

The implementation of a legal framework for access and benefit sharing; A case study of natural gas extraction in Kilwa District, Tanzania.

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1.0 Abstract

The distribution, access, and sharing of direct benefits from extractive companies with host communities is a global concern. This study investigates the difficulties in keeping the legal framework in place for access to natural gas and benefit sharing among local communities. Specifically, this study will examine setbacks in implementing direct benefits like employment, service levy and utilisation of local market. A cross-sectional study design was employed to collect quantitative and qualitative data from 373 respondents and analysed through content analysis and descriptive statistics. The findings revealed that the statutory framework was not properly applied.. It is recommended that local governments should consult with the host community to reach an agreement, which will promote transparency and accountability in the regulations and procedures that allow access and benefit sharing. It is also recommended that the government, in partnership with non-governmental organizations, develop nearby communities with capabilities to meet extractive companies' supply demands.

Keywords: Natural gas, barriers, legal framework, direct benefits, Tanzania

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1.0 INTRODUCTION

Imprecise or poorly structured legal frameworks expose the host community to losing the benefits, in this way, benefit-sharing should be clearly established

in law (Coolsaet & Pitseys, 2015; Ombella, 2018). In addressing such a gap, the international human rights instruments provided a framework for countries to follow in ensuring that the advantages from shared resources are distributed equally (Brink, 2013). The Convention on Biological Diversity (CBD) of 1993 was the first international agreement to address access to and benefit-sharing (ABS) in a comprehensive way. The CBD's third goal ensures that the advantages derived from the use of inherited resources are distributed fairly and equally.

The Convention established criteria for access and benefit-sharing through bilateral contacts and on a case-by-case basis, with access granted on mutually agreed terms and with the community's prior informed consent (Brink, 2013; Giuliano & Blockchain, 2019). The ABS agreement must be arranged with the country of origin and local communities holding it, according to the convention. The CBD's Article 17(7) requires resource-rich countries to obtain and share monetary or non-monetary benefits as compensation for the environmental harm of the host populations. As a result, various authors globally have advocated for locals to receive the benefits as a result of adequate legal coverage of community needs because the Convention serves as a practical policy tool for increasing social inclusion, improving local livelihoods, and reinforcing social equality as a means of fostering sustainability (Wynberg & Hauck, 2014; Arkan Oil Watch 2013; Humphries et al. 2022).

The Nagoya Protocol on Access to Genetic Resources, signed in 2010, emphasized ABC even further. The Nagoya Protocol aimed to aid the CBD's third goal, which stated that each state should take legal or policy steps under domestic law to ensure that the local communities benefit fairly and equitably from the exploitation of genetic resources. Article 6 of the Nagoya Protocol lays the groundwork for access to natural resources and traditional knowledge, requiring prior informed permission and mutually agreed-upon terms. The benefit-sharing should be enshrined in formal agreements that spell out monetary and non-monetary rewards, as well as monitoring and compliance (Humphries et al., 2022). The rights of indigenous people to prior consultation and consent are also codified in the international law in ILO 169 and ILO 169A.

As a result of CBD and Nagoya Protocol guidance is that the law should lead ASB, international law principles such as *Pacta Sunt Servanda* (agreements must be kept and enforceable) have become crucial legal weapons of convincing investors to share the profits with the host society (Crafa et al., 2021). This means that any treaty in force is binding on the parties and must be implemented in good faith due to the power imbalance between the investors and host countries in order to ensure transparency and the mapping of actions into legal-institutional outcomes (Lemme & Blockchain, 2019; Crafa et al., 2021).

Four separate components should be recognized in the assimilation of this principle in the mining contract between the government and the extractive: agreement, licenses, violations, and obligations. As a result, companies must be respected, and benefit-sharing agreements must be applied to the host communities. Permissions, it has been said, convey empowerment and the ability to carry out an action at a specific stage. Prohibitions, on the other hand, refer to the ban of acting, while responsibilities are recast as promises made within a specified time (Radin, 2017). The above elements enable mining corporations to carry out their legal duties and promises regarding access and benefit-sharing with the communities.

