



Vol. 3 | Social and development concerns in Africa (b)

Vol. 3 Article 8/15 | October 2018

Copyright © 2018 The International Journal of Social and Development Concerns (IJSDC) All Rights Reserved
(An International Publisher for Academic and Scientific Resources)

IMPLICATIONS OF SODA ASH MINING ON THE LIVELIHOODS OF INDIGENOUS MAASAI COMMUNITY: A CASE OF TATA CHEMICALS MAGADI, KAJIADO COUNTY, KENYA

Kaanto Lemarron, Dr. Urbanus Mwinzi Ndolo, Bernard Ndonga

Corresponding author: lkaanto@yahoo.com

The Catholic University of Eastern Africa, P.O BOX 62157 00200, Nairobi, Kenya

Chief Editor

Web: www.ijfdc.org

Email: info@ijfdc.org

Editing Oversight

Impericals Consultants
International Limited

Abstract: *The study sought to investigate how Tata Chemicals Company Soda ash mining activities have affected the indigenous Maasai community's livelihoods security. Kenya is a nation endowed with minerals such as oil, gas, diamonds, Gold and Uranium though in small quantities. The study adopted a case design and purposive sampling technique where interviews and observation were extensively used in data collection. Data were analysed qualitatively. The findings reveal that although the company has assisted the local community with water, improved social infrastructure like schools and health facilities including creation of employment for some local people in different sectors, it has caused serious negative environmental and social impacts on the environment and the people's way of culture. This includes not only environmental degradation and removal of pasture, but also land alienation, which has pushed the local people far away from the region in search of pasture and water for their livestock. The study concludes that the Companies social responsibility programme should be enhanced to target reduction of extreme poverty especially when the community are seriously affected by chronic drought; and increase sponsorship of children from needy households to access education and technical skills as a long-term social security safety net. It recommends that both the County and National Governments should review the soda ash mining policy framework to ensure that the local community range groups earn a proportion of the Companies income to enable them rehabilitate the environment and boost the children to acquire education for the communities sustainable future.*

Key Words: *Magadi, Soda Ash, Indigenous community, Livelihoods, security, sustainability, poverty, alienation*

1.1 Background to the study

For many indigenous communities around the world the consequences of the industrialisation, and in particular, the destruction of agrarian lands in the commercial pursuit of the mineral resources which lie beneath, have brought major social, environmental and economic changes (Namu, 2015). The areas most impacted are education, health, economic mainstay, the environment, social structures, and human security (Isidro, 2015). A study in Russia by Margolis and Walsh (2013) established that mining of iron ore earned the country \$794 billion and is reported to have immensely contributed to the indigenous peoples' economic lifeline and empowerment. Could Kenya earn and improve the economy from soda ash? However, the study established that mining activities have negatively affected and loosen the social fabric and core existence as mining players and indigenous people take on each other and consider mining as source of individual gratifications and accumulation of wealth by a few people. This is a good learning experience for Kenya, since similar conflict seems to emerge in other regions besides the study area.

Africa is rich with a wide variety of minerals such as oil and gas, diamond, gold, uranium, nickel, coltan, and others. There is great hope that those resources will contribute to continuing economic growth and improvement of the quality of life in a number of countries (Margolis & Walsh, 2013). However, experience demonstrates that the wealth generated by the extraction and sale of natural resources has not always translated into positive outcomes. In many cases, it has in fact led to economic decline, poorer quality of life and protracted conflicts, hence the term, "resource curse".

Natural riches such as valuable minerals have often been accused of fuelling armed fighting. A typical case that recently made the headlines is the heavy fighting that broke out between the Rizeigat and Bani Hussein, two Arab tribes, over the Jebel Amer gold mine near Kabkabiya in Sudan's North Darfur region, killing more than 800 people and displaced some 150,000 others since January 2013. Fighters from the "Sudan Liberation Army" (SLA) have operated their own illicit gold mine in Hashaba to the east of Jebel Amer to finance their fighting. Other prominent examples of rebels sustaining their fighting efforts with the cash from running mines include rebels groups operating in Sierra Leone and Liberia.

1.2 Statement of the problem

The mining industry contributes 45% of the world's gross domestic product (GDP) (Boehm, 2012). In Kenya, mining contributes 1 per cent of the Kenyan GDP (Global Times, 2015). Mining is also source of direct and indirect employment apart from that mined deposits are used to make products such as ornaments, currencies, utensils, trophies and so on. Mining therefore plays a significant role in the economy and in the society. However, there has been an outcry from both parties based on media reports on the relationship between the indigenous Maasai local community and Tata Chemical Magadi Limited regarding the exploitation of soda ash in the ward thus a clear need to understand the effects of mining on socio-economic of indigenous community in Kenya.

