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Local participation beyond the law: Gendered employment in Ghanaian oil and gas companies

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ABSTRACT

Oil and gas extraction can promote development through inter-sectoral linkages with the broader national economies. Increasingly, there is an emphasis on revenue management and local content laws aimed at fostering extractive sector-led development in African countries due to the neglect of gender dynamics within the sector. This paper examines the factors that influence women employees' progression into leadership positions in Ghanaian companies in the oil and gas sector using 2 case studies. The findings show gender segregation of work and underrepresentation of women in technical, management, and senior management positions. While underrepresenting women in technical positions is unsurprising, the study shows an equally low representation of women in support roles, often considered a preserve for women. Effectively, there is a stark income inequality between men and women as men dominate the highly paid and strategic positions as compared to women. We argue that while local content laws can promote local participation in the extractive sector, in Ghana, there is a reinforcement of gender asymmetry between men's and women's employment and income. Thus, local content laws must move beyond promoting local participation to ensuring gender-responsive policies and programmes in the oil and gas sector.

1. Introduction

Natural resource exploitation and utilisation can be essential to economic growth, employment, physical investment, and structural transformation of economies (Kotsadam and Tolonen, 2016). The oil industry is a critical driver of global economies, and it encompasses the exploration, extraction, refining, transportation, and marketing of petroleum products (Ablo, 2015). This complex nexus comprises the potential for significant economic transformation and the risks of adverse outcomes (Ablo and Otchere-Darko, 2022). Adopting institutional reforms and legal frameworks to foster local participation can be critical in mitigating the resource curse (Adams et al., 2019; Owusu, 2018; World Bank, 2009).

In 2007, Ghana discovered substantial volumes of crude oil offshore in the Jubilee, TEN and Sankofa fields (Arhin, 2023). The oil and gas discovery has been critical to the economy as total petroleum revenue between 2011 and 2023 stood at about US\$9.85 billion (PIAC, 2023). The industry has become a crucial component of Ghana's economy, contributing to government revenue, employment and foreign investment (Obeng-Odoom, 2015). However, there is an uneven distribution

of the benefits of oil production, undermining the overall impacts of the extractive sector on broader society (Ablo, 2015). Foreign companies' control over most exploration and production activities deepens the industry's enclave character, primarily delinked from the rest of the economy (Ackah-Baidoo, 2012). Due to inadequate technology and funds, local companies are usually disadvantaged and remain at the outer edge of a capital-intensive industry (Ayee et al., 2011). Thus, the Ghanaian economy remains dependent on the export of raw materials, which has slowed growth and caused a debt crisis. In effect, the fiscal linkages (revenues) have not led to any structural changes in the economy. Enhancing local participation can potentially promote inter-sectoral linkages between the oil and gas sector and the broader national economy.

Ghana's Petroleum (Local Content and Local Participation) Regulations, 2013 (L.I. 2204), aims to ensure that a reasonable percentage of the accrued benefits in the petroleum industry remains in the country through local employment, procurement of local goods and services and the transfer of technology to local companies. The law specifies percentages of jobs at various levels that are to be reserved for Ghanaians (Ablo, 2015). One key section of Ghana's Local Content Policy (LCP) is

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training and skill development. Foreign companies operating in the oil and gas sector are mandated to train local employees, which ensures the transfer of critical skills and knowledge. This has equipped local employees with the relevant skills and abilities to enhance their employment in the global market (Ablo and Otchere-Darko, 2022).

The LCP also focuses on increasing local employment, promoting local businesses and ensuring that a certain percentage of resources, contracts and services are sourced domestically. While studies have outlined the dynamics of employment and local businesses in the oil and gas sector, less attention has been paid to gender dynamics within Ghanaian oil and gas companies. Indeed, studies have shown that women are underrepresented in the extractive industry (Baiden, 2020; Gyan, 2013; Nunoo, 2012). Cultural norms drive these gender disparities, coupled with limited access to specialised training and gender biases in hiring and promotion practices (Baiden, 2020; Gyan, 2013) further creating gender gaps in the extractive sector.

As Ovardia (2024) argues, local content policies often prioritise economic inclusion but fail to recognise women's intersectional challenges in male-dominated sectors. Bosky et al. (2022) emphasise that layoffs and organisational practices in the oil and gas industry contribute to gender inequality, particularly affecting women in technical roles. Consequently, there is a pressing need to move beyond legal mandates in local content laws and the general emphasis on the activities of multinational companies to examine the structural barriers hindering women's involvement in the oil and gas industry. This paper seeks to address this gap by exploring gender dynamics in Ghanaian oil and gas companies, highlighting the necessity for a more inclusive approach to local participation that ensures equitable opportunities for all, regardless of gender (Ofosu et al., 2024).

