



# CHAD

## SELECTED ISSUES

August 2016

This Selected Issues paper on the Republic of Chad was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on July 8, 2016.

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**International Monetary Fund  
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## SELECTED ISSUES

July 8, 2016

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# CHAD'S OIL SECTOR — INCREASING COMPLEXITY PLACING GREATER DEMANDS ON TRANSPARENCY AND INTEGRITY ARRANGEMENTS<sup>1</sup>

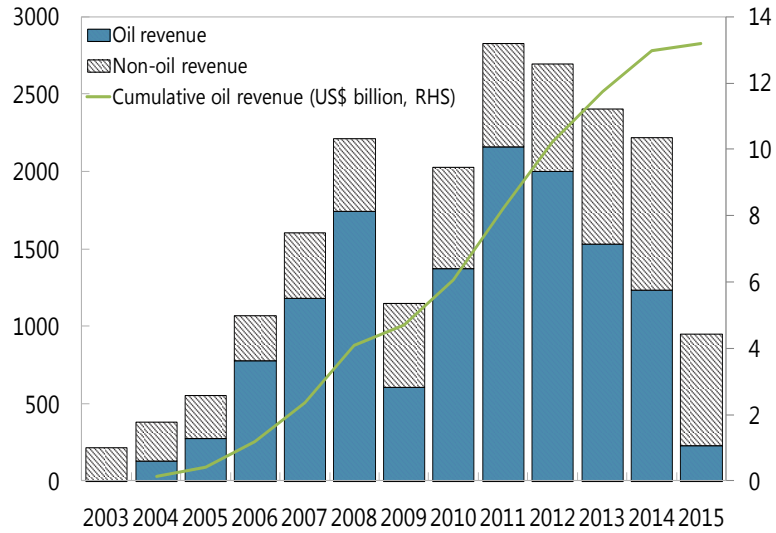
## A. Introduction

1. Chad developed its oil sector under uniquely difficult circumstances: extremely low levels of human and physical capital, civil strife, a virtual absence of basic infrastructure in the oil producing region, and landlocked. Oil was first discovered in Chad in the 1970s but civil war prevented exploration and exploitation. In 1988 the Chadian Government finally granted a 30-year concession to a multi-company consortium, of which Esso eventually took the lead and became the operator (University of Texas, 2003).
2. Construction began in 2000. Key infrastructure was a 1,070 km buried pipeline from the producing region, Chad's southern province of Doba, two thirds through Cameroon, to the Atlantic coast near the city of Kribi. For this pipeline the Doba Consortium had approached the World Bank, which ended up financing the Chadian and Cameroonian stakes in the pipeline, together with the European Investment Bank (EIB). The Doba reservoir was estimated to contain one billion barrels, to be extracted over 25 years. Oil production started in 2004; dictated by the characteristics of the reservoir, production peaked the year after, at 172,000 barrels per day, and then started on a steady decline. But thanks to new fields coming on stream Chad's overall oil production stabilized at 120,000 b/d in 2008 before rising to 145,000 b/d in 2015.
3. Just when Chad's oil era began, oil prices went on an upward trend. During 2000-03, the oil price was near US\$ 30 p/b, and Chad's budget was expected to benefit from the oil to the tune of US\$45 to 50 million per year (about a quarter of donor assistance). But as oil prices rose, oil revenues exceeded those expectations by a wide margin. With a brief interruption following the 2008 world financial crisis, prices kept climbing through 2011 with Doba oil prices reaching around \$100 p/b during 2011-14. As a result, Chad's oil revenue peaked in 2011 at US\$2 billion, making up 76 percent of government revenue. Then the bust set in, and as prices fell to US\$43 in 2015, revenues dropped to some US\$200 million in 2015, or 24 percent of government revenue. Still, over the period 2004-15, Chad—with a population of 10 million in 2004—collected cumulatively an impressive US\$13 billion in oil revenue (Figures 1 and 2).
4. The remainder of this paper will describe how Chad's oil sector became increasingly complex—with more producing companies and a new fiscal regime—and then discuss the transparency and integrity arrangements in place and make good-practice recommendations for their strengthening.

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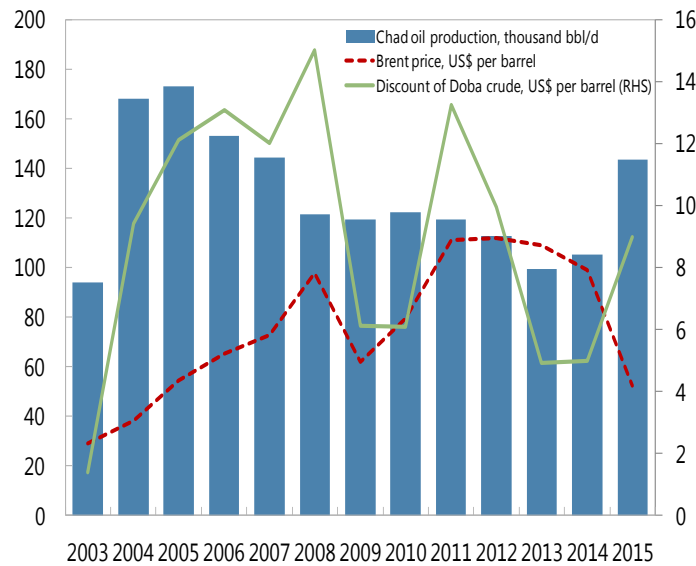
<sup>1</sup> Prepared by Anton Op de Beke and Samson Kwalingana.

**Figure 1. Chad: Oil and Non-Oil Revenue, 2003–15**  
(Million U.S. dollars)



Sources: Chadian authorities; IMF Staff estimates.

**Figure 2. Chad: Oil Profile, 2003–15**



Sources: Chadian authorities; IMF Staff estimates.

## B. Increasing Complexity of the Oil Sector

5. As part of its involvement, the World Bank helped Chad with a Petroleum Revenue Management System (PRMS) designed to ensure that Chad's oil revenue would benefit development and alleviate poverty.<sup>2</sup> The PRMS included safeguards, notably a mechanism for paying royalties into an offshore account and another for paying income tax into the central bank, plus the earmarking of revenue for investment spending. Moreover, the structure of the oil sector at the outset was rather simple: one consortium with two licenses, one set of oil fields, and one oil fiscal regime. Thanks to these safeguards and the simple structure of the sector, oil revenue collection was relatively transparent, and the integrity challenges were limited. Ten years later, that has radically changed: Chad's oil sector has become complex, and the need has arisen for stronger transparency and integrity arrangements.

6. Over the past decade Chad's oil sector developed rapidly, with more producers, a new fiscal regime and a number of institutional innovations:

- More producers appeared on the scene: besides the Doba Consortium there are now the China National Petroleum Company International (CNPCI), producing since 2011, and Glencore, (previously Griffith), producing since 2013. A dozen other companies hold exploration permits.
- Chad introduced a second fiscal regime: whereas the Consortium and the CNPCI continue to produce under the concessionary regime—also called “royalty/tax”—all licenses issued after the new Hydrocarbon Law of 2007 are of the production sharing contract (PSC) type.
- The creation in 2006 of a national oil company, the *Société d'Hydrocarbures de Tchad* or SHT, introduced a new key player with tasks and responsibilities to be coordinated with other government agencies.
- In 2012, the Government switched to revenue-in-kind (RIK). Marketing of government oil had been declared one of the SHT's principal tasks. To supply it with product, the Government asked the companies to pay royalties and taxes (under the CPP) in physical barrels of oil. In 2015, RIK accounted for two-thirds of oil revenue, its marketing a major challenge and risk factor.
- In 2008, at the Government's request, the Doba Consortium started paying quarterly income tax advances based on a concurrent estimate of what will be due. Previously they were based on the past year's declaration. Thanks to this change, the advances are more accurate—higher when prices rise, lower when they drop. But there is now uncertainty on how much will be received from quarter-to-quarter.

