



CENTRO DE INTEGRIDADE PÚBLICA
Anticorrupção - Transparência - Integridade

Exploration of Natural Gas at Pande and Temane

INFLATION OF COSTS AND TRANSFER PRICES

SASOL will continue to milk Mozambique





CENTRO DE INTEGRIDADE PÚBLICA
Anticorrupção - Transparência - Integridade

EXPLORATION OF NATURAL GAS AT PANDE AND TEMANE

INFLATION OF COSTS AND TRANSFER PRICES

SASOL will continue to milk Mozambique

Adriano Nuvunga and Inocência Mapisse

Maputo, October 2017

Índice

- EXECUTIVE SUMMARY.....5
- 1. INTRODUCTION.....6
- 2. PPA - DEVELOPMENTS AFTER THE FIRST DECADE OF EXPLOITATION OF NATURAL GAS FROM PANDE AND TEMANE.....7
 - 2.1 Trends and Liberalization in the Sales Price of Gas.....8
 - 2.2 Capacity of the CPF versus Increases in Production11
 - 2.3 Capital and Operational Costs of the Project of Pande and Temane.....13
 - 2.3.1 Costs of Capital13
 - 2.3.2 Operating costs13
 - 2.4 Conflict of Interest versus Transfer Prices14
 - 2.5 Revenue of Sasol Petroleum Temane15
 - 2.6 Revenue Paid to the Government16
- 3. CONCLUSIONS18
- 4. RECOMMENDATIONS.....20
- 5. REFERENCES.....21

Executive Summary

Under the title "Exports of Gas from Pande Temane to South Africa: The first major project of the extractive sector frustrates the expectations of Mozambicans", CIP in 2013 published a report analyzing the first project of exploitation of natural gas in Mozambique that resulted from an agreement between the Mozambican Government and the South African multinational Sasol, signed in 2000, in the form of a Petroleum Production Agreement (PPA). Analyzing the revenues of Sasol and the Mozambican Government, that report covered the period from the beginning of production in 2004 to 2012.

Four years later, in 2017, CIP publishes the present report updating the first. This analysis covers developments in the PPA, following the publication of the first report in 2013, through December 2016, and finds that:

As foreseen in the PPA contract, after the first 10 years of exploitation of natural gas from Pande and Temane by Sasol, not only was the price liberalized, consisting in the abandonment of the 'clause' of limits on the method of calculating the natural gas price from Pande and Temane, but there was also a marked increase in the production of natural gas; however, the high expectations that the combination of these factors would result in a significant increase in government revenues did not materialize.

The official story is that it was the fall in international prices that thwarted the potential of the liberalization of the sales price of gas from Pande and Temane to significantly increase government revenue. It is true that price liberalization occurred in the context of a significant drop in gas prices on international markets, but this is a minor factor as an explanation for not increasing the revenue of the Government.

Affecting negatively the level of government revenue from the project in the period under review, three factors impeded the revenue increase from Sasol Petroleum Temane (SPT) -- the entity that pays the income tax (Impostos sobre o Rendimento de Pessoas Colectivas, IRPC) to the Government:

- First, in addition to the initial capital that was increased by 66% more than originally anticipated, there was a supplementary investment, of the very high amount of US\$ 400 million, aimed at increasing the capacity of the central processing facility, that played a large part in reducing the government take in the first years after the investment;
- Secondly, the declared project operating costs were very high, representing on average about 50% of the revenues obtained by the SPT-led consortium, having reached 71% of revenues in 2011 and 54.3% in 2016. These costs are also recovered in advance but only after taxable income is recorded; and
- The fact that the sale and purchase of gas from Pande and Temane takes place within the same business group, i.e., Sasol, allows the practice of transfer pricing, with SPT, registered in Mozambique, transferring the gains to SASOL Petroleum International (SPI), registered and based

in South Africa. With this, even with the liberalization that occurred, the sales price of gas from Mozambique still continues to represent only a fraction of the price of gas in other countries.

These are the factors that have minimized SPT's revenue in the context of the PPA, with negative consequences for the fiscal revenue to be received by the Mozambican Government.

As a result of the above, the PPA is structured in such a way that the South African multinational Sasol is enriching itself, while the Mozambican Government is being milked.

Accordingly, it is recommended that the following take place:

- Review of the methodology for calculating the price at which SPT sells natural gas from Pande and Temane to SPI, in line with the main international markets;
- Verification of (alleged) costs incurred in increasing the capacity of the central processing facility; and
- (Strict) control of project operation costs.

1. INTRODUCTION

Despite excessive opacity and lack of information that has characterized the mining sector in Mozambique, the Center for Public Integrity (Centro de Integridade Pública, CIP) was able to publish a report that presents in detail evidence of how the first project of exploitation of natural gas in Mozambique benefited the South African multinational company Sasol and generated insignificant revenues for the Mozambican Government.