Studies on Ghana's LCP identify key challenges, including inconsistent policy implementation and lack of state continuity, activities undermining local participation (Ayanoo, 2018). While local content laws exist, their sustainability relies on stable government policies and institutional support (Ayanoo, 2018). As part of strategies to promote local content for instance, the government of Ghana with support from some multinational companies established the Enterprise Development Center (EDC) to enhance local capacity (Ablo, 2020). The EDC however could not be sustained as its operation became highly politicised with limited successes in improving local participation in the oil and gas sector (Ablo, 2020). Additionally, the Ghana National Petroleum Corporation (GNPC) has shifted from being a regulator in the initial stages of the oil and gas industry, transitioned to active wealth creation, and today seems to take a revenue distribution role, potentially impacting long-term sectoral development (Tyce et al., 2025). Additionally, the absence of a proactive strategy for local industry growth limits the participation and success of local businesses in the sector (Arthur and Arthur, 2014).

Generally, the extant literature on the extractive sector in Africa has emphasised the resource curse (Asif et al., 2020; Auty, 1994; Siakwah, 2017), with recent studies focusing on local participation, energy security, health and environmental concerns (Ablo, 2015, 2018; Acheampong and Ackah, 2015; Graham et al., 2019; Oppong, 2014). While several studies have focused on local content and participation in Ghana's oil and gas sector (Ablo, 2017, 2018, 2019, 2020; Ablo and Otchere-Darko, 2022), few studies have delved into the gendered outcomes of LCPs in local companies. This study addresses the gap in the literature by contributing to the growing body of studies on local participation, emphasising the interplay of gender and employment dynamics within Ghanaian companies.

Specifically, the paper explores the factors that influence women employee's progress to leadership positions in Ghanaian oil and gas companies. Studies have shown that women's leadership can positively impact organisational performance and governance (Eagly, 2007; Paustian-Underdahl et al., 2014). However, the barriers for women in leadership roles within Ghanaian oil and gas companies remain underexplored. Thus, despite the sector's importance in creating and

sustaining economic development, women experience barriers to entering the labour market, training, and accessing leadership positions (Ablo, 2018). According to Hill et al. (2016), achieving gender equity in leadership positions will enhance fairness and productivity. Drawing on case studies from Ghanaian companies in oil and gas industry, we explore the job types of men and women and the barriers to women's leadership roles within the sector. The paper draws on the social role theory to examine how gender roles shape individuals' experiences and opportunities within the oil and gas sector. The following section discusses the theoretical perspectives followed by the data collection methods, results and conclusion.

2. Social role and gender dynamics in the extractive sector

The paper draws on the Social Role Theory (SRT), which explains the influence of social roles on human behaviour (Bailey and Yost, 2000) to explore gender and employment in the oil and gas industry. The SRT focuses on differences and similarities between men and women based on prescribed social roles within their society (Eagly and Wood, 2016). This paper, thus, sought to understand how cultural norms and values about gender-appropriate roles influence the opportunities for men and women in the oil and gas sector. The SRT explains how gender roles, gender stereotypes, and socialisation contribute to gender inequality in the workplace. Gender roles are societal expectations that assign men and women different characteristics and responsibilities, with men often associated with agentic traits like assertiveness and women with communal traits like nurturing (Heilman and Caleo, 2018). As Ablo (2018) showed, in Ghana, men dominate technical and highly paid roles in offshore work mainly because of gender roles. These roles often dictate that men are the primary breadwinners, while women are expected to manage household responsibilities such as taking care of children (Gyan, 2013). This societal expectation discourages women from pursuing demanding careers in the oil and gas industry, which often require long hours and fieldwork to have enough time to care for their families (Gyan, 2013).

An essential perspective of the SRT is that social roles give rise to gender stereotypes, which influence perceptions of leadership and competence (Schein, 2007). In Ghanaian companies, especially in male-dominated companies, gender stereotypes influence hiring decisions, with employers favouring men for technical roles due to biases about women's capabilities (Bernhardt et al., 2018). Women pursuing leadership positions often face discrimination and negative evaluations, being perceived as incompetent or too aggressive when exhibiting agentic traits such as assertiveness (Eagly and Karau, 2002; Heilman and Caleo, 2018). Leadership is commonly associated with men through the "think manager, think male" bias, further reinforcing gender inequality in managerial roles (Schein, 2007). Agentic traits like assertiveness and competitiveness are associated with men, while women are linked to communal roles emphasizing nurturing and cooperation (Heilman and Caleo, 2018). These stereotypes hinder women's hiring and promotion in leadership or decision-making positions, even when their qualifications match men's (Wrigley-Asante et al., 2022). Additionally, the lack of female role models and mentors in these fields contributes to a reduced sense of belonging and confidence among women aspiring for such roles (Ong et al., 2011; Wrigley-Asante et al., 2022).

