Factors Influencing Extractive Companies Benefits Sharing with Host Communities in Kilwa District, Tanzania.

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ABSTRACT

The effects of stakeholder influential attributes in benefits sharing from extractive companies have not been muchemphasized. Extractive companies feel that it is the role of the Government to provide social services to her citizens because companiespaid statutory taxes they are obligated to pay. However, communities surrounding extraction activities have the right to share benefits because they are exposed to different risks. The paper analysed factors influencing extractive companies sharing benefits with host communities in Tanzania. Specifically, this paper examined; respondents' characteristics, stakeholder expectations, the perceived benefits sharing and factors influencing extractive companies to share benefits with host communities. A cross-sectional research design was used to collect quantitative data from 373 respondents. Binary logistic regression was used to determine factors influencing benefit sharing. It was found that the stakeholder had a higher expectation of benefit-sharing however; their perceived level of benefits sharing from extractive companies was low. The binary logistic analysis confirmed that distance, education, and legitimacy influenced benefit-sharing from extractive companies. It is recommended that extractive companies and the Government should take into consideration the stakeholder' expectations as a starting point to improve benefits sharing from extractive companies. It is also recommended that the extractive industry should improve communication channels with the host communities to allow local people to understand opportunities available from extraction business companies.

Keywords: Stakeholders, extractive companies, communities, and natural gas

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1. Introduction

The concept of improving the livelihood status of communities living close to the extractive industries is not well understood by different investors including those in the gas extractive sector (Lange, 2006; Emel *et al.,* 2012; LHRC and ZLSC, 2014). Globally, host communities have not benefited much from natural gas development (Kamlongera, 2013; World Bank, 2015). In this way, extractive industries have insufficient or limited economic linkages to the host communities where they operate. The Extractive Companies (ECs) feel that they are doing beyond what they are obliged to do. They pay all statutory requirements like taxes, service levy, and royalties to the government. Thus extractive companies feel that it is the government's responsibility to return some of the revenue to the local communities (Mwalyosi and Hunges, 1998; Campell, 2007). It is argued that investors decide when, how, where to invest or allocate a small amount of money for community support which is considered not enough for community development and denied locals alternative livelihood strategies (Mader, 2012). Therefore, sharing of benefits with communities living close to mining sites are perceived as charitable activities, and they are not legally bound (LHRC and ZLSC, 2014).

The concept of benefit is subjective and defined differently by the host communities, government, and investors (Bekkering and Kleijnen, 2008). This paper adopts the definition provided by SIDA (2015) that host communities define benefits as opportunities derived from the utilisation of natural gas resources, including satisfaction with both direct benefits including employment, royalties, improvement of infrastructures like roads and indirect benefits including all induced opportunities generated due to the presence of natural gas activities. In addition, Pham *et al.* (2013) define sharing of benefits as the distribution of the direct and indirect benefits that are generated through the implementation of a mining project. In this study, sharing of benefits refers to the division and distribution of direct and indirect benefits as defined by the law of the country in a way that is equitable and fairly outcomes to close communities.

Indeed 24 out of all the 54 African countries have natural gas reserves whereby the benefits sharing mechanism is divided into three channels: first, the statutory payment such as royalties, taxes and services levy. Secondly, the compensation for land taken for project development; and thirdly, the community development through corporate social responsibility (CSR) (Kamlongera, 2013). It is worth noting that the availability of laws, policies, and regulatory frameworks are among the determinants of a country's ability to attract benefits from foreign investment and direct to the host communities (Lange and Kolstad, 2012). It is obvious that companies would act more responsibly when facing strong and well-enforced state regulations (Campbell, 2007). For

example, the Nigeria Energy Policy and Renewable Energy Master Plan of 2006 indicate that natural gas energy is for achieving sustainable development, wherebyalmost173 million peoplebenefit from 6,976 Megawatt of power generated from natural gas (Usman and Abbasoglu, 2014).Regardless of the existence of different channels of benefits flow from the extractive sector.Other factors influencing close communities to share benefits from extractive companies are not well known.

In some sub-Saharan African countries, including Kenya and Malawi, benefit sharing is not properly regulated by the law but investors voluntarily support different community development projects (Kamlongera, 2013, Nyamwaya, 2013 and Kayumba, 2014). It has been argued that inadequate legal frameworks hinder the smooth flow of benefits from the extractive industry to communities living close to the extraction sites (Eweje, 2006). This leads to a feeling of powerlessness because communities lack the power to demand benefits from ECs.

In respect of Mozambique, Nigeria and Tanzania benefit sharing is regulated by the law (Wall and Pelon, 2011). Tanzania adheres to International laws and standards through national laws and bilateral investment treaties. Tanzania is part of the Convention on Biological Diversity (CBD) of 1992 as was signed in 1992 and ratified in 1996. The Constitutional of the United Republic of Tanzania, 1977, Article 9(c) explains that the benefits from natural resources should be directed to the development of the people and in particular be geared towards the eradication of poverty, ignorance, and disease. The pattern of benefits flow from extractive industries to the host communities in Tanzania is considered to be legally constructed as it was observed from international laws to domestic laws.