The natural gas exploitation project for Pande and Temane, in the southern Province of Inhambane, operated by the South African multinational Sasol results from an agreement with the Mozambican Government signed in 2000 in the form of a Petroleum Production Agreement (PPA), under Law 3/81 of 3 October¹, in force at the time, with taxation conditions that only provided for the payment of the IRPC, which varied between 17.5% and 35% (which later was changed to 32%), and of royalty payments of 5%. The successful exploration led Sasol to propose building a pipeline from the gas field in Inhambane to its petrochemical facilities in Secunda, South Africa.

Apart from Sasol Petroleum Temane (SPT), which participates with 70% in the project, the shareholder structure of the project includes the National Company of Hydrocarbons (ENH), through its subsidiary, the Mozambican Hydrocarbons Company (Companhia Moçambicana de Hidrocarbonetos, CMH) (with 25%) and the International Finance Corporation, IFC (5%). The production and export of gas started in 2004, with the Contract for the Sale of Gas² signed between Sasol Oil (Pty) Ltd, as purchaser, the CMH and Sasol Petroleum Temane (SPT) as sellers, and ENH and Sasol Petroleum Mozambique Ltd as producers.

While arguing that the exploitation of the Pande-Temane gas fields was not to generate revenue for the Government but rather to attract investors to the country, in a post-civil war scenario, projections were also presented, on the one hand, by the World Bank and IFC (partner in the project) showing that during the first 10 years the project would generate US\$ 500 million in tax revenue for the Government (plus CMH dividends) and, on the other hand, the most optimistic projections, presented by the Ministry of Mineral Resources and Energy, now designated by MIREME (Ministério dos Recursos Minerais e Energia), and the International Monetary Fund (IMF), which forecast total revenue of about US\$ 2 billion over the lifetime of the PPA project (2004-2029).

After 10 years of production and export of natural gas to South Africa, evidence shows that it is the South African multinational that benefited from the project, while the Mozambican Government was being milked. The elimination of the clause of the production sharing without a compensating increase in the rates of royalty and the IRPC, the abusive price agreement, in the larger picture of transfer pricing between companies of the Sasol Group, the very high (and growing) capital expenditure (capex) and, above all, the inflation of the operations expenditures (opex), is the main cause of the country's reduced fiscal gains from the project. As can be seen, the PPA is structured and implemented in such a way

that the South African multinational Sasol is enriching itself, while the Mozambican Government with earnings below projected.

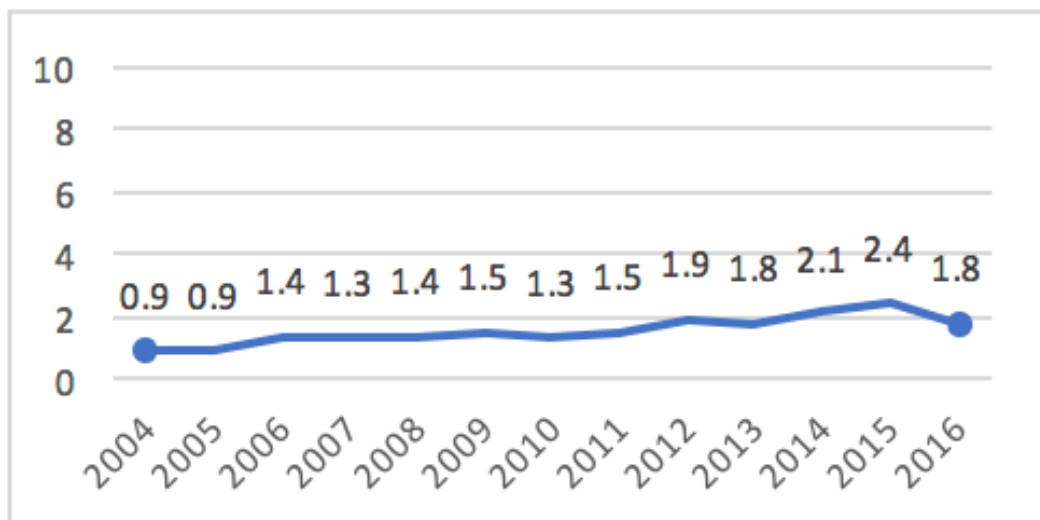
2. PPA - DEVELOPMENTS AFTER THE FIRST DECADE OF EXPLOITATION OF NATURAL GAS FROM PANDE AND TEMANE

The Contract for the Sale of Gas, entered into between Sasol Oil (Pty) Lda, as purchaser, Empresa Moçambicana de Hidrocarbonetos (CMH) and Sasol Petroleum Temane (SPT), as sellers, and ENH and Sasol Petroleum Mozambique Ltd, as producers, signed an appendix to the PPA contract that provided, after 10 years of exploitation, that the sales price of gas would be revised, i.e., 'liberalized', which would consist of withdrawing the 'clause' putting limits on the method for calculating the price of natural gas from Pande and Temane.

2.1 Trends and Liberalization in the Sales Price of Gas

During the first ten years of gas production, prices were in the range of US\$ 0.90 / GJ in 2004 and US\$ 2.40 / GJ in 2014, corresponding to an average annual price of US\$ 1.50 / GJ, much below the average international price of US\$ 5.20 / GJ³. For example, in 2008 a maximum price of US\$ 8.80 / GJ was reached, equivalent to a difference of US\$ 7.40 / GJ in that year with the price of gas sold in Mozambique of US\$ 1.40 / GJ. That is, SPT sold gas from Mozambique at a price some 6 times lower than the price on international markets in 2008.

