

BALANCING INFRASTRUCTURE DEVELOPMENT AND COMMUNITY LIVELIHOODS:

Lessons from Mtwara - Dar es Salaam Natural Gas Pipeline





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EXECUTIVE SUMMARY

1. Introduction

This research documents the impact of the construction of Mtwara – Dar es Salaam Natural Gas Pipeline on Land Rights in Lindi and Mtwara.

The research aims at contributing to improvement in the governance of natural resources in Tanzania, through analysis of the impact of the construction of the Mtwara – Dar es Salaam gas pipeline, on the land rights of affected communities. It is also aimed at identifying opportunities for addressing gaps in policy design and implementation, in order to ensure that benefits from the natural gas subsector are inclusive.

The extractive sector in Tanzania received a new impetus in 2010 following the discovery of huge quantities of natural gas in the southern part of the country. Recent discoveries, as early as 2016, have reinvigorated that interest and led to increased investments in infrastructure including pipelines, processing plants and gas-to-electricity plants, to mention a few.

Government commitment to construct key natural gas infrastructure onshore carries implications, in terms of positive and negative impacts, on livelihood of citizens as well as on the environment. Land acquisition and resettlement, which often accompanies major, land-based development projects, usually causes either physical or economic displacement, or both. Ensuring fair, transparent and justified compensation is an obligation that governments have to fulfill. Failure to uphold this fundamental requirement means that projects aimed at bringing development may end up undermining the rights of those that should be benefiting.

The history of construction of natural gas pipelines in the country shows that, the Mtwara – Dar es Salaam natural gas pipeline, which is the subject of this study, was preceded by two, relatively small pipelines. The first was a 25-kilometer marine gas pipeline of 12-inches followed by a 207-kilometer terrestrial gas pipeline of 16-inches diameter from Songo Songo Island to Ubungo in Dar es Salaam, via Somanga Fungu in Lindi. Construction of the Mtwara – Dar es Salaam pipeline took place between 2001 and 2005. The second pipeline was a 27-kilometer marine and terrestrial gas pipeline of 8-inches diameter from Mnazi Bay gas field to Mtwara Power Plant, constructed in 2006. Moreover, the pre-project impact assessment of the former (Songo Songo – Ubungo pipeline), attributed major impacts to land acquisition and resettlement process while a post-project evaluation of the latter (Mnazi bay – Mtwara pipeline) attributed major impacts to land acquisition too.

The new pipeline is the longest and largest natural gas pipeline that has ever been built in Tanzania. The 542-kilometer marine and terrestrial gas pipeline has 4 parts: (i) 290-kilometer terrestrial pipeline of 36-inches diameter from Madimba in Mtwara to Somanga Fungu; (ii) 25-kilometer marine pipeline of 24-inches from Songo Songo Island to Somanga Fungu; (iii) 197-kilometer terrestrial pipeline of 36-inches diameter from Somanga Fungu to Kinyerezi in Dar es Salaam; (iv) 30-kilometer terrestrial pipeline of 16-inches diameter from Kinyerezi to Tegeta in Dar es Salaam. Moreover, the new pipeline marks the beginning of the construction of major natural gas infrastructures in the country, as the government and stakeholders move to monetize the reserve, now estimated at 57.27 Trillion Cubic Feet. As such, it sets a precedent on community consultation, negotiation and compensation handling, in the context of land access and resettlement. It is this view that underlies the importance of drawing lessons from the project.

The study conceptualizes land as livelihood due to the fact that, land is central to the livelihood of the majority of Tanzanians. Government estimates that agriculture employs more than 65% of the population. As such, agriculture has been, generally and rightly so, described as the backbone of the economy not only due to the number of people it supports but also because of its connection to other sectors such as fisheries , pastoralism and trade. Therefore, the report conceptualizes livelihood not only in terms of citizens' access to land but also related resources such as water, pastures and markets. The conception of land as livelihood means that, for people to sustain livelihood after the loss of their land, they would need to at least recover it through fair, timely and adequate compensation.