1.3 Research Objectives

The general objective of the study was to investigate the socio-economic effects of Tata Chemicals Magadi on the livelihoods of indigenous Maasai community in Kajiado County Kenya. The specific objectives were:

- i. To examine the effect of mining of soda ash on the incomes of the indigenous Maasai community in Kajiado County Kenya.
- ii. To examine the effect of alienation on the coexistence of the indigenous Maasai community in Kajiado County Kenya.
- iii. To assess the effectiveness of corporate social responsibility on the wellbeing of the indigenous Maasai community in Kajiado County Kenya.

1.4 Justification of the study

There are little empirical studies done to explore the implication of large scale mining on the indigenous Maasai communities. An assessment of the situation in Magadi Ward of Kajiado North Subcounty of Kajiado County and the effects of Tata Chemicals Magadi Limited have for a long time been left for discussion by entities that can be considered either partisan or inadequately equipped to give a scientific analysis of the state of affairs. The partisan entities include the local indigenous Maasai community and Tata Chemicals Magadi Limited, based on the interests that both parties have in the entire scenario. The parties that would be considered inadequately equipped to report on the issue are the media.

1.5 Significance of the Study

The study may be of importance to the government of Kenya as well as the County Governments in that it may be used as a reference document in informing the policies of permitting the operations of MNCs and other investors in the mining and extractive industries. The study is to be significant to the stakeholders more especially the host community in that it would enlighten them on the influence of the operations of Tata Chemicals Magadi Limited on the socio-economic wellbeing of the host community. It would also serve as an eye-opener for other stakeholders e.g. NGOs and CBOs working in the area within the domain of socio-economic empowerment as it would reveal detailed information on the three issues under the objectives of the study. The study would also be of significance as it would seek to contribute to the knowledge gap in terms of the socio-economic well-being of the indigenous Maasai host community living around Tata Chemicals Magadi Limited. It provided information on the effectiveness of Tata Chemicals Magadi Limited CSR's policies, the influence of their operations on the livelihoods of the indigenous communities as well as how their co-existence has been affected.

1.6 Scope and Delimitations of the Study

This study focussed on the impact of soda ash mining on indigenous Maasai community in Magadi Ward, Kajiado County. The study focussed on how Tata Chemicals Magadi Limited soda ash mining influences the socio-economic well-being of the Maasai community in Kajiado County. The target population was the local members of Magadi Ward in Kajiado County. The study was undertaken for a period of eight months from January 2017 to September 2017. Lake Magadi in Magadi Ward in Kajiado County is the main source of soda ash mining in Kenya. This therefore means that this was only focussed to assess the impact of soda ash mining on indigenous Maasai community in Magadi Ward, Kajiado County. This was likely to give more

accurate results compared to if the study had wider scope of mining areas in part of Kenya to be also covered.

1.7 Conceptual Framework

Cooper and Schindler (2011) define conceptual framework as a model or delineation showing the relationship between or among variables in a study.

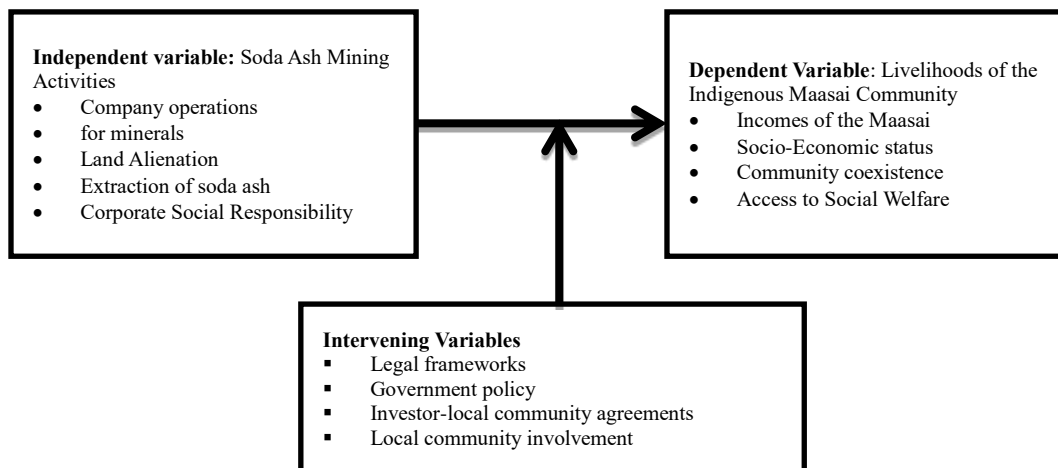


Figure 1: Conceptual Framework

Source: Researcher's own illustration on how the variables influence each other

The conceptual framework above shows the relationship between socio-economic status, incomes, alienation, co-existence and access to social welfare as dependent variables. Legal frameworks, government policy, investor-local community agreements and local community involvement as moderating variables.