Graph 1: Gas price of the Pande and Temane Fields



Source: Data of MEF (2017).

The sales price adopted for the first ten years of the production of gas (2004-2014) was as follows, according to the aforementioned 'Contract for the Sale of Gas':

a) "... The contract price for gas shall be calculated periodically (every three months) and shall apply to gas deliveries during the quarter beginning with the date of adjustment of the price for which the price is calculated";

b) "In the quarter in which the adjustment takes place, the contractual price of gas shall be calculated by the sellers using the following equation:

$$c) P = P_{wellhead} + P_{CPF} \quad (A)$$

i. For this period (2004-2014), the price at the 'wellhead'⁴ was set taking into account the reference price of US\$ 0.50 / GJ and the weighted average of crude petroleum from Dubai, diesel (gasoil) of Singapore and fuel oil with a high sulfur content (HSFO), also of Singapore, all in US dollars.

$$P_{wellhead} = usd0.50 \left[\left(\frac{0.45Dubai}{usd25} \right) + \left(\frac{0.40Gasoil}{usd31} \right) + \left(\frac{0.15HSFO}{usd23} \right) \right] \quad (B)$$

ii. The contractual price relative to the central processing facility (CPF) considers the reference price of US\$ 0.35, a factor of inflation adjustment and weighted averages (without any limit) of crude petroleum (Dubai) of Dubai, diesel (Gasoil) of Singapore and fuel oil with a high sulfur content (HSFO) of Singapore, all in US dollars:

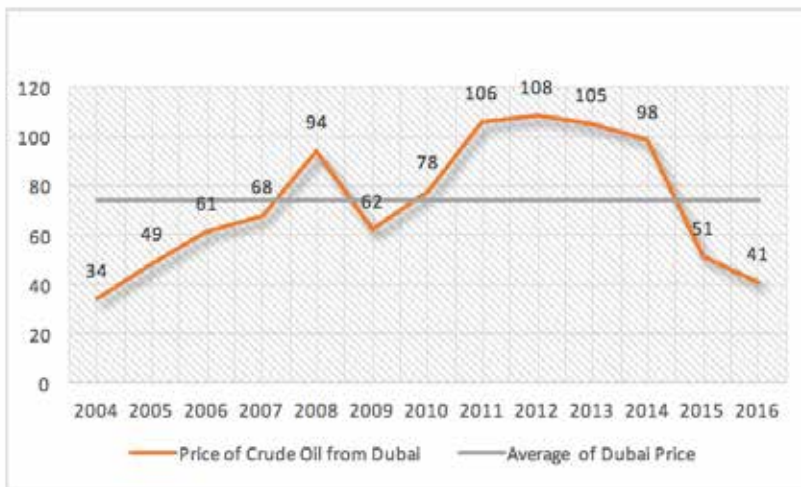
$$P_{cpf} = usd0.35 \left[0.59X \left(\frac{0.17Dubai}{usd25} \right) + \left(\frac{0.17Gasoil}{usd31} \right) + \left(\frac{0.07HSFO}{usd23} \right) \right] \quad (C)$$

According to the equations presented, the 'wellhead price' was limited to a range⁵ of US\$ 0.33 / GJ to US\$ 0.67 / GJ, representing the minimum and maximum price, respectively. Even with the increase in the international prices of the components of the equation, the price at the wellhead was always at the ceiling of US\$ 0.67 / GJ.

The petroleum from Dubai, one of the components of the equation, is considered worldwide as one of the main references of the physical market of petroleum. This was included in equations (B) and (C) as one of the variables with the highest weighting (0.45 and 0.17). However, its price was limited to a range of US\$ 16 and US\$ 34 for the 'wellhead price', in case it would fall below or rise above these limits, respectively.

Throughout 2004 to 2014, the average price of the Dubai petroleum on international markets was approximately US\$ 74 (see Chart 2), i.e., US\$ 40 above what was actually considered for the calculation of the gas price of Pande-Temane (US\$ 34), which shows how disadvantageous the rigid method of "pricing" the gas from Mozambique was for the Mozambican Government.

Graph 2: Trend in the price of crude petroleum (Dubai)



Source: Data extracted from the historical series of the IMF, Monthly Commodity Prices, 2017.

The combination of the price at the wellhead (maximum of US\$ 0.67 / GJ) and the price of the central processing facility (equations B + C) determined the prices applied during the first ten years of natural gas production in Mozambique (average price of US\$ 1.50 / GJ), but it was the price related to the central processing facility (equation C) that was responsible for the increase of the total price over the years. Prices that were completely distorted with respect to international prices, as can be seen in Graphs 3, and that were extremely detrimental to the country.