On the other hand, when carrying out agreements, the Principle of Good Faith and Prohibition of Abuse of Rights requires contracting parties to be true and honest in their intentions (Hesselink, 2010) despite the previous material claiming that the international law norm of good faith is difficult to establish (Crafa et al., 2021). This approach, on the other hand, emphasizes the *Pacta Sunt Servanda* principle, which stipulates that while parties must adhere to the binding contract, they must also be truthful in carrying out the extraction contract (Reinhold, 2013).

This principle demands contractual parties to be sincere and honest in their intentions when carrying out agreements, as a breach of the duty of good faith may result in the contract being declared invalid (Hesselink, 2010; Apaydin, 2019). This concept emphasizes the need for the parties to adhere to the binding contract and being truthful when carrying out the extraction

contract. From an international perspective, it is unclear if Tanzania's legislative framework for natural gas extraction allows communities living near mining sites to enjoy and share advantages as indicated in the international treaties. Tanzania joined the Nagoya Protocol in 2018 and ratified the Convention on Biological Diversity (CBD) in 1996. Tanzania thus participates in international access and benefit-sharing efforts. The idea of perpetual sovereignty over natural resources, on the other hand, allows the state to enter into international agreements by implementing laws and regulations that govern resource access and benefit sharing within the country (Kamuli, 2017; Ombella, 2018).

Minerals such as oil and gas are managed by the United Republic of Tanzania, according to Article 4(3) of the Constitution. Tanzania's commitment is represented in Article 9(c) of the 1977 Constitution, which addresses the concept of benefit sharing as it is expressed in the international law norms. According to this article, the advantages of natural resources such as minerals, oil and gas should be diverted towards human advancement, specifically the elimination of poverty, illiteracy and disease. The 2015 Natural Gas Policy, which called for the use of natural gas, was built on the foundation of these constitutional directives. Companies must respond differently to women, men, children and the underprivileged groups in order to provide other livelihood options such as eccentric power generation for residential consumption, employment, training, and investing in locally produced goods and services. This means that Tanzania's Natural Gas Policy aimed to help expedite the country's social-economic transformation for people of both genders. Direct benefit sharing in Tanzania, as in other African countries such as Mozambique and Nigeria, is controlled by legislation based on these foundations (Wall & Pelon, 2011; Tysiachniouk & Petrov, 2018).

1.1 Implementation of mining regulations in Tanzania

Tanzania follows international laws and regulations through national legislation and bilateral investment treaties (Ombella, 2018). The Extractive Companies must sign and abide by the terms of the benefits sharing in the operating agreement, namely the Production Sharing Agreement (PSA), as stipulated in section 219 of the Petroleum Act. The Production Sharing Agreement (PSA) between extractive companies and the government is signed on behalf of

the government by the National Oil Company (N.O.C.), formerly known as the Tanzania Petroleum Development Corporation (TPDC). One of the conditions that has been demanded is how extractive firms will effect direct benefit sharing with host communities (Peng & Poudineh, 2017). Tanzanian regulations require license holders, contractors and subcontractors to contribute to the local community's economic development. In this way, within the PSA between the government and Songas and Pan African Energy, there are mandatory requirements for the benefits flow to the host communities in terms of employment, education, scholarships, skills training and technology transfer to locals, utilisation of the local market and preparation of a credible corporate social responsibility plan. Sections 220, 221 and 222 of the current Petroleum Act No. 21 of 2015 are read in conjunction with Section 97(1) of the Land Act of 1999 and Section 7(1) Part II of the Act of Local Government Finance Act of 1982. These sections directed that during land acquisition, landowners must be appropriately paid for the property seized for the construction of the gas projects and pay a service levy of 0.3 per cent to the relevant local authority, with 20 per cent of the money going to the host communities as benefits and utilised for economic growth and environmental recovery.

