

## **Organisational Factors, Business Environment, Regulatory Systems and Local Content Practices: A Case of Oil and Gas Companies in Tanzania**

*Hemed Juma*<sup>1</sup>  
*Margreth Mwanjala*<sup>2</sup>  
*Henry Chalu*<sup>3</sup>

### **Abstract**

*The purpose of this paper is to assess the effect of; organisational related factors and the mediating roles of; business environment and regulatory systems on the local content practices in the oil and gas companies in Tanzania. Five hypotheses were developed from the literatures and data were collected using standardized questionnaires from a sample of 150 respondents selected randomly from the employees of the oil and gas companies operating in Tanzania. The collected data were analysed using regression technique where Barron and Kenny approach for testing mediation were applied. The findings revealed that organisational related factors have significant negative effect on the local content practices and that business environment and regulatory systems support partial mediation between organisational factors and local content practices. The findings imply that oil and gas companies' activities and strategies have significant roles on developing local industries in Tanzania as its influence on regulatory systems and business environment in the host country is significant.*

Key words; Organizational factors, regulatory systems, business environment, local content practices, oil and gas companies

### **Introduction**

According to vision 2025, Tanzania aims to be middle-income country by 2025 which means that its gross national income (GNI) per capita should be between USD 1,045 and USD 12,736, as per the World Bank (WB) criteria. Economic growth rate is currently reported at 6.6% (AfDB, 2019). However, the vision to become middle-income country is challenged by; infrastructure bottlenecks especially in the transport and energy sectors, vulnerability to climate change, high poverty and income inequality (AfDB, 2019). Discovery of natural gas amounting to 55tcf in 2016 posits a vast opportunity to realisation of the national vision through enhancing energy availability at affordable prices whereby currently; 91% of energy supply in a country's households is wood and charcoal, 2% hydra-electricity and 7% is from oil and gas (WB, 2019). To date oil and gas contributes to about 58% of total electricity energy production in a country whereby natural gas contributes to 45% while oil contributes 13% of the total electricity energy production in the country (ibid). However, economic growth indicators reveal that despite potentiality of the oil and gas resources its contribution to the gross domestic product (GDP) is minor. The main contributors are; agriculture (23.4%) while employing 67% of workforce, industry (28.6%) employing 6% of workforce and services (47.6%) employing 27% of workforce. Agriculture includes farming, fishing and forestry. Industry includes mining, manufacturing, energy production and construction. Services cover; government activities, communications, transportation, finance, and all other private economic activities that do not

---

<sup>1</sup> PhD Candidate at University of Dar es Salaam Business School (UDBS); Email: [hemedjuma@gmail.com](mailto:hemedjuma@gmail.com)

<sup>2</sup> MBA Student at University of Dar es Salaam Business School (UDBS); Email: [mwanjalamm@gmail.com](mailto:mwanjalamm@gmail.com)

<sup>3</sup> PhD, Senior Lecturer at University of Dar es Salaam Business School (UDBS); Email: [hchalu@gmail.com](mailto:hchalu@gmail.com)

produce material goods (WB, 2019). In order to develop local industries so as to increase its GDP contribution, various stakeholders include; government, oil and gas companies, local suppliers, financial institutions and high learning institutions have the roles to play (URT, 2016; Vaaland et al., 2012).

Stakeholder's theory requires business firms to develop the surrounding society (Freeman & Reed, 1983; Mitroff, 1983; Donaldson & Preston, 1995). However, studies reveals that most oil and gas companies are still reluctant to render their resources for developing the host society (Ngoasong, 2014; Tordo *et al.*, 2013; Vaaland, Soneye & Owusu, 2012; Heum, 2008; Heum *et al.*, 2003). Studies have found divergent reasons for this reluctance ranging from organizational factors, business factors and regulatory systems (Maccarrone, 2009; Clarkson, 1995; Mozes, Josman & Yaniv, 2011; Katou & Budhwar, 2014). Organisational factors that makes business firm's reluctant to render its resources for developing local community includes; the arguments that the firm is not the charity organisation but a profit oriented company that seek to minimise cost and increase profit (Tordo et al., 2013). Also HR practices and sourcing practices are principled such that cannot be reverted to suit the local content requirements (Hansen & Wernerfelt 1989). Furthermore, organisational structure that defines the chain of command makes the firm rigid to change towards adhering to imposed local content requirements (Katou & Budhwar, 2014) and corporate strategies that direct the firm's efforts towards organisational vision rather than the socio-interest.