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<sup>2</sup> For an analysis of the PRMS see Dabán and Lacoche, 2007, and also the World Bank, 2007. See further Nachega and Wiczorek, 2007, and for a civil society perspective, Gary and Reisch, 2004.

- The introduction of RIK opened the way to oil-collateralized borrowing in the form of prepayment agreements. In 2013, the Government borrowed US\$600 million for budget financing, and in 2014 the SHT borrowed—with a government guarantee—US\$1.45 billion for purchasing a 25 percent share in the Doba Consortium.
- In 2011, a refinery—the N'Djamena Refinery Company (NRC)—started operations. It is owned 60 percent by the CNPCI and 40 percent by the SHT, and supplied with crude produced by the CNPCI. The NRC brought new regulatory and management responsibilities for the Government.
- The Government has steadily increased its participation in the oil sector, with a potential for greater gains but also increased revenue volatility and risks to the budget. These participations are assigned to the SHT for management. The major acquisition occurred in 2014 with the purchase of the 25 percent in the Doba Consortium from Chevron. Also in 2014, the Government assumed 10 percent in the CNPCI's two producing fields, this as part of a settlement over environmental damages (on top of US\$600 million in cash compensation). In addition, the SHT holds 25 percent in the CNPCI's three not-yet-producing fields, and a 15 percent stake in Glencore (after having sold 10 percent in 2013).

7. All of these developments added complexity and, thus, for the Government, greater challenges administering and regulating the oil sector. In particular, accounting for past oil revenues is now more complicated as is projecting future revenues. The debt service on the oil collateralized borrowing is not only onerous but also hard to predict, since it is a function of oil prices and production. In general, the organization of a smooth flow of oil sector information throughout the Government has become a more pressing issue, and the Government's oversight and audit responsibilities have multiplied.

8. In 2014 a new PRMS was adopted<sup>3</sup> which maintained two important transparency institutions of the 1999 original PRMS, and added two others:

- The oil revenue oversight body, the *College de Contrôle et de Surveillance des Recettes Pétrolières* or CCSRP, continues to produce annual reports. They cover the use of "direct" oil revenue (royalties plus dividends) for priority spending, and contain detailed information on production, exports, shipments, and prices not published elsewhere. The last report covers 2013.<sup>4</sup>

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<sup>3</sup> See *Loi No. 002/PR/2014 Portant Gestion des Revenues Pétrolières*, 27 Janvier 2014, at <http://itie-tchad.org/?p=347>

<sup>4</sup> The report is published on the CCSRP website, <http://www.ccsrp-tchad.org/w1/index.php>, but also available on the site of Chad's EITI Secretariat, [www.itie-tchad.org](http://www.itie-tchad.org).



- Another feature carried over into the new PRMS is the offshore account with Citibank in London into which all direct revenues must be paid. It was originally an escrow account, designed to ensure the debt service on the WB and EIB pipeline loans. Those loans were repaid but the offshore account continues. It serves transparency because it is the only bank account into which companies can make royalty payments, a rule that has been extended to the proceeds of the sale of RIK. The alternative could be a multiplicity of accounts which would seriously hamper revenue administration. Besides, only the Treasury has access to this offshore account, another important safeguard. At the same time, the “indirect revenues” (taxes and customs duties) must be paid directly into the accounts of the Treasury.
- A 2010 innovation was the introduction of the *model* Production Sharing Contract.<sup>5</sup> This serves to standardize key fiscal parameters across contracts and reduces the scope for negotiations to limited set of parameters. It is a commitment to transparency that facilitates accountability.
- Also in 2010, Chad joined the Extractive Industries Transparency Initiative. Chad has produced annual EITI reports covering 2007-13, and was declared EITI compliant in 2014. To remain compliant, Chad will have to produce the 2014 report before the end of 2016 and this report should meet the standards of the EITI.<sup>6</sup>

### C. Two Oil Fiscal Regimes

**9.** Chad’s revised Hydrocarbons Law adopted in 2007 added to the concession or tax/royalty regime a second fiscal regime, the Production Sharing Contract (PSC). In practice, all licenses issued since 2007 are of the PSC type. However, holders of previously issued licenses have availed themselves of their fiscal stability clauses and opted to remain with the concessionary regime.<sup>7</sup> Thus the Doba Consortium and also the first phase of the CNPCI production continue as concessions. In 2010, Chad issued a model PSC contract to complement the Hydrocarbons Law.

**10.** In principle the concessionary and the PSC or contractual regimes can be designed to be equivalent in terms of government take and control (Daniel, 2010). The concessionary regime prevails in industrial countries, and is better suited at integrating the oil companies in the general tax system. But developing country governments tend to prefer the contractual regime, which they believe gives them greater control over the natural resource and the companies. In Chad the two regimes generate largely the same revenue flows, the main difference being that under a PSC the Government is entitled to a share of production instead of income tax (Box 1).

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<sup>5</sup> See Ordonnance No. 001/PR/2010 Portant approbation du contrat type de partage de production, at <http://itie-tchad.org/?p=351>, and Annexes au contrat de partage de production, at <http://itie-tchad.org/?p=257>.

<sup>6</sup> The reports can be found on the Chad EITI website, <http://www.itie-tchad.org/>, or the EITI’s international website, [www.eiti.org](http://www.eiti.org). Besides the standard reconciliation of payment and revenue information—see later—the 2013 report contains a wealth of information on Chad’s oil sector, of which this paper has made ample use.

<sup>7</sup> For a primer on oil contracts see Open Oil, 2012.

### Box 1. Chad-Concessionary vs. Contractual Oil Fiscal Regime

The two prevailing types of oil fiscal regimes are: the concession (or tax/royalty) regime and the production sharing contract (PSC). Under the concession, the government cedes control of the oil in return for a royalty payment plus corporate income tax. Under the PSC the government contracts with a company to produce the oil in return for a share of the physical production. The two can be structured to be equivalent in terms of tax take and government control. The concessionary regime is popular among industrial countries, the PSC among developing countries. In practice, regimes are often hybrids.

In Chad the two regimes generate the following revenue flows:

#### For Concessions and PSCs

- Signature bonus (US\$ 40 million, o/w US\$10 million deductible).
- Production bonus (US\$ 2 million, upon issuance of exploitation license).
- Production royalty (12.5-16.5% of production at well head).
- Statistical fee (1% of exports).
- Government participation (max. 25%, carried interest), gives rise to payments to SHT.
- Surface fees.
- Contribution to staff training (US\$ 250,000 p/a in exploration, US\$ 500,000 p/a in exploitation).
- Contribution to audit costs (US\$ 200,000 p/a in exploration, US\$ 400,000 p/a in exploitation).

#### For PSCs

- Tax oil (40-60% share for government of total profit oil, depending on R-factor).<sup>8</sup>
- Profit oil calculated as total production minus royalty minus cost oil (with 70% cost limit).

#### For Concessions

- Corporate income tax (42.5-65% of net profits, depending on field and R-factor).

**11.** In a concessionary regime the government cedes to a company the ownership rights over a natural resource for a specific period of time. For that right the company pays a royalty, which is essentially a user fee, and which is fixed in relation to production. Royalties are popular because they guarantee the government an early and continuous revenue stream regardless of the profitability of the project, fluctuating in value only with price and volume of production. The flip side is that royalties are regressive and may motivate companies to stop production prematurely on marginal fields. In addition, the company pays a tax on its net profits, usually at a higher rate than the standard corporate income tax, and more or less progressive. In Chad, the income tax is somewhat progressive because the rate ranges from 42.5 to 65 percent depending on the profitability of the project as measured by the R-factor.

<sup>8</sup> The R-factor is the ratio of a company's gross revenues over its gross costs for a particular project. When the ration reaches one, the company's cumulative revenues equal its cumulative costs. In order to make the tax rate progressive, it is tied to the R-factor rises. Both the corporate income tax rate in a concessionary regime and the government's share in profit oil or tax oil in a contractual system tend to go up with the R-factor.