The concept of socialization of the social role theory plays a crucial role in shaping career development for both men and women. Through socialization, individuals internalize gender norms from an early age, significantly influencing their career choices and professional behaviours (Adongo et al., 2023; Tabassum and Nayak, 2021). In Ghana, girls are often socialized to prioritize domestic and caregiving roles such as teaching or nursing. This early conditioning fosters a lack of interest and confidence in pursuing science and technical subjects, traditionally regarded as male-dominated fields and as the foundation for engineering careers (Wrigley-Asante et al., 2022) such as the oil and gas sector. Furthermore, societal expectations give girls less encouragement to

excel in STEM (Science, Technology, Engineering, and Mathematics) disciplines. Teachers and parents often unconsciously reinforce these norms by offering more support and resources to boys in these areas (Andoh et al., 2024). As a result, fewer girls pursue higher education in STEM fields, limiting their qualifications for engineering roles (Andoh et al., 2024). Also, many women in Ghana internalize the perception that technical and engineering careers are unsuitable, leading to lower aspirations in these fields (Bosak et al., 2018). This dynamic reduces the number of women applying for and securing positions in the extractive industry (Bosak et al., 2018). With a focus on Ghanaian companies in the oil and gas industry, we explore sociocultural factors and analyse how individuals and organisations internalise social roles that influence the opportunities for men and women to take more technical and highly paid managerial positions.

3. Context and data collection

3.1. Study context

The study focuses on two Ghanaian oil and gas-related companies in the STMA and the EDA in the Sekondi-Takoradi Metropolis (STMA) and Ellembele Districts Assembly (EDA) in the Western Region of Ghana from May to June 2023. STMA is Ghana’s third industrialised city, central export hub, and an oil and gas-related activity (see Fig. 1). The EDA, conversely, is agrarian, producing both food crops and export crops like cocoa and coffee. Despite being rural, the district’s proximity to Ghana’s offshore oil fields has attracted extractive sector-related activities like gas processing and storage terminals.

Company A is a private company located in STMA. Established in 1979, it operates a different oil, gas, and petrochemical business portfolio. The company operates in other West African countries and the Middle East. Their key activities are inspection, repair, and maintenance services. They offer workforce logistics, specialized metal welding, tank cleaning, and handling hazardous materials. Their portfolio includes constructing critical components for FPSO projects and subsea manifolds and expertise in scaffolding and other specialized services. Company B, on the other hand, is a state-owned company headquartered in Accra and is Ghana’s leading mid-stream gas enterprise. Established in 2011 and fully operational by 2014, it manages infrastructure for gathering, processing, transporting and marketing natural gas domestically and internationally. It plays a crucial role in Ghana’s industrial sector, supplying gas for electricity generation. They process various gas products, including lean gas, condensate, LPG, and isopentanes.

3.2. Data collection

The study commenced with collecting and analysing secondary data from two selected companies. This involved reviewing organizational charts, employment records, and gender distribution reports to ascertain the number of men and women at different hierarchical levels within the organizations. Descriptive statistics, including frequencies and percentages, were employed to summarize this data, providing a quantitative overview of gender distribution and establishing a foundational understanding of the gender composition within the organizations.