1.8 Review of empirical studies

In Kenya, several commercial and local mining activities have been practiced for many decades that date back to 1911. Minerals are among the most important natural resources in the Kenyan economic context. Currently, mining contributes 1 per cent of the Kenyan global domestic product (GDP) (Global Times, 2015). Because of its great potential to contribute to achieving high economic growth rates envisioned under Kenya Vision 2030, the mining and mineral resources sector has been included as a priority sector under the economic pillar of Kenya Vision 2030 and its Second Medium Term Plan (2013-2017). Its contribution to GDP is expected to increase to three percent by 2017 and 10 percent by 2030, making mining a key driver of economic growth and transformation (Mining & Minerals Policy, 2016).

The mining industry in Kenya is dominated by metallic and non-metallic minerals. The metallic minerals that are currently produced in Kenya include titanium, iron ore and gold. The statistics of the Kenyan annual export shows a continuous growing of the mining sector in Kenya. For instance, the export of titanium increased to 25,000 tons by February 2014 and the value is expected to increase annually. Metallic mineral, for instance gold is produced basically by artisanal workers in the Western and Southern regions of the country where it is found in several

small greenstone belts. On the other hand, iron ore is also mined in small quantities in the localized deposits for use in the domestic production of cement (Ministry of Mining, 2015). Kenya is rated the third largest world producer of soda ash and the seventh largest producer of

fluorspar, all of which are non-metallic minerals (Witness, 2011). Commercially, Kenya started mining soda ash since 1911 in Magadi Division in Kajiado County (Matthews, 2014). This has been carried out through collaboration with the Tata Chemicals Magadi Limited formerly Magadi Soda Company Limited. There has also been mining of salt in the same area. Tata Chemicals Magadi Limited operated in the Lake Magadi as the Africa's largest soda ash producer (Omolo, 2013).

According to Hughes (2016), the Magadi leases by the mining company occurred after wide consultations and official agreements made between them and the Maasai community living in Magadi Division. These included the Maasai Agreement and other certain passages established during the 1911 Agreement, which suggested that the British administrators were waiting to secure Maasai representatives' acquiescence to land alienation before granting mineral extraction rights in the area (Rutten & Mwangi, 2013). The agreement was not of the alienated land, but in territory supposedly reserved for the community that had been dispossessed its source of livelihood.

History of Tata Chemicals Magadi Limited in Kenya

Tata Chemicals Magadi Limited was established at Lake Magadi of Kenya in 1911. It was entirely owned by a UK based company called Brunner Mond PLC as its subsidiary (Hughes, 2015). The mother company, Brunner Mond and Company was established in 1873 as a soda ash manufacturing in the UK. In the year 1926, Brunner Mond and three other chemical companies merged to establish Imperial Chemical Industries that would later be called ICI. Brunner Mond Holdings Limited was established in 1991. The newly found corporation included the Soda Ash mining business in Kenya established from the ICI. In February 1998, the soda ash activities of Akzo Nobel in the Netherlands were acquired. The acquisition of Brunner Mond PLC by Soda Ash Investment PLC was completed in September 1998 (Hughes, 2015). Consequently, the shares of Brunner Mond were delisted from the London Stock Exchange in September 1998 and the company was later renamed Brunner Mond Group PLC.

Background of Magadi Ward Kajiado County

Magadi ward lies in the Great Rift Valley, about 120 km South West of Nairobi at a latitude of 605m (2000 feet) above sea level. The average rainfall each year is around 500mm, about half falling between March and May. Temperatures range from 29°C to 41°C, giving a high evaporation rate of 3500mm per year. Lake Magadi consists of a deep crystalline bed of Trona (the name given to the naturally occurring solid mineral content), which is a mixture of sodium sesquicarbonate, sodium chloride, other sodium salts and clays, together with a small amount of organic matter. The Trona deposit is up to 30 meters thick, and the surface of the lake covers about 80sq.Kms.