In Tanzania, the right to own property is guaranteed by the constitution. Article 24, subsection 1 states that "Every person is entitled to own property, and has a right to the protection of his property held in accordance with the law." Subsection 2 makes it unlawful for "any person to be deprived of his property for the purposes of nationalization or any other purposes without the authority of law which makes provision for fair and adequate compensation. "Specifically, land rights are incorporated in the Land Policy of 1995 whose revision began in 2016, Land Act number 4 of 1999 and Village Land Act number 5 of 1999. Section 4.1.1(c) of the policy clearly states that: "The rights and interests of citizens in land shall not be taken without due process of law." Section 4.2.16 (iv) of the policy also categorically states that the "compensation for land acquired in the public interest will be based on the principle of 'opportunity cost." According to Section 4.2.20, they include: Market value of the real property; Disturbance allowance; Transport allowance; Loss of profits of accommodation; Cost of Acquiring or getting the subject land; Any other costs or capital expenditure incurred to the development of the subject land; Compensation should be paid promptly, and if not paid in time, interest at market rate will be charged. The respective laws are meant to enforce the policy statements.

The compensation criteria in the Land Act are outlined in Articles 22(1)(k); 23(6); and 34 (3) (b) of the Act. These are: Not less than one hundred and eighty days' notice of any requirement to move; The opportunity to reap crops sown before any notice to move was given to those persons; The right to continue to use water which those persons had a right to use before being given notice to move; Prompt payment of full compensation for loss of any interests in land and any other losses that are incurred due to any move or any other interference with their occupation or use of land.

Since the new pipeline primarily passes through villages, it is the Village Land Act that is particularly applicable to the rights of villagers. Section 4 (8) (a) (i) of the Village Land Act categorically states that: "No Village transfer land shall be transferred" until "the type, amount, method and timing of the payment of compensation has been agreed upon between "the village council and the Commissioner." Its Subsection (ii) also provides for other persons, particularly those who occupy the village land that is to be transferred, to agree with the Commissioner.

It is also important to note that the Land Act and Village Land Act are read hand in hand with the Land Acquisition Act Number 47 of 1967 as amended from time to time. This study also refers to International Finance Corporation standards which provide for livelihood restoration and resettlement of affected communities in cases involving physical displacement. The IFC standards also require compensation at full replacement cost for land and other assets lost.

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2. Key Findings

The perceptions of the impact of the pipeline construction on land rights are, to a large extent negative, in spite of the enormous future potential presented by the infrastructure.

Community consultation: Respondents interviewed were dissatisfied with the general approach, which fell short of providing a room for Free, Prior and Informed Consent in land acquisition. Although it was indicated that the consultation process involved the use of statutory village meetings, the meetings were characterized by low turnout especially for women, making meaningful and inclusive consultation difficult.

Standards for payment of compensation: Tanzania Petroleum Development Corporation (TPDC) stated use of 'domestic standards' in the calculation and payment of compensation. The standards provided for by the Land Policy and Land Act were not applied consistently across the project area. Community members complained that in Msimbati ward the compensation package involved disturbance allowance and rent payments, while in Kiranjeranje, some project affected people had to spend their own funds to travel to Kilwa district headquarters to collect their compensation, and yet, no refunds were made. The research findings revealed that TPDC did not fully disclose compensation terms. This lack of transparency, inevitably contributed to the feelings of dissatisfaction amongst the people affected by the project. Besides, it is difficult for third parties to accurately examine the fairness and adequacy of the compensation in absence of relevant information.

Delay in paying compensation: The Land Policy (1995) identified the delay in paying compensation as a main concern of many people. In the project under consideration, TPDC compensated those affected by the project before relocation as it is required by the law. However, the affected individuals were dissatisfied with the delay in making payments. The delay, insufficient communication and uncertainties arising from it led to a missed farming season yet no compensation was paid for the additional loss.

Resettlement Action Plan: The pipeline project implementation involved physical displacement of people. However, TPDC did not prepare nor implement a Resettlement Action Plan (RAP). People affected by the project did not receive alternative land. TPDC stated that community members received 'full (monetary)' compensation. International standards, especially those recommended by International Finance Corporation (IFC), suggest substitute land instead of monetary compensation when dealing with poor and vulnerable households. This is the case because, money is easily wasted and for rural and agrarian communities, land is central to recovering and sustaining livelihoods.