Further, Section 219 (1- 4) of the Petroleum Act of 2015 directs license holders, contractors, and subcontractors to utilise goods and services manufactured and accessible in Tanzania. If products and services are unavailable in Tanzania, extractive industries must rely on multinational corporations that have formed a joint venture with local enterprises to suit their needs.

To ensure the long-term use of Tanzanian goods and services, the law requires contractors and subcontractors to prepare and submit to the Public Utilities Regulatory Authority (PURA) a procurement plan for at least five years outlining how they intend to use services such as insurance, financial, legal, accounting, and health matters, as well as goods manufactured in Tanzania. To address access and benefit-sharing and ensure revenues contribute to sustainable development and poverty reduction in communities surrounding mining areas, the government enacted the Extractive Industries Transparency Initiatives (TEITI) Act in 2015, directing extractive companies to be transparent in the implementation of the benefit-sharing principle. In this context, ECs

are expected to provide the TEITI Committee with a report on adopting local content and corporate social responsibility; failure to do so results in a penalty (TEITI, Section 15.1).

Tanzania enacted a Local Content Policy for the Oil and Gas Industry in 2015 to resolve market inefficiencies and ensure competitiveness. Local content regulations are essential for benefit sharing since they indirectly generate employment and business. This is another area where Tanzanians may benefit indirectly from the natural gas business. The Local Content Unit is in charge of, among other things, developing the capacity of local suppliers to meet international standards while delivering services in the oil and gas sector.

Different authors investigating the legal framework of benefit-sharing natural gas like Bishonge et al. (2018) examine the existing legal and institutional framework for energy on oil and gas resources and their importance to socio-economic and political growth. On the other hand, Ombella (2018) investigated the legal obligations of Tanzania in the oil and gas sector under international economic laws, and Breakthrough Attorneys (2015) describe the legislative framework of the natural gas industry. Unfortunately, none of these researchers investigated the implementation of access and benefit-sharing of direct advantages of natural gas production in Tanzania from an international, national, and community-level perspectives. Thus, in this article, emphasis is placed on understanding the factors that limit the implementation of a legal framework on access and sharing of direct benefits to the host communities. The study specifically looked at the restrictions in implementing direct benefits such as employment, service levy, and utilization of the local market.

1.2 Conceptual framework for benefit sharing in Tanzania

This study is based on the overarching notion of a legal framework for transferring benefits from the extractive industry to the surrounding communities. The Petroleum Act No. 21 of 2015 mandates extractive enterprises to enter into a Production Sharing Agreement (PSA) with the government via TPDC. Extractive businesses must demonstrate how they will share direct advantages such as employment, education, training, technology transfer to locals, the use of local markets and responsibility for community closure.

As a consequence, the Local Government Finance Act of 1982 was enacted. Section 7(1) of Part II of the Act requires extractive firms to contribute 0.3 per cent of their yearly earnings to the Local Authority, with 20 per cent of the money going to the relevant wards for local economic development and environmental recovery. Furthermore, Section 97(1) of the Land Act of 1999 required investors to pay a fair and reasonable price for land seized for the construction of gas projects. However, the money made by locals for land acquired for natural gas extraction was not examined in this study. In this context, the study looked at the barriers communities face in gaining direct benefits from the extractive sector.

2.0 METHODOLOGY

This research was carried out in Kilwa District, which is one of the administrative districts of the Lindi Region in Tanzania's southernmost region. The District is between 8° 58' South and longitudes 39° 38' east. The research was carried out in Songosongo Ward, which is located 247 kilometres from Dar es Salaam and has a population of 3 032 people, and Somanga Fungu Ward, which is located 217 kilometres from Dar es Salaam and has a population of 10 161 people (Nakumira, 2011; URT, 2013). Because of the availability of natural gas extraction activities, the two wards were purposefully chosen (Songas, 2001).