Interviews were conducted to explore sociocultural, individual, and

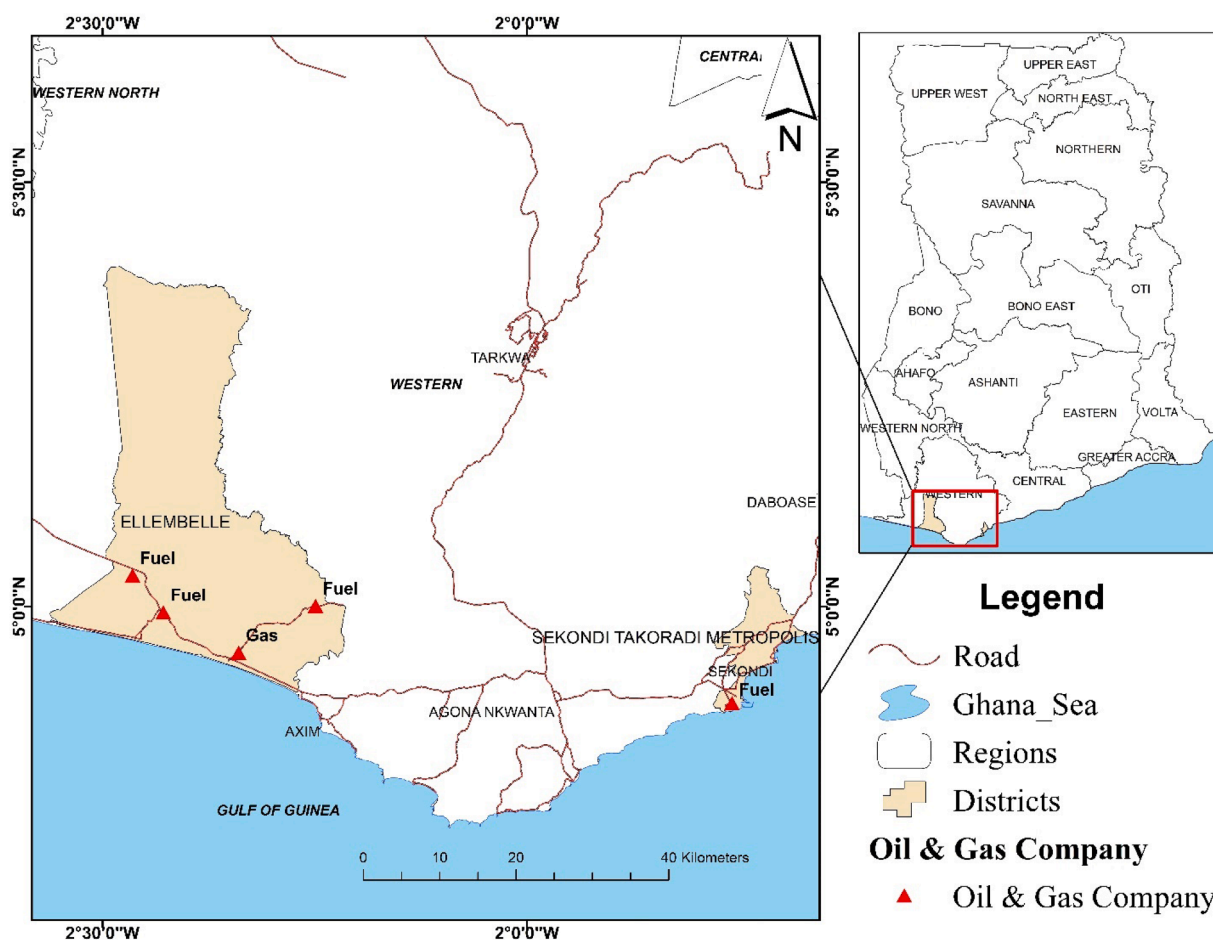


Fig. 1. Map EDA and STMA. Source: RS/GIS Lab DGRD, University of Ghana

institutional factors influencing gender dynamics. A purposive sampling technique was used to select twenty-five (25) participants, which included twenty-one (21) managers, assistant managers, and senior managers. Thirteen (13) from Company B, eight (8) from Company A and four (4) representatives from the Ministry of Gender, Children, and Social Protection and Traditional Authorities in the Ellembele District and Sekondi-Takoradi Metropolitan Assembly. This selection aimed to ensure a diverse and knowledgeable participant group. The semi-structured interviews covered themes related to the underrepresentation of women in the oil and gas sector. They were conducted in either English or local languages, based on participant preference, and transcribed into English for analysis.

The qualitative data was analysed thematically, which involved creating transcripts, generating initial codes, compiling codes into themes, reviewing and refining themes, and defining and labelling themes (Braun and Clarke, 2006). Thematic analysis facilitated a nuanced understanding of the qualitative data and provided illustrative quotes related to the study’s objectives. To enhance the validity of the findings, data triangulation was employed. This involves comparing information from theories and other studies, which help reduce bias and strengthen the credibility of the findings (Creswell and Creswell, 2017). Ethical standards were rigorously upheld throughout the study. Informed consent was obtained from all participants, who were assured of the anonymity and confidentiality of their responses. Participation was voluntary, and participants were informed that the data would be used solely for research purposes. Measures were also taken to protect participant privacy, ensuring that identities and organizational affiliations were not disclosed (Kirchherr and Charles, 2018).

4. Results and discussion

4.1. Gender and representation in the case study companies

Studies have consistently shown that gender representation within various companies is crucial in shaping economies and fostering inclusive growth (Smith et al., 2018; Johnson & Reimer, 2019). The oil and gas sector, traditionally male-dominated, is no exception. Including women in this industry has substantially benefited the individuals involved and the broader economic landscape (Von Lonski et al., 2021). Gender diversity can drive innovation, improve decision-making and enhance the overall performance of organizations (Triana et al., 2014). However, despite these recognized advantages, women remain

underrepresented in the oil and gas sector. Barriers such as gender biases, lack of mentorship, and limited access to professional networks persist and hinder women’s full participation in this field (Nguyen, 2023). An analysis of data from the two institutions found an underrepresentation of women in private and state-owned companies (see Fig. 2). While women can be found in support and administrative positions, they are noticeably absent from senior management roles, especially in operations and technical departments. This underrepresentation is more evident in Company A, which shows fewer women in senior management and key technical positions. Although male-dominated, Company B has better female representation in support and technical roles than Company A due to their proactive gender policies, such as the maternity leave and flexible work arrangements.

