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Policy Brief

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# Local Content in Practice: Improving the Participation of South Sudanese in the Petroleum Industry

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## Summary

*Local content requirements promote national capacity, employment, economic diversification, and economic growth (Kazzazi and Nouri 2012, Tordo et al., 2013). Local content develops capacities that link the oil and gas sector to other industries. While over 80% of the oil and gas sector's workforce is South Sudanese, little is known about their earning levels, experience, and educational attainment, compared to their expatriate colleagues (Tiitmamer, 2015). This paper analyzes human resources data from two of the joint operating companies and determines how the South Sudanese compare to the expatriates. Second, the paper reviews the local content clauses to determine possible gaps in an effort to inform amendments stipulated in the Revitalized Agreement for the Resolution of Conflict in the Republic of South Sudan (RARCSS). The study reveals several insights with public policy relevance. First, nearly 90% (87.95%) of the oil and gas sector employees are South Sudanese. Second, expatriates, many of them Chinese, earn an average of $29,312.56 per month, compared to just $1,858.11 (6% of total income) for an average South Sudanese. Third, expatriates are extremely averse to sharing data on prior experience, education, and other professional qualifications, complicating comparisons with the South Sudanese workforce. This raises questions about the good will of oil and gas sector partners in the country. Finally, the Petroleum Act, 2012 inadequately addresses the local content matters, lending the oil companies leverage to exploit the South Sudanese[1]. These findings support a call for immediate action, including developing strict enforcement and monitoring mechanisms and amending the Act.*

[1] This research has been made possible through CORDAID's generous financial support. However, the views expressed in this paper are not CORDAID's.

An erratum has been considered for the VP's earnings in relation to the President. This was initially misreported as 1.5%, instead of 13.5%. This has now been corrected.

## 1. **Introduction**

While oil and gas development is potentially a big blessing to a country, it can also be a curse if it is poorly managed. Countries that mismanage their petroleum resources suffer poverty, conflicts, environmental pollution, high rate of unemployment, extreme illiteracy, excessive mortality, rampant crimes, and political instability (Frankel, 2011, Lewin, 2011, Dougherty, 2011). Oil producing countries that face these conditions spend less money on public goods such as education, health, infrastructure, and social welfare, among others, resulting in low human development. In addition, they often suffer low levels of transparency and accountability and ignore environmental measures, among other detrimental conditions.

Due to low investment in education, health, infrastructure, agriculture and local industries, citizens of oil producing countries possess little capacity to participate competitively in the oil industry. As a result, the oil industry is dominated by foreigners in terms of workforce, materials inputs, services, technology and equipment. With most of these resources procured by the oil industry from outside, the wealth from oil is transferred out, leaving the citizens vulnerable. This is made worse by lack of transparency and accountability, which enables some corrupt local elites to collude with foreigners to undercut measures designed to benefit the citizens.

To avoid these conditions, oil producing countries have deployed various mechanisms to ensure oil does not become a curse. Chief among these mechanisms is investment in education, health, local content, transparency, accountability, environmental protection, road, water and electricity infrastructure, among others (Lewin, 2011). For example, Botswana has done exceptionally well, as a natural resource rich country, by establishing the respect for the rule of law, property rights, transparency, accountability and being focused on investment in infrastructure, health and education (Lewin, 2011).

South Sudan's Petroleum Act, 2012 and Petroleum Revenue Management Act, 2013 provide for some of these mechanisms, significant shortfalls in enforcement notwithstanding. The Petroleum Act, 2012, in particular, provides local content clauses that require (1) procurement of goods and services produced in South Sudan, (2) prioritization of employment and training of South Sudanese, and (3) transfer of skills, knowledge, competence and know-how to South Sudanese. To meet these requirements, the Act requires the oil companies to prepare and implement plans and programs that prioritize procurement of South Sudanese goods, services, materials, personnel and training and transfer of know-how to South Sudanese. Local content is important because it builds the national capacity, promotes employment of nationals and diversifies the national economy and maximize economic returns (Kazzazi and Nouri 2012, Tordo et al., 2013).

