority to collaboratively administer undiscovered wells:54

The federal government in cooperation with the producing regions and governorates shall administer the extracted (produced) oil and gas from existing oil and gas fields provided that the proceeds (revenues) are evenly distributed in accordance with the demographic distribution around the whole country, and a specific share of the proceeds for a specific period of time shall be allotted to the regions which are unjustly deprived by the previous regime, and were affected by it, to secure a balanced development of the different areas of the country and this shall be regulated by law.55 (emphasis mine)

Ambiguity abounds as to whether the term “existing oil and gas fields” refers to all discovered fields, to those in the process of current extraction (equaling about 78 of Iraq’s known reserves), or to fully developed fields (approximately 36 of the total).56

The Kurdish Natural Resources Minister, Dr. Ashti A. Hawrami, initially interpreted “existing fields” to mean those currently producing oil.57 He later broadened that definition by proclaiming that the regions and governorates should not only control the revenue from undeveloped fields, but have veto power over the limited administrative role enumerated for the federal government.58 To him, this seemingly innocuous verbiage limits the federal authorities to the narrow administrative role necessary to exporting and marketing extracted oil and gas from existing producing fields. Because the KRG views even this limited administrative role as conditional upon a comprehensive agreement between the regions as to the gas proceeds, it would likely earmark additional shares to regions uniquely deprived under the Saddam era, particularly the Kurdish and Shiite areas.

KRG officials insist that the regional governments also be vested with added shares, as Saddam’s regime systematically deprived them of their rightful shares. The KRG also contends that, while the right of the central government to handle extracted oil and gas is contingent upon an equitable
revenue distribution, the daily management of the fields should be conducted locally.

**Conflict of laws.** Ironically, the Iraqi Constitution does contain a conflict of laws provision, as reflected by Article 115 which declares:

> all that is not written in the exclusive powers of the federal authorities is in the authority of the regions. In other powers priority will be given to the region’s law in case of dispute.

The KRG therefore views Article 115 as a trump card that vests it with authority to have its own petroleum law on the grounds that a comprehensive petroleum law does not exist.59

**Enumerated powers.** Because the constitution is silent about many aspects of the oil and gas industry, the KRG views most rights as vested in the regional authority. This is consistent with Article 115, which declares that non-enumerated functions are implicitly left to regional governance. Yet there are many logical gaps in the argument, since Article 115 does not make provision for dealing with the discovery of new fields, or any unexplored areas. Furthermore, it does not specify if control of downstream activities is vested in federal or regional authorities when oil comes from new or undeveloped fields, and it fails to mention downstream activities, such as refining, storage facilities, pipeline, export terminals, tankers, etc.

**The conflict over Kirkuk.** Kirkuk is located in Northern Iraq, about 250 kilometers north of Baghdad, near the foot of the Zagros Mountains. With approximately ten billion barrels of proven reserves and exports totaling about half of Iraq’s oil exports, Kirkuk is a flashpoint in Iraq’s oil politics: whoever controls Kirkuk effectively controls Iraq’s oil and wealth.60 A referendum was to be held by December 31, 2007, but amid persistent allegations of potential voting irregularities and flare-ups of violence, it was delayed until June 2008.61 The issue is particularly inflammatory because of the uncertain status of the Kurds whom Saddam displaced under his Arabization resettlement policy.

Kirkuk is a battleground, since Kurdish residents are re-entering at a rate that will soon give it a “democratic” advantage over competing ethnic groups, namely Turkomen and Arabs. The Sunni Arabs are supported by Baghdad; Turkey not only favors its ethnic brethren, the Turkomen, but intends to block the Kurds from regional power. The Kurdish North favors
the local Kurds, and wishes to bring the Kirkuk governorate, with its 8.7 billion barrels of proven remaining reserves, securely into the KRG fold.\footnote{62}

If the referendum finally does take place, Kirkuk residents will decide if the province will be incorporated into the Kurdish region. There are reports of ethnic Arabs being driven out of the city, and of reprisals and counter-reprisals.\footnote{63} The Kurds see their return as an important response to redress the wrongs committed under Saddam’s Arabization program; they also feel that the oil revenue gained from the city will help solidify their position as an autonomous region. KRG’s annual budget is derived from its share of the overall Iraqi oil export, essentially seventeen percent of the total.\footnote{64} The Kurds fear—although not without reason—economic starvation if the Arabs gain a numerical edge. This embattled feeling steels the KRG determination to exercise regional authority in granting oil contracts.

State of the Current Iraqi Draft Petroleum Law

At the time of writing, the Iraqi Cabinet created\footnote{65} a draft petroleum law (not yet entered into law) which would create the framework for nationwide distribution of the country’s immense oil wealth and structure foreign investment in the country.\footnote{66} This agreement, which included all major ethnic and sectarian power blocs, revealed an unprecedented level of cooperation, particularly with regard to governance of Iraq’s oil reserves. The law allows a degree of centralization, because the oil revenue will go to Baghdad, which will then distribute the wealth to all eighteen provinces based on population demographics. This particular factor could act as a salve for Sunni worries, who fear that they will be left out of any oil plan by the politically powerful and oil-rich Shiites and Kurds.