Business factors include the arguments that local industries are incapable to meet the quality standards of the oil and gas companies (Arthur & Arthur, 2014) and micro economic issues such that absence of strong financial institutions for funding local suppliers and fluctuation in the markets (Porter & Kramer, 2006). Regulatory factors include the argument that imposition of reinforced local content requirements is against world trade organisation (WTO) convention that promotes free market economy (Tordo et al., 2013). However, findings in most previous studies are inconsistent about the influence of the above factors on firms CSR practices. For instances Adomako and Danso (2014) found that a well regulated industrial practices nurture the infant industries in developing countries while Abdalla, Siti-Nabiha and Shahbudin (2013) found that industrial regulations have insignificant influence on the firm's practices due to weak enforcement mechanisms. Other studies focused on factors influencing firm's CSR disclosure in oil and gas sector where they found number of factors including; organisational related ones as well as industrial regulation factors (Yu & Choi, 2014). Therefore, due to the existing divergent findings from previous studies, this study aimed at assessing the influence of organizational factors on the local content practices and examining the mediating role of business factors and regulatory systems. Business factors are considered as a mediator because business firms pursue its goals within the society and need the society (Porter & Kramer, 2006) for its sustainable success. As such, the structuring of the corporate strategy is normally allied with the social need hence business mission of a firm can be a triggering factor for the firm to endorse the local content practices.

The remainder of this paper is organized in the following sequences; theoretical background and research hypotheses, research model, methodology of the study and variable measurements, data

collection, reliability test and analysis, findings and its interpretation, hypotheses testing, discussion of findings and finally conclusion and policy implication.

## **Theoretical Background and Research Hypotheses**

### **An Effective Local Content Practices**

Local content practice has been defined differently by different people depending on the sectors and the essence (Tordo *et al.*, 2013; Heum *et al.*, 2003; Warner, 2017). There are those who perceive it as ‘domestic contribution’ to the ‘output’ (Arfaa, Tordo & Tracy, 2011). They viewed local content as a share (in percentage) of local or domestic workforce, service provisioning and local materials (inputs) inclusion in each output in the oil and gas companies’ activity. This view was also observed in the work of; Ovadia, (2014); Vaaland *et al.*, (2012); who explains it as “the amount of; local personnel, materials and services employed by oil and gas companies when; exploring, drilling and operating a well”. Other scholars such as Warner (2017) perceive local content as “the jobs or value-added brought to the host country economy through the activities of the oil and gas companies.” On the other hand Tordo, *et al* (2013) consider local content as the provision, by the oil and gas company, of infrastructure (schools, medical facilities) that are not inputs into its own production but intended for the benefit of the local population including development of the local suppliers whose businesses have natural synergy with oil and gas sector. In this study local content practices are the activities done by the oil and gas companies for developing local industries. These activities are measured in terms of whether there is an indications of; increase in procurement of local goods and services, increase in the number of local employees in the oil and gas companies, increase in training programs for locals, an increase in promotion for locals and increase in reporting the local content practices (Heum, 2008). This study posits that local content practices in the oil and gas companies are affected by; organisational factors, business environment and regulatory systems as explained below.

### **Organizational Factors and Local Content Practices**

Organizational factors are the attributes of the business firms that define its mission. Hansen and Wernerfelt (1989) portray that organizational factors comprises of all resources and procedures staffed for and directed towards attaining corporate objectives. They identify human resource management, corporate strategies (goals, financing, sourcing policies), organisational structure and employee perceptions as the key factors determining the practices of the business firms. Arinanye, (2015) identifies; cultures, commitment and communication as organisational factors affecting firm’s performance. Communication is defined by organisational structure depicting the chain of command while commitment explains the employees’ perception on job continuation (*ibid*). Human resource competence is key for organisational success as researchers (Panayotopoulou & Papalexandris, 2004) portray that HRM orient on staffing competent workers for attaining corporate objectives, however, they argue that only when HRM orientation adhere to the four HR models and principles is when the HR will have significant effect on firm’s performance. HR principles insist on employees’ qualification, competence, professionalism and independence. Hence, this study posited that human resource management in the oil and gas companies will influence negatively the local content practices because HR principles for staffing and development does not allow favouritism and or local preferences as required by local content policy. Corporate strategies include; company’s goal, financing and sourcing practices (Wernerfelt, 1989). Hansen and Wernerfelt (1989) refer to organisational systems as a

combination of organisational goals and policy. In this study, corporate strategy covers corporate goals and sourcing policies. Considering business firms orientation, corporate strategies are structured to pursue the profit oriented goal and increasing firm's competitiveness whereas local content practices are perceived as unnecessary cost to the firm (Tordo *et al.*, 2013). Organizational structure depicts the chain of command in the company (Hansen & Wernerfelt, 1989). Some companies are decentralized hence render autonomy to the subsidiaries while other centralized companies do not (Katou & Budhwar, 2014). Most of oil and gas companies in the upstream are multinationals with no mandate to endorse anything without any prior authorization from the mother company. Local content practices are imposed by the host countries and are not universally accepted. Since the structure of the oil and gas companies is designed to facilitate the flow of information and activities for attaining corporate objectives, these companies lack flexibility to adopt imposed local requirements, therefore, this study hypothesize that;