When we focus on management positions, it is also apparent, as shown in Fig. 2, that men dominate senior management positions compared to women.

In Table 1, 87.8 % of women, compared to 73.3 % of men, possess less experience and are early career professionals. Comparatively, more men (26.7 %) than women (12.2 %) have worked between 6 and 21 years in the companies. As Costa and Gianecchini (2007) argued, the most reliable predictor of career advancement in management is an individual’s experience. This explains the situation in these two companies in the sense that more men are in senior positions than women, as shown in Table 1, and further clarifies the data in Fig 2. We argue that as fewer women accumulate the necessary experience, the pipeline for female leadership in Ghana’s oil and gas sector is limited.

This finding aligns with studies which show that men dominate leadership positions in the extractive sector due to their high level of experience in this field compared to women (Baah-Boateng et al., 2022; George and Braimah, 2021). The employment dynamics are further explained by Eagly and Wood (2016) view that societal expectations often enable men to pursue careers in companies perceived as masculine, such as the extractive sector, while women are encouraged to enter feminine professions. These gender norms result in fewer women entering the extractive industry, and those who do face additional barriers that limit their ability to gain comparable experience (Ablo, 2018; Eagly and Wood, 2016).

4.2. Factors influencing the under-representation of women

In Ghana, traditional gender roles assign women primary responsibility for domestic and caregiving duties (Ablo, 2012), creating

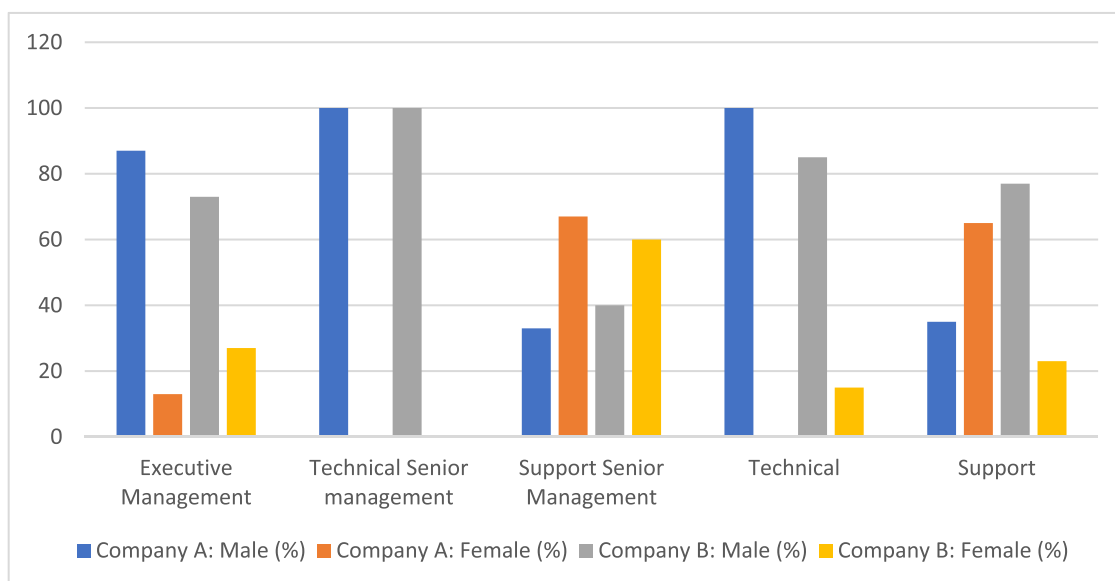


Fig. 2. Gender disparity in job categories.

Table 1
Gendered dynamics of employment in Ghanaian oil and gas companies.

Gender				
Years of experience	Female (%)	Male (%)	Total (%)	
1 - 5	87.8	73.3	78.0	
6 - 10	10.2	16.8	14.7	
11–15	0.0	7.9	5.3	
16–20	0.0	2.0	1.3	
>21	2.0	0.0	0.7	
Total	100.0	100.0	100.0	
<i>The work environment is less accommodating for women and Gender</i>				
Gender				
		Female (%)	Male (%)	Total (%)
The work environment is less accommodating for women	Strongly agree	14.3	12.9	13.3
	Agree	55.1	47.5	50.0
	Neutral	12.2	22.8	19.3
	Disagree	12.2	13.9	13.3
	Strongly disagree	6.1	3.0	4.0
Total		100.0	100.0	100.0
<i>Differences in the way women and men are promoted</i>				
Gender				
		Female (%)	Male (%)	Total (%)
There are differences in the ways women and men are promoted	Strongly agree	12.2	18.8	16.7
	Agree	38.8	40.6	40.0
	Neutral	14.3	20.8	18.7
	Disagree	18.4	10.9	13.3
	Strongly disagree	16.3	8.9	11.3
Total		100.0	100.0	100.0
<i>Mentorship opportunities</i>				
Gender				
		Female (%)	Male (%)	Total (%)
There are formal mentorship programmes	Strongly agree	2.0	18.8	16.7
	Agree	20.4	40.6	40.0
	Neutral	30.6	20.8	18.7
	Disagree	38.8	10.9	13.3
	Strongly disagree	8.2	8.9	11.3
Total		100.0	100.0	100.0