This policy brief focuses on the extent to which South Sudanese participate in their petroleum industry's workforce. In 2015, about 80% of the workforce in the three petroleum operating companies were South Sudanese (Tiitmamer, 2015). However, little is known about the (1) earning power of South Sudanese compared to foreigners, (2) amount of money spent with South Sudanese companies or value of money added to the local economy/extent of South Sudanese goods and services procured by the petroleum industry, (3) the level of training provided compared to foreigners, (4) increase in the amount of money in import substitution after the capacity building of local suppliers, and (5) increase in revenues generated after the development of local manufacturers/money invested in local manufacturing, among others. This brief particularly examines the (1) the gaps in the Petroleum Act, 2012 with regards to local content provision, (2) earning capacity, 3 skills transfer/training, and (4) industry experience. The results should prove useful to the government and its partners in informing efforts to develop national capacity and opportunities in the oil industry.

## 2. Methodology

To achieve the objectives of this analysis, a number of tools and methods were enlisted. First, a general literature review was conducted on local content, as well as on the legal clauses relevant to local content in the Petroleum Act, 2012. In particular, clauses that cover Procurement of Goods and Services, National Goods and Services, Local Employment and Training, Knowledge Transfer, and Local Content Plans and Reports were examined in relation to best practices. The identified gaps are discussed in sections that follow.

Second, we obtained data on local content implementation from two oil companies. In particular, we obtained human resources data from Greater Pioneer Operating Company (GPOC) and Dar Petroleum Operating Company (DPOC), with the following information presented: (1) demographic—nationality, state, county, gender, and age of an employee, (2) position and grade, (3) earnings, (4) education, (5) experience, (6) number of capacity and professional trainings, and (7) the number of times one has been promoted.

DPOC supplied only manhours data. Salary data, stratified by citizenship, come from GPOC. The GPOC dataset has nearly complete records, except for the Chinese counterparts. Despite the fact that we were given authorization by the Ministry of Petroleum to obtain the full data, the Chinese and other expatriates deliberately removed education and other important variables from the dataset, suggesting they may be hiding something from the public. DPOC and SPOC completely refused to provide the full data with all the variables. Such data are supposed to be made publicly available to meet transparency requirements in accordance with the Petroleum Act, 2012.

Nevertheless, we used what data was available to explore the employment benefits individual South Sudanese accrue from the petroleum sector visa-vis their foreign counterparts. Our findings are presented in the sections that follow.

# 3. Findings

## 3.1. Gaps in the Petroleum Act 2012

Chapter 15 of the Petroleum Act, 2012 contains the local content clauses. These clauses govern (1) procurement of goods and services, (2) national good and services, (3) local employment and training, (4) knowledge transfer and (5) local content plans and reports.

Clause 63 of the Act requires that "procurement of goods and services that exceed a prescribed threshold value shall follow open, transparent, non- discriminatory and competitive tendering procedures as prescribed in the regulations." While this clause is in line with open, transparent, non-discriminatory and competitive tendering processes, it suffers from ambiguity. For example, the threshold for goods and services that would undergo such tendering process is not stated. This lends the officials in charge an authority to determine such value, a recipe for corruption. While other details can be determined through a ministerial regulation, a threshold of goods and services remains necessary, inhibiting potential manipulation. Similarly, the contract value of goods and services should be specified. In Ghana, for example, no goods and services are excluded from competitive procurement processes.[2] In particular, a local content legislation specifies a range of contract values and procurement and the level of authority to undertake the procurement.