The recently enacted Petroleum Act No 21 of 2015 of Tanzania, sections 219, 220, 221, 222, together with section 97(1) of Land Act of 1999 and section 7(1) Part II of the Act of Local Government Finance Act of 1982, explain the way benefits from extractive industries should trickle down to the local communities. Laws instruct the license holders, contractors, and sub-contractors a mandatory obligation to contribute to the local communities' economic growth. Therefore, ECs, are required to observe these provisions in Production Sharing Agreement (PSA) before signing with the National Oil Company (NOC), formerly known as the Tanzania Petroleum Development Corporation (TPDC) on behalf of the government in the case of oil and gas production.

Within the PSA, there is a mandatory requirement for benefits flow to the community in terms of employment, education, scholarships, skills training, and technology transfer to the locals,

utilisation of the local market and prepare a credible corporate social responsibility plan. In the same vein, during land acquisition, landowners were required to be paid fairly and equitably for the land taken for the gas project investments. After the commencement of production, ECs are obligated to pay 0.3% as service levy to Kilwa District Authority, of which 20% of the money is supposed to be paid to host communities (Songosongo and Somanga Fungu Wards) as benefits to be used for economic development and recovering from poverty and environmental damage. Consequently, the Extractive Industries Transparency and Accountability (TEIT) Act of 2015has been developed to address the issue related to profit sharing and ensures that the revenues from extractive industries contribute to sustainable development and poverty reduction among communities around the mining areas. To put more emphasis, section 15(1) of the Act shows that it is mandatory for EC to submit to the TEIT committee a report on the implementation of local content and corporate social responsibility; failure to do that amounts to a penalty. Evidently, the existing legal frameworks do not guarantee that the concern of communities to share benefits will be addressed without considering stakeholder attributes.

Different authors used stakeholder theory to integrate the host community right of benefit sharing from ECs (Campbell, 2007; Donaldson and Preston, 1995; Lange and Kolstad, 2012). The theory is flexible enough to cover both the mining and non-mining sectors (Greening and Gray, 1994). Stakeholders are defined as any group or individual who can affect or be affected by the activities of the company. Thus, stakeholders may include but not be limited to employees, customers, suppliers, government and local communities (Freeman, 1984). The definition adopted by this paper is that stakeholders are communitymembers who are living close to mining activities and can be affected or affect by the extraction activities.

Proponents of stakeholder theory assert that without an element of "risk" there is no stake, and the stake is only something that can be lost (Jones, 1995) and the stakeholders should be the ones likely to be affected by the activities of the company. In fact, women and men living close to mining communities arevoluntarily or involuntarily at risk as they surrender their land for project development. In due process, host communities lose cropland, water, wildlife, and forests for fuel and medicines. It has been argued that environmental challenges have been observed on the western side of Songosongo Island whereby extraction activities have been linked to soil erosion. On the other hand, the community experienced a shortage of freshwater at Panga well due to the construction of a TPDC plant. Further, that community loses its rights to access fishing areas to support their livelihoods. In the same way, close communities are involuntarily exposed to explosions and exposure to hydrogen sulphide risks caused by plant emission through combustion, which is toxic and can lead to health problems (Songas, 2002; Darley, 2004).

It is their expectations to get alittle share from mining developmentbecause they are exposed to different risks (Burke, 1999; Rio Tinto, 2010). In this regard, EC management has the responsibility to take the expectations and needs of men and women aiming at gaining a better understanding of challenges caused by extraction activities in the community (Le Masson *et al.,* 2015). Theory entails that confirmation or power, urgency, legitimacy, interests or expectations and community proximity to the project influence a corporation to share benefits to the communities (Rajablu *et al.,* 2014). This is in contrast with Coff's (1999) perspective of organization operation that theory uses state intervention (law) to force companies to share benefits with their stakeholders.However, little is knownabout how stakeholder attributes influence benefits sharing with the surrounding communities where mining activities take place.

The recent studies conducted by academia and industry on local communities and benefits sharing from mineral mining in Tanzania including Lange, 2006, Emel *et al.*, 2012, Lange and Kolstad, 2012, Nyamwaya, 2013, none of the above studies relate the concept of stakeholders influential attributes with benefit sharing from natural gas. Basing on the theoretical framework, this study intended to explorerespondents' characteristics in the study area, community's expectations from natural gas extraction, perceived benefits sharing and factors influencing extractive companies to share benefits with host communities.