**12.** In contrast, under a PSC, the government retains the full rights over the natural resource. It appoints a company as a contractor for operations to produce the resource. For that, the company is rewarded with a share of the oil, after having been reimbursed for its expenses. Typical for a PSC is the accounting in barrels, ultimately converted into money at an agreed price per barrel. First, the so called “cost oil” is taken out of total production (after royalties), that is, the number of barrels equivalent to the costs incurred over the period. What remains after cost oil is the “profit oil.” This is shared between the government and the company, according to the “profit oil split.” The government share is called “tax oil” since it is equivalent to a tax on profits. In Chad the split in favor of the Government ranges from 40 to 60 percent depending on the R factor. However, the cost oil deduction is subject to the “cost oil limit” (70 percent in Chad). This limit acts like a royalty in that it always sets aside at least 30 percent of turnover in profit oil, of which the government gets 40 percent, regardless of profitability (but costs that cannot be deducted are carried forward).

**13.** Other payments by the companies are the same for both regimes. Notably companies must make lump sum bonus payments at signature of the license and at the start of production, which can be substantial.<sup>9</sup> They also owe a one percent statistical fee on exports, plus a fee depending on the size of their exploration and exploitation zones. Another significant benefit to the Government is the maximum 25 percent stake it is entitled to. This is a benefit because this participation is risk free: the Government can wait with exercising the option to participate until oil is found and being produced. If it decides to participate, the Government is entitled to a part of the profit oil reserved for shareholders, the so called equity profit oil. It also shares in the costs but on lenient terms. Specifically, in the case of Chad,<sup>10</sup> it must reimburse its share of the exploration costs, but without interest. It must also pay its share of the development, exploitation and abandonment costs, but only from the moment production starts. Moreover, the other partner(s) will advance these costs, at an interest, and reimburse themselves from the cost oil and equity profit oil accruing to the Government (a so called “carried equity participation” with partial carry). In Chad, these stakes have been assigned to the SHT which therefore receives any equity profit oil as income.

**14.** When the government owns all subsoil resources—as is true in most countries including in Chad—the overarching objective of any petroleum (and mining) fiscal regime is to maximize the government’s so called “tax take”,<sup>11</sup> while allowing a sufficient risk-adjusted margin to the companies to pursue their operations (IMF, 2010). This is easier to achieve if the petroleum fiscal regime is progressive, meaning the tax take increases with the profitability of the project. Chad’s 2007 Petroleum Code and the subsequent shift to PSCs were motivated by a desire to raise the tax

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<sup>9</sup> In 2011 Griffiths paid the Chadian Government signature bonuses worth US\$93 million, and in 2012 United Hydrocarbon Chad paid a bonus of US\$86 million

(see EITI reports on Chad covering 2011 and 2012 at <http://itie-tchad.org/> ).

<sup>10</sup> These are the modalities for government participation described in the published PSCs (see par. 36).

<sup>11</sup> The technical term is the Average Effective Tax Rate (AETR) which is the proportion of the present value of the income of a project that is taken in tax.

take and render the regime more progressive. The only way to evaluate the tax take associated with a contract is to model the contract (see later discussion). This was done by Gab-Leyba and Laporte (2015) who concluded that Chad's concessionary regime is regressive and its PSC regime progressive. However, only when the Brent oil price goes over US\$57 per barrel does the tax take under the PSC start to exceed the one under the concessionary regime.<sup>12</sup>

## D. Four Oil Companies

**15.** As of 2016, Chad has three producing oil companies. One is a consortium of companies, the other two operate for their own account. As of 2013, eight other companies were in the process of exploring (EITI, 2016).

### **The Doba Consortium led by Esso<sup>13</sup>**

**16.** The oldest (since 2004) and largest producer (about 70 K bbl/d in 2015) is the Doba Consortium led by Esso. It operates under its 1988 Convention the blocks Komé, Miandoum and Bolobo, and under its 2004 Convention the blocks Nya, Moudouli, Maikeri and Timbré. Esso owns 40 percent, the Malaysian company Petronas Carigali 35 percent and, since 2014, Chad's national oil company, the SHT, 25 percent (previously Chevron Petroleum Chad). The main change going from the 1988 to the 2004 Convention is the increase in the royalty rate, from 12.5 to 14.25 percent, and the decrease in the corporate income tax rate, from a fixed 60 percent<sup>14</sup> to a range of 42.5 to 65 percent depending on the field and R-factor. Esso is the "operator" and, as such, in charge of the production. It recovers its costs through so called "cash calls" on the consortium partners, asking them to contribute, proportional to their equity share, in the operating and development costs.

### **The China National Petroleum Corporation International<sup>15</sup>**

**17.** The second largest producer (48 K bbl/d in 2015) is the China National Petroleum Corporation International (CNPCI), which operates block H, in particular the fields Ronier and Mimosa. It purchased the licenses from Cliveden and Encana. In 2011 the CNPCI started its Phase 1, supplying the refinery NRC, of which it owns 60 percent, with crude, gradually raising production to the refinery's maximum throughput capacity of 14,000 barrels per day in 2015. The CNPCI deliveries are not subject to royalty; instead, the NRC delivers the equivalent in refined product for free to the army and the electricity company. The price is set in a long-term agreement. In 2014, the CNPCI started production under its Phase 2.1 which is subject to a concessionary regime, with a royalty rate of 13.5 percent and an income tax rate of 40-50 percent. The SHT holds a 10 percent stake in Phase 2.1., which the government is in the process of selling. Production on the fields that make up Phase

<sup>12</sup> Both regimes have a regressive component, the royalty, and a progressive one, the income tax rate or profit oil split varying with the R-factor.

<sup>13</sup> See <http://corporate.exxonmobil.com/en/company/worldwide-operations/locations/chad>.

<sup>14</sup> When the Brent price drops below a certain inflation adjusted floor, the rate is reduced to 55 percent.

<sup>15</sup> See [http://www.cnpc.com.cn/en/Chad/country\\_index.shtml](http://www.cnpc.com.cn/en/Chad/country_index.shtml).

2.2 has yet to start. It is covered by a PSC with a cost oil limit of 70 percent, a profit oil split of 40 to 60 percent depending on the R-factor, and a royalty of 14.25 percent. The SHT has a 25 percent stake in this phase.

### **Glencore (ex Caracal, ex Griffith, ex Petrochad Ltd) <sup>16</sup>**

**18.** The most recent (since 2013) and smallest producer is Glencore (21 K bbl/pd in 2015) which produces on blocs DOI, DOB, DOH, Borogop and Chari East Doséo. In April 2014, Glencore purchased the licenses held by Caracal, previously known as Griffiths Energy and Petrochad, for US\$1.35 billion. The SHT holds a 15 percent share (having sold 10 percent of Caracal in 2013). The Glencore production company is owned by Glencore Xtrata Plc but is operationally separate from Glencore's trading arm. The main parameters for its PSC are the same as for the CNPCI Phase 2.2: a cost oil limit of 70 percent, a profit oil split of 40-60 percent, and a 14.25 percent royalty. Glencore's expansion plans were severely affected by the drop in oil prices, and in 2015 it wrote off US\$790 million of its initial investment.

### **The National Oil Company SHT <sup>17</sup>**

**19.** Created in 2006, the *Société des Hydrocarbures du Tchad* (SHT) plays a growing role in Chad's oil sector. It is a public enterprise, 100 percent government owned, and under the supervision of the Ministry of Petroleum. Its governance is set out in the 2006 law of its establishment, a 2007 decree describing its statutes, and a 2011 management contract with the Government, covering in particular its marketing of government oil.<sup>18</sup> The SHT has a broad mandate permitting it to engage in the whole oil value chain: prospecting, exploration, development, production, and transport. Its activities can also include refining, and the storage and distribution of refined products. However, the 2011 Contract, stipulates that the SHT is not a regulator, and that only the Government has the right to issue licenses. Also, the Government receives all payments from companies other than the RIK, explicitly assigned to the SHT. The resources of the SHT consist of a 2 percent commission on the sale of oil, plus the net income from its oil assets, plus interest income, loans, and state subsidies. The SHT is subject to the oil fiscal regime for its production activities, and to the general income tax for its marketing. It is not subject to any dividend rule, and the Statutes give its General Assembly great latitude to re-invest any net income.