In addition, the equation being used for the calculation contains a component X' (equation C) for inflation that is very subjective. The 'Contract for the Sale of Gas' refers to this as the appropriate factor for the adjustment of inflation to be agreed, but, by not being specific, it leaves room for manipulation and, depending on its value, can contribute to reducing the price component of the central processing facility and, consequently, the final price of the gas.

The trend in gas prices in Mozambique was slightly increasing, as shown in the chart below, but, because a very low base was established for its calculation, this price has always remained well below other international reference prices.

As of 2015, the limits imposed for calculating the price of gas sold by Sasol Petroleum Temane (SPT) have been 'liberalized', rising from US\$ 2.10 / GJ in 2014 to only US\$ 2.40 / GJ in 2015 and US\$ 1.80 / GJ in 2016, which, however, is below the price in other markets, as shown in Graph 3 below.

Graph 3: Gas Prices in Mozambique Compared to Other International Markets

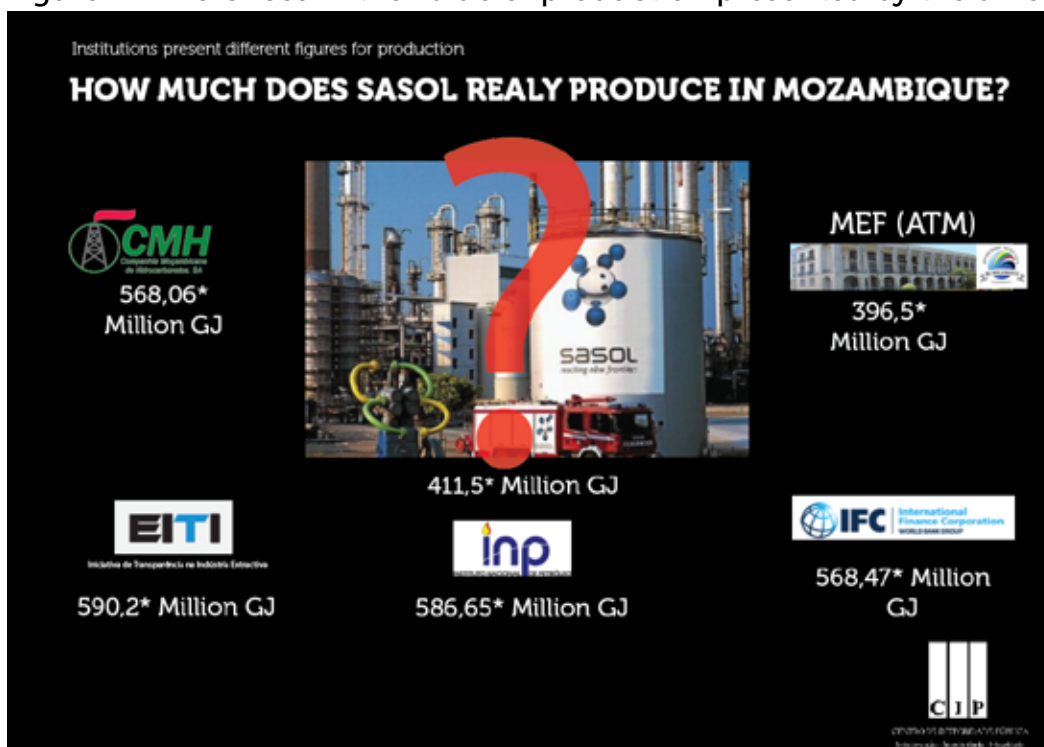


Sources: Data of the MEF (AT) and IMF (historical series, 2017).

2.2 Capacity of the CPF versus Increases in Production

In the period 2011 to 2014 the volume of natural gas production declared in the report of the Mozambican Hydrocarbons Company (Companhia Moçambicana de Hidrocarbonetos, CMH), by the Ministry of Economy and Finance (MEF), which in turn receives the information from Tax Authority (TA), in the report of the Extractive Industries Transparency Initiative (EITI) and by the National Oil Institute (Instituto Nacional de Petroleo, INP) varies, as shown in the figure below, which raises serious problems of transparency.

Figure 1. Differences in the value of production presented by the different institutions ⁱ



Source: Prepared by the authors on the basis of data from CMH, MEF, EITI and IFC, 2017.

Interestingly, as can be seen in table 1, the volume of production presented by the MEF (396.5 mGJ) is the lowest, about 30% below the total value presented by the CMH (568.03 mGJ) and about 33% below the total value presented by INP (586.mGJ), sector regulator. This is problematic because it is from the MEF data, provided by the companies, that the taxes due to the Government by the project are calculated.

Table 1: Volume of Production of Natural Gas in Pande e Temane (2011 – 2014), in millions of Giga Joules (mGJ)

Institution	2011	2012	2013	2014	Total
CMH	125.8	128.5	147.53	166.26	568.06
EITI	131.6	134.5	157.3	166.8	590.2
MEF	88	89.95	102.20	116.35	396.5
IFC	124.82	135.37	146.43	161.85	568.47

Sources: Data extracted from the accounting reports of CMH and reconciliation report of EITI Moçambique, MEF e IFC, 2017

Initially, installed capacity of the central processing facility (CPF) was 120 million giga-joules (mGJ) per year, although actual production was 83.3 mGJ per year (average annual volume from 2004 to 2008), almost 30.5% below installed capacity. In 2007, Sasol Petroleum Temane (SPT) proposed an expansion of the capacity to produce 183 mGJ per year, more than twice as much as was then actually produced, for a budgeted investment of US\$ 400 million. The proposal was approved in 2009, and the production increase was expected to begin in May 2012.