Conceptual Framework

It is well known from various literature sources that benefit-sharing between ECs and host communities needs to be guided by various factors. As indicated in Fig. 1, it is assumed that not only the availability of legal framework influence benefits flow from ECs to the host communities, but also there are other factors as stipulated by the stakeholder theory. From legal framework, Petroleum Act No 21 requires investors to sign a Production Sharing Agreement (PSA) which directs ECs to create employment opportunities, transfer technology, education and utilization of local products, as well as prepare corporate social responsibility plans that direct the companies to take into consideration development of close communities in terms of social services so that they can acquire social license to operate. In the same way, the Finance Act of 1982 directs companies to pay 0.3% as service levy to the local government authority and 20% of the money is required to be paid to the host communities. It was further assumed that the following factors also influencehost communities to access benefits (i) host community's proximity to project, (ii) host community interests from the including project or expectations, the

legitimacy of relationship with company, power of host community to influence the firm, and urgency of their claim on the company (Freeman, 1984; Rajablu *et al.,* 2014; Alves *et al*. 2015).
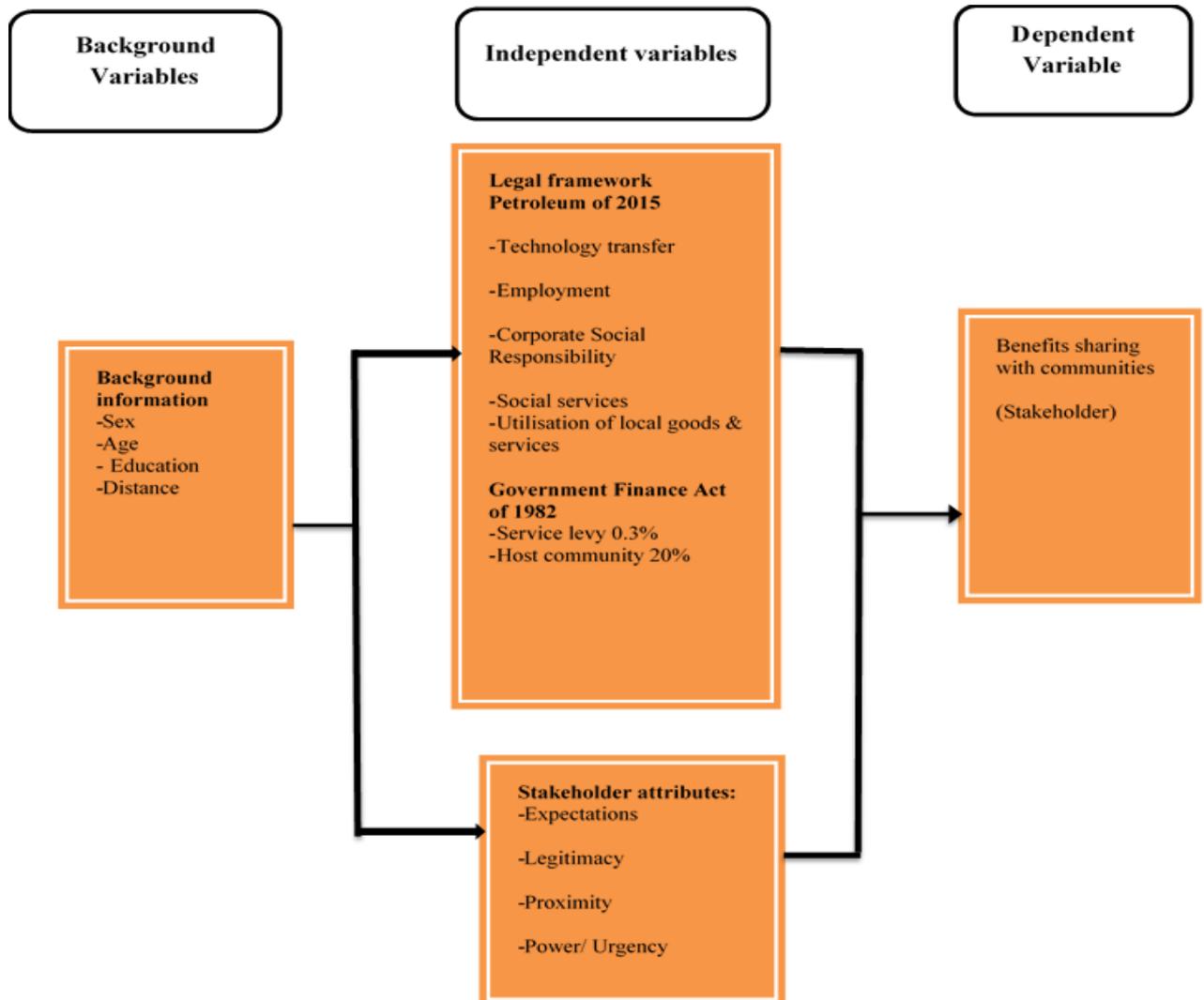
Background Variables