**20.** In practice, so far, the SHT concentrates on managing the government's oil assets and marketing the government's and its own oil. Its largest asset is the 25 percent in the Doba Consortium, known as Badoit, purchased in 2014 for US\$1.3 billion from Chevron. It entitles the SHT

<sup>16</sup> For Glencore reports on its payments to governments, see

<http://www.glencore.com/investors/reports-and-results/reports/>.

<sup>17</sup> See <http://www.shtchad.net/>

<sup>18</sup> La Loi No. 27/PR/2006 portant Creation de la S.H.T., 23 Aout 2006; le Décret No. 527/PR/PM/PM/2007 Fixant les Status de la S.H.T., 12 Juillet 2007; le Contrat entre La Republique du Tchad et la S.H.T. portant sur la gestion par la SHT des actifs et participations de l'Etat dans le domaine de hydrocarbures et la commercialisation des quantités d'hydrocarbures revenant à l'Etat dans les Contrats Pétroliers, 15 Février 2011.

to 25 percent of production (after royalties). From the proceeds it must cover the associated costs (see Box 2).<sup>19</sup> In addition to the Badoit oil, the SHT sells the government's RIK, altogether 36 K b/d in 2015, or one quarter of Chad's total production. All SHT sales currently are to Glencore, under a monopsony marketing contract that is an integral part of the prepayment agreement. SHT also has shareholdings in a number of other enterprises, notably the refinery, NRC, of which it owns 40 percent and the CNPCI 60 percent.<sup>20</sup> The SHT does not publish a report on its activities, nor does it publish financial statements; its website is under construction.

### Box 2. The Badoit Project Purchase

In June 2014, the Chadian government became a partner in the Doba Consortium after buying Chevron's 25 percent stake, known as the Badoit Project. The price was US\$1.3 billion: US\$1.23 billion for Badoit and the rest for Chevron's shares in the two pipeline companies, TOTCO and COTCO. The price had been agreed in 2013. The transaction was financed with a \$1.45 billion oil prepayment from the oil trader Glencore. The prepayment agreement between Glencore and the SHT was guaranteed by the Government and to be repaid over 4 years. The prepayment is serviced from the proceeds of oil cargoes sold by SHT to Glencore. A sales agreement sets out how many cargoes the SHT will sell to Glencore, at a discount to Brent to be agreed.

Through this purchase, the Government stood to gain the full 100 percent of any profits on Badoit instead of only the 60 percent tax take. But as owner it also agreed to share any losses that might arise. In 2014, with the Doba price at US \$90 p/b, projections showed the purchase price could be recovered over four years solely from the Badoit equity oil, leaving still a US\$500 million positive cash flow for the Government. The subsequent sharp drop in oil prices changed this dramatically.

When oil prices dropped later in 2014 and in 2015, the project's profitability was thrown in jeopardy, with its net proceeds no longer covering debt service. The Government approached Glencore for a rescheduling of the prepayment. Included in the discussions was the balance on the US\$ 600 million 3-year prepayment Glencore had advanced in 2013 for budget financing. In December 2015, the rescheduling resulted in a new US\$1.45 billion prepayment agreement. It lowered the interest rate, saving the Government an estimated US\$150 million, and extended the effective repayment period to 2022 at the latest depending on oil prices.

But the rescheduling also expanded the RIK available for debt service. The 2013 Glencore prepayment was to be repaid solely from royalties, and the 2014 one solely from Badoit equity oil. For repaying the new 2015 prepayment the Government's royalty as well as equity oil can be called on. From the purchase price of the cargoes, Glencore first retains the Badoit cash calls and the pipeline fees. The remainder is used for debt service, to the tune of 100 percent for "equity deliveries" and 70 percent for "royalty deliveries" (50 percent until July 2016). This debt service is subject to quarterly caps. What is left after debt service is paid by Glencore into the Government's off-shore account in London.

During 2015, Glencore purchased from the SHT 14 cargoes containing a total of 13.2 million barrels, equity and royalty deliveries combined. The gross proceeds were US\$528 million (CFA 312 billion), of which an estimated US\$233 million from Badoit equity oil. The average Doba price resulting from the sales was US\$39.9 p/b or a discount relative to Brent (US\$52.4) of US\$12.5 p/b. Glencore retained US\$ 183 million (CFA 108 billion) in costs—incl. US\$ 113 million in cash calls for Badoit, and US\$65.0 million for transportation (US\$4.9 p/b)—resulting in net proceeds of US\$ 345 million. Of those it applied US\$158 million (46 percent) to debt service—US\$99 million in interest and US\$59 million in principal. The remaining US\$187 million (CFA 110 billion) were transferred to the Government.

<sup>19</sup> Importantly, Badoit is not a "carried interest" participation as described in par. 13. The joint venture partners are under no obligation to make advances to help the Government pay its cash calls.

<sup>20</sup> Other shareholdings include Tchad-Oil, where SHT holds 45 percent, and Tchad Handling Services, 55 percent, and la Société Tchadienne de Traitement des Déchets et d'Assainissement, SOTRADA, where SHT holds 45 percent and the company Bocom 55 percent (EITI, 2016 A).

## E. Oil Sector Transparency Arrangements

**21.** Many natural resource rich countries achieve development and poverty outcomes that are disappointing given their wealth. This phenomenon is often referred to as the “resource curse,” and to counter it transparency is generally considered crucial (IMF, 2007 A). The general case for transparency in fiscal policy is that it allows for a better informed debate, resulting in better quality decisions, a better appreciation of the risks, and more policy credibility.<sup>21</sup> At the international level several initiatives promote transparency in extractive industries, such as the IMF’s Guide on Resource Revenue Transparency, the EITI, and the Natural Resource Charter.<sup>22</sup>

### Chad’s 2013 EITI Report

**22.** The EITI is a global transparency standard for extractive industries (EI) in which Chad participates (Box 3). Annual country reports reconcile payments from EI companies with revenue information from governments. Chad’s 2013 EITI report, issued in January 2016, is available on the internet.<sup>23</sup> It covers the hydrocarbon<sup>24</sup> as well as the mining sector, even though the latter is miniscule (CFA 1.9 million in government revenue). The report’s principal conclusion is the absence of any significant discrepancies. In other words, all company payments were identified as having been officially received by the government. However, not all of it was received in the budget. Also, not part of the EITI mandate, and therefore not covered by report, is the question whether the companies are paying what they should according to the contracts, laws and regulations. For that the Government has to organize audits, a subject discussed later in the context of Integrity Arrangements. Nor does the EITI determine whether a country’s EI fiscal regime is competitive. As discussed later, under Transparency Arrangements, this can be done by modeling the fiscal regime and comparing it internationally.

<sup>21</sup> See IMF website at <http://www.imf.org/external/np/exr/facts/fiscal.htm>.

<sup>22</sup> For the IMF Guide see <http://www.imf.org/external/np/fad/trans/guide.htm>. For the Natural Resource Charter, a product of the Natural Resource Governance Institute, see <http://resourcegovernance.org/approach/natural-resource-charter>.

<sup>23</sup> See the [www.eiti.org](http://www.eiti.org) and Chad’s national EITI website at <http://itie-tchad.org/>

<sup>24</sup> Hydrocarbons include oil, gas and coal. Chad only produces oil; the associated gas is not yet commercialized.