Clause 64 (a) demands the oil companies to "acquire materials, equipment, machinery and consumer goods of national production of the same or approximately the same quality as foreign materials, equipment, machinery and consumer goods and that are available for sale and delivery in a timely manner at prices that are no more than ten percent higher than the price for imported items." Clause 64(b) also obliges the oil companies to "acquire national services to the extent that the services are similar to those available on the international market and their prices, when subject to the same tax charges, are no more than ten per cent higher than the prices charged internationally for similar services." This clause also suffers from ambiguity. The best practice is to specify mandatory quotas for goods and services in a certain category in the industry. Ghana, a recent entrant in the oil and gas industry, has mandatory targets for local content in all categories. For example, the 2013 Ghana local content law commits oil and gas companies to a minimum of 5% and 10% local equity participation in exploration, production, and services. In training and employment, 30% is required for Ghanaians in management positions at the start, 50% to 60% in five years, and 70% to 80% in ten years. For core technical staff, the oil companies are required to allocate

[2] See Ayanoore, I. (2018) The politics of local content legislation in Ghana. ESID Working Paper No. 104. Manchester, UK: The University of Manchester. Available at www.effective-states.org

at least 20% to Ghanaians at the start, increasing to 50-60% in five years and 70-80% in ten years. Such mandatory targets are not stipulated in South Sudan's Petroleum Act, 2012.

Clause 65 deals with local employment and training of nationals. Clause 65(2) in particular requires the oil companies to provide training opportunities to South Sudanese. Clause 65(3) grants unskilled labor to South Sudanese only. Yet the definition of "unskilled labor" is not clear. Because of this ambiguity, foreigners have since engaged in almost all work categories in the oil and gas industry in South Sudan, abusing the spirit of the law. Oil companies are also required to have a program for training South Sudanese, yet like other clauses, this particular one is devoid of targets and specifications.

Clause 66 requires oil companies to transfer knowledge to the nationals through formation of joint ventures. We have no records suggesting that this is happening. Clause 67 requires the oil companies to prepare an annual local content plan and submit it to the Ministry of Petroleum for review and approval. The plan is supposed to lay out the implementation of the local content requirement. A summary of such plan is required to be published in a government gazette, providing details of procurement of goods and services, employment and training, and skills and knowledge transfer. Yet such reports have never been made publicly available as required. In addition to the shortfalls already highlighted, there are no implementation mechanisms in place. Instead of having other independent institutions to help enforce the local content rules, the Act mandates the Ministry of Petroleum to check itself, breeding a lax that is evidently failing the people of South Sudan.

More broadly, the Petroleum Act, 2012 is inadequate in numerous aspects. First, the threshold for goods and services required of the local content implementation is not specified. Second, the law does not state the targets for various local content categories, leaving the oil companies to decide as they see fit. Third, the law does not stipulate any consequences for non-compliance. Finally, it does not empower independent institutions to oversee the Ministry of Petroleum or the oil companies.

For the local content to produce meaningful benefits for the nationals, well defined targets are required. This helps in monitoring and evaluating the local content program. Well defined targets should also be tied to incentives. For example, oil companies that exceed their targets should get rewards. Rewards or incentives to companies that exceed targets of the local content could be in form of tax reduction or tax rebate, among others. In addition to incentives, targets should be monitored, and clear penalties spelt out for companies that fail to comply. In addition to the lack of well-defined targets, what constitutes a South Sudanese company remains unclear. Having a registration and headquarters in South Sudan and more than 50% equity by a South Sudanese is not adequate. The benchmarks for a South Sudanese company should be set. It should include more than 90% of workforce and 80% of equity.

Most important, the Act does not include mechanisms to create adequate enabling environment for the success of local content requirements. To create an enabling environment, the country needs industrial policies that support a suitable macro-economic environment, strong institutions, legal system, "incentives for enhancing 'sound business practices', infrastructure for business environment and social systems for inclusion and participation" (INTSOK, 2003, Kazzazi and Nouri 2012). A vibrant participation of the South Sudanese in the oil and gas industry cannot be obtained without the capacity to do so. This requires effective training at all levels. This entails the development of all other sectors of the economy that are linked to the oil and gas sector through backward and forward networks (Kazzazi and Nouri 2012, Tordo et al. 2013). This spreads the benefits from the oil and gas industry to all other sectors of the economy, essentially enhancing growth.