Increase of value of land: The value of land in Lindi and Mtwara has appreciated significantly due to the discovery of natural gas and subsequent increase in its demand. The pipeline project implementation triggered land disputes due to the expectations over an increase in the value of land. Community members and village authorities were filing land related complaints more regularly than in previous years. Disputes between villages were over compensation and pipeline protection fees.

Relocation of socio-cultural sites and related costs: Land acquisition involved relocation of important cultural and spiritual sites such as graves. Those affected complained about unfair compensation such as 100,000 Tshs per grave. This compensation did not cover the cost of traditional and religious reburying services.

3. Conclusion

The pipeline project had a huge potential from the beginning, for positively contributing to the livelihood of the people in Southern Tanzania, a region that is relatively impoverished. However, perceptions that their wealth was being taken elsewhere in the country aroused historical feelings of marginalization. Loss of farmland without resettlement or adequate compensation, coupled with the lack of the necessary skills required in the gas industry has negatively affected citizen's prospects for benefitting from the natural gas wealth. As a result, there are grievances that need to be addressed. The gaps identified in policy design and implementation as presented in this report and subsequent recommendations highlight a starting point for public authorities, Oil and Gas companies, civil society, and other stakeholders in addressing issues arising from this study.

4. Key recommendations

Prioritize land use planning and titling: It is important to prioritize surveying of all land in Lindi and Mtwara, preparation of land use plans and issuance of title deeds/Certificate of Customary Right of Ownership (CCROs). This is important in securing ownership rights of smallholder farmers in the current context of high land price appreciation and speculation. This measure will avert future land conflicts and ease their resolution. This initiative can be embedded in the ongoing national land use planning plan.

Develop and implement Resettlement Action Plan (RAP): To ensure that project affected people are able to sustain their livelihood, in cases of physical displacement or restriction on use of land, the government should prepare and implement a Resettlement Action Plan, as a standard. The government should involve LGAs and CSOs/CBOs in the designing of RAP to ensure that the alternative land has the quality of retaining or improving the state of livelihood of those whose land is being acquired.

Uphold Free, Prior and Informed Consent (FPIC) in community consultation: The government is obliged to ensure that Project Affected People (PAP) have access to all the information they need to be able to make informed decisions and either give or withhold their consent. Ensuring transparency in the entire land acquisition process is key in upholding Free, Prior and Informed Consent (FPIC). Findings from this report have shown shortcomings related to availability and access to information. The government needs to improve community consultation through disclosing all relevant information and ensuring inclusion of other interested parties such as Civil Society Organizations. The use of alternative consultation spaces such as sub-village meetings should be considered.

Preserve the Sanctity of Land to Maintain Harmony: When resettlement is necessary and unavoidable, religious and cultural aspects of land need to be honored. This is the case especially when such sites as graveyards and places of traditional worship/rites have to be relocated. In this case, faith leaders should be consulted and involved throughout the process.

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Prioritize livelihoods in Corporate Social Responsibility: Ensure that the livelihood of community members is the main priority in Corporate Social Responsibility (CSR) plans. In this regard, the government has to enforce the provisions in the Natural Gas Policy and the Petroleum Act that require the participation of host communities in the preparation of CSR plans and the approval of Local Government Authority.

LIST OF ACRONYMS AND ABBREVIATIONS

ARAP Abbreviated Resettlement Action Plan

ASIA Environmental and Social Impact Assessment

CCRO Certificate of Customary Right of Ownership

CDA Collaborative For Development Action

CNPC China National Petroleum Company

CPTDC China Petroleum Technology & Development Corporation

CSR Corporate Social Responsibility

CBOs Community Based Organizations

EIA Environmental Impact Assessment

IOCs International Oil Companies

IFC International Finance Corporation

GASCO Gas Supply Company
GIIP Gas Initially in Place

LGAs Local Government Authorities

LNG Liquefied Natural Gas

MMSCFD Million Standard Cubic Feet per Day

NOC National Oil Company

NNGIP National Natural Gas Infrastructure Project

NRGI Natural Resource Governance Institute

PAP Project Affected Persons

RAP Resettlement Action Plan

RCs Regional Commissioners

REA Rural Energy Agency

SAM Social Accountability Monitoring

TCF Trillion Cubic Feet

THDR Tanzania Human Development Report

TPDC Tanzania Petroleum Development Corporation

VEO Village Executive Officer

VLUP Village Land Use Plan

PNG Papua New Guinea

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ACKNOWLEDGEMENT

Oxfam in Tanzania commissioned this research and was undertaken by three independent consultants: Aikande Kwayu (Ph.D), lecturer at Tumaini University (Makumira), Godfrey Telli (Ph.D), lecturer at Mwenge University (Moshi) and Mr. Ahmed Dau, an independent consultant based in Dar es Salaam.