However, despite the high investment allocated for the increase in capacity and personnel, the delay in reaching installed capacity was very long, i.e., the investment was carried out in 2010 but only in 2016 did production reach the installed capacity of 180 mGJ (see graph 4). This had a negative fiscal impact in that the USD 400 million invested increased costs since 2010 but only in 2016 were these costs reflected in production.

Graph 4: Production of Natural Gas and Condensate



Source: Data from CMH, Annual financial statements (2017).

2.3 Capital and Operational Costs of the Project of Pande and Temane

2.3.1 Costs of Capital

Inflation in costs (capex and opex) and ineligible costs are often cited in the literature as main reasons for low tax revenues from extractive sector projects in developing countries. The Sasol Petroleum Temane project is no exception.

On the one hand, the capital initially estimated at US\$ 600 million by MIREME and US\$ 721 million by the World Bank was inflated by 66% to US\$ 1.2 billion (as quoted by CIP in 2013⁶). Contributing to this inflation were the costs of developing the central processing facility in the amount of US\$ 446.5 million and pipeline costs of US\$ 753.5 million.

Table 2: Project Costs

	Costs (millions of US dollars)		
	Projection	Outturn (before US\$ 400 million expansion)	Difference
Capital upstream costs	US\$317	US\$446,5	40%
Capital gas pipeline costs	US\$404	US\$753,5	87%
Total capital costs	US\$721	US\$1,200	66%

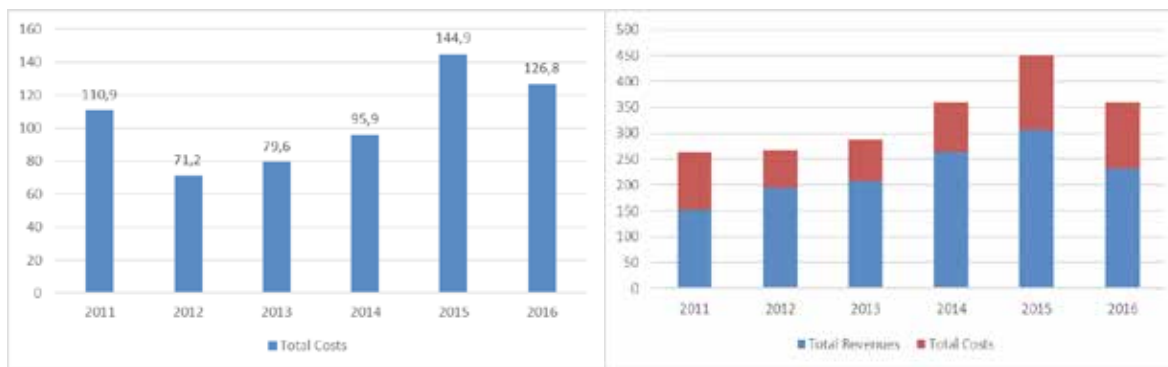
Sources: Prepared by the authors; and data from the World Bank (projections) and ENH (outturn).

On the other hand, throughout the first 10 years of the Sasol-led project, costs have also ballooned, in the amount of US\$ 400 million of investment to increase the capacity of the central processing facility approved in 2009. These costs had a great impact in the increase in total costs and consequent reduction of the tax base for the Government during the first years after the investment took place.

2.3.2 Operating costs

Data on operating costs⁷ of the Pande and Temane project show that in 2011 the total cost declared by the project was US\$ 110.9 million, followed by lower costs until 2014. However, in 2015, the year in which revenues of the Government should have been higher given the increase in production from and reflecting mainly the effect of the removal of the limits on the price at the wellhead, costs were higher, going up to US\$ 144.9 million, thus diluting possible increases in government revenue.

Graph 5: Sasol Costs and Revenue



Source: Data of the MEF (AT) (2017).