Table 1: The History of Tata Chemicals Magadi Limited

Year	Event
1902	Deposit discovered
1911	Establishment of Magadi Soda Company
1914	Outbreak of First World War
1924	Company purchased by Brunner Mond & Co, Northwich, UK
1926	Formation of ICI; BM & Co a founder member
1991	ICI sells U.K. and Kenyan soda ash interests
1995	Took Control of Rail Operations
1998	Magadi pure Ash Project (MPAP) Commenced
2004	MPAP Construction started
2005	Tata Chemicals Ltd acquires a majority stake in the Brunner Mond Group
2006	Tata Chemicals acquires 100% stake
2011	April 1, change of corporate name to Tata Chemicals Magadi Limited in line with Tata worldwide

Source: Nairowua, 2016

Effect of Mining on Incomes and Socio-economic Status of Indigenous Communities

Indicators are “succinct measures that aim to describe as much about a system as possible in as few points as possible” and which “help us understand a system, compare it and improve it. (Hughes, 2015). The aspect of incomes and improved socio-economic status are central to the general well-being of the local communities. Incomes according to the study are looked at earnings from employment, either from the self or other opportunities. On the aspect of socio-economic indicators, there are certain fundamental rights that when met, they can be used as a benchmark to decent living of the community members. These include but are not limited to healthcare, education, nutrition, security among others.

Effect of Alienation on Coexistence of Indigenous Communities

According to Schmiermund (2014), alienation can be defined as the actual take-up of land, which meant the alienation of the local community from the use of this vital resource. The aspect of alienation in this study brings to light the nature of what normally happens in incidences when big corporations take strike deals with governments around the world that involve the local population being relocated or pushed out of their land (normally ancestral) so that they can open shop. Various studies have been carried out that show how this arrangement antagonizes, compromises and offsets the livelihoods of the local communities affected.

Ross (2013) opines that indigenous territories are often part of a water basin or a fragile ecosystem such as lakes, moorlands, cloud forests and highland wetlands. The water serves agriculture, livestock and human consumption. The study reported that these resources and their value for subsistence of the inhabitants and their local economies are not taken into account when granting mining concessions nor are given sufficient weight in environmental impact assessments.

Effect of Corporate Social Responsibility on the Social Welfare of Indigenous Communities

The idea of Corporate Social Responsibility (CSR) has existed for over 70 years yet is not a universally adopted concept (Mankay, 2015). Some see CSR as a subset of ethics, some as a unique function of business, whilst others suggest that CSR does not need a universal definition. Perhaps one of the most useful definitions is that provided by Moon (2007) who suggests that CSR is a form of self-regulation to contribute to social and environmental welfare. Despite the lack of a common definition, CSR has become an integral component of many organizations strategic and operational activities. Such activities include volunteer work in communities, promoting environmental awareness and supporting local community causes (Moon, 2007). Corporate organizations see CSR as a means to manage their profit, risks and protect the reputation of their brand and that a company's CSR can greatly contribute to the sustainability of its business success (Ana, 2016).

1.9 Theoretical Framework

The Conflict Theory: This is a sociological concept developed by Karl Marx as a response to a capitalistic form of economic and political system of the West. It tends to discriminate people based social class and economic status (Global Witness, 2011). The theory posits that tensions and conflicts might occur when resources, status and power are unevenly distributed among various groups in a society, and that the conflicts become the elements of change (Sears, 2008). In this context, power refers to the control of material resources and accumulation of wealth, as well as the control of politics and institutions, which constitute the society and one's social status in relation to others. The discriminative control of material resources is determined by culture, economic practices and lifestyles among others. Conflicts have been acknowledged as an integral part of the process of human interaction; they are a continual fact in a society. With respect to natural resources, conflict is bound to arise from competing demands placed on resources by different claimants within the society. This means that in societies that are rapidly changing, as in Eastern Africa, it is not possible to create a conclusive list of resource without encountering conflict situations. As stated by Kuloba (2010), conflicts are the symptoms of disruption or transition within the society. From this standpoint, conflicts contribute to the preservation of social balance by capturing certain challenges, changes and developments within a given society or in terms of governance (Cuts, 2012).

Stakeholder Theory: The stakeholder theory is a theory of organizational management and business ethics addresses adherence to moral values in managing an organizations. It was advanced by Ian Mitroff and Freeman (1983). This theory may serve as a mirror on which organizations may assess their corporate social responsibility activities. Instead of starting with a business and looking out into the world to see what ethical obligations exist, stakeholder theory expects all interested parties to be involved from inception through out the organizational growth and advancement. It lists and describes those individuals and groups who are affected by the company's actions and asks, "What are their legitimate claims on the business to safeguard their interest?" "What rights do they have with respect to the company's actions?" and "What kind of

responsibilities and obligations can they justifiably impose on the investment?” This thinking affirms that those whose lives are directly affected by a corporate agency hold a right and obligation to participate in its operations, especially the local community. Other important stakeholders include shareholders, workers, customers and suppliers. The theory is relevant to the study since it provides a framework on how the local community ought to be involved in Tata Chemicals Company since its activities affect them directly.