### Box 3. The Extractive Industries Transparency Initiative EITI

The EITI is a multi-stakeholder initiative combining governments, companies and civil society organizations, and holding up a global standard for transparency in the extractive industries. Over 50 countries are member, of which 19 in Sub-Saharan Africa. Its governance structure consists of: bi-annual Global Conferences, a multi-stakeholder Board, a renowned Chair Person, and a Permanent International Secretariat; and, at the country level, of a national Multi-Stakeholder Group (MSG), a National Coordinator, and a National Secretariat.

The core of the annual, national EITI reports consists of a reconciliation of EI company information on payments with government information on receipts. The work is carried out by an Independent Administrator, hired by the national EITI MSG, who is subject to international standards on auditing. This reconciliation produces hard, reliable data on EI revenues, and will generally uncover any revenues kept off budget, notably bonuses and other one-time payments.

The EITI has articulated a set of standards. A Validation Process determines whether a country meets them and can be considered "compliant." In EITI reports certain information is "mandatory", other information "expected" or "optional." EITI reports are a valuable source of information on a country's EI sectors. Chad's 2013 EITI report contains: a description of the oil fiscal regime, including definitions of each revenue flow; a description of players in the oil sector, including information on all permits issued;<sup>25</sup> detailed information on payments by company and revenues by collecting agency; and a summary of the oil sector's contribution to the budget.

**23.** Chad's EITI report covers 28 payment flows (see Table 2), comprised of 6 in-kind flows and 21 cash flows, plus one residual cash flow (defined as any pertinent payment/revenue exceeding \$100,000).<sup>26</sup> In total 20 companies were identified as active in the petroleum sector: 17 upstream, plus 3 downstream (TOTCO, COTCO, and the NRC). Out of the 17 upstream companies, 13 submitted data; the omitted companies were judged immaterial. The SHT plays two roles: it collects revenue, namely the RIK, and it makes payments, namely to other government agencies. These other agencies are the Treasury (95 percent of all revenue), Customs, and the Ministry of Petroleum. To assure the veracity of their data, EITI encourages companies to ask their external auditor to approve their submissions: out of the 13 reporting companies, 12 did so.<sup>27</sup>

**24.** According to the summary EITI table, Chad's oil revenue in 2013 was FCFA 803 billion (see column State reporting), which amounted to 68 percent of total revenue and 17 percent of non-oil GDP. Corporate income tax (flow 13) accounted for 70 percent of oil revenue, and royalties for the remainder.<sup>28</sup> The latter consist mainly of in-kind royalties collected by the SHT (flows 1, 4 and 6) and transferred to the State (flow 2). The difference between the barrels the SHT collected and paid—respectively 3,886 and 3,757 thousand—is explained by an end-year accumulation too small for marketing in 2013.<sup>29</sup> The proceeds from the marketing are shown in the bottom part of the table: one third was used for loan repayments to Glencore (flow 9) and the remainder went into the offshore account for the Treasury (flow 8). The simultaneous reporting of volumes and proceeds

<sup>25</sup> See Annex 1 of the 2013 EITI report. An update for 2015 can be found in the Gab-Leyba (2015).

<sup>26</sup> Annex 2 of the 2013 EITI report contains a detailed description of all the payment flows.

<sup>27</sup> The missing company was Chevron which had already left Chad when the 2013 EITI report was drafted.

<sup>28</sup> The 2013 EITI report contains a concise description of the overall contribution of the EI sector to the budget.

<sup>29</sup> EITI data, including on in-kind payments, are compiled on a "cash basis," both from companies and governments, not on an accruals basis.



permits calculation of the price obtained by the SHT for the RIK. Since proceeds totaled to FCFA 186 billion in 2013, the average price per barrel was US\$100.4, so that given an average Brent price of US\$ 108.9 p/b, the discount comes to US\$ 8.5 p/b.

**25.** The 2013 EITI report reveals a one-time revenue for the SHT. It lists under “other significant payments” (flow 28) a revenue of CFA 41.5 billion (US\$84 million). As the report explains, these were the net proceeds of the sale by the SHT of a 10 percent stake in the Caracal concession to Glencore (which reported to EITI the corresponding payment). It appears the SHT received US\$150 million from Glencore for its 10 percent share in the Badila and Mangara fields. From that it paid US\$60 million in carried-interest debt, and US\$6 million to the Treasury as registration fees. The remaining US\$84 million was used by the SHT to fund activities approved by its Board. Since the EITI’s definition of State includes the SHT, this transaction did not give rise to an EITI payment-revenue discrepancy, even though the funds were not received in the budget.<sup>30</sup>

**26.** Finally, the 2013 EITI report ends with five recommendations to Chad’s EITI High National Committee, in the interest of furthering transparency. A key recommendation is for Chad to create a publicly accessible, authoritative cadaster of all existing oil (and mining) licenses. The EITI requires that this cadaster contain certain minimum information on the licenses and the license holders. Another recommendation is for the Ministry of Petroleum and the SHT to keep better track of the oil belonging to the Government, and to consolidate their supervision of, and control over, the utilization of these resources.<sup>31</sup>

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<sup>30</sup> However, it does raise questions about the nature of the SHT’s quasi-fiscal expenditures, which should also be reported on by the EITI report. See Requirement 6.2 in EITI (2016).

<sup>31</sup> This would entail explaining the oil-collateralized borrowing. See Requirements 2.6 and 4.3 in EITI (2016).

Table 1. Chad: EITI Report 2013 – Oil Sector <sup>1/ 2/</sup>

	Companies (a)	SHT collector (b)	SHT payor (c)	State (d)	Discrepancy (a-b)+(c-d)
	('000 barrels)				
1 Royalty on production (Allocation)	3,809	3,809			-
2 Royalty on production (Marketing Treasury)			3,757	3,757	-
3 Royalty on production (Marketing Loan Glenclore)			-	-	-
4 Profit oil State (Allocation)	63	63			-
5 Profit oil (Marketing Treasury)			-	-	-
6 Profit oil (Marketing Loan Glenclore)	14	14			-
<b>Total in-kind oil revenues</b>	<b>3,886</b>	<b>3,886</b>	<b>3,757</b>	<b>3,757</b>	
	('000 FCFA)				
7 Royalty on production (paid in cash)	2,224,170			2,199,619	24,551
8 Royalty on production (cash counterpart Treasury)			119,209,691	119,223,786	(14,095)
9 Royalty on production (cash counterpart Glenclore)			67,047,894	67,080,784	(32,890)
10 Profit oil State (cash counterpart Treasury)	-		-	-	-
11 Signature bonus	-		-	-	-
12 Surface royalty	451,538		-	493,431	(41,893)
13 Corporate income tax	564,667,037		-	563,141,912	1,525,125
14 Statistical royalty on gross exports	13,704,267		-	14,254,066	(53,799)
15 Personal income tax (IRPP)	16,529,091		64,609	17,955,615	(1,361,915)
16 Lump sum tax by employers	-		-	-	-
17 Tax for training and professional development	-		-	25,518	(25,518)
18 Contribution to development staff and current expenditures Min. of Petrol	1,463,971		-	1,008,439	455,532
19 Fiscal assessments and fiscal penalties	14,060	-	-	-	14,060
20 Penalties for non-execution of exploration and development programs	-		-	-	-
21 Dividends paid to the State	-		-	-	-
22 Dividends paid to SHT	-	-			-
23 Statistical fee on imports	1,359,371			4,199,975	(2,840,604)
24 Tax on capital gains of ceded assets	-		-	-	-
25 TOTCO premium	-		-	-	-
26 Customs duties at import	1,291,838		-	2,177,728	(885,890)
27 Withholding tax at source for subcontractors	4,206,427		-	2,543,732	1,662,695
28 Other significant payments	49,925,758	41,486,760	642,217	8,999,647	81,568
<b>Total cash oil revenues</b>	<b>655,837,528</b>	<b>41,486,760</b>	<b>186,964,411</b>	<b>803,290,252</b>	
<i>Memorandum</i>					
Total oil revenues as percent of:					
Nominal GDP				12.6	
Non-oil Nominal GDP				17.2	
Total revenues				67.7	
Source: Republic of Chad-EITI Report 2013, pages 5 and 7					
1/ Flows declared by 13 upstream companies. Cash basis. Reporting in actual currency used. Average annual exchange rate 493.9 FCFA/US\$. 2/ Shaded areas do not apply to particular collector or payor. For other cells, if no number then zero was reported.					