*H<sub>1</sub> Organization factors have negative effect on the local content practices*

### **Organisational factors and Business Environment, Regulatory Systems**

Activities and strategies of the business firms have impact on the external environment of the firm, external environment comprises of suppliers, financiers, customers and competitor as well as government and the community at large (Pfeffer, 1987). The government establish regulatory systems to monitor and control the practices of the firms for the interests of the host community. Pfeffer and Salancik (1978) portray that business firms' practices are partly influenced by the environment; however, environment can also be influenced by the firm's practices. Pfeffer (1987) portray that there is an interdependence relationship between business firms and its environment. He argues that business firms formulate its strategies to react up on environmental needs; however, as they both interact they tend to influence one another's practices. That means; suppliers develop competence to supply the requirements as par buyer standards, so does service provider. Buyer likewise, does not set standards beyond what market can provide. Adomako and Danso (2014) portrays that there is interdependence relationships between regulatory systems and firm's performances. However, the findings are inconsistent from country to country due to the fact that there other factors that affect the influence of policy and regulations (Abdalla, Siti-Nabiha & Shahbudin, 2013). For instance, in Nigeria it was found that regulatory system nurture the local infant industries (Adomako and Danso, 2014) while in South Sudan the study found that regulatory systems has no significant influence on the outcomes. However, this study has interests on examining the effect of organisational factors on business environment and the regulatory systems, henceforth we hypothesized that;

*H<sub>2</sub> Organisational factors have positive effect on the business environment in the host countries*

*H<sub>3</sub> Organisational factors have positive effect on regulatory systems in the host countries*

### **Business Environment, Regulatory Systems and Local Content Practices**

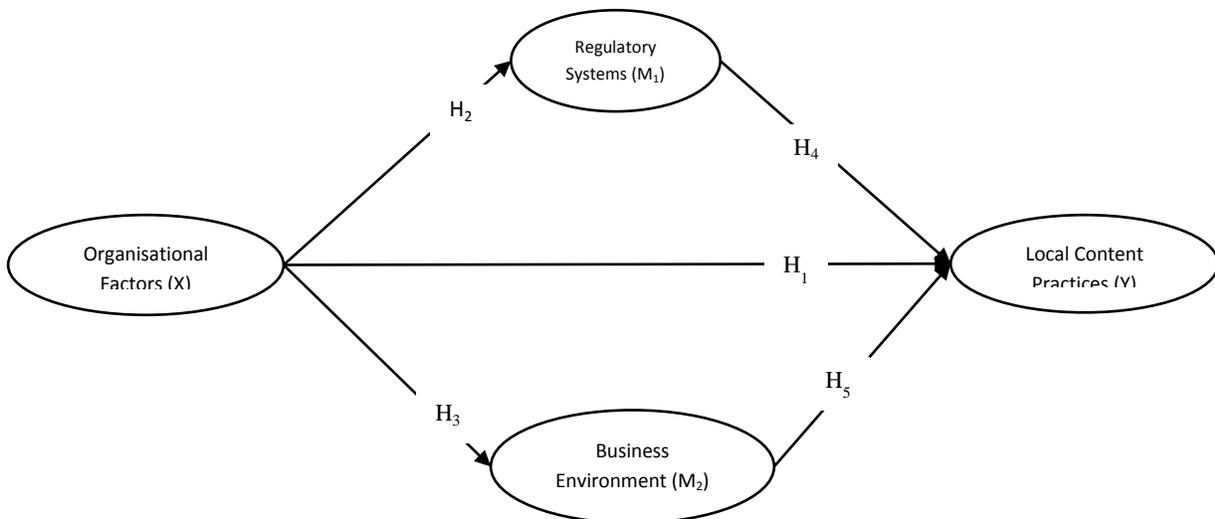
Porter and Kramer (2006) portray that business environment such as; availability of capable local suppliers, labours, sound financial institutions and macro-economic issues such as; stable inflation rate, moderate interest on loans, growing demand rate, stable upward trends on world market and predictable currency revaluation rates may facilitate the implementation of the CSR as the market certainty increases. In this study, it is posited that presence of local business environment characterized with presence of; competent suppliers and macro-economic issues would facilitate the endorsement of local content practices. Adomako and Danso (2014) found that a well-regulated business environment have positive effect on nurturing of infant industries. This study focus on the effect of; tax attributes, local content policies, regulatory agencies and model production shared agreement (MPSA) on the local content practices. It posits that tax