Source: Fieldwork (2023).

challenges in balancing work and family responsibilities. Organisational factors, such as discriminatory practices and inadequate workplace policies, are critical in maintaining gender imbalances (Dako-Gyeke and Owusu, 2013). These challenges are not only evident in politics, education, and mining (Akotia and Anum, 2015; Odame, 2010; Seidu et al., 2020; Yeboah-Banin et al., 2024) but also significantly impact the oil and gas sector, as demonstrated by this study. The subsequent sections discuss these factors in detail.

4.2.1. Sociocultural factors

The study found that work-life balance remains a significant challenge that heavily influences women’s participation in the oil and gas sector. Many women struggle to balance family life with demanding careers, often leading them to put their careers on hold to raise children. Motherhood responsibilities, for instance, influence women’s career advancement in the oil and gas sector. Juggling between the role of taking care of a child and fulfilling the leadership duties in the oil and gas sector was described by some female managers variously as a “daunting task and stressful”.

Balancing work and family responsibilities is a significant challenge for women’s career advancement in the extractive sector. One female manager from Company B had to stop work due to pregnancy. The participant further explained that such interruptions can be career-threatening as “one might take a break in her career and be unable to rise again” (Female Manager, Company B, June 2023). Another female participant from Company A explained that “travelling to or being at the site for long hours and leaving the kids behind is challenging. If one’s kids are too young, that individual must carry them along, and this could be very challenging” (Female Manager, Company A, June 2023). Society has deeply rooted cultural norms that assign caregiving roles predominantly to women (Eagly and Wood, 2016). In Ghana’s male-dominated oil and gas sector, long hours, site visits and frequent travel pose challenges for women. The extended family system traditionally supported working mothers, but urbanization and nuclear family setups have reduced this support. As a result, many women struggle to balance work and family responsibilities, limiting their career advancement.

Culturally, Ghanaian society continues to assign leadership and assertiveness to men, while women are often expected to embody nurturing and supportive roles (Payne, 2024). When these societal role expectations are carried into the workplace, they limit career aspirations and opportunities for women, reinforcing the traditional division of labour (Payne, 2024). In this study, traditional societal expectations regarding the appropriate roles and behaviours for men and women influence how individuals, especially women, are perceived and evaluated in the workplace. When a man displays assertive or authoritative behaviour, such as shouting at people to perform their duties, it is readily accepted or perceived as a regular part of his leadership style. However, when a woman displays the same behaviour, she is judged more critically and negatively and labelled with derogatory terms. Company B’s Environmental Health and Safety officer notes this issue: “A man might walk in and shout at people to perform their duties, but when a woman does the same, she is tagged as arrogant or power drunk.” (Female Manager, Company B, June 2023)

Similarly, a female manager from Company A recounted her experience of persistent gender bias in her leadership role. She is often labelled as bossy or difficult when asserting herself or making firm decisions. According to her, when her male counterparts display the same level of assertiveness, they are praised for their strong leadership and such acts are seen as “normal”.

This attitude and double standards faced by women in leadership roles were further explained by a female Human Resource Manager of Company A as follows:

Some men in this organisation do not want to submit to a woman boss. Sometimes, when a woman is in a leadership position, she is expected to act like a man. When you act like a man in that role..... When you are hard, they will say oh, you are too hard; when you are soft too, they will say, oh, you are too soft. But when the men are hard, no one has an issue with it because they see it as normal, but when a woman’s boss is hard, they will say oh, she is too stiff, she is being difficult, she is this (Female Manager, Company A, June 2023)

A similar view was shared by an official of the Ministry of Gender and Social Protection: “When women take decisive actions or assert their authority, they are often criticised as being unladylike or too domineering, while men displaying the same traits are praised for their leadership and decisiveness” (Interview, Ministry of Gender and Social Protection, June 2023). Thus, in Ghana, where cultural values and traditions are deeply respected, men are often seen as natural leaders, while women who step into leadership roles face heightened scrutiny. Therefore, the few women who rise to management positions must navigate a minefield of diverse sociocultural expectations. Those who are assertive are labelled difficult; if they are soft, they are seen as ineffective. This constant scrutiny limits their ability to advance and perform their roles confidently. These findings are consistent with studies which indicate that women’s ability to advance in their careers is restricted by constant scrutiny and double standards (Ablo and Otchere-Darko, 2022; Ovadia,

2013; Tordo and Anouti, 2013). This limits their confidence and effectiveness in their roles, contributing to their underrepresentation in higher-level technical and management positions (Ablo and Otchere-Darko, 2022; Ovadia, 2013; Tordo and Anouti, 2013).