Independent variables

Dependent Variable

Background information
-Sex
-Age
- Education
-Distance

Legal framework Petroleum of 2015

-Technology transfer

-Employment

-Corporate Social Responsibility

-Social services
-Utilisation of local goods & services

Government Finance Act of 1982
-Service levy 0.3%
-Host community 20%

Stakeholder attributes:
-Expectations

-Legitimacy

-Proximity

-Power/ Urgency

Benefits sharing with communities

(Stakeholder)

Figure 1: Conceptual framework for benefit sharing from EC to the host Community
Source: Adopted from the works of Wall and Polen (2011)

2. Research Method

2.1 The study area

The study was conducted in Songosongo and Somanga Fungu Wards in Kilwa District. Songosongo Island is located 247 km from Dar es Salaam and has 3026 inhabitants (Nakamura, 2011; URT, 2013). Somanga Fungu is located 217 km from Dar es salaam and has a population of 10,161. The study area was selected due to the availability of gas wells, processing plants, and power generation plants (Songas, 2001; PWYP, 2011). Thus, the social and environmental situation around the mining communities raised high expectations from communities that the development of natural gas would share benefits (Songas, 2001; Kamlongera, 2013).

2.3 Research design, sampling procedure, and sample size

The cross-sectional study design was employed, and the data were collected once. This design was effective and economical in terms of time and financial resources (Bailey, 1998). Purposive sampling was used to select two Wards where natural gas activities were done. Selection of key informants and participants in focus group discussions (FGD) took place in consideration of gender whereby both men and women were included in the sample. The sample size was determined by employing Cochran's (1977) formula whereby 373 households were selected including 287 respondents from Somanga Fungu and 86 respondents from Songosongo. A random sampling technique was employed to select respondents from Songosongo, Somanga Simu, Somanga North, Somanga Sourth, Marendego and Namatungutungu villages using village registers, whereby 209 men and 164 women were selected.

2.4 Data collection

Both qualitative and quantitative methods of data collection were used. Quantitative data were collected using a structured questionnaire which was administered to 373 respondents from whom information on respondents' characteristics and factors influencing benefit sharing were collected. Moreover, 15 key informants were interviewed based on their being regarded as understanding and having knowledge of natural gas investment. A total of eight (8) Focus Group Discussions (FGD) were held whereby four FGDs were for women and four for men. Each FGD consisted of 6 participants. Secondary data were collected from published and unpublished documents including CSR policy and reports, financial reports and documents on the companies' contribution to local development projects.

2.5 Data processing and analysis

Qualitative data collected from FGDs and key informant interviews were analysed through content analysis. The information was summarized in themes and sub-themes to reflect the objectives of the study. Quantitative data were processed and analysed using the Statistical Package for Social Sciences (SPSS) software. Data were descriptively analysed to determine frequencies, percentages, averages and standard deviations.

A perceived benefit-sharing index was developed to explain benefit sharing to the host community. The benefit variables including water, education, employment, health, electricity and service levy. For each of the variables the responses were either "1" = Yes I get particular benefits or "0" otherwise. The scores obtained from the questions related to the variables were added up to form an index and further categorised into low and high levels of benefits sharing whereby a low level of benefits was represented by scores from 0 to 2.45, while a high level of benefits was represented by scores from 2.46 to 6.00.

Consequently, an expectations index was developed to describe the level of expectations from host communities. The variables that were included for determining the expectations were: employment, health, water, electricity, utilisation of local markets, financial services, compensation for land taken for gas exploration, development funds and sea transport. The scores for lowest were from 0 to 1.45 while high scores for expectation scores ranged from 1.46 to 10.00.

Model specification

Binary logistic regression was used to assess the influence of eight independent variables that influence the host community from sharing benefits with EC. Pallant (2007) points out that binary logistic regression is an appropriate model for predicting dichotomous dependent variables with two or more continuous or categorical independent variables. The model was appropriate for this paper because the response variable, sharing benefits was a dichotomous variable (1 = Yes, 0 = No) with independent factors. The impact of independent variables on the dependent variable was examined to establish which factors contributed to benefit sharing and to measure the role of each variable in explaining the variances in the dependent variable. Value "1" was assigned to "Yes response" whereas "0" was assigned to "No response". More details are given in Table 1.