attributes such as; tax incentives, tax policy and act, regressive and progressive tax system, tax penalties and fines and additional profit tax will have mediating effect on organisational factors. This is because most tax systems are refined to influence oil and a gas company to endorse local content practices after discovering that taxes alone does not add desired value in the home economy (Kinyondo & Villanger, 2017). Vaaland *et al.*, (2012) found that establishment comprehensive policy to foster local content practices would have positive effect. This is because the policy will identify the key stakeholders for developing local industries and therefore assign local content practices to each one and promote the willingness to endorse them. Therefore, this study posits that local content policy has positive on local content practices. The presence of government agency regulating local content practices in the oil and gas sector is necessary catalyst for endorsement of the practices by key stakeholders (Vaaland *et al.*, 2012). This is because the agencies normally act as a watch dog or whistle blowers in the industry. This study therefore posit that regulatory agencies such as; government institutions, quality institutions, system for tracking and reporting as well as governance structure has positive effect on local content practices. Contracts oblige the parties to practices as per signed agreement. Inclusion of model production shared agreement (MPSA) into oil and gas contract between government and investors influence automatically the oil and gas companies to endorse local content practices despite the organisational and business factors. Therefore, this study posits that MPSA will have mediating effect on the organisational and business factors. Considering the basis of; taxes, policies, regulatory agency and contracts this study hypothesize that;

*H<sub>4</sub> Business Environment mediate the relationship between organisational factors and the local content practices in the oil and gas companies*

*H<sub>5</sub> Regulatory systems mediate the relationship between organisational factors and the local content practices in the oil and gas companies*

## Research Model



## Methodology of the Study

**Variable Measurements**

Measurements for major variables in this study are adapted from the sources indicated in the following table, also the response to these items were on the likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

**Table 1: Variable Measurements**

<b>Variables</b>	<b>Measurements</b>	<b>Sources</b>
Local Content Practices (LOCOP)	There is an increase in the number of local labour employed	Heum (2008)
	There is an increase in procurement of local goods	
	There is an increase in procurement of local services	
	There is a program to train local labour in this company	
	There is clear bureaucracy for promoting local labour after fulfilling the criteria	
	This company submit to the regulator its reports on local content programs	
	This company has programs to develop local supplier	
Organisational Factors (OrFAC)	This company employment process targets on competence	Panayotopoulou and Papalexandris (2004)
	This company employs it worker irrespective of nationality	
	Employment opportunities in this company are made public locally and internationally	
	This company train all of its staff for skills development	
	This company has both local and foreign employees	Wernerfelt (1989)
	There is good relationship among employees in this company	
	This company aims at making profit	
	This company has organisational policy that guide its decision making	
	Employees in this company have good perception on local content requirements	
	Documentation procedures delays decisions for local content issues	
chain of command delays decisions in favour of local content issues		
Standard rules hinder this company to endorse local content requirement		
There is internal steering committee for local content issues		
Business Environment (BusEN)	There is abundant competent local suppliers for this company	Porter and Kramer (2006)
	There is abundant competent local labour	
	There is sufficient local financial institutions	
	Local suppliers have access to financial services	
	Macroeconomic issues (inflation & interests rates) are stable to facilitate business	
Regulatory	This company complies with taxes regime	Adomako and Danso

Systems (ReGSY)	This company complies with local content policy  This company submit its reports about taxes compliances to the regulatory authority This company submit its reports about local content compliances to the regulatory authority This company complies with model production shared agreement (MPSA)	(2014)
--------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------

### Data Collection, Reliability Test and Analysis

Data were collect using standard questionnaire distributed to a sample of 200 respondents drawn randomly from employees of the oil and gas companies operating in Tanzania. All items were measured in the scale of; 1 strongly disagree to 5 strongly agree. One hundred and fifty (150) questionnaires equivalent to 75% of total distributed one were returned and preceded to the data analysis, instrument reliability was also tested. The descriptive statistics and reliability test results are indicated in the table 2 below; whereby all Cronbach's alpha for each measurement ranging between 0.930 and 0.750 which means are all acceptable (Kline, 1999).