Features of the draft code. The draft law vests regions with negotiating power to conclude exploration and development agreements with IOCs subject by the review and approval by the central authorities.\footnote{67} A controversial aspect of the code is that it will allow regions to enter into production-sharing agreements (PSA) with IOCs, a feature that some Iraqis feel conceals a tacit bid by foreign IOCs to gain control over the country’s petroleum resources.\footnote{68} To mitigate this fear, Iraqi officials have insisted that all contracts be subjected to a transparent bidding process. Many foreign delegates contend that changes in bidding protocols will do little to stem the corruption, which they believe is rife in the upper
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Echelons of government, or diminish the fear among non-Americans that U.S. companies will be favored. Oil industry experts respond that there is little to fear, since there IOCs have little incentive to invest in Iraq; the law not only fails to adequately protect investors, but remains vague and uncertain.\textsuperscript{69} Parliament must approve the draft law before it takes effect, if at all; bitter sectarian feuds that impeded its drafting may also impede its enactment.\textsuperscript{70}

\textit{Potential problems}. Even though the draft law allows revenue to be divided according to population demographics and has done much to placate Sunni worries, accurate population figures are elusive as Iraqi census counts have nearly always been politically driven.\textsuperscript{71} The draft law attempts a delicate balancing act between the powers of the regions, and those of the Central authorities.\textsuperscript{72} The law could placate Sunnis if it allows more petroleum exploration on their oil parched territory.\textsuperscript{73} The Iraqi government recently paid upwards of tens of millions of dollars to IOCs for review of old seismic data across the country, and to retrain Iraqi petroleum personnel.\textsuperscript{74}

The issue of revenue splitting was agreed upon fairly early in the draft negotiations: the main point of contention with regard to oil contracts being whether the authority to sign was vested in the regions or the central authorities. The Kurds forcefully argued for expansive regional powers, while Sunni Arabs sought a more centralized system. The draft law sought to balance the interests of these two often adversarial groups with compromises that declared that regions may enter into contracts\textsuperscript{75} with IOCs, subject to overview of a powerful new committee termed the “Federal Oil and Gas Council”;\textsuperscript{76} that the Iraqi National Oil Company (INOC) will be resurrected with a separate legal status from the Oil Ministry, and will be run according to a profit model;\textsuperscript{77} and that any region that produces more than 150,000 barrels a day can incorporate its own regional operating company. Harsh criticism\textsuperscript{78} has been leveled at the proposed draft law since there is no mechanism for dispute resolution between the regions and the federal government. Some allegedly aggrieved parties contend that the compromise was pushed through with significant political pressure from Washington.\textsuperscript{79} Parliament may enact the draft laws, yet only time will tell if it will bring lasting stability.

\textbf{Conclusions and Recommendations}

To stabilize its petroleum sector, Iraq must speedily achieve critical short-term objectives. To encourage investment, the primary objective
must be toward production restoration from the major fields and reducing ethnic tensions. It is essential that before significant expansion of production is attempted, petroleum specialists carefully study the historic production levels of reservoirs to analyze the extent of damage, if any, and prescribe best production practices that will contribute to the long-term petroleum recovery.

The noted author on Iraq and energetic proponent of Kurdish autonomy, Peter Galbraith, proposed that the U.S. authorities should accept the inevitability of the dissolution of Iraq into three distinct countries (relating back to the old Ottoman administrative viliyats (provinces) based on ethno-sectarian majorities. This should be avoided at all costs. The reality is that many of Iraq’s regions are mixed, and internal conflict can, as with anywhere, wreak epic devastation. Once unleashed, highly impassioned instability may race throughout the region and lead to ethnic cleansing as rival groups battle over petroleum resources.

Because historically producing fields should not be overtaxed, production efforts should create secondary production fields from underutilized or new (not produced before) fields. Stable production is necessary, not only for Iraq, but for the world.

*Enhanced oil production requires foreign investment.* Iraq has not benefited from state-of-the-art oil industry technology (i.e., 3D seismic, directional or deep drilling, gas injection), and its oil production has suffered from a lack of sufficient spare parts and investment throughout most of the 1990s. Production has been sustained with sub-standard engineering techniques such as over-pumping and water injection (“flooding”) and obsolete technology (systems were in various states of decay, including corroded well casings). Reversal of all these practices and utilization of the most modern techniques, combined with development of both discovered fields and any new ones, could result in Iraq’s oil output increasing by several million barrels per day. In February 2004, former Iraqi Oil Minister Issam al-Chalabi astutely concluded that recent efforts to boost Iraqi production may harm the country’s oil reserves.