Chambi Chachage (Ph.D candidate at Harvard) and Annmarie Mavenjina (Independent consultant) coedited the report.

The research was funded by Norad's Oil for Development Programme. Dastan Kweka and Jovitha Mlay (Oxfam in Tanzania) co-managed the research.

Oxfam is grateful to Thabit Jacob (University of Dodoma), HakiRasilimali Secretariat and Oxfam America's Extractive Industries Programme team for reviewing several drafts and giving useful input.

PART ONE: INTRODUCTION

1.1. Background

East Africa has been described as a new 0il and Gas frontier, following a series of 0il and gas discoveries from mid 2000s. The discoveries of 0il in Uganda and Kenya, 2006 and 2012 respectively, and huge quantities of natural gas in Tanzania and Mozambique (2010), have enabled the region to capture 'the focus of attention' as a potential source of new global energy supply.²

In spite of the significant discoveries that have been made, East Africa, Tanzania included, is seen as a relatively under-explored region.³ This raises prospects that there will be an 'even larger share of global production and reserves in the future,' from this region.⁴

The ongoing exploration and discovery of natural gas in Tanzania is expected to have a profound impact on social and economic development. Recent discoveries such as in 2015 whereby Norway's International Oil Company (IOC), Statoil, discovered an additional 1.0-1.8 Trillion Cubic Feet (TCF) and Dodsal Group's discovery of 2.15 TCF in 2016, worth an estimated USD 8 billion, are a proof that Tanzania has a huge hydrocarbons potential. ⁵ The figures from the government indicate that Tanzania has a total of 57.27 TCF, Gas Initially in Place (GIIP).

The latest map on exploration activity in Figure 1 below indicates that there is an `exploration rush` in the country. However, onshore and offshore exploration concessions are concentrated on the eastern seaboard. Yet most of the natural gas has been discovered in the southern part of the country, in Lindi and Mtwara regions.

Reuters, 'Highlights from Africa Oil week conference', http://af.reuters.com/article/nigeriaNews/idAFL6E7M42I220111104?pageNumber=1&virtualBrandChannel=0

Ladesma David, `East Africa Gas – Potential for Export` https://www.oxfordenergy.org/wpcms/wp-content/uploads/2013/03/ NG-74.pdf

³ Reuters, Op.Cit.

Brown David, E. `Africa`s Booming Oil and Natural Gas Exploration and Production : National Security Implications for the United States and China`, 2013, Strategic Studies Institute

The Wallstreet Journal. `Dodsal Group Discovers Gas Reserves Worth \$8 Billion in Tanzania`, http://www.wsj.com/articles/dodsal-group-discovers-gas-reserves-worth-8-billion-in-tanzania-1459171005

Ministry of Energy and Minerals. `Energy Sector Quarterly Digest`, https://mem.go.tz/wp-content uploads/2016/09/28.09.2016Final-ESQD-4TH-QUARTER-APRIL-TO-JUNE-2016-final-draft.pdf, page 12