The study involved 373 respondents who were randomly sampled in cross-sectional research whereby data were collected at one point in time as the design was effective in terms of time and management (Babbie, 1990; Bailey, 1998). Data from the questionnaire and observation were triangulated through eight Focus Group Discussions (FGD) to reveal the truth of the information collected. Due to natural gas extraction activities, purposive sampling was employed to select Wards and villages. Households were randomly selected from the village register with the aid of village governments. The selection of households was based on whether the household head was a man or a woman. This method allowed equal opportunities for every household head to be selected (Kothari, 2004).

Primary data were collected using a questionnaire administered to 373 respondents to understand employment opportunities, services levy, the

market of goods and services as direct benefits. The questionnaire was pilot-tested with 30 randomly selected respondents from Kilwa Kivinje as they share similar characteristics with Somanga Fungu and Songosongo. This was important for ensuring the instrument's validity (Msabila et al., 2013). Secondary data consisting of International human rights instruments and domestic regulations contained useful information on legal framework on access and benefits sharing and information was obtained from different government offices and the internet. Qualitative data were reduced into topics and subtopics through coding and condensing the codes to reflect appropriate objectives.

3.0. RESULTS AND DISCUSSIONS

3.1 Community engagement before extraction activities

ILO 169 and the United Nations Declaration on the Rights of Indigenous Peoples include indigenous peoples' rights to prior consultation and consent before resource utilization. The findings in Figure 1 indicate that most (62%) of the respondents agreed that they were not engaged or consulted before extracting natural gas to gain a social license to operate from host communities. This finding is consistent with the finding in a study by Nkolo (2018) which revealed that the nearby community was aware of the gas finds but had limited knowledge of the topic. In addition, Poncian and Jose (2019) observe that Tanzania's national control of natural gas limits opportunities for effective community involvement. As a result, just 38 per cent of the respondents were aware of natural gas norms and regulations, even though most are leaders at the ward and local authority levels. This also implies that the local consent or social license to operate was not fully achieved.

3.2 Description of Respondents of employment status

The findings in Table 1 show that most (89.5%) of the respondents were not employed, while extractive companies employed a small proportional (10.5%) of respondents. The finding indicated further that a large proportion (88.5%) of the respondents were not employed at the household level, except a small proportion (7%) of men. One key informant revealed said,

“Women are more excluded than men due to the nature of extraction activities, such as a lack of appropriate education including being female engineers, unfriendly environment, transportation facilities, facilities are limited to include family, there are no baby care facilities thus discouraging women from working, and offices are located in remote locations.”

TABLE 1 Description of Respondents of employment sharing status

Variables	Frequency	Percent
Employment		
Not employed	334	89.5
Employed	39	10.5
Member of Household employed		
Husband	26	7.0
Wife	9	2.5
Relative	3	.8
Not employed	330	88.5
Children	5	1.3
Whether household get information on job opportunities		
No information	230	61.7
Well informed	143	38.3
Source of information about employment opportunities		
Village office	56	15.0
Village employment committee	7	1.9
Through friends and relatives	39	10.5
Unsure whether extractive companies offer employment	270	72.4
News paper	1	.3

One female worker added:

“When I walked to the neighbouring workplace to have my lunch, some people spoke about me as to how women work in this industry, the issue being the sort of clothes and environment.”

It was agreed after a focus group discussion that;

“Most extraction firms favour males, even if there are certain tasks that do not require particular education or masculinity, such as dishwashing, lawn mowing, and cleaning, yet women are often barred.”

The findings also show that a small proportion (38.3%) of the respondents were well informed of the availability of employment opportunities offered by extractive companies. Most of them got information at the village office and 61.7 per cent of the respondents did not have any information on job opportunities. Thus, these findings imply that the mere existence of rules and regulations does not guarantee that work opportunity benefits would flow from EC to nearby communities. This finding is congruent with the findings in a study by (2008) who concludes that natural resource exploitation is harmful to women and males by failing to offer them new work prospects. According to World Bank research, community employment in extractive businesses is limited and seldom surpasses 10 per cent of the workforce (Eftimie et al., 2009). This implies further that community labour market involvement in extractive operations is minimal.