Table 1: Description of variables used in the binary logistic regression model

Variables	Description
Y	Perceved benefits (1= High benefit, 0 = Low benefit)
X^1	Sex (1 = Male, 0 = Female)
X^2	Age of respondents measured in years
X^3	Numbers of years of schooling
X^4	Distance (1 = if one lives 1 km from a natural gas production cite, 0 = otherwise)
X^5	Expectations from host community (0 = low expectations, 1 = high expectations)
X^6	Legitimacy = provision of development funds in respective wards (1 = if ward received fund, 0 = otherwise)
X^7	Power = availability of communication channels to submit needs and ideas to the company (0 = Yes, 1= No)

The model used the following predictors: sex, age, education level, distance from the household to natural gas activities, expectations of communities before the establishment of EC, legitimacy, and power while the dependent variable was perceived shared benefits, as seen in Table 1. The analysis involved overall model evaluation, Beta weights, Wald statistics and significant level of p-value at 5%. Evaluating the impact of independent variables on the changes of the dependent variable securing is through detecting the signs of the beta value (β value) which indicates either negative or positive signs. The Wald statisticsare commonly used to test the significance of individual logistic coefficients for each independent variable (Garson, 2008). The general logistic regression model equation was as follows:

$$\text{Log(Y)} = \text{in}\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots + \beta_n X_n + e_1$$

Where: p is the probability of the study event occurring = Dependent variable;

Yi = Benefit-sharing (1 = Y, 0 = Otherwise)

β_0 = constant

e_1 = Random error terms

X_i to Xn = Independent variables or set of predictors (factors influencing),

β_1 to βn = Coefficients of the predictor variables

At least one of the $\beta_s \neq 0$

3. Results and Analysis

3.1 Respondents' characteristics

3.1.1. Sex and Age of Respondents

Of the 373 respondents, more than half (56%) were men while women were 44%.It was interesting to note that men and women were almost equally represented in this study. The respondents' age range was between 18 and above 68 years. The large categories (41.2%) of the respondents were in the age group between 31 to 42 years. This indicates that the majority of the respondents are young and middle age, believed to be active in economic activities and they can afford to carry out various roles in the community.This finding is supported by the work of Cheah *et al,* (2011) that young people represent a generation of investors who are more sensitive to the manner in which companies conduct their business and the impact they have on society and the environment.

3.1.2 Respondents' proximity to the natural gas project

Data in Table 2 clearly shows large proportion (76.6%) of the respondents were from Somanga Fungu Ward who lived 10 km from the natural gas wells, electricity plants, and power stations, while 23.3% of the respondents who were from Songosongo Islands lived within 1 km from natural gas wells. This implies that the majority of respondents interviewed come from Somanga Fungu, while the rest were from Songosongo**.**

3.1.3 Years of education

Furthermore, Table 2 shows that 27.4% of the respondents do not have formal education, but they have informal education, whereas 49.5% of the respondents have formal education (seven years of primary education). Only 8% have a university education (sixteen years of formal education). This implies that a large proportion of targeted beneficiaries in the natural gas mining projects completed seven years of schooling or did not attend school at all. Lack of or having little formal education implies that communities are likely to be more unaware of, and concerned about, the impact of the companies' activities on society and the environment. Community's understanding of a company's conduct influences their benefits sharing behavior since they possess the required skills to work in natural gas activities. This further implies that a low level of formal education in the study area is considered an important factor to exclude men and

women from accessing formal employment benefits from natural gas activities.In 2015, Tanzania had a deficit of 200 experts in the field of oil and gas, thus all the posts were taken by persons living outside of mining sites because community members living close to the mining sites did not have the minimum formal education required (MEM, 2015).

Table 2. Respondent's characteristics

Variables	Frequency	Percentage
Sex		
Male	209	56
Female	164	44
Age		
31-42 yrs	154	41.2
18-30 yrs	120	32.2
43-55 yrs	67	18
56-68 yrs	22	5.6
Above 68 yrs	10	2.7
Distance		
1km	87	23.3
10km+	286	76.7
Education		
0 Year (No formal education)	101	27
7 years (Standard seven)	185	49.5
11 years (Form four)	63	16.8
14 years (Diploma)	21	5.6
16 Years(Bachelor Degree)		.8

3.2 Stakeholder's expectations from natural gas mining

Community expectations have been growing attention on benefit-sharing approaches in recent years (Wall and Pelon, 2011). The largest portion (16.6%) of respondents expected to be employed by EC (Table 3). Community members expected to get employment as alternative livelihood strategies after their land being taken away and experience facing in fishing areas due to extraction activities. The finding is similar to the observation made by Rio Tinto, (2009) that a common expectation is that mining will bring employment, and lack of equitable employment for local people can become a point of tension between companies and communities because

community members lack economic activities. On the other hand, the findings show about 14.6%, 13.5%, 11.5% and 10.5% of the respondents expected improvement in the existing social services including health, education, water, and electricity services respectively (Table 3).This suggests that health, education, water, and electricity arethe potential demands of local communities.The community had expectations that companies would fill in the gaps and provide basic social services. In this manner, when companies address social services, aspirations and expectations of stakeholders improve benefits sharing and social license to operate. Finding a further show that small proportional (5.4%) of the respondents had low expectations in improving sea transport(Table 3). This implies that communities living close to mining sites are used to local boats which involved in livelihood activities such as fisheries, the salt industry, and sea transportation business from Kilwa Masoko harbor to songosongo or Somanga Fungu harbor. The majority (64.6%) of the respondents had higher expectations of sharing different kinds of benefits from natural gas extraction. An experience by Norwegian Church Aid [NCA] (2015) Kenya found similar high expectations of the local community in sharing different kinds of benefits from natural resources extraction to solve their poverty.