## Contract Modeling—A Powerful Transparency Tool

**27.** A potentially very powerful transparency tool for governments is the modeling of oil contracts.<sup>32</sup> EI companies use it extensively to evaluate their projects. Governments, too, can make good use of modeling, particularly to assess the fiscal performance of projects. They would also help civil society understand the contracts once published. A model combines in mathematical form the parameters that together make up the oil fiscal regime—e.g. tax rates, profit oil splits, and amortization schedules—with project specific information—costs and production—with economic assumptions—e.g. prices, inflation, interest and discount rates—and with financing assumptions. Companies would typically be interested in profitability indicators, and governments in measures of “government take”.<sup>33</sup> The most stable component of a model is the fiscal regime; all other variables are subject to great uncertainty, and, therefore, model results have to be taken as indicative.

**28.** In different forms, oil fiscal models can meet different government needs. They can be used over the long, medium and short term, and for individual projects or the whole sector. A long-term projection could forecast the revenues of a single project over its projected life, or forecast in the aggregate the revenues from all existing projects over a certain period. A single project forecast can be used to evaluate the fiscal take of a project proposed by a company. Or the Government can use it to evaluate—based on a hypothetical project—changes to the fiscal regime it is considering, for instance by comparing with regimes in other countries. A life-cycle model will show what type of revenues (e.g. royalty and income tax) will accrue at what stage of the project, useful information for managing popular expectations. A long-term forecast can usefully inform a government’s strategic economic planning. Medium-term revenue forecasts are most useful for budget preparation; they should be detailed and updated regularly. Finally, short-term forecasting, on a monthly or quarterly basis, is essential for informing the government’s cash management and spending programming.

**29.** Models can also be used retrospectively. For instance, a government may want to compare how a particular project has fared relative to what the company expected at the time it submitted its feasibility study.<sup>34</sup> This would shed light on how much better or worse companies did than their own projections on account of unforeseen circumstances. And, finally, a potentially very lucrative application is for a resource revenue administration to calculate precisely how much revenue should

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<sup>32</sup> The same is true for the modeling of mining contracts which is a very similar exercise.

<sup>33</sup> An interesting application to Chad was carried out by a nongovernmental organization dedicated to spreading information about the exploitation of natural resources in developing countries, OpenOil. Using a model it estimated the value of the 10 percent in the Mangara oil field Glencore purchased in 2013 from the SHT at US\$172 million, close to the US\$150 million the SHT obtained. See par. 25 and West, 2015 .

<sup>34</sup> Feasibility studies submitted as part of a license application contain valuable information. Because of their relevance to investors, countries known for their EI sectors like Australia and Canada require of their companies that they be published.

have been received from each ongoing project over the past period—given actual production, costs, prices, etc. A comparison of the results with actual collections would help focus the audit efforts.

**30.** The IMF has produced and published a simple life-cycle model for analyzing oil and mining projects. Its methodology is called Fiscal Analysis of Resource Industries, and hence the model is called the FARI model. It discounts all cash flows throughout the four distinct life cycles of a project: exploration, development, production, and closure. In 2016, the Fund publicly released this FARI model, with a description of its methodology and an Excel template, to promote the wider use of modeling.<sup>35</sup> Besides governments, the target audience includes members of the public who take an interest in evaluating natural resource projects. Fund staff uses the FARI model for advising on resource fiscal regimes and for providing technical assistance to governments in modeling.<sup>36</sup>

**31.** There is great potential for developing fiscal modeling in Chad. Currently the Study and Forecasting Directorate of Chad's Ministry of Finance uses a rudimentary model for making short to medium-term revenue forecasts. This capacity could be significantly enhanced.<sup>37</sup> The forecasting model should be able to produce more detailed reports, properly reflect both the concessionary and PSC fiscal regimes, and allow risk assessments or at least scenarios. Accurate forecasts of oil revenues are even more important when those revenues are under stress. Cash management in Chad is extremely difficult under the current circumstances, and the Treasury should be optimally informed on how much revenue will arrive and when. For a model to remain relevant and accurate, the staff maintaining it should be informed immediately of any changes to the fiscal regime. Also, any government commitments which may affect oil revenue, such as oil-collateralized debts, should be integrated in the model. Finally, the model's historic data and assumptions should be constantly updated, requiring a free flow of information within the administration.

### **Oil Sector Information Flows**

**32.** When oil prices were at their peak in 2011-12, oil revenues contributed three quarters of total government revenues in Chad. Even if prices settle well below that level, the budgetary importance of oil revenue remains enormous. Good management of this resource requires the cooperation of many government departments and agencies, all with different responsibilities. A free flow of information throughout the government is indispensable to facilitate this cooperation. The three principal actors are the Ministry of Petroleum (MoP), the SHT, and the Ministry of Finance (MoF). The MoP has the closest contacts with the oil companies. It is in charge of contract negotiations, the monitoring of all upstream and downstream activities, and the promotion of the sector. The SHT participates on the government's behalf in the equity of all oil companies, benefits from oil prepayments guaranteed by the Government, engages in quasi-fiscal spending from its net income, and collects and sells the Government's oil. The MoF is responsible for revenue streams

<sup>35</sup> For a description and template spreadsheets, see <http://www.imf.org/external/np/fad/fari/>

<sup>36</sup> An example of the use of the FARI model by IMF staff can be found in a published IMF technical assistance report for Mali which evaluates the evolution of the mining fiscal regime in that country. See IMF, 2016 (also in French).

<sup>37</sup> An extensive IMF technical assistance effort in 2010 developed a spreadsheet-based oil revenue forecasting model for Chad, with annual and monthly sections, which, however, was never rendered operational.

derived from taxation (but not necessarily the implementation of the PSCs), debts contracted or guaranteed by the government, and the forecasting and reporting of all government oil revenue in the context of budget preparation and execution.

**33.** The Government recognizes the problematic nature of the flow of oil sector information, not only vis-à-vis the public but also within the administration. Over the years it has taken several initiatives to remedy the situation, including recently in the context of its program supported by the IMF from its Extended Credit Facility (ECF). The initial PRMS recognized the importance of providing the MoF with the information to play its role of overseeing all fiscal aspects of the oil sector. It therefore created the Office for Monitoring Oil Revenues (*Bureau de Suivi des Recettes Pétrolières*) in the MoF. Unfortunately, it was never truly operational, and in 2014 it was replaced by a Unit for Collecting and Centralizing Revenues from the Extractive Sector (*Cellule de Collecte et de Centralization des Recettes du Secteur Extractif*) in the Treasury department of the MoF. This unit was created at the recommendation of the 2012 EITI report, and proved very useful in collecting information for the 2013 EITI report.

**34.** A signal of how serious the Government judged the situation was its decision in 2015 to create an Inter-Ministerial Committee in Charge of Monitoring Petroleum Revenues (*Comité inter-ministeriel chargé du suivi des recettes pétrolières*). As a key reform, this Committee became a structural benchmark under the ECF-supported program for June 2015. Composed of representatives of the MoP, the MoF, the SHT, the *Collège*, and the EITI, the Committee was tasked with consolidating and conveying all information related to oil revenue. At its first meeting, in July 2015, it set an ambitious agenda for its Technical Committee (*Comité Technique*): identifying all oil revenue flows, following up the various ongoing oil sector litigations, getting a good grasp of the second Glencore loan and its accounting, exploiting the available company audit reports, and preparing proposals for a new petroleum revenue management system. At the same time, the Government decided to publish more detailed oil sector information. In the first instance that would be included in the quarterly budget execution reports to be published on the MoF website (structural benchmark for September 2015). Following that, the Inter-Ministerial Committee would start the regular publication of oil sector information such as production volumes, shipments, Doba discount, individual revenue flows, and the SHT financial flows, for instance to Glencore and Esso (structural benchmark for June 2016). However, progress in this area has been uneven. The Inter-ministerial Committee rarely meets, and the last budget execution report with oil sector information covers the first semester of 2015.<sup>38</sup> A latest plan is for the MoP to form a “data room” where all oil sector information will be centralized and can be consulted by anyone in the Government with a need.