Table 2. Factors limiting the implantation of the access to employment

Variables	Frequency	Percent
Lack of appropriate education and skills	150	40.1
Lack of information	129	34.5
Language problem	4	1.1
Corruption (money/sexual)	26	7.0
Nepotism	23	6.1
Favouritism (friends and relatives)	40	11.2
Total	373	100

The findings in Table 2 show that about 40.1 per cent of the respondents cited the lack of appropriate education and skills related to extraction activities as a major barrier in accessing and sharing employment benefits from mining companies. This finding is consistent with the findings in a study by Haman (2003), who observed that getting a job in the mining industry can be difficult for communities living near mining sites due to failure of meeting educational requirement, a lack of expertise in the sector, the prevalence of cultural obstacles and prejudice at work, and the imposition of work hours that are unfamiliar to people (for example, the fly-in, fly-out system). This survey also indicated that 34.5 per cent of the respondents lacked information about available job opportunities from mining businesses, owing to favouritism and nepotism since much information about mining operations was available at the village office, where not everybody could have access (Table 2). Surprisingly, a small proportion (1.1%) of the respondents lacked job opportunities due to language barrier. This connotes that some people manage to secure employment but fail to enter into contracts due to inadequate communication skills.

3.3. Access and Sharing Service Levy Benefits from Extractive Companies

The findings in Table 3 indicate that more than half (59.1%) of the respondents knew that mining businesses pay a service charge to the local government and relevant ward. During an interview with the Executive Officer of Songosongo Ward and the evidence from records revealed that from 2012 to 2015, Kilwa District Authority paid Songosongo Ward 139.4 million out of 1.6 billion in service levy. This demonstrates that just 8.2 per cent of the money was paid on a three-month interval from 2012 to 2015, while 11.8 per cent of the service levy cash, amounting to 199 million, was not paid to the relevant wards. This means that it is the discretion of the local authority to decide when and how to distribute the said money to the respective ward. Regrettably, Songosongo Ward owed TZS 158 million to install power in the village.

Table 3. Payment of Service Levy for the Development

Variables	Frequency	Percent
Service levy paid to the ward		
Yes	224	59.9
No	150	40.1
Kind of Projects Funded by Natural Gas Companies		
Women empowerment projects	4	1.1
Construction of hospitals	71	19
Construction of schools	138	36.9
Investment in marine transport	16	4.3
Scholarship to students	33	8.8
No funded project	115	30.7

As a result, all service levy payments collected from the Local Government Authority were diverted to debt repayment. This suggests that, despite the community receiving free energy, they have not witnessed any other development on their island. In contrast, from February 2014 to December 2015, Somanga Fungu Ward reported to have received nothing from Kilwa District Council as a service levy. A similar finding is reported in a study by Ngowi (2015) that the gas profits received by Kilwa District Council from PanAfrican Energy are utilised for various development and recurring spending purposes. One respondent had this to say,

"Somanga Fungu Ward hosts a large gas plant and a natural gas servicing station from Songosongo, and as a result, according to the legislation, is entitled to a share of the 0.3 per cent service fee, but from the commencement of natural gas production in 2014, our ward has gotten nothing."

As observed by Wynberg and Hauk (2014), power imbalance among stakeholders (local authorities against communities) impedes equitable

allocation of natural resource benefits. From the overhead view, we can see that the distribution of service levy, a lack of downward accountability and transparency, elite capture of benefits, and abuse of power are all significant barriers to communities' access to resource benefits. This is in contravention of the Tanzania Extractive Industries (Transparency and Accountability) Act (TEIA) of 2015, which require both extractive companies and Local government to be transparent and accountable.