Table 3. Stakeholder's expectations from natural gas extraction

Expectations	Responses	%
Sea transport	87	5.4
Development fund	90	5.6
Compensation for land taken	111	7.0
Financial services i.e banks	112	7.0
Utilisation of local markets	133	8.3
Electricity services	167	10.5
Water services	183	11.5
Education opportunities	217	13.6
Health services	233	14.6
Employment opportunities	263	16.5
Respondents expectation index		
Mean index	1.40	
Hig expectation	241	64.6
Low expectation	132	35.4

3.3 Perceived benefits sharing by stakeholders

The findings in Table 4 show that the majority (61.1%) of the respondents had perceived a low level of benefit sharing, while 38.9% had perceived a high level of benefits sharing from the natural gas ECs. The findings further imply that mining companies had little impact on poverty reduction among host communities. These findings are similar to the arguments by Kamlongera (2013) who found that different host communities in Malawi were disappointed with benefit-sharing from EC because there was little effort to improve their livelihoods. EC reported big and useful projects to improve host communities' livelihoods, but it was contrary to the reality of the actual projects. In one FGD at Somanga Fungu the discussants said:

> *"Benefits are not equally distributed as it was expected. The main challenges are non-payment of service levy by the local government authority to the respective wards, little communication with the target groups to understand needs and low awareness of local, political and cultural contexts. Further, women are still struggling to access safe and clean water and health services in our ward".*

This implies that respondents from Somanga Fungu Ward perceived low benefit sharing because their ward was not receiving service levy, no proper communication to submit their claims against extractive companies, and lacked safe water and health services.

Table 4: Stakeholders Perceived benefits-sharing index (n = 373)

Score	n	Percentage
1	83	22.3
2	127	34.0
3	70	18.8
4	40	10.7
5	47	12.6
6	6	1.6
Mean Index 2.45		
Std Dev. 1.53		
General perceived benefits		
Low benefits	228	61.1
High benefits	145	38.9

3.3 Factors Influencing Benefit Sharing

The findings in Table 5 indicate that the model has predictors percentage accuracy classification (PAC) of 84.2% which implies that the model was appropriate.The model performance was statistically significant (χ^2(8 df) = 291.268, p < 0.001). Hosmer and Lemeshow statistic which indicates the inferential test for goodness-of-fit, the model fitted the data well (R^2 (7 d.f) = 6.812, p > 0.05). The descriptive measures of goodness-of-fit also supported that the model fitted the data well (Cox and Snell R^2 = 0.542, Nagelkerke R^2 = 0.735).

The findings further showed that three out of seven independent variables were statistically significant on benefits sharing including distance or proximity, education, and legitimacy. This indicates that Kilwa District Council was among the extractive companies' stakeholders hence entitled to get benefits. This finding is in line with Mitchell *et al.* (1997) and Rajablu *et al.* (2015) who recommended that stakeholders can be identified by the possession of one, two or three of the factors.

It was further revealed that distance or proximity of the host community to the mining activitieswas significant atp < 0.05. This implies that communities living close to mining areas can access more benefits than those who live far from the mining sites. This was also supported by one of the key informants from Somanga Fungu who commented that:

> *"Our fellows are privileged by the natural gas project as PAT, Songas and TPDC companies invested more in social services at Songosongo Island compared to Somanga Fungu Ward where we have only electricity project "*

Similar findings were reported by Rajablu (2014) who observed that the shorter the distance from homestead to the mining activities the higher the rate of access of locals to different benefits. However, Chuhan-Pole *et al.* (2015) noted that within less than 20 km there is an economic footprint of mining activities.

Accordingly, education had negative effect (p < 0.05). This implies that respondents with higher education had more chances of sharing benefits than the ones who had a low education level. Kasanga (2005) argues that education is valued as a means of deliverance from ignorance and enables one to perform effectively any task within a specified period. Similarly, legitimacyshowed to have a positive effect (p < 0.05). This indicates that the presence of legal

and regulatory frameworks in the mining sector was found to be a determinant of the host communities' ability to access benefit-sharing from the mining development.