1.10 Methodology

This study focused on Tata Chemicals Magadi Limited mining operations in Magadi Ward, Kajiado County Kenya. Magadi ward lies in the Great Rift Valley, about 120 km South West of Nairobi at a latitude of 605m (2000 feet) above sea level. Lake Magadi consists of a deep crystalline bed of Trona (the name given to the naturally occurring solid mineral content), which is a mixture of sodium sesquicarbonate, sodium chloride, other sodium salts and clays, together with a small amount of organic matter. The Trona deposit is up to 30 meters thick, and the surface of the lake covers about 80sq.Kms (Omollo, 2013). The county has a total population was estimated at 807,070 with 401,785 being females and 405,245 males (Kenya National Population Census, 2009).

Research Design

Peil (2003) describes a research design as a cautiously and carefully undertaken process to attain full description of the situation and to achieve minimum bias in the collection of data and reduce errors in interpreting the data collected in order to obtain the desired goal of the project. The study used a case study design, with purposive sampling and observations in data collection. Key informant interview guides and focus group discussion were organized to generate in-depth insights from the local on how their livelihood have been affected by soda ash mining in the study area

Target Population

Cooper and Schindler (2003) define target population as the total number of subjects from which the researcher would draw his sample. The target population consisted of the indigenous maasai community members in Olkeri, Olkiramatian, Oldonyonyokie and Shompole group ranches (as per the Ministry of Lands 2017 data) and other key stakeholders that comprised of the employees, Community Based Organisations (CBOs), Faith Based Organizations (FBO), Non-Governmental Organizations (NGOs) and government representatives (county and National level). The Community Leaders in Magadi ward and Kajiado County were important contributors in all negotiations.

Description of the Sample and Sampling Procedures

This section defines and explains the sampling technique and the sample size that were used in this study.

Sampling Techniques

In a research context, there are two major categories of sampling techniques, which are probability and non-probability sampling. This study used non-probability sampling technique. The sampling approach used in this study was purposive sampling. This approach was adopted to identify knowledgeable respondents on the subject matter from the community, Tata Chemicals

Magadi Limited, government officials and other key stakeholder groups. Purposive sampling was used to select members of the community from the four ranches in Magadi. With the guidance of the respective group ranch leaders, individuals who were available and willing to provide the required information were selected using this strategy. To select the key informants, the same purposive sampling strategy was used. These were individuals such as Tata Chemicals Magadi Limited staff, government officials and community leaders who were deemed to be knowledgeable about the relationship between Tata Chemicals Magadi Limited and the community and therefore had pertinent information that could lend insight to the study. The study therefore used this sampling approach to target these individuals from Tata Chemicals Magadi Limited itself as well as from government representatives.

Kothari (2004) ascertains that generally in a qualitative research approach, participants of 30-50 people are representative enough to be used as a sample size in a study. Likewise for purposive approach to work a few respondents are recommended as Morse (1994) suggests. This study targeted a total of 43 participants. This was meant to ensure optimal diversity for the study based on the representatives of each range. In view of this, a sample size of 36 people drawn from the community were distributed amongst the four group ranches based on the membership population of each group ranch; 4 key informants were selected from Tata Chemicals staff and 5 from other stakeholder groups totalling a sample size of 43. A complete summary of the sampling frame is illustrated below:-

Description of Data Collection Procedures

Table 2: Sampling Frame

Group Ranch	Frequency
Olkeri	8
Oldonyonyokie	7
Olkiramatian	8
Shompole	9
Community Leaders	2
Tata Chemicals Magadi Limited Staff	4
Other Key Stakeholders	5
Total	43

Source: Research data, 2017

Interviews and observation were predominantly employed in this study. Focus group discussions were used to collect data from Maasai group ranch members using the focus group discussion guide mentioned above. FGDs were held in their individual group ranches, where focus group discussion materials such as discussion guides were used to further explore the initial findings.

To further enhance the study, the focus group discussion allowed the participants to agree or disagree with each other in order to provide insights into what the groups thought about the study area. In this regard, they were able to give a range of opinions and ideas. Focus group discussions and interviews with various categories, in addition to secondary data helped in

triangulating the information collected through other data collection methods. The dates and the timing of the focus group discussions were agreed upon by the Maasai community members themselves.