The findings in Table 3 show that a sizable proportion (36.9 %) of the respondents believed that access to and sharing monetary advantages from extractive firms helped the education sector through the construction of schools and the provision of scholarships to students. At the same time, about 30.9% of respondents were unaware of the availability of fund flow from extractive companies. Consequently, 19 per cent of the respondents reported that money was used to build the current hospital at Nangurukuru and staff houses at Kilwa Masoko. This indicates that the service levy collected by ECs is spent on development expenditures that benefit all members' areas.

3.4 Utilisation of local market for the extractive industry at the community level

The respondents were asked to indicate the products frequently purchased by extractive companies in their area. The majority (83.9%) of the respondents could not sell anything to the extractive industries. This contradicts the legal obligation stipulated in Petroleum Act Section 21, also incorporated in the Production Sharing Agreement (PSA), which mandates contractors and subcontractors to employ locally produced products and services before importing comparable goods and services from outside. The findings reveal further that small proportion (4.5% and 2.2%) of the respondents offered building supplies and clean water to the extractive companies. One respondent said,

"Surprisingly, several extractive corporations have acquired fish from Mwanza, even though our coast is rich in fish resources across the south-east coast".

Table 5 Goods and services purchased from close communities

Goods and service	%
No supply of goods and services	83.9
The utilisation of local workers	9.1
Supply of building materials (stones)	4.5
supply of freshwater	2.2

It appears that the majority of community residents were unable to sell food items to extractive corporations such as vegetables, fish, meat, or any other products found in their vicinity. This is contrary to section 15.1 of Production Sharing Agreement between Government, and Panafrican Company stipulating that,

The company should prioritise the procurement of Tanzanian products and materials; however, such items must be of acceptable quality and accessible on a timely basis in the required quantity on competitive terms.

In response to this trend, one key informant said,

"In our organisation, we have personnel from different nations." Caterers must fulfil many international hotel criteria due to the presence of global staff to be considered for such a contract. However, most local food producers do not meet such standards."

According to observations, TPDC subcontracted the operations of their cafeteria in Songosongo to a local company from Dar es Salaam. However, Tanzanian workers solely utilised the cafeteria, while experts from other nations cooked their meals. This suggests that communities near ECs received fewer advantages since they could not satisfy international standards in terms of quality, quantity, and timely delivery of commodities due to a lack of capital and expertise in offering goods and services.

4.0 Conclusions and Recommendations

According to the findings, Tanzania's extraction sector abide by international standards in terms of access and sharing direct benefits by enforcing different laws, rules, and regulations that are clearly specified in the production sharing agreement. Nearly all communities were not adequately engaged or consulted prior to the production of natural gas. They did, however, have sufficient expertise about natural gas production, but they were unfamiliar with the norms and regulations that govern access and benefit sharing. The aforementioned setback was found to have influenced the execution of the legislative framework in terms of access and distribution of direct benefits: People living near mining sites struggled to find work due to a lack of education and skills required for extraction activities, as well as an unreliable source of information about job opportunities. It was also revealed that the service charges were not paid in time, that the community and the local government had unequal power to influence payment, and that there was a lack of accountability and transparency. Several local businesses were also failing to meet international standards in terms of goods and services delivery to extractive companies. As a result, the legislative structure in the investigated region is ineffective. This study recommends that before exploration, indigenous people should be properly informed in order to get informed consent and enable the social license to operate. It is also recommended that the Local Authority should pay service levies to relevant wards in time and ensure openness and accountability about usage and flow of the service levy. It is also recommended that the government, in collaboration with non-governmental organizations, should capacitate the neighbouring community through education and awareness raising to enable them meet extractive firms' supply requirements.

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Legal framework

The Convention on Biological Diversity (CBD) of 1992

Nagoya Protocol on Access and Benefit Sharing of 2010

Constitution of the United Republic of 1977

Extractive Industries Transparency Initiatives (EITI) Act of 2015

Land Act of 1999

Local Content Policy for Oil and Gas Industry of 2015

Local Government Finance Act of 1982

Mining Act no 14 of 1920

Natural Gas Policy of 2015

Petroleum Act No 21 of 2015

The National Natural Gas Policy of Tanzania of 2013