## 3.2. Salaries

Table 1 presents analysis of GPOC's workforce data. Oil companies are obliged by the Petroleum Act, 2012 to lend access to such data. Thus, GPOC granted us access to data for its 465 employees, 17 of which are missing nationality designation. Salaries represent base remunerations. Analysis of nationality stratification is based on those employees whose nationality information is available in the current dataset.

Table 1. GPOC's workforce by nationality

| Nationality | n | % |
|---|---|---|
| Expat | 54 | 12.05 |
| National | 394 | 87.95 |
| N | 448 | 100.00 |

As illuminated in Table 1, nearly 90% (87.95%) of GPOC's workforce are South Sudanese, an improvement from 80% in 2015 (Tiitmamer 2015). Of these, a vast majority (96%) are males. Similarly, the expatriates are all males. Taken together, the oil and gas sector in South Sudan is male dominated.

Table 2 presents workforce by professional training. Engineers, geologists, and other natural scientists make up only 26% of the total workforce. A vast majority (55%) have not attained (none) any professional training or have not reported (unknown) such information. This information helps in understanding South Sudan's preparedness in phasing out foreign investors in the oil and gas sector. This finding indicates that South Sudan remains distanced from reaching this goal.

Table 2. GPOC's workforce by professional field

| Field | n | Percent |
|---|---|---|
| Engineering | 51 | 11.23 |
| Geology | 16 | 3.52 |
| Humanities | 12 | 2.64 |

| | | |
|---|---|---|
| Law | 9 | 1.98 |
| Management | 39 | 8.59 |
| None | 124 | 27.31 |
| Sciences | 52 | 11.45 |
| Social Sciences | 22 | 4.85 |
| Unknown | 129 | 28.41 |
| N | 454 | |

Further, we examine the GPOC's salary data by nationality, education, gender, and experience (see Table 3). We find that an average expatriate earns a monthly salary of $29,312.56, compared to only $1,858.11 for an average South Sudanese, representing 6% of average earnings. That is, an average expatriate earns nearly 16 times that of an average South Sudanese. The highest paid expatriate at GPOC is the president with a base pay of $75,504 a month. In contrast, the highest paid South Sudanese, the company's vice president, earns $11,790 a month, which represents only 13.5% of president's salary. The lowest paid expatriate earns $6,277 a month while the lowest paid South Sudanese national earns $804 (11% of average value) a month. A statistical test of true difference between the two group indicates that nationality is a major factor in salary allocation in the oil and gas sector in South Sudan. In short, South Sudanese hold more positions in the sector, work more hours, but earn less than their expatriate counterparts. These findings directly contradict South Sudan's labor laws, especially chapters 6 and 7 of Labor Act, 2017. Chapter 4(49) states that "all employers shall pay the wages/salaries of their employees without discrimination on the basis of nationality," while Chapter 7 (57)(5) states "that an employer shall pay an employee for overtime."

Manhours is another useful measure. The results are the same. Expatriates earn more than South Sudanese. On average, a South Sudanese earns $14.2 per hour compared to $56.6 for an expatriate. Thus, an expatriate earns almost 4 times that of a South Sudanese. In other words, being a South Sudanese means being paid $42.40 less than an expatriate.

Education, whose information is available for South Sudanese only, is an important predictor of earnings in this sector. The more educated a person is the higher they earn. Given example, a person with primary or no education earns an average of $1,324 a month, compared to $2,342 for an individual with university education. Those with the 'unknown' qualifications, many of them expats, earn on average $23,270.8 per month.