**35.** As noted in the section on modeling, to remain up-to-date a model, especially one for short-term or medium-term forecasting, must be fed continuously with new information. A prime source are the companies’ work plans and annual budgets, both the provisional and definitive ones. Equally critical are the companies’ monthly reports. For long-term forecasts it is important to have

<sup>38</sup> See [http://finances.gouv.td/images/DGB/REBGE\\_S1\\_2015.pdf](http://finances.gouv.td/images/DGB/REBGE_S1_2015.pdf)

company reports on remaining reserves, and the investments and operating costs required to produce them. Currently companies in Chad do not produce such reports. The revenue forecasters should also receive the companies' quarterly tax submissions, including details of the calculations of the fiscal flows, and the deductions for amortization and debt. Currently tax submissions in Chad do not contain this detail. From the pipeline companies, the forecasters need information to project the transport costs. Oil revenues fluctuate with oil prices but also—sometimes even more wildly—with costs. Fortunately, unlike prices, these costs can often be anticipated, with the help of good company information, in particular their investment program and amortization payments. Much of this information is sent routinely by the companies to the MoP; some information arrives uniquely at the SHT. Therefore, a constant and timely flow of information from these two institutions to the MoF is of the utmost importance.

### Publication of Contracts

**36.** Public information in Chad on the oil sector is scarce. The most comprehensive source of information presently are the EITI reports. The MoP could usefully publish an annual report on developments in exploration, production, and investments, but also refining and marketing, as well as the legal framework. The SHT could publish information on its production, investment and marketing activities. A big gap in transparency is that Chad does not systematically publish its oil contracts. Nonetheless, the Esso contracts are available on the EITI website.<sup>39</sup> Furthermore, thanks to regulatory actions abroad, five PSCs signed between 2011 and 2013 have come into the public domain.<sup>40</sup> The fiscal terms across these five contracts are nearly identical, but there are differences in other provisions, including the size of signing and production bonuses (West, 2015, page 6).

**37.** Publication of contracts is considered good transparency practice for oil producing countries.<sup>41</sup> The fiscal transparency principle at play is that contracts between the government and companies, whether public or private, must be publicly accessible for there to be accountability. This principle is recognized in Chad's draft Transparency Code which is about to be transmitted to the National Assembly for adoption. This Code is a transposition of the 2011 CEMAC *Directive regarding a Code on Transparency and Good Governance in Public Finances*.<sup>42</sup> Following closely the CEMAC directive, Chad's draft code states that public access is particularly important for natural resource contracts, and that access pertains as much to the process of attribution of the contracts as to their

<sup>39</sup> For the 1988 and 2004 conventions with Esso, see <http://itie-tchad.org/?p=341> and <http://itie-tchad.org/?p=343>.

<sup>40</sup> See <http://repository.openoil.net/wiki/Chad>.

<sup>41</sup> See, for instance, the IMF's 2007 *Guide on Resource Revenue Transparency* at <http://www.imf.org/external/np/pp/2007/eng/101907g.pdf>, the *Natural Resource Charter* at <http://resourcegovernance.org/approach/natural-resource-charter> and the *EITI Standard 2016* at <https://eiti.org/>.

<sup>42</sup> See Section I.5 of

<http://droit-afrique.com/upload/doc/cemac/CEMAC-Directive-2011-06-transparence-finances-publiques.pdf>.

content. Publication of individual contracts will complement the 2010 model PSC (*contrat type*), also a good transparency practice.<sup>43</sup> This model contract comprehensively informs prospective investors of Chad's oil fiscal regime, discouraging negotiations over special deals. Chad would do well to follow the example of other countries and publish on a website all existing concessions and contracts, as well as the model PSC, plus the feasibility studies submitted with the license applications. The site could also be the place to publish the cadaster of oil licenses recommended by the EITI.

**38.** Finally, companies, too, stand to benefit from more contract transparency. If their contracts were public it would establish very clearly in the public eye what their rights and obligations are. It would help them with their public image and give them a chance to defend themselves publicly against allegations of contract violation.<sup>44</sup> The irony is that companies usually have no difficulty obtaining copies of contracts since there is an active informal market, confidentiality clauses notwithstanding; it is only the public which is in the dark (Rosenblum and Maples, 2009).

## F. Oil Sector Integrity Arrangements

### The Need for Audits

**39.** Rules and regulations need to be enforced with controls to ensure their integrity. In the absence of controls, incentives will inevitably drive corporate and personal behavior towards maximizing gains at the expense of the public interest. The oil fiscal regime is no exception. As Chad's petroleum sector has increased in complexity, the challenge of assuring the integrity of oil revenue flows has also increased. In developing countries, and compared to other revenues, oil revenues pose a high risk of malpractice (IMF, 2007 A). On the one hand, the transactions are large and technically complex, so the temptations for abuse are strong. On the other hand, the expertise necessary to counter such temptations is usually scarce, and even the political will to address these risks is not always evident. In building their capacities in this area, governments will want to emphasize data quality, internal controls, and independent external audits.

**40.** The principal tool for ensuring integrity is the audit process. This is a formal process for verifying financial and other data against documentary evidence, according to standards concerning accuracy and independence, and resulting in a report. With respect to the oil companies, the government has the legal and contractual rights to carry out audits on a routine basis; in addition, it can request special audits. These audit rights are valuable. How the government chooses to use them has a direct bearing on its success in mobilizing revenue given the fiscal regime.

**41.** Key for guarding over the integrity of oil revenues are the audits of the oil company tax declarations. For a revenue administration this is one of the most challenging functions. Even under

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<sup>43</sup> See footnote 5.

<sup>44</sup> For instance, in their September 16, 2008 Protocol with the government the Doba Consortium partners insisted that the amendments to the 1988 and 2004 Conventions deriving from this Protocol be published in the Official Gazette. In the end, the amendments were not issued.

the best of circumstances there will be tax manipulation at the margin, and with oil even marginal errors can involve large losses to the Treasury (Calder, 2014). Given limited resources, a risk assessment should guide what to audit. In the case of oil companies, the revenue at stake is so large that their tax declarations should be audited annually, even if only selectively.

### Multiple Types of Audits

**42.** For a comprehensive integrity system, multiple types of audits are required. Physical audits cover the volume and quality of production. Oil companies should be subject to clearly defined obligations to measure and record physical production, and government agencies should oversee their performance with respect to those obligations. If there is production valuation based on benchmark prices—as anticipated in the SHT 2011 contract—this process must be audited. So called cost audits are critical for ascertaining the accuracy of the cost information provided by the companies: excessive costs lead to understatement of profits. Doing this well requires technical expertise, but also access to sets of comparator data with which to challenge costs of specific equipment and services submitted by the tax payer. If costs are abnormally high, and if the transaction took place between related parties—very common in the oil industry—this points to abusive transfer pricing, a way for international companies to shift profits to lower-taxed jurisdictions (Calder, 2014, page 70 and following). Once production, prices and costs have been verified, the tax audit can proceed with verifying that all pertinent tax laws and regulations, and specific contract provisions, have been complied with in making the tax declaration.