Table 3: Research Instruments used

Category	Data Collection Technique
Maasai Community Members	Focused Groups Discussion Guide
Community Leaders	Key Informant Interviews Guide
Tata Chemicals Magadi Staff	Key Informant Interview Guide
Other Key Stakeholders	Key Informant Interviews Guide
Total	4 Categories

Source: Researcher, 2017

Data Analysis Procedures

The collected data was analysed using content analysis. The findings of structured observation (evidenced by photos in the appendices section), face-to-face interviews and focus group discussion were analysed as mentioned. In content analysis, there was the use of non-numerical approach. In other words, the data was analysed in narrative form. Further explained, such analysis is based on organizing the information based on the issues discussed, which were analysed as interpretation made. In this study, data was organized based on the three study objectives as the main factors that determined the relationship between Tata Chemicals Magadi Limited and the Maasai community. The analysis and interpretation of data were then done. The use of triangulation method were adopted to help the researcher cross examine the views of the members of the Maasai community given through the focus-group discussions and the information obtained through key informants interviews and secondary data. Photos were taken to enhance clarity of the data, especially when dealing with the observable data sets and that provided important information to support the data gathered from the selected study sample during the survey of the study geographical areas.

1.11 Study findings and discussions

The Cohort of Respondents

Based on the selected sample size, the study was able carry out Focus Group Discussions with 28 community members drawn from the respective four group ranches of Magadi Ward. On the other hand, 11 key informants - one faith based leader, one non-governmental organisation member, four members of staff at Tata Chemicals Magadi Limited, one county government officer, two chiefs as well as two group ranch heads (Community Leaders) - were interviewed totalling to 39 interviewees for the study.

Implications of soda ash mining on the Indigenous Maasai People

The first objective of the study was to examine the effect of soda ash mining on the incomes of the indigenous Maasai community in Magadi ward, Kajiado County, Kenya. A research question was also formulated in line with this objective seeking to source for the same. In the research tools, the key informants in the study and the participants in the focus group discussion were asked to describe how soda ash mining by Tata Chemicals Magadi Limited affected the incomes of the indigenous Maasai community in a positive way. It was observed that the company had

served a positive role in regards to employment creation. This was the case in terms of enhanced opportunities both from within and outside the company. From within the company, the income opportunities came about through the offering of employment to the locals which initially were not available. These were such as cleaning, security and basic clerical jobs.

With the setting up of the Tata Chemicals Magadi Limited, opportunities to set up small businesses arose. These were in areas such as whole sale shops and retail outlets, transport, food industry and service businesses like hotels. On the same note, the company opened up Magadi area for opportunities in tourism. The above factors are revealed in the following verbatim expression by one of the key informants.

“This company has employed some people from the local community in the various sectors within the company to earn them a living. For example, cleaning services of the offices and Magadi township has been entirely contracted out to the local community. Apart from that, the company together with the local community are also exploring some other business opportunities including tourism and diversification of livelihoods by introducing bee keeping and posho mills for women groups”.

The negative effects of soda ash mining in Magadi

The study also sought to explore the negative effects of the establishment of the company to the incomes of the indigenous Maasai Community. A question was posed asking for a description of how soda ash mining by Tata Chemicals Magadi Limited affected the incomes of the locals in a negative way.

From the responses and reactions elicited, it was noted that the Maasai community felt that the Tata Chemicals Magadi Limited’s mining operations negatively affected their incomes by withholding a huge chunk of land, which previously was available to the locals. This was used mainly to generate income by the group ranches and since the Company did not pay for it and relying solely on pastoralist, they were hard-hit. The above-mentioned reaction was brought out in a focus group discussion with one of the group ranches representatives.

“The existence of TCML has brought a lot of frustrations and inconsideration to the community as stakeholders.....the company has deprived the community of its bigger chunk of land that is lying fallow without any agreement between the company and the indigenous community”.

In addition to the above, the participants felt that the local community had been side-lined from taking up the plum jobs. They had been relegated to low-paying manual tasks which did not help them much especially due to the high cost of living. On the same note, the findings of the study revealed that the indigenous Maasai community members who had qualifications to meet the well-paying jobs should be given priority in employment by virtue of their ceding land for the establishment of the company. This however was not the case as companies from outside that were contracted to do the staffing did not take this into consideration. Equally, it was noted that the local community members were side-lined in decision-making processes in as much as they felt like they should be stakeholders based on the fact that they had given up their land for the establishment of the company. The above-stated issues were captured in the FGDs held and the

verbatim quotes cited below.