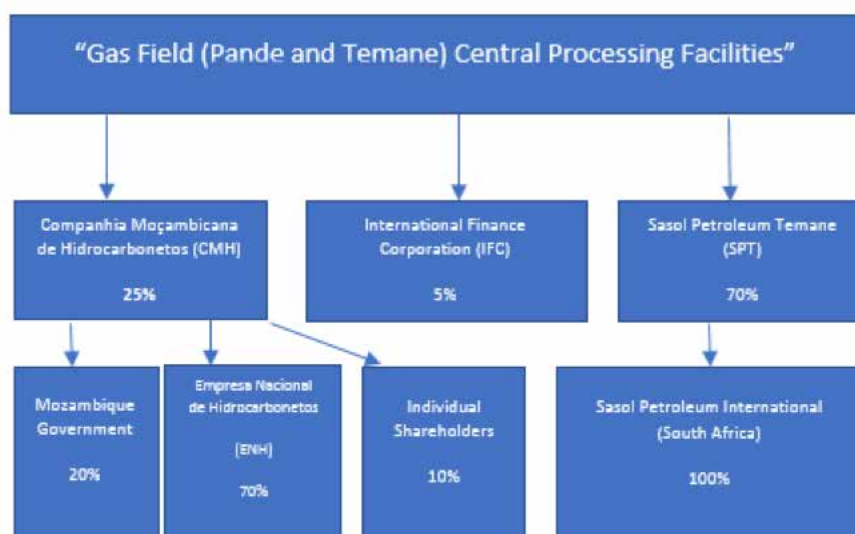
Declared operating costs represented on average about 50% of the revenues obtained by the SPT-led consortium, reaching 71% of revenues in 2011 and 54.3% in 2016, thus reducing the basis on which tax revenues to be paid to the Government are calculated. These same operating costs of the PPA project raise many questions as to how they could have been allowed by the Tax Authority.

2.4 Conflict of Interest versus Transfer Prices

Sasol Petroleum Temane (SPT), which owns 70% of the gas fields of Pande and Temane as well as the central processing facility, is a Mozambican subsidiary of Sasol Petroleum International of South Africa. In other words, SPT belongs to Sasol Petroleum International of South Africa.

The gas exploited by SPT is sold to Sasol Petroleum International, that is, the gas is sold to the same company that exploits it, which constitutes a 'moral hazard' with respect to undervaluation of revenues by the concessionaire, with serious implications for government revenue.

Figure 2: Shareholder Structure of the Pande-Temane Gas Field



Source: Prepared by the authors based on information in the PPA contract.

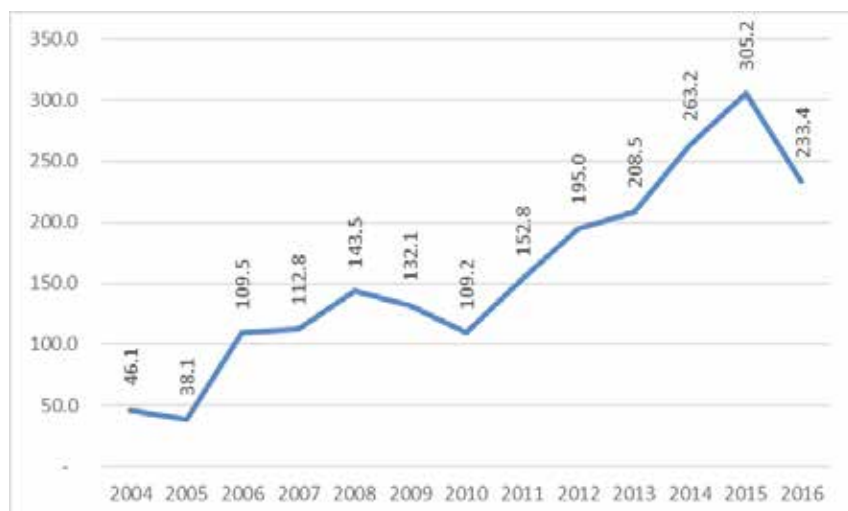
The Sasol Group has interests and participates in the entire gas value chain of Pande and Temane, which guarantees it not only privileged information during negotiations but, most importantly, in the setting of transfer prices that are harmful to the interests of the Mozambican Government.

The practice of transfer pricing is cited as one of the major challenges in capturing gains by developing countries with natural and mineral resources⁸ and has allowed Sasol Petroleum Temane (SPT) to transfer the actual gains made by the company to Sasol Petroleum International (SPI) by charging an average price of US\$ 1.50 / GJ during the first ten years, considerably lower than the average price of US\$ 7.00 / GJ of the same gas prevailing in South Africa. Even after the elimination of limits to the calculation and liberalization of the gas price, gas in Mozambique continued to be sold at an average price of US\$ 2.10 / GJ, US\$ 4.90 below the price applied by the same company in neighboring South Africa.

2.5 Revenue of Sasol Petroleum Temane

The increase in gas production (albeit below its potential) over the years should have been accompanied by significant growth in Sasol's revenues and, consequently, revenues collected by the Government. But the combination of price liberalization and increased production resulted in an annual increase in Sasol's revenue of only 175%, from US\$ 233.4 million in 2014 to US\$ 274.3 million in 2015, corresponding to an increase of only US\$ 40.9 million in nominal terms.

Graph 6: Trend in Revenues of Sasol (millions of USD)



Source: Data from the MEF (AT), 2017.

The official story is that the potential increase of Sasol Petroleum Temane's (SPT), as a result of the liberalization of the sales price of gas and the increase in gas production, which in turn resulted from the increase in capacity of the central processing facility, was 'sterilized' by the downward trend in international gas prices. This argument is partially true because, actually, as shown above, the potential for increases in revenue has been significantly thwarted by three factors, namely:

- First, the transfer prices applied by the Sasol Group. A simple simulation⁹ (below) shows the potential revenues that Sasol would have earned had it adopted the international price (Henry

Hub, HH) from 2004 to 2014, keeping constant the quantities produced in those years.

vs. revenues from Sasol using international



Source: Data from the MEF (AT) and IMF, historical series 2017.