Table 5: Factors influencing community sharing benefits with extractive company

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
							Lower	Upper
Sex	-0.559	0.350	2.550	1	0.110	0.572	0.288	1.136
Age	-0.010	0.015	0.431	1	0.511	0.990	0.962	1.019
Distance	-7.716	1.264	37.290	1	0.000	0.000	0.000	0.005
Expectations	0.106	0.380	0.078	1	0.781	1.112	0.528	2.430
Legitimacy	1.917	0.430	19.889	1	0.000	6.799	2.928	15.876
Communications channels	.496	0.466	1.133	1	0.287	1.642	0.659	4.094
Education	-3.776	0.744	25.765	1	0.000	43.642	10.155	187.554
Constant	2.251	1.193	3.561	1	0.059	9.495		

Model evaluation				
Tests:	χ^2	**Df**	**P**	
Likelihood ratio test	291.268	7	0.000	
Goodness of fit test				
Hosmer & Lemeshow test	6.812	8	0.557	
Nagelkerke's R^2 and Cox & Snell's R^2	207.195	0.542	0.735	
Percentage accuracy classification –PAC			84.2%	

4. Conclusions and Recommendations

It was established that communities have low access of perceived benefits sharing from EC. A low level of benefits sharing was caused by the mismatch between communities' expectations and the actual EC development contribution to the neighboring communities. On the basis of this conclusion, the governments, local government and ECs should take into consideration in their plans, host communities' expectations as a point of intervention for benefit sharing.

It is also concluded that Kilwa District is among stakeholders hence entitled to receive benefits from ECs as three factors (distance or proximity, education and legitimacy) have a positive impact on benefits sharing ($p < 0.05$). Accordingly, it is recommended that there is a need to improve communication between companies and host communities to understand opportunities available from extraction companies.

Acknowledgments

REFERENCES

Alves, E. R., Gomes, E. R. and Corsini, L. F. (2015). The characteristics of Power, Legitimacy and Urgency of Stakeholders and the Actions of Corporate Social Responsibility of Companies. *Asian Journal of Business and Management Sciences* 3(7):34 – 46.

Bailey, D. (1998). *Methods of Social Science Research.* The Press Collier Macmillan, London. 475pp.

Bekkering, G. E. and Kleijnen, J. (2008). Procedures and methods of benefit assessments for medicines in Germany. *The European Journal of Health Economics* 9(1): 5 – 29.

Burke, E. M. (1999). *Corporate Community Relations: The Principle of the Neighbor of Choice*. Quorum Books, Westport. 68pp.

Cappelen, A. W., Fjeldstad, O., Jahari, C, Mmari, D., Sjursen, I. H. and Tungodden, B. (2016). Not so great expectations: Gas revenue, corruption and willingness to pay tax in Tanzania. *Chr. Michelsen Institute (CMI) BRIEF* 15(4): 1- 4

Campbell, J. L. (2007). Why would corporations behave in a socially responsible way? An institutional theory of corporate social responsibility. *Academy of Management Review* 32(2): 946 – 967.

Cheah, E., Jamali, D., Johnson, J. E. V. and Sung, M. (2011).Drivers of Corporate Social Responsibility Attitudes: The Demography of Socially Responsible Investors.*British Journal of Management* (22) 305 – 323

Chuhan-Pole, P. Dabalen, A. Kotsadam, A. Sanoh, A. and Tolonen. (2015). A. The Local Socioeconomic Effects of Gold Mining; Evidence from Ghana; Policy Research Working Paper 7250. World Bank.28pp.

Coff, R. W. (1999).When competitive advantage doesn't lead to performance: Resource-based theory and stakeholder bargaining power. *Organization Science* 10: 119- 133

Darley, J. (2004). *High Noon for Natural Gas: The New Energy Crisis*. Chelsea Green Publishing, White River Junction, Vermont. 42pp.

Donaldson, T. and Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review* 20(1): 65 – 91.

Emel, J., Makene, H. M. and Wangari, E. (2012). Problems with reporting and evaluating mining industry.community development projects: A case study from Tanzania. *Sustainability Journal* l4: 257 – 277.

Eweje, G. (2006). The role of MNEs in community development initiatives in developingcountries. Corporate social responsibility at work in Nigeria and South Africa. *Business and Society*45: 93 – 129.

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. MA Pitman Publishers, Boston. 46pp.

Garson, G. D. (2008). *Testing of Assumptions. Quantitative Research In Public Administration*. North Carolina State University, USA. 70pp.

Greening, D. W. and Gray, B. (1994). Testing a model of organisational response to social and political issues. *Academy of Management Journal* 37(3): 467 – 498.

Jones, T. M. (1995). Instrumental Stakeholder Theory: A synthesis of ethics and economics. *Academy of Management Review* 20 (2): 404 – 437.

Kamlongera, P. J. (2013). The mining boom in Malawi: Implications for Community development. *Community Development Journal* 48(3): 377 – 390.

Kayumba, A. A. (2014). *Challenges and Prospects of Benefits Sharing from Oil and Gas.* Institute of Law and Environment Governance, Nairobi, Kenya. 3pp.

Lange, S. (2006). Gold and governance: Legal injustices and lost opportunities in Tanzania. *African Affairs* 110(439): 233 – 252.