“On the other hand, despite the fact that the land belongs to the Maasai community and the increased number of qualified people from the indigenous Maasai community, most of the employees come from other parts of the country and the world at large, the Maasai community has been typically ignored in employment considerations and are not anywhere in the decision making positions of the company”.

Indigenous Maasai community’s Coexistence with Tata Chemicals Magadi Limited

After having gotten the responses on how coexistence among the indigenous Maasai community was before the setting up of Tata Chemicals Magadi Limited, the study sought to make a follow-up with a probe on how coexistence of the same group was affected after the set-up of the company. The participants who took part in the study were asked to describe how the situation was compared to how it was before the Company had been established.

It was observed that Tata Chemicals Magadi Limited did bring water which was a critical infrastructural development/adage to the community. Magadi Ward being a water scarce region, the aspect of competition for the Kajiado County like many counties in Kenya was most probably as a cause of conflict among the community members for the available water points. The appreciation of the improvement of infrastructure was demonstrated by the verbatim reactions given by the various participants below:-

“The company has provided at least nine watering points at various locations along the 35 kilometre pipeline from Nkuruman escarpment to Magadi. The company also finance the provision of piped water to the Iparakuo community located about 12 kilometres from Magadi Township. Mining by TCML has brought about ease of water access to the animals of the indigenous Maasai community”.

The study also sought to examine whether the negative effects of the Company to the local people. It was observed that the company posed a threat through competition for the available resources. It extracted huge quantities of water in direct competition with the Community’s need of water for their livestock as highlighted below by some of the community elders in their focus group discussion

“The existence of the TCML brought about with it a larger group of investor from outside Magadi Ward. Substantial numbers of land users are now tenants who lease land from Maasai livestock-oriented owners. This has discouraged sustainable development of the land or long-term investment in the farming activity: a decline in soil fertility is one consequence of the former”.

1.12 Conclusions

On the basis of the above findings, the study concludes that:

- Soda ash mining by Tata Chemicals Company limited affects the physical environment to the extent that seriously affects the livelihoods of the locals pastoralists since it reduces arable areas and to an extension pasture.

- The Company was found to have improved infrastructure like roads, water, schools and health clinics which is a great help to the people
- The Company's corporate social responsibility unit does not support the local community in an equal measure, since the company generates more income from their investment
- It has also provided bursaries for education of poor children though not enough.
- The Company has created employment to some of the local Maasai people, although majority are in low cadre jobs
- It was found that the local people are alienated since they are not directly involved in the management of the Company, neither do they know how much it generates.
- The local people usually gets a little share compared to the investors of soda ash mining company.
- Likewise it was found that there is high level of environmental degradation in the area, which would have serious effects on Maasai pastoral way of life for many years to come.

1.13 Recommendations

- The Tata mining Company should establish environmental mitigation programmes to protect the environment alongside their mining activities.
- The Company should strive to increase bursaries and employment level for the indigenous Maasai people.
- Although the Company got a lot positive compliments from the local people for improving infrastructure, they need to have good and timely maintenance programmes.
- Make an attempt to include the local community in the management and planning processes of the company's activities
- Enhance the company's corporate social responsibility unit to provide more to the community in proportion to the high income they make from the mining investment.

References

- Ahafi, H. (2015), The social impact of gold mining in Central Africa: *Journal of Development*, 91, 259–271.
- Ana, C., (2016), The Price of Gold: Gold Mining & Human Rights Violations in Honduras. Report to the United Nations Committee on Economic, Social and Cultural Rights, The Center for Economic and Social Studies. New York. April 2016.
- Boehm, A., (2012), The Participation of Businesses in Community Decision Making', *Business and Society*, 44. 2: 144-78.
- Brereton, D. and Forbes, P. (2014), Monitoring the Impact of mining on local communities: A hunter valley case study. Website: http://www.csr.m.uq.edu.au/docs/Hunter_Valley.pdf, (Assessed 22 January, 2016).
- Business Daily (2016) Magadi Soda Company and Maasais' call for land rights. Link: (<http://www.businessdailyafrica.com/Magadi-Soda-Company-and-Maasais-call-for-land-rights/539444-3373944-i3akn2z/>) Date retrieved: 16/10/2017
- Cooper, .R. and Schindler .D. (2003), *Social Science Research Methods*, 2nd Edition, London: MC Grow Hill Publishers.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Cut, T., (2012), *Living on Mangetti*, Oxford studies on social and cultural anthropology; *Oxford University Press*.