As can be seen in Graph 7 above, if the price adopted for the sale of gas by Sasol Petroleum Temane (SPT) had been close to the international trend (HH), and considering Sasol's production during those years, tax revenues would have been considerably higher.

- Second, recovery of the very high and growing capital. In addition to the initial capital, which was increased by 66% compared to what had been originally estimated, there was an additional investment of US\$ 400 million aimed at increasing the capacity of the central processing facility, which was recovered but, despite being an exponential inflation in cost, was not reflected in a substantial increase in production; and
- Third, the declared operating costs were very high, representing on average about 50% of the revenues obtained by the SPT-led consortium, reaching 71% of revenues in 2011 and 54.3% in 2016.

Therefore, it was not only the international context of falling prices that muted the positive effect of the liberalization of the sales price of gas in Mozambique, but rather the governance of the Pande and Temane Project that allowed the SPT to determine transfer prices and the inflation of the project's operating costs.

2.6 Revenue Paid to the Government

The fiscal contributions of the consortium of Pande and Temane, led by SPT, consist of the IRPC¹⁰, royalty¹¹ and dividends¹², under the terms indicated below. These have been used as references for the revenue projections.

Table 3: Sources of Tax Contributions from the Project

Tax	Rate	Terms established in the contract
Royalties	5%	In kind or in cash
IRPC	35%	50% of the rate (35%) during the first 6 years, which was raised to 32% from 2007 onwards
Dividends	Paid in accordance with the percentage of participation of each share holder	

Source: Prepared by the authors on the basis of information contained in the PPA contract.

From 2004 to 2014, the Pande-Temane Project generated total revenues for the Government in the amount of US\$ 141.85 million, that is, after ten years the country collected only 7.09% of the US\$ 2 billion of revenues projected by the Ministry of Resources Minerals and Energy (MIREME) and Multilateral Investment Guarantee Agency (MIGA) for the 25-year project.

At the end of the first ten years of exploitation, revenues collected by the Government registered an average annual growth of 35.3%, from US\$ 46.25 million in 2014 to US\$ 78.91 million and US\$ 78.97 million in 2015 and 2016, respectively. The increase was considerable relative to the first 10 years of exploitation, but overall at US\$ 22.9 million (from 2004 to 2016) it did not meet the expectations of the IMF's US\$ 50 million in annual average revenue.

Table 4: Revenue collected by the Government from the Pande and Temane Project (millions of USD)¹³

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
SPT														
Royalty	1.20	0.9	2.5	2.6	3.4	2.3	1.5	2.5	3	4.4	5	3.6	3.1	36
IRPC	-	-	-	-	-	-	-	-	6.24	35.35	32.45	53.44	56.47	183.95
CMH														0
Royalty	-	-	0.6	0.7	0.9	0.6	1	1	1.3	1.5	1.8	1.2	0.7	11.3
IRPC	-	-	-	-	2.8	2.3	-	1.1	10.2	0.5	4.4	14.5	14.5	50.3
Dividends	-	-	0.4	-	-	0.4	-	0.5	0.5	2.01	2.3	6	4.2	16.31
IFC														0
Royalty	-	-	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.17	-	1.87
Total	1.2	0.9	3.6	3.4	7.3	5.7	2.7	5.3	21.44	44.06	46.25	78.91	78.97	299.73

Source: Prepared by the authors based on data from CMH, IFC, and EITI.

As can be determined from table 4, despite the increase following the price liberalization, the revenue collected by the Government from the Pande and Temane Project remains well below its potential. This is because the quality of governance of the project allows SPT, the entity that pays taxes to the Government, to depress its own revenues, with serious consequences for the Government, since it is on this basis that these revenues owed to the Government are calculated. And, as has already been pointed out above, it is the transfer prices, the recovery of the very high and rising capital and the inflation of operating costs that negatively impact on the potential of increased government revenue from the Sasol project.

3.CONCLUSIONS

As foreseen in the PPA contract, after the first 10 years of natural gas exploration from the Pande and Temane's fields by Sasol, the price was liberalized by the elimination of the limits 'clause' in the method of calculation of the natural gas price of Pande and Temane, but the high expectation that this price liberalization would lead to a significant increase in government revenues did not materialize.

The official story is that the drop in international prices thwarted the potential of the liberalization of the sales price of gas from Pande and Temane to significantly increase government revenue. It is true that price liberalization occurred in the context of a significant drop in international gas prices, but it is a tiny piece as a factor explaining of why the increase in government revenues did not happen.

According to the economic structure of the project, government revenue comes mainly from the IRPC of the SPT. This means that government revenue depends on the increase in SPT's revenue which, in the period under review, should have increased due to two factors: first, the increase in the price at which the SPT sells the gas and, second, the increase in production, consistent with the increase in the capacity of the CPF.