Although Iraq has made long strides from its previous incarnation as a despotic regime, it finds itself in a very precarious position. The national Constitution made great headway as a starting point for national reconciliation and establishment of a fledgling nation-state. Although tact and ambiguity may have been essential ingredients in crafting the Constitution, intentional ambiguities can now generate divisiveness. The present Iraqi government can implement transparency and accountability
in any national oil management regime. The sustainability of the historically underrepresented areas (i.e., the Kurdish North and Shiite South) depends on a measure of interdependency with the rest of the country. No discussion of the development of the Kurdish-administered area can take place without considering the development of problem solving forums within a larger Iraqi national framework.

**Legislative reform must pre-empt the growth of post-Saddam corruption.** To escape Saddam’s legacy of exploitation and culture of corruption, the Iraqi stakeholders should implement the following legal and constitutional recommendations:

- The establishment of a transparent and accountable budgetary process. Any section of the constitution that details the responsibility for the national budget should specifically include that all oil-related revenue and expenditures must be a portion of the public budgetary process. The legislature must also be given the power for administrative oversight of the Executive and the cabinet ministers, to monitor spending decisions and budgetary allocations. To prevent post-Saddam Iraq from merely perpetuating its culture of corruption, an audit board armed with specific authority to investigate alleged misappropriation should give annual reports to the parliament. Even in a highly decentralized Iraq, all petroleum monies should flow through a central authority that will be legally authorized to monitor the budgetary process.

- National petroleum law. The development of the Draft National Petroleum Law based on the Constitution will reassure IOCs before they commit large sums of FDI to the Petroleum Sector. The new petroleum law need not be exhaustive, but it should cover all aspects and phases of operations, particularly main principles, while leaving site-specific details to regulations, individual agreements, and future amendments.

- Formulation of a model petroleum agreement. The petroleum law and subsequent regulations should establish the overarching features of a coherent petroleum policy, and must broadly establish the relationship between the host country and IOCs. To accommodate regional interests, the specific details of the relationship should be documented in individual commercial agreements and contracts. The four main types of petroleum arrangements used internationally are modified buyback schemes, service contracts, production-sharing agreements (PSAs) and a
petroleum tax regime. These four types of petroleum agreements reflect different levels of the relationship between the government and the oil company. The government can negotiate to achieve whatever policy considerations it desires. However, one overriding consideration is that petroleum ownership should be in the hands of the Iraqi people as required by Constitutional mandates. The service and buyback agreement should both place primary ownership in the hands of the national oil company. A tax-based regime and PSA should allow the IOC to take full or partial ownership only after the extracted resources are above surface level.

Any new Iraqi fields require large capital investments, as well as the transfer of technology and expertise. To facilitate and recoup their investments, IOCs generally prefer PSAs. Even so, the Iraqi government should only accept a PSA if there is an optional clause for the INOC to take over operations after a specified period of time. It is incumbent upon the central government in Baghdad to craft a model PSA and distribute it to the regions for contract negotiations. Ideally, a PSA should leave ownership of the fields in Iraqi hands, but allow a mutually beneficial fiscal arrangement with the IOC.

*The Iraqi constitution should be amended to conform to the realities on the ground.* The fundamental principles of a country are enshrined in its laws and constitution, and subsequent legislation details the exercise of these principles. Constitutional amendments to the Iraqi constitution safeguarding oil revenues will have stability when integrated into the constitution.\(^83\) Any amendment should include ownership restrictions to eradicate corruption centered on the management of natural resources. In the manner of anti-trust legislation, the Iraqi Constitution should limit the ownership of any single person, family, clan or entity. Ownership provisions should be creatively employed as a vehicle that moves rival groups into economic interdependence. Regulators must, however, monitor dummy corporations or front people attempting to thwart the restrictions. Constitutional ambiguities, omissions, and contradictions relating to petroleum must be sharpened and clarified. A good starting point would be the phrase “existing fields” in Article 112 (1), which is not a standard petroleum industry term and is therefore open to highly self-serving interpretations. A proposed amendment to Article 112 (1) would replace the hazy term “existing fields” with one specifying that supervision of all oil/gas exploration and production is vested in the Central authorities. The amendment would also enumerate a proposed
share of oil profits for the producing regions and provinces, but not to exceed a clearly defined percentage.

A Natural Resource Fund (NRF) should be established through a constitutional amendment, to prevent the petroleum sector from being victimized by political wrangling, ensure its (semi-) immutability, and enforce interdependence among the various stakeholders. There are two methods of structuring a NRF: a *stabilization fund* would channel excess revenue to the stabilization fund when oil prices are high, and channel funds to the general budget when it runs a deficit; a *saving fund* would channel a constant share of oil revenue to be set aside for future generations. If successful, this fund would lead to higher governmental savings in the aggregate.

If a constitutional framework is developed alongside a culture of interdependence, the legislative and constitutional changes suggested should have a lasting impact in Iraq and build a successful future. These anti-corruption, consensus-building measures are post-Saddam, but they are also designed to cure the culture of corruption that Saddam created.