**Table 2: Descriptive Statistics**

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Cronbach's Alpha
LOCOP	150	3.0000	5.0000	4.168254	.5652609	0.899
OrFAC	150	2.5836	4.5362	3.329751	.4901843	0.789
BusEN	150	1.6786	4.5185	2.987235	.6735736	0.750
ReGSY	150	2.5510	4.5582	3.376212	.4917567	0.930
Valid N (listwise)	150					

Data were analysed using regression analysis in the SPSS 20 where Baron and Kenny (1986) four steps for testing mediation were used in the following sequences;

Step 1: a simple regression analysis with organisational factors (X) predicting local content practices (Y)  $\longrightarrow$  (LOCOP = B<sub>0</sub> + B<sub>1</sub>OrFAC + e)

Step 2a: a simple regression analysis with organisational factors (X) predicting regulatory systems (M<sub>1</sub>)  $\longrightarrow$  (ReGSY = B<sub>0</sub> + B<sub>1</sub>OrFAC + e)

Step 2b: a simple regression analysis with organisational factor (X) predicting business environment (M<sub>2</sub>)  $\longrightarrow$  (BusEN= B<sub>0</sub> + B<sub>1</sub>OrFAC + e)

Step 3a: a simple regression analysis with regulatory systems (M<sub>1</sub>) predicting local content practices (Y)  $\longrightarrow$  (LOCOP = B<sub>0</sub> + B<sub>2</sub>ReGSY+ e)

Step 3b: a simple regression analysis with business environment (M<sub>2</sub>) predicting local content practices(Y)  $\longrightarrow$  (LOCOP = B<sub>0</sub> + B<sub>3</sub>BuSEN+ e)

Step 4: a multiple regression analysis with organisational factors (X), regulatory systems (M<sub>1</sub>) and business environment (M<sub>2</sub>) predicting local content practices (Y)  $\longrightarrow$  (LOCOP = B<sub>0</sub> + B<sub>1</sub>OrFAC + B<sub>2</sub>ReGSY + B<sub>3</sub>BusEN + e)

### Findings and Interpretation

Findings from a simple regression analysis in the table 3 – model 1 below reveals that organisational factors (OrFAC) have significant negative relationship with local content practices (LOCOP) ( $B = -0.334$ ,  $p\text{-value} = 0.000$ ; i.e.  $p\text{-value} < 0.01$ ). Also the results in the same table model 2a it was found that organisational factors have significant positive relationship with regulatory systems (ReGSY) with ( $B = 0.907$ ,  $p\text{-value} = 0.000$ ; i.e.  $p\text{-value} < 0.01$ ). The findings (model 2b) also reveals that organisational factors have significant positive relationship with business environment (BusEN) ( $B=1.280$ ,  $p\text{-value} = 0.000$ ; i.e.  $p\text{-value} < 0.01$ ). In case of testing whether regulatory systems have relationship with local content practices (model 3a) it was found that regulatory system have insignificant negative relationship with local content practices (with  $B = -0.118$ ,  $p\text{-value} = 0.212$ ; i.e.  $p\text{-value} > 0.01$ ). On the other hand it was found that business environment (model 3b) has significant negative relationship with local content practices (with  $B = -0.242$ ,  $p\text{-value} = 0.000$ ; i.e.  $p\text{-value} < 0.01$ ). On testing whether organisational factors, regulatory systems and business environment collectively have any relationship with local content practices it was found (model 4) that organisational factors has significant negative relationship with local content practices (with  $B = -1.525$ ,  $p\text{-value} = 0.000$ ; i.e.  $p\text{-value} < 0.01$ ). In case of regulatory systems, these were found to have significant positive relationship with local content practices ( $B = 1.070$ ,  $p\text{-value} = 0.000$ ; i.e.  $p\text{-value} < 0.01$ ) while business environment has insignificant positive relationship with local content practices (with  $B = 0.172$ ,  $p\text{-value} = 0.332$ ; i.e.  $p\text{-value} > 0.01$ )

According to Baron and Kenny (1986), some form of mediation is supported if the effect of mediator M remains significant after controlling for independent variable X. If X is no longer significant when M is controlled, the finding supports *full mediation*. If X is still significant (i.e., both X and M both significantly predict Y), the finding supports *partial mediation*. From our findings organizational factors (X) remains significant when tested together with regulatory systems ( $M_1$ ) and business environment ( $M_2$ ), however, regulatory systems was found with significant relationship with local content practices when tested together than when tested alone, whereas business environment showed an insignificant positive relationship with local content practices when tested together than when tested alone. Therefore, it was concluded that there is partial mediation