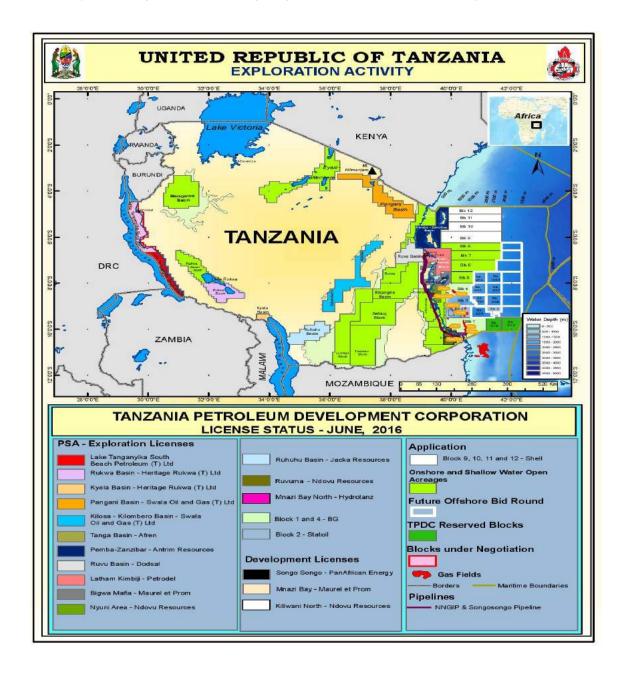


Figure 1: Exploration Activity Map on the Oil and Gas Industry in Tanzania 7

The rush in exploration and discoveries has been happening against what has been described as an 'infrastructure gap.' The government recognized this gap in the national natural gas policy (2013)

⁷ TPDC, `Exploration Activity Map – December 2016`, http://www.tpdc-tz.com/activitymap.php

Natural Resource Governance Institute, `Country Strategy Note`, http://www.resourcegovernance.org/sites/default/files/documents/nrgi_tanzania-strategy_20160629.pdf, 2015

and committed to `participate strategically through its national companies to develop and operate major infrastructure for natural gas. `9 Tanzania Petroleum Development Cooperation (TPDC), as Tanzania's National Oil Company (NOC), has been working with Oil and Gas companies, contractors and other stakeholders in building the requisite infrastructure for extracting, transporting and utilizing gas under what is referred to as the National Natural Gas Infrastructure Project (NNGIP). The project includes Mtwara – Dar es Salaam natural gas pipeline, which is the subject of this research, Kinyerezi 1 (Gas to electricity) processing plant and Mnazi Bay Gas Development Project. ¹⁰

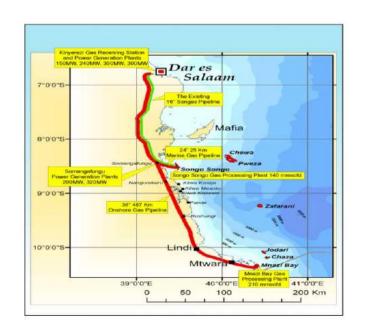


Figure 2: Natural gas transportation pipeline from Mtwara to Dar es Salaam 11

1.2. Rationale of the study

This report is an outcome of the research that was conducted in Southern Tanzania in February 2016. It analyzes the construction of the new gas pipeline in Tanzania and its impacts on land rights of those who live alongside it. The new pipeline marks the beginning of the construction of major natural gas infrastructures in the country, as the government and stakeholders move to monetize the reserve, now estimated at 57.27 TCF. As such, it sets a precedent in terms of how community consultation, negotiation and compensation are handled, in the context of land access and resettlement.

The study is motivated by Oxfam's desire and commitment to have a better understanding of such impacts so as to figure out better ways for redress, prevention in future projects and mitigation.

⁹ United Republic of Tanzania, `The National Natural Gas Policy of Tanzania - 2013` http://www.tanzania.go.tz/egov_uploads/documents/Natural_Gas_Policy_-_Approved_sw.pdf

¹⁰ MEM, `Energy Sector Quarterly Digest` 2015, Op.Cit

Ministry of Energy and Minerals, Energy Sector Quarterly Digest', https://mem.go.tz/wp-content/uploads/2015/11/24.11.15ESQB-FOR-Q1-1.pdf, September 2015 issue, page 21

The construction of oil and gas infrastructure; dams, pipelines, processing plants in other countries in Africa (Chad, Cameroon and Uganda) and across the world has shown that, the process is not without negative impacts to the host communities and environment.¹² The situation tends to be worse in 'poorly planned infrastructure projects' which are often characterized by underestimation of social impacts.¹³

Major infrastructure projects, especially those that are land-based, require land access. Land acquisition may lead to either economic or physical displacement, or both. For rural and agrarian communities, impacts arising from these forms of displacement could be adverse and often lead to conflicts.