- Drakopoulos, P., (2012), *Tapping into Greece's Mineral Treasure Chest*, Athens News Agency.
- Gelb, A., (2012), *Oil Windfalls: Blessing or Curse?* New York: Oxford University Press, 4 (3): 41-46.
- Global Times (2015), *A Rough Trade: The Role of Companies and Governments in the Angolan Conflict*, London: Global Witness, 7 (2): 4-9.
- Global Witness (2011), *A Rough Trade: The Role of Companies and Governments in the Angolan Conflict*, London: Global Witness, 7 (2): 4-9.
- Hale, C. R. (2014), Rethinking indigenous politics in the era of the “indio permitido”, *NACLA Report on the Americas* 38(2).
- Hughes, L. (2016). Land Alienation and Contestation in Kenyan Maasailand: *Digital Library of the Commons*, Accessed, 29.
- ILO report (2014), Breaching Indigenous Law: Canadian Mining in Guatemala: *Indigenous Law Journal* 6(1): 101-139.
- Isidro, A., (2015), Reforming Panama’s Mining Code: Paper presented at the MMSD Indigenous Workshop, Oct 21 2015. Quito, Ecuador.
- Kadima, A. (2016), Exploring: A detailed look at Kenya’s Mining Act, 2016. Retrieved from <http://www.oraro.co.ke/alert/exploring-a-detailed-look-at-kenyas-mining-act-2016/>.
- Kanfer, S., (2013), *The Last Empire: De Beers, Diamonds and the World*. New York: Farrar Strauss Giroux.
- Kenya National Population Census (2009), (GoK), Kenya Government Printer, Nairobi, Kenya
- Kibet, S., Nyangito, M., MacOpiyo, L., & Kenfack, D. (2016), Tracing innovation pathways in the management of natural and social capital on Laikipia Maasai Group Ranches, Kenya, *Pastoralism*, 6(1), 16.
- Koissaba, B. O. (2016). Elusive Justice: The Maasai Contestation of Appropriation in Kenya: A Historical and Contemporary Perspective. In *Kenya after 50* (pp. 189-219). Palgrave Macmillan US.
- Kothari, C., (2004), *Research methodology, methods & techniques* (2nd ed.).New Delhi: Wishwa Prakashan.
- Kuloba, J. D. (2010). Challenges to and opportunities for collective action in managing communal natural resources: A case of Shompole Wetland, Kajiado District, Kenya , Kenyatta University, Oct 2010.
- Kumaran, D., Hassabis, D., & McClelland, J. L. (2016), What learning systems do intelligent agents need? Complementary learning systems theory updated. *Trends in Cognitive Sciences*, 7(2), 512-534.
- Mackay, F., (2014), Indigenous Peoples’ Right to Free, Prior and Informed Consent and the World Bank’s Extractive Industries Review: Sustainable Development Law and Policy, 4(2): 43–75.
- Margolis, J. D. and Walsh, J. P., (2013), Misery Loves Companies: Rethinking Social Initiatives by Business?, *Administrative Science Quarterly*, 48: 268-305.
- Matthews, E., (2014), *The Weight of Nations: Material Outflows from Industrial Economies* Washington, DC: World Resources Institute.
- Mining and Minerals Policy (2016), *Ministry of Mining*: Retrieved from <http://www.idlo.int/sites/default/files/pdfs/highlights/Kenya%20Mining%20Policy%20Popular%20Version-LowRes.pdf>.
- Ministry of Mining (2015), *The ministry of mining: The 2015 annual report*. Nairobi, Kenya:

- Government Printing Press.
- Namu, A., (2015), Impact of mining on the people of Kwale: *Journal of Environmental Management*, 2: 11-14.
- Omolo, S., S., (2013), *Mineral and oil development, and the politics of the bottom billion*, 3rd Edition, Thousand Oaks, CA: Sage Publishers, London, 3 (3): 11-15.
- Ross, M., (2013), Natural Resources and Civil Conflict: Evidence from Case Studies, Paper prepared for the World Bank: *UC Irvine Workshop on Civil Wars and Post-Conflict Transitions*, May 18-20, 2001, Irvine, CA.
- Rutten, M. M. E. M., & Mwangi, A. (2013), Do geopolitical and historical contexts in explaining conflicts over natural resources really matter? An example from Africa.
- Peil R., D., (2013), *Social Science Research Methods*, 6th Edition, MacGraw-Hill Publisher: New York.
- Schmiermund R., (2014), Social benefits and costs of mining in South Asia, *The Royal Institute of International Affairs*, 83(6), 1123–1140.
- Witness, G., K., (2011), Community Consultation in Mining – A tool for community empowerment or for coercion: *Cultural Survival Quarterly*. Spring.