**Table 3: Findings Summary**

	Model	Interc ept	Coeff	Beta	t	Sig	R <sup>2</sup>	Adj R <sup>2</sup>	F Value
1	LOCOP = $B_0 + B_1\text{OrFAC} + e$	5.28	-0.33	-0.29	-3.68	0.00	0.08	0.08	13.52
2a	ReGSY = $B_0 + B_1\text{OrFAC} + e$	0.36	0.91	0.90	25.79	0.00	0.82	0.82	665.29
2b	BusEN= $B_0 + B_1\text{OrFAC} + e$	-1.27	1.28	0.93	31.07	0.00	0.87	0.87	965.37
3a	LOCOP = $B_0 + B_2\text{ReGSY} + e$	4.57	-0.12	-0.10	-1.25	0.21	0.01	0.00	1.57
3b	LOCOP = $B_0 + B_3\text{BuSEN} + e$	4.89	-0.24	-0.29	-3.67	0.00	0.08	0.08	13.45
4	LOCOP = $B_0 + B_1\text{OrFAC} +$ $B_2\text{ReGSY} + B_3\text{BusEN} + e$	5.12	-1.53	-1.32	-4.39	0.00	0.23	0.21	14.37
			1.07	.93	5.17	0.00			
			0.17	.21	0.97	0.33			

**Table 4: Hypothesis Testing**

S/N	Hypothesis	Decision	t-value (paired sample)	p-value
H <sub>1</sub>	Organization factors have negative effect on the local content practices	Supported	-4.262	0.000
H <sub>2</sub>	Organisational factors have positive effect on the regulatory systems in the host countries	Supported	5.028	0.000
H <sub>3</sub>	Organisational factors have positive effect on business environment in the host countries	Supported	12.234	0.000
H <sub>4</sub>	Regulatory systems mediate the relationship between organisational factors and the local content practices in the oil and gas companies	Supported	-8.198	0.000
H <sub>5</sub>	Business Environment mediate the relationship between organisational factors and the local content practices in the oil and gas companies	Supported	-14.525	0.000

### Discussion of Findings

It was found that organisational factors have significant negative relationship with local content practices in the oil and gas companies in Tanzania. That means the way most oil and gas companies practices on labour recruitment process, sourcing of requirements and staff development processes are not embedded to suit local content industries as their focus is to get quality inputs for smooth operations and not to develop local industries. This finding is in-line with Amoako-Tuffour, Aubynn and Atta-Quayson (2015) where they found that there is a negative relationship between organisational policies and the local content practices in most oil and gas firms in Ghana. However, the findings are contrary to Mozes, Josman and Yaniv (2011). where they found that employees' motivation as part of organisational factor have positive influence on the CSR implementation. In addition, Maccarrone (2009) found that corporate strategies have positive effect on CSR endorsement. This finding reflects the reality that business firms align their resources and efforts towards their vision which is to enhance firm's competitiveness and profit (Ngoasong, 2014; Tordo *et al.*, 2013). The question of corporate social responsibility in most oil and gas companies stem from profit made and considered unnecessary costs, therefore it should not be considered as a means to develop local industries (Kinyondo & Villanger, 2017).

The findings also revealed that organisational factors significantly influence positively the regulatory systems in oil and gas sector in Tanzania. The essence of regulation systems is to enforce implementation of local content policies in the oil and gas sector. However, this finding reveals that practices of the oil and gas companies dictate the kind of policy in place and not the other way around. That means the companies are more influential to the host country on policy formulation. Number of reasons can explain this situation which are consistent with Tordo *et al.* (2013).. First reason could be lack of knowledge about oil and gas reality in the host country. Second is that the regulations may not be robust enough to enforce oil and gas companies to implement due to dominance of few giant companies who are not willing to transfer this technology to host countries. Last, could be local content policies are not universally agreed so there is room for negotiation between oil and gas companies and the host government. This finding is opposite to Vaaland *et al.*, (2012) where they found that regulation systems have positive effect on local content practices. Adomako and Danso (2014) found that good regulatory systems influence positively the business firms' performance and growth however, in contrary;

this finding reveals that business firms in their natural outsets support policy formulation but rejects its implementation. The reasons for this rejection is that local content requirements are too demanding and therefore impose unnecessary costs to the company and that the essence of local content practices is to develop local industries which is not their responsibility but the government's (Arthur & Arthur, 2014; *Tordo et al., 2013*). This finding is also contrary to the findings by Abdalla, Siti-Nabiha and Shahbudin (2013) who found that regulatory systems have no significant influence on firm's practices in South Sudan because they lack institutional arrangement for its enforcement.