Men earn 2.3 times as much as women. There is also an experience paradox: the most experienced earns less than the least experienced. Experience, which is measured for all nationals and a few expats, is the number of years spent at the current oil and gas company. On average, the analyzed employees have been at GPOC for about 8 years. The least experienced has 2 years (a new arrival), while the most experienced has 9 years. Those who have spent 0-5 years at GPOC earn $10,291.8 on average a month, while those who have spent 6 years or more earn, on average, $3,096.9 a month. Perhaps newcomers at GPOC accumulate experience elsewhere before joining the company. But this effect disappears when nationality is controlled for. This is intuitive—the expats earn more regardless of how long they have stayed at the company.

Table 3. GPOC's monthly salary comparisons

| Nationality (n=405) | Average pay (USD) | Std. err | 95% CI | |
|---|---|---|---|---|
| Expat | 29,312.56 | 2,324.20 | 24,743.52 | 33,881.61 |
| National | 1,858.11 | 58.26 | 1,743.59 | 1,972.63 |
| Education (n=340) | | | | |
| No education/primary | 1,324.25 | 106.90 | 1,113.97 | 1,534.52 |
| Diploma | 1,550.63 | 90.75 | 1,372.13 | 1,729.14 |
| University | 2,242.16 | 104.36 | 2,036.90 | 2,447.43 |
| Unknown | 23,270.84 | 2,552.33 | 18,250.44 | 28,291.25 |
| Gender (n=411) | | | | |
| Female | 1,796.12 | 172.86 | 1,456.31 | 2,135.92 |
| Male | 4,084.36 | 425.18 | 3,248.57 | 4,920.16 |
| Experience (years) (n=454) | | | | |
| 0-5 | 10,291.82 | 1,831.01 | 6,692.49 | 13,891.15 |
| 6-10 | 3,096.92 | 365.06 | 2,379.30 | 3,814.53 |

*Notes: Std. err stands for standard errors*

Second, income distribution by field of specialization surprisingly indicates that the engineers ($1,861.59) and geologists ($1,856.58) earn less than professionals from nearly all other fields, particularly natural sciences, law, humanities, management, and social sciences. Only those who do not have specialized skills earn less than oil and mineral gurus (see Table 4). Why are some of the most technical professionals underpaid in the South Sudanese context? One possible explanation is that the expats continue to hold the most senior technical positions, with earning penalties for nationals.

Table 4. Monthly salary distribution by field (USD)

| | | 95% CI | |
|---|---|---|---|
| Field | Average | Lower | Upper |
| Engineering | 1,861.59 | 1,421.26 | 2,301.93 |
| Geology | 1,856.58 | 1,558.48 | 2,154.67 |
| Humanities | 1,990.98 | 1,506.73 | 2,475.24 |
| Law | 2,039.35 | 1,523.08 | 2,555.62 |
| Management | 2,127.60 | 1,837.43 | 2,417.76 |
| None | 1,515.56 | 1,391.62 | 1,639.51 |
| Sciences | 2,254.14 | 1,764.62 | 2,743.65 |

| | | | |
|---|---|---|---|
| Social Sciences | 1,923.07 | 1,530.00 | 2,316.15 |
| Unknown | 10,951.51 | 7,963.48 | 13,939.54 |
| N | 411 | | |

In Table 5, we explore how grade and salary respond to one's education, gender, and years (experience) spent at the present job. Do merits matter in grades assignment, for example? Model 1 presents the partial effects of these factors on grade. Models 2 and 3 present the same effects on salary level, with Model 3 a modification of Model 2. Model 1 indicates that education is consequential for a pay grade. Compared to those with no or primary education, those with secondary school certificate or diploma enjoy 1.4 grade points advantage. This is even higher for university educated–4.3 additional grade points. Note that the higher the grade the higher the pay in the South Sudan's oil and gas sector.

Model 2 shows that university education and experience are the most important in salary allocations. University education results in $806.42 additional earnings per month. But experience reduces such by nearly $200 per month. In Model 3, the effect of education on salary fades when grade is added to the estimation. This is because grade and level of education are strongly correlated. In this model, experience continues to nag earnings, a loss of $124.9 a month. An additional grade unit increases one's monthly salary by $260.