As indicated, with the liberalization the price went from a very low US\$ 0.90 / GJ in 2004 to US\$ 2.40 / GJ and US\$ 1.80 / GJ in 2015 and 2016, respectively. But even with the drop in international prices, the sales price of Mozambique's gas is still only at a fraction of the price in other countries. In addition, an investment was approved in 2009 to increase the capacity of the central processing facility from 120 mGJ to near 183 mGJ of natural gas per year. However, this increase only was attained in 2016, six years after the investment, giving this investment significant weight in reducing the tax base, by increasing the costs in these first years.

The combination of the price liberalization and increased production resulted in an annual increase in the revenue of SPT of only 17.5%, from US\$ 233.4 million in 2014 to US\$ 274.3 million in 2015, corresponding to an increase of only US\$ 40.9 million in nominal terms.

It could therefore be concluded that three factors have led to the sterilization of the increase in revenue of SPT, in the period under review:

- First, in addition to the initial capital that was increased by 66% from what was first expected, there was an additional investment of the very high amount of US\$ 400 million, to increase the capacity of the central processing facility, which contributed significantly to the reduction in the government take in the initial years after the investment took place;

- Second, the declared operating costs were very high, representing on average about 50% of the revenues obtained by the consortium led by SPT, reaching 71% of revenues in 2011 and 54.3% in 2016; and
- Third, the fact that the sale and purchase of gas from Pande and Temane occurs within the same group, Sasol, allows the practice of transfer pricing, with the SPT registered in Mozambique transferring its gains to SPI, which is registered and based in South Africa. With this, even with the liberalization that has taken place, the sales price of Mozambique's gas still continues to be only a fraction of the price of gas in other countries.

These are the factors that have minimized SPT's revenue, in the context of the PPA, with negative consequences for the revenue to be obtained by the Mozambican Government.

In this way, it can be seen that the PPA is structured in such a way that the South African multinational Sasol is enriching itself, while the Mozambican Government is "being milked".

4. RECOMMENDATIONS

The conclusions of this report revolve around the quality of governance in the relationship between the Mozambican Government and the multinational Sasol. What is clear is that the latter uses all possible strategies to maximize its gains while sterilizing the gains of the Mozambican Government. This is normal, but the present case is seriously problematic and cries out for the following urgent actions:

- Review of the methodology for calculating the price at which SPT sells natural gas from Pande and Temane to SPI so that it is in line with the main international markets and prevents the use of transfer prices;
- Verification of the costs (allegedly) incurred in increasing the capacity of the central processing facility; and
- (Strict) control of project operation costs.
- Disclose Sasol's revenue projections for the sake of transparency.

5. REFERENCES

¹ Law n° 3/81 of 3 October regulated the petroleum operations in Mozambique.

² The Contract for the Sale of Gas is annexed to the Petroleum Production Agreement relating to the unified block of the Pande and Temane reservoirs, signed and approved by the Council of Ministers under Law 3/81 of 3 September.

³ Spot price of natural gas at the Henry Hub Terminal, Louisiana.

⁴ The wellhead price excludes other expenses related to the transport and delivery of natural gas.

⁵ The range was calculated using the limits set in the contract for the first 10 years for both Dubai (US\$ 16 / barrel - US\$ 34 / barrel) and for diesel (US\$ 22 / barrel - US\$ 40 / barrel) and HSFO US\$ 14 / barrel - US\$ 32 / barrel).

⁶ CIP. 2013. "Exportações de gás de Pande Temane para a África do Sul: Primeiros grandes projectos do sector extractivo frustram as expectativas dos moçambicanos". Edition N° 17/2013 – October.

⁷ Refers here to the sum of operating, administrative and amortization / depreciation costs.

⁸ Daniel Philip et al (2017). International Taxation and the Extractive Industries. ISBN. NY.

⁹ The calculation of the revenue using the HH price considered only the production of natural gas, excluding the production of condensed gas.

¹⁰ IRPC - The corporate income tax rate for SPT was set at 17.5% during the first six years of production. This 50% reduction from the previous corporate income tax rate of 35% was a stimulus to normal investment in the early 2000s. After six years of tax exemptions, the prevailing tax rate of 32% was applied again.

¹¹ Royalties - Under the Gas Sales Agreement, the 5% royalty is only based on the "wellhead" price. Royalty payments are divided among the three owners according to their proportional share.

¹² Dividends - Mozambique also receives dividend payments based on the profits generated by CMH. Dividends are divided according to the share in ownership of the company: 70% for ENH, 20% for the Government of Mozambique and 10% for private Mozambican shareholders.

¹³ Data extracted from the reports of the Extractive Industries Transparency Initiative, Mozambique (2011, 2012, 2013 and 2014), Annual Financial Statements of the Mozambican Company of Hydrocarbons (2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016), and data from the International Finance Corporation (http://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site).

¹⁴ The production figures (million Giga Joules) presented correspond to the total production between 2011 and 2014 by the respective institutions. The lowest figure is presented by the Ministry of Economy and Finance (MEF). This amount negatively impacts the taxes collected, minimizing the contribution of this project to the country.

Parceiros:



 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



Reino dos Países Baixos



Norwegian Embassy