On testing whether organisational factors has effect on business environment it was found that the effect of organisational factors on business environment is significant. That means; suppliers, labours; financial institutions formulate their strategies and policies to react up on oil and gas companies requirements. This finding is not different from Pfeiffer (1987) who found that business firms have significance influence on its business environment. The reason being the resources interdependence between business entities in the sector (Pfeiffer, 1987; Hansen & Wernerfelt, 1989) The empirical findings portray that employees select, train and develop their careers to suit the requirements of the labour market, suppliers and service providers generate the capacity required by the buyers. That means local industries requires information about the requirements of the oil and gas companies so that they can develop the appropriate competence to suit the sector.

The finding also reveals that there is negative relationship between regulatory systems and local content practices. That means existing policies on local content and the implementation enforcement mechanisms do not lead to any significant outcomes. The finding are similar to previous studies examining the effect of regulatory framework on ensuring sustainable local environmental protection is South Sudan (Abdalla, Siti-Nabiha & Shahbudin, 2013). Where, they found that the finding was due to the fact that South Sudan, the study area lack institution arrangement and thus capacity to enforce an endorsement of the regulations therefore they failed to find any significant contribution of the existing regulations on environment protections. However, the finding in this study is contrary to Adomako and Danso (2014) who found that regulatory framework in Nigeria have positive effect on growth of local infant industries. However, they assert that where host countries lack enforcement capacity the relationship would change. Institutional arrangement for enforcing policy implementation should be free from corruption, well informed, with legal legitimacy and political will (Abdalla et al., 2013). Regulatory systems in most developing countries fall short of the smart politics and practices to bring about the expected outputs (Manolova, Eunni & Gyoshev, 2008).

It was also found that there is negative relationship between business environment and local content practices. That means existing business environment are not facilitating local content practices in the oil and gas companies. Most local industries may be lacks; information and capital to pursue the business opportunities in the oil and gas companies This findings is similar to Esteves *et al.*, (2013); *Tordo et al.*, 2013; *Vaaland et al.*, (2012) who found that local industries in most developing countries are incompetent to satisfy oil and gas sector requirements. The findings also are similar with Arthur and Arthur (2014) who found that most local industries lack competence to meet the desired quality standards of the oil and gas companies that international suppliers offer. The findings suggest that business environment which depicts local industries competence have to be developed. Local suppliers and service providers in Tanzania do not have

competence to meet the oil and gas companies' requirements that is why the companies have to source internationally.

### **Conclusion and Policy Implication**

The study focus was to assess the effect of organisational factors on the local content practices. In addition, to examine the mediating effect of regulatory system and business environment on local content practices. The findings shows that the effect of organisational factors, regulatory systems and business environment on local content practices are statistically significant and that regulatory systems and business environment partially mediate the relationship between organisational factors and local content practices. The findings imply that regulatory systems and business environment alone cannot ensure substantial practices of the local content as organisational factors are somehow rigid to the imposed regulatory and contextual constraints. Therefore, any formulation of policy on local content issues should take into account attributes of the oil and gas companies as well as constructive dialogue between the key stakeholders such as government, oil and gas companies and industries to establish a harmonized scheme on how to develop local industries. This is contrary to direct imposition of the policy requirements as the pre-requisite for business license.

### **References**

- Abdalla, Y. A., Siti-Nabiha, A. K., & Shahbudin, A. (2013). Examining the regulatory frameworks for the oil and gas industry in Sudan. *Journal of Environmental Assessment Policy and Management*, 15(01), 1350006.
- Adomako, S., & Danso, A. (2014). Regulatory environment, environmental dynamism, political ties, and performance: Study of entrepreneurial firms in a developing economy. *Journal of Small Business and Enterprise Development*, 21(2), 212-230.
- AfDB (2019), African Economic Outlook. Available on; [https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2019AEO/AEO\\_2019-EN.pdf](https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2019AEO/AEO_2019-EN.pdf). Accessed on 24th March, 2019
- Amoako-Tuffour, J., Aubynn, T., & Atta-Quayson, A. (2015). Local Content and Value Addition in Ghana's Mineral, Oil, and Gas Sectors: Is Ghana Getting It Right. *ACET: Accra, Ghana*.
- Arfaa, N., Tordo, S., & Tracy, B. S. (2011). Natural oil companies and value creation.
- Arinanye, R. T. (2015). Organizational Factors Affecting Employee Performance at The College of Computing and Information Sciences (Cocis), Makerere University, Kampala-Uganda. *Unpublished master dissertation. Uganda Technology and Management University*.
- Arthur, P., & Arthur, E. (2014). Local content and private sector participation in Ghana's oil industry: an economic and strategic imperative. *Africa Today*, 61(2), 57-77.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Benon-be-isan Nyuur, R., F. Ofori, D., & Debrah, Y. (2014). Corporate social responsibility in Sub-Saharan Africa: hindering and supporting factors. *African Journal of Economic and Management Studies*, 5(1), 93-113.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of management review*, 20(1), 92-117.

- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review*, 20(1), 65-91.
- Esteves, A. M., Coyne, B., & Moreno, A. (2013). Local Content Initiatives: Enhancing the Sub-National Benefits of the Oil, Gas, and Mining Sectors. *Rev. Watch Inst.*
- Freeman, R. E., & Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California management review*, 25(3), 88-106.
- Hansen, G. S., & Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic management journal*, 10(5), 399-411.
- Hansen, G. S., & Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic management journal*, 10(5), 399-411.
- Heum, P. (2008). Local Content Development: Experiences from oil and gas activities in Norway.
- Heum, P., Quale, C., Karlsen, J. E., Kragha, M., & Osahon, G. (2003). Enhancement of local content in the upstream oil and gas industry in Nigeria: A comprehensive and viable policy approach.
- Katou, A., & Budhwar, P. (2014). HRM and firm performance. *Human Resource Management: Strategic and International Perspectives*, Sage Publications, London.
- Kinyondo, A., & Villanger, E. (2017). Local content requirements in the petroleum sector in Tanzania: A thorny road from inception to implementation?. *The Extractive Industries and Society*, 4(2), 371-384.
- Kline, N. (1999). *Time to think: listening to ignite the human mind*. Hachette UK.
- Maccarrone, P. (2009). Factors influencing the attitude towards corporate social responsibility: Some empirical evidence from Italy. *Corporate Governance: The international journal of business in society*, 9(2), 103-119.
- Manolova, T. S., Eunni, R. V., & Gyoshev, B. S. (2008). Institutional environments for entrepreneurship: Evidence from emerging economies in Eastern Europe. *Entrepreneurship Theory and Practice*, 32(1), 203-218.
- Mitroff, I. I. (1983). *Stakeholders of the organizational mind*. Jossey-Bass Inc Pub.
- Mozes, M., Josman, Z., & Yaniv, E. (2011). Corporate social responsibility organizational identification and motivation. *Social Responsibility Journal*, 7(2), 310-325.
- Ngoasong, M. Z. (2014). How international oil and gas companies respond to local content policies in petroleum-producing developing countries: A narrative enquiry. *Energy Policy*, 73, 471-479.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization studies*, 24(3), 403-441.
- Ovadia, J.S. (2014), "Local content and natural resource governance: the cases of Angola and Nigeria", *The Extractive Industries and Society*, Vol. 1 No. 2, pp. 137-146.
- Papalexandris, N., & Panayotopoulou, L. (2004). Exploring the mutual interaction of societal culture and human resource management practices: Evidence from 19 countries. *Employee Relations*, 26(5), 495-509.
- Pfeffer, J. (1987). A resource dependence perspective on intercorporate relations. *Intercorporate relations: The structural analysis of business*, 25-55.
- Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence approach. *NY: Harper and Row Publishers*.
- Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard business review*, 84(12), 78-92.

- Tordo, S., Warner, M., Manzano, O., & Anouti, Y. (2013). *Local content policies in the oil and gas sector*. World Bank Publications.
- URT (2016), Tanzania Oil and Gas Local Content Policy [online] <http://www.mem.go.tz/> accessed on 23rd November, 2016
- URT (2019). Tanzania National Bureau of Statistics; available at <https://www.nbs.go.tz/> accessed on 21th March 2019
- Vaaland, T. I., Soneye, A. S., & Owusu, R. A. (2012). Local content and struggling suppliers: A network analysis of Nigerian oil and gas industry. *African Journal of Business Management*, 6(15), 5399.
- Warner, M. (2017). *Local content in procurement: creating local jobs and competitive domestic industries in supply chains*. Routledge.
- WB (2019). World Bank Group. Available at <https://www.worldbank.org/> accessed on March 20<sup>th</sup> 2019
- Wernerfelt, B. (1989). From critical resources to corporate strategy. *Journal of general management*, 14(3), 4-12.
- Yu, Y., & Choi, Y. (2014). Corporate social responsibility and firm performance through the mediating effect of organizational trust in Chinese firms. *Chinese Management Studies*, 8(4), 577-592.