4.2.2. Individual factors

Personal interest emerged as a factor influencing the lower representation of women in management and senior management positions. This was indicated in the study as women often prefer people-oriented jobs, such as administration, public relations and international relations, which typically involve office-based work. In contrast, men tend to gravitate toward more challenging, field-based roles like engineering.

According to a female Manager in Company A,

While many of my male counterparts like technical positions, I've found fulfilment in roles that allow me to connect with others and foster collaboration. It's not about shying away from challenges but recognising where my strengths lie and carving a path that aligns with my passion for interpersonal connections (Female Manager, Company A, June 2023).

The findings reveal that personal interests in Ghana's oil and gas sector, shaped by biological differences and socialization, significantly influence career paths. Women often prefer people-oriented, office-based roles in administration or public relations. At the same time, men gravitate toward field-based, technical roles like engineering, reflecting societal norms that promote assertiveness and leadership for men (Diekmann and Schneider, 2010).

4.2.3. Institutional factors

Organizations must provide inclusive work environments that support women's recruitment, retention, and advancement in the oil and gas sector (Arthur and Arthur, 2014). Studies have shown that the underrepresentation of women in extractive companies in Ghana, factors such as cultural biases and gendered divisions of labour, leads to unequal treatment in hiring, promotions, and salary (Baah-Boateng et al., 2022; Faanu and Graham, 2024; Kansake et al., 2021). Additionally, retention challenges post-childbirth, unsafe working conditions, and discrimination in career progression further exacerbate the issue (Baah-Boateng et al., 2022; Faanu and Graham, 2024; Kansake et al., 2021). The study identified several institutional factors hindering women's participation and advancement in Ghana's oil and gas sector.

For instance, the physically demanding nature of Science, Technology Engineering and Mathematics (STEM) careers in Ghana, particularly in the oil and gas sector, presents significant barriers to women's participation (Wrigley-Asante et al., 2022). Table 1 shows worker's perceptions of the nature of the work environment in the oil and gas sector. Both male and female workers (58.7 %) indicated that the working environment is less accommodating for women than for men, with women agreeing at a higher rate than men, while 24.6 % disagreed and strongly disagreed. This indicates that unfavourable work environments for women hinder gender equality in the extractive sector in Ghana (Faanu and Graham, 2024; Yakovleva et al., 2022).

The long working hours and uncomfortable personal protective equipment (PPE) disproportionately affect women's ability to take up well-paid technical positions. A male manager in Company B observed that "the PPE is so thick, and it is so hot. Honestly, when the weather is hot, and you wear that, you will be drenched in sweat. Also, the boots are heavy. It's problematic, and the ladies feel it more." (Male Manager, Company B, June 2023). The Assistant Manager further echoes this view about the nature of the work environment in charge of pipelines in Company B: "Our control room does not have females. We normally do long hours, so it is a little strenuous on the body. We spend about twelve hours in the control room. So, if you go at 8 am, you close at 8 pm." (Male Assistant Manager, Company B, June 2023)

These accounts underscore how the physically demanding nature of work, long hours, and the design of PPE contribute to a gender imbalance favouring men in the oil and gas sector. As the female respondent in

Company A argued, "A job like welding may appear straightforward on the surface, but the reality is far from easy. The demands of precision, the physical exertion, and the need for unwavering focus under challenging conditions make it a truly demanding profession." (Female Manager, Company A, June 2023). Long work hours and the strenuous nature of technical jobs in the oil and gas sector create an automatic barrier to women taking such positions. These physically demanding roles are traditionally assigned to men, reflecting societal norms and perceptions of physical strength (Eagly and Wood, 2012). This pattern not only perpetuates gender disparity but also enables men to accumulate technical expertise that positions them for leadership roles. The exclusion of women from these foundational roles limits their career advancement opportunities, reinforcing male dominance in decision-making and leadership within the sector (Gatti, 2023).

Ghanaian employers often make incorrect assumptions about women's productivity based on their gender, which leads to disparities in job opportunities and career advancement. These biases contribute to lower female participation and hinder women's progression within the extractive companies (Haarstad, 2014; Ovadia, 2024).