Table 5. Grade and salary predictors

| | (1)<br>Grade | (2)<br>Salary | (3)<br>Salary |
|---|---|---|---|
| Education (ref = No education/primary) | | | |
| Diploma | 1.444*** | 210.567 | -191.425 |
| | (.423) | (213.639) | (187.375) |
| University | 4.304*** | 806.424*** | -312.057 |
| | (.396) | (198.023) | (201.298) |
| Unknown | 2.158*** | 272.875 | -286.747 |
| | (.709) | (414.485) | (359.73) |
| Gender (ref = female) | | | |
| Male | .706 | 339.652 | 160.343 |
| | (.62) | (306.191) | (263.3) |
| Experience | -.203** | -186.499*** | -124.916*** |
| | (.083) | (42.172) | (36.671) |
| Grade | | | 260.006*** |
| | | | (25.091) |
| Constant | 9.634*** | 2582.048*** | 18.277 |
| | (.983) | (492.949) | (490.022) |
| Observations | 326 | 303 | 303 |
| R-squared | .376 | .156 | .381 |

*Standard errors are in parentheses*

**** p<.01, ** p<.05, * p<.1*

## 4. **Conclusion and recommendations**

We have reviewed the Petroleum Act, 2012, particularly the clauses on local content. We have also analyzed the workforce data from two oil operating companies in South Sudan. We reveal several loopholes in the local content law. Primarily, the Act is ambiguous on targets, impeding attempts at monitoring and evaluating progress. Second, there are neither penalties nor incentives attached to requirements enforcement. Third, there is no institutional arrangement to implement the local content requirements.

Nevertheless, over 80% of the analyzed workforce is composed of South Sudanese, partially meeting Article 46(1) of South Sudan's Labor Act, 2017. However, the expatriates are paid exceptionally higher salaries than the South Sudanese. In other words, while South Sudanese constitute over 80% of the workforce, foreigners benefit more in terms of earnings. This level of disparity in earnings, enormous as we have revealed, is hardly justifiable. It exhibits an extreme form of exploitation, not a mutually rewarding partnership. This revelation ultimately calls for benefits audit in the oil and gas sector, engendering a local content policy that is equitably rewarding for the people of South Sudan and their partners.

Moreover, we have discovered that the expatriates are averse to revealing qualifications. According to Article 46(3)(a) of the South Sudan's Labor Act, 2017, only foreigners with rare qualifications, skills, and experiences are granted employment in South Sudan. And for such a foreigner to obtain a work permit, such records must be availed to the Labor Commissioner before taking up employment in South Sudan. That the partners conceal such a crucial information from the government is a violation against the people of South Sudan. The following recommendations are in order.

- Review and amend the local content clauses in the Petroleum Act, 2012. These amendments should include laying out enforcement and monitoring mechanisms, procurement and training requirements, incentives, and penalties. For this, Botswana and Ghana represent good models on the continent.
- Set local content targets in labor opportunities, exploration and production, training, and benefits. Salary disparities should be narrow and based on experience and skill gaps, not nationality, except for the living allowances.
- There is need to define what constitutes a South Sudanese company. Having a registration in South Sudan is not enough. For a company to qualify as South Sudanese, greater (at least 80%) local ownership and 90% local employment should be required.
- Article 46 of Labor Act, 2017, requires that 'all foreign employers present their lists of employees to the office of the Labor Commissioner.' This should be immediately executed in order to protect the nationals.
- There should be a schedule specifying who is considered an unskilled laborer.

- Establish a local content Oversight Commission/Board to monitor and enforce local content requirements, as well as empowering civil society, petroleum union workers, and the media to expose bad practices and hold the partners accountable.
- Finally, publicize annual local content plans submitted to the Ministry of Petroleum, as required by law.

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