### Audit Responsibilities

**43.** The introduction in Chad of the PSC fiscal regime raises the question of the institutional responsibilities for auditing the oil companies. The MoF through the Directorate General of Taxes (*Directorate Général des Impôts-DGI*) has responsibility for licenses subject to the concessionary regime (held by ESSO and the CNPC) because they involve corporate income tax. But licenses under the PSC regime (such as those held by Glencore and also the CNPC) are excluded from the corporate income tax. Thus, the auditing task would seem to fall to the MoP. The SHT may also play a role: its 2011 contract leaves open the possibility of being delegated such tasks. Given the similarities between tax oil and corporate income tax, the case could be made to assign the tax oil auditing also to the MoF. Generally, the integrated administration of oil revenues by the tax department has many advantages over a fragmented approach (Calder, 2014, page 26). On the other hand, the technical expertise of the MoP will be indispensable in conducting the physical, price, and cost audits.

**44.** Even oil companies that are still in the exploration or development phases should be audited. They are incurring substantial costs which will be deducted for tax oil or income tax calculations as soon as oil production starts. At that time, it may be too late to properly audit them since audit rights expire, and so do companies' record-keeping obligations. According to Chad's PSCs, the Government has five years after the end of a company's fiscal year to launch an audit of that year's accounts. If it fails to do so, the accounts will be deemed "accurate and definitive." Any pertinent findings must be brought to the attention of the company, after which a time-bound



correspondence ensues. This should result in a clear conclusion that the company owes a tax adjustment. If not, the accounts are again deemed “accurate and definitive.” In case of a dispute which cannot be resolved amicably, the parties can turn to mandatory arbitration in front of the International Chamber of Commerce in Paris.

**45.** In the oil industry, audits are very common and not at all interpreted as a lack of trust. Typically, an oil company undergoes an internal commercial audit, followed by an independent external audit. In the case of Chad, ESSO, as operator of the Doba Consortium, is also audited by its consortium partners who want to make sure costs are not excessive since that would cut into their profits. And finally the company’s physical operations and tax declarations are subject to audit by the country’s regulatory and tax authorities. The fact that ESSO is audited by its partners audits should give some comfort to Chad’s fiscal authorities in the context of their audit strategy.<sup>45</sup>

**46.** Outsourcing of tax audits may be useful when capacity constraints prevent the full and effective utilization of all audit rights.<sup>46</sup> Developing country revenue administrations find it hard to train and retain the necessary staff. Audit firms with an international reputation can be a good match for the specialized staff of the oil companies.<sup>47</sup> They may even have experience with the same company in other countries. Moreover, they have access to the comparator data needed for the cost audit part. With appropriate terms of reference, outsourcing can also assist with capacity development. The Chadian authorities are presently using the services of an international company to audit their oil companies and the refinery.

### **SHT Audit**

**47.** Proper auditing of the SHT is paramount. The SHT is now a major player, with some US\$2,750 million (FCFA 1,462 billion) in assets at end-2014.<sup>48</sup> As an oil company the SHT is subject to the provisions of the Hydrocarbons Law regarding the production of financial statements.<sup>49</sup> In addition, its Statutes oblige it to produce annual financial statements, within six months after the end of the year, and in line with internationally accepted accounting principles (Art. 33). Since the SHT is branching out to various core and non-core activities, its financial statements should be compiled on a consolidated basis. According to its Statutes (Art. 28), the SHT must submit its

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<sup>45</sup> For that reason, some countries only allow consortia, and with a minimum number of partners (e.g. Lebanon).

<sup>46</sup> See Calder (2014) and Lundgren, Thomas and York (2013), especially Box 6.3 on page 58.

<sup>47</sup> Angola has entirely outsourced its oil company auditing. Tanzania did at one point outsource the auditing of its mines but then reverted to in-house audits.

<sup>48</sup> According to the SHT’s Fiscal and Statistical Declarations, its assets end-2014 included US\$1,042 million in land and US\$1,179 million in financial participations, and its liabilities US\$937 million in investment subsidies and US\$1,427 million in financial debts.

<sup>49</sup> According to Art. 82 of the 2007 *Loi d’Hydrocarbures*, oil companies must deposit a complete set of financial statements to the Ministry of Finance within three months of the end of their operating year. These should conform to the accounting system of the *Organisation pour l’Harmonisation en Afrique du Droit des Affaires* (OHADA).

financial statements to an internal auditor approved by the *Communauté Economique et Monétaire de l'Afrique Centrale* (CEMAC), and the Government may nominate an external auditor. Finally, the newly created Accounting Court (*Cour des Comptes*) has a responsibility for the proper auditing of public enterprises. Best practice would be for the SHT financial statements to be subjected to an independent external audit in accordance with International Standards on Auditing and for the statements to be published together with the opinion of the auditor on their truthfulness.<sup>50</sup>

**48.** As noted, the SHT is responsible for the marketing of the government's oil. Given the high stakes and risks, this operation should be regularly audited. Currently the government receives two-thirds of its oil revenue in kind, some 13 million barrels in 2015. According to its Contract, the SHT must send the MoP an explanatory note (*Note de calcul*) immediately after each shipment. And every month it must send a detailed report to the MoP and the MoF justifying the prices and other terms and conditions of the sale. According to the SHT Contract the Government has the right to appoint an expert to evaluate the SHT's marketing performance, and to take back this mandate from the SHT if it believes SHT prices are unfavorable.

**49.** Pricing Doba crude is not an easy task, however. With total production of less than 200 thousand barrels per day, the market for Doba is shallow, and none of the parties publishes prices.<sup>51</sup> Usually the Doba price is quoted at a discount to Brent, which is a popular benchmark. Whereas the Brent price helps judge the trend in Doba prices, there can still be a lot of volatility in the discount. In gauging the discount obtained by the SHT, the Government could be guided by the other oil companies. Those who are subject to income tax need to reveal the price at which they calculate their turn-over, and those subject to a PSC the price at which they convert their (US dollar) costs into barrels of cost oil. The Government could complement this with information from specialized firms which estimate crude prices based on their quality characteristics and refinery needs (Tordo and Bacon, 2005).

### **Audit of the Revenue Administration**

**50.** The system of integrity assurances should be completed with an audit of the revenue administration itself. Obviously such an audit should not re-audit the oil companies' tax returns but should involve an examination of the revenue administration's audit systems and include a selective review of its audit papers. In the Chadian context, the task of auditing the government auditors could be assigned to the Government Accounting Court (*Cour des Comptes*), possibly with the help of outside expertise. Topics to cover could include the distribution of responsibilities and accountability over different agencies, and the audit strategy being pursued.

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<sup>50</sup> See Natural Resource Governance Institute, 2016, specifically at

<http://resourcegovernance.org/approach/natural-resource-charter/precept-6-nationally-owned-resource-companies#>

<sup>51</sup> The industry publication Platts started assessing the price of the Doba grade only in August 2015. Since then it observed a steady increase of the discount to Brent, to US\$10 beginning of December, followed by a decline to US\$6.50 in May 2016.

## Accounting for Utilization of Audit Rights

**51.** Expert audits are costly but in the case of oil companies may produce significant additional revenues. At least, that is typically the case initially. Over time, as audits become a regular feature, they are less likely to result in major corrections to the tax assessments. But that should be taken as proof that they are having their disciplining effect. Chad's PSCs oblige companies to pay the government to organize tax audits, and the amounts are generous. Already during the exploration phase, the companies must pay at a rate of US\$200,000 per year (inflation indexed, plus travel and per diems for four staff), continuing during exploitation at US\$400,000 per year.

**52.** Audit rights are hugely valuable, and public accountability on their utilization is therefore desirable. Whether the audit fees are paid by companies or the Government, these are public funds and they should be spent effectively on the mobilization of oil revenue. Moreover, since audit rights represent a unique legal opportunity to probe the oil companies, the Government should be very conscientious in using them. Public accountability on the utilization of government audit rights could be in the form of a regular report indicating which licenses or projects give rise to audit rights, and what type of audit rights these are, their expiration, the government agency assigned those rights, how the rights have been exercised, and what the main conclusions of the audits were. In addition to oil licenses, the report could cover the agencies (for instance, SHT, NRC) or activities (for instance, production or marketing of oil) the Government wants to see audited on a regular basis.

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