Lange, S. and Kolstad, I. (2012). Corporate community involvement and local institutions: Two case studies from the mining industry in Tanzania. *Journal of African Busines* 13(2): 134 – 144.

Le Masson, V., Norton, A., and Wilkinson, E. (2015). Gender and Resilience. BRACED. [www.odi.org/sites/odi.org.uk/files/odi-assets/publicationsopinion-   files/9890.pdf] Site visited on 2/7/2017.

Mader, K. (2012). Corporate Social Responsibility in Tanzania: [httpd://csroveriew tanzania.files.wordpress.com/2012/08/csr-overview-tanzania3.pdf] site visited on 27/7/2016.

Mitchell, K. R., Agle, B. R. and Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review* 22(4):853 – 886.

Moser, C. (1989). Gender planning in the third world: meeting practical and strategic needs. *World Development* 17(11): 1799 – 1825.

Mwalyosi, R. and Hughes, R. (1998). *The Performance of Environment Impact Assessment in Tanzania: An Assessment*. Research Paper No. 41. International Institute for Environment and Development, London. 5pp.

Nakamura, R. (2011). Multi-Ethnic Coexistence in Kilwa Island, Tanzania: The Basic Ecology and Fishing Cultures of a Swahili Maritime Society. The *International Journal of Research into Island Cultures* 1: 44 – 68.

Norwegian Church Aid [NCA]. (2015). *Local Communities in Kenya's Extractive Sector:From Paternalism to Partnership*. Nairobi, Kenya.166pp

Nyamwaya, C. (2013). *Benefits Sharing on Extractive Natural Resources with Society in Kenya*. Kenya Human Rights Commission. Nairobi. 32pp.

Pallant, J. (2007). *Statistical Package for Social Sciences (SPSS) Survival Manual*: *A step by step Guide to Data Analysis Using SPSS for Windows* 3rd Edition. Open University Press. Berkshire. 212pp.

Pham, T. T., Brockhaus, M., Wong, G., Dung, L. N., Tjajadi, J. S., Loft, L., Luttrell, C. and Assemble, M. S. (2013). *Approaches to Benefit Sharing: A Preliminary Comparative Analysis of 13 REDD+ Countries.* Working Paper No. 108. Centre for International Forest Research, Bogor, Indonesia. 4pp.

PWYP (Publish What You Pay). (2011). *Tanzania Oil and Gas Trend and Status Repor*t. Government Printer, Dar es Salaam, Tanzania. 24pp.

Rajablu, M., Marthandan, G. and Wan Fadzilah, W. Y. (2015). Managing for Stakeholders: The role of stakeholder-based management in project success. *Asian Social Science* 11(3): 111 – 125.

Rio Tinto (2009). *Why Gender Matters: A Resource Guide for Integrating Gender Considerations into Communities Work at Rio Tinto.* Queensland, Australia, 80pp.

SIDA (2015). Gender analysis, principles and element. [http://www.sida.] site visted on 6/3/2016.

Songas (2001). *Environmental and Social Assessment and Management Plan. A summary of Environmental and Social Impact Studies and Detailed Management Plan*. Songas, Dar es Salaam. 59pp.

Songas. (2002). *Environmental and Social Management Programme for the Songosongo Gas to Power Project*. Dar es Salaam. World Bank/TPDC. 40pp.

LHRC and ZLSC (The Legal and Human Rights Centre and the Zanzibar Legal Services Centre) (2014). *Tanzania Human Right Report*. Dar es Salaam, Tanzania. 227pp.

United Republic of Tanzania (2013). *The National Natural Gas Policy of Tanzania. Minister for Energy and Minerals.* Government Printer, Dar es Salaam, Tanzania. 2pp.

United Republic of Tanzania (2015). Extractive Industries Transparency and Accountability (TEIT) Act. Government Printer, Dar es Salaam, Tanzania. 3pp

United Republic of Tanzania (2013). Tanzania national population and household census. [http://www.scribd.com/doc/134906223/Tanzania] site visited on15/8/2014.

Usman, Z. G. and Abbasoglu, S. (2014). An overview of power sector laws, policies and reforms in Nigeria. *Asian Transactions on Engineering* 4(2): 1 – 7.

Wall, E. and Pelon, R. (2011). *Sharing Benefits in Developing Countries: The Experience with Foundation, Trust, and Fund. Extractive Industry*. World Bank, Washington DC. 6pp.

Word Bank (2015). The Art and Science of benefit sharing in the natural resource sector.[http://www.ifc.org/wps/wcm/onnect/8e29cb00475956019385972fbd86d19b/IFC_Art+and+Science+of+Benefits+Sharing_Final.pdf?MOD=AJPERES &CACHEID=8e29cb00475956019385972fbd86d19b] site visited on 29/5/2016.