From Table 1, most participants, both males and females, 56.7 %, either strongly agree or agree that there are differences in how women are promoted within the organisation. This finding is consistent with studies that revealed that the promotion process in male-dominated organisations like the oil and gas sector is biased against women, hindering their career advancement (Heilman, 2012; Smith et al., 2023). For instance, a manager of company B iterated that when a man and a woman vie for an engineering position, there is bias in the post going to the man rather than the woman. This is because the profit-oriented nature of the industry leads to concerns about women's potential career interruptions due to maternity leave. A male Senior Manager in Company B illustrates this:

When I want to promote a woman to the position of deputy CEO, and she is a young woman, I will begin to think that she will marry and start giving birth, and then she will stay in the house for four months. When we want to make money in the company, she will think of joining her husband, who has been transferred to the US, and then she will resign. So, the industry is inclined to play it safe, so the decision will be to give that position to a male (Senior Manager, Company B, June 2023)

Thus, organizational aspirations focused primarily on reducing costs can become barriers to women. As illustrated above, a woman who is culturally expected to be a mother faces the potential loss of opportunities if the organization is unwilling to pay for maternity leave. These organizational cultures can also interrupt the promotion of women who are employed. A female assistant manager in charge of engineering in Company A expressed frustration over gender disparities in recognition and promotion. She said, "I felt frustrated because I have worked hard and deserve to be promoted, but I keep getting passed over. Meanwhile, I see men getting promoted without any trouble at all." (Female Assistant Manager, Company A, June 2023)

Promotional bias is prevalent in male-dominated companies, where men are often favoured for leadership roles despite claims of merit-based promotion (Fioramonti, 2014; Heilbrunn, 2014; Kopyński et al., 2013). In companies A and B, biases and stereotypes shape promotion decisions, limiting women's advancement opportunities. Societal norms and expectations about career interruptions and caregiving responsibilities hinder women's career progression (Gatti, 2023).

Studies indicate that in male-dominated companies with limited female representation in senior leadership roles, there is a notable correlation between gender and mentorship. Women often face more significant challenges in finding mentors, particularly those of their gender (Boateng, 2018). Table 1 shows that a higher proportion of males (59.4 %) believe that formal mentorship programs exist than females (22.4 %). Women in male-dominated companies struggle more with mentorship and leadership opportunities (Baiden, 2020; Bosky et al., 2022; Ovadia, 2024).

While male participants describe a system where guidance is

informal and based on personal connections rather than official channels, female participants noted that few women in senior roles contribute to limited understanding and support for women's workplace challenges. Company A's female manager pointed out, "Most of the senior positions are held by men, so it's hard to find someone who can relate to the challenges I face as a woman" (*Female Manager, Company, June 2023*). On the other hand, a male assistant manager in Company B stated that "most younger males who entered the industry easily adapt to the working environment as compared to their female counterparts. This is because the males easily get closer to the senior officers than the females" (*Male Assistant Manager, Company B, June 2023*).

This shows an apparent lack of mentorship for women in these institutions due to fewer women in leadership positions in Ghana. The lack of mentorship programs is a significant barrier, as mentorship has been shown to impact gender diversity and leadership advancement positively (Murrell et al., 2021). Mentorship provides a platform for individuals to receive guidance, support, and skill development from experienced leaders, helping women overcome career-related barriers (Gottlieb and Travis, 2018; Murrell et al., 2021).

5. Conclusion

Situated in the context of LCPs, this paper sought to understand the gendered employment within Ghana's oil and gas sector. Emphasis was placed on women's employment and leadership in Ghanaian oil and gas companies to shed light on a less explored aspect of LCPs in the extractive sector. The findings show a substantial disparity in leadership, support and technical roles, where women remain significantly underrepresented. Sociocultural, individual and institutional factors account for this underrepresentation of women in Ghanaian oil and gas companies. The paper shows how social and cultural roles permeate society and influence the perception, norms, opportunities and expected roles of men and women in the workplace (Eagly and Karau, 2002; Heilman and Caleo, 2018), and in this context, the oil and gas sector. It emphasizes that women often face discrimination and negative evaluations when pursuing leadership positions in their world of work as they are often perceived as not competent enough for leadership or too aggressive when exhibiting agentic traits (Eagly and Wood, 2016). Yet, there appear to be very few systems in place, such as formalized mentorship programmes, to support women, particularly in such male-dominated sectors.

To effectively address these disparities, first, oil and gas companies must commit to a rigorous and continuous assessment of their gender equality initiatives. This entails setting clear, measurable goals and closely monitoring progress, such as actively promoting and supporting the advancement of women in both technical and support roles, providing work-life balance solutions that can accommodate family responsibilities and making it easier for women to pursue and advance in their careers. Ghanaian companies must also ensure that personal protective equipment (PPE) is designed to meet the specific needs of women, thereby enhancing their safety and comfort in technical roles. This will ensure that the employment effects of Ghana's Local Content Policy are not limited to only men but create opportunities for the equitable participation of women in Ghana's oil and gas industry.

CRedit authorship contribution statement

Aba Pepraba Okosu: Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation. **Austin Dziwornu Ablo:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Investigation, Funding acquisition, Conceptualization. **Charlotte Wrigley-Asante:** Writing – review & editing, Supervision, Resources, Conceptualization.

Declaration of Competing Interest

The authors declare no conflict of interest.

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