The Government of Tanzania, through the natural gas policy (2013), recognizes the fact that 'natural gas operations may have adverse effects on the environment, health and safety of people.' The policy cites, as examples, impacts on marine ecology and carbon dioxide from gas flaring and confirms that the government is committed to follow 'good industry standards and practices' so as to prevent and mitigate impact. ¹⁵

1.3. Methodology: A Listening Approach

This research employed a qualitative research method known as 'collaborative learning,' initially developed and tested by The Collaborative For Development Action (CDA), a US-based non-governmental organization. Collaborative learning method is evaluative, evidence-based and inductive in nature. It is distinct from (traditional) interview in the sense that it values conversation and requires attentive listening. Attentive listening is portrayed as a way of showing respect.

Oxfam adopted the collaborative learning approach first in Papua New Guinea (PNG) (2011) where Esso highlands Limited, a subsidiary of Exxon Mobil, was constructing a Liquefied Natural Gas Plant (LNG).¹⁹ The study in PNG aimed at understanding 'people's experiences and views of the impacts of the PNG LNG project on their villages.'²⁰ The use of the method in PNG was an additional test, after it had proved its usefulness in previous CDA projects.

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Gender Action & Friends of the Nation, `Broken Promises: Gender Impacts of the World Bank-Financed West-African and Chad-Cameroon Pipelines`, http://www.genderaction.org/publications/11/chad-cam-wagp-pipelines.pdf

¹³ Smyth et al, 'Land Access and Resettlement, A guide to Best Practice', Greenleaf Publishing Limited

¹⁴ International Finance Corporation, 'Perfomance Standard 5 : Land Acquisition and Involuntary Resettlement', 2012,

 $^{^{\}rm 15}\,$ See page 19 and 20.

The Origin and Founders of CDA http://cdacollaborative.org/about-cda/history/

¹⁷ CDA, 2012, Collaborative Learning Projects, 'Time to Listen: Hearing People on the Receiving End of International Aid', http://cdacollaborative.org/wordpress/wp-content/uploads/2016/01/Time-to-Listen-Hearing-People-on-the-Receiving-End-of-International-Aid.pdf

¹⁸ CDA, ibid

Oxfam, 2011, `Listening to the Impacts of the PNG LNG Project`, Papua New Guinea, http://www.banktrack.org/download/ listening_to_the_impacts_of_the_png_lng_project/oauspnglnglisteningprojectreport1110.pdf

In this study, the research team constituted itself as a 'Listening Team' and listened to 146 community members living close to the pipeline's wayleave. The team talked to 29 gas stakeholders in Mtwara, Lindi and Dar es Salaam. The total number of interviewees was 175 and these included youth, men and women.

The team selected Lindi and Mtwara for the 'Listening Sessions', out of the 4 regions that the new pipeline passes. The main rationale was that, these 2 regions are the main sources of gas for the pipeline. As Table 1 below shows, these sessions were conducted in villages within 7 wards out of 41 wards in its wayleave. The team employed quota sampling in selecting community members to ensure that, in each ward, participants were drawn from representative groups in the community. Local Civil Society Organizations (CSOs) and village authorities assisted the team in selecting participants.

Table 1: Number of Community Members in the Listening Sessions

Region	Wards	Group	Female	Male
	Masoko	Interfaith Leaders	3	13
		Youth	7	7
Lindi	Songo Songo	Women	14	0
	Kinjumbi	Mixed group	3	15
		Students (Primary)	5	5
	Kiranjeranje	Mixed group	6	9
	Madimba	Mixed group	5	6
Mtwara		Students (Primary and Secondary)	9	11
	Msimbati	Youth	4	9
	Ziwani	Women	15	0
Total Disag	gregated By Gender	71	75	
Grand Total			146	

In two of the sessions the team purposely listened to women only. Such an arrangement allowed for the expressions of insights that might have not come out if all sessions were uniform. When men and women were mixed, the team attempted to ensure that gender balance in the listening process is maintained. This balance is also reflected in the sample whereby, overall, 71 women and 75 men attended the sessions.

The research team carried out a desk study analysis of central and local government reports, media clips, research studies and company records for triangulation purposes. The documents comprised of; annual reports, official interviews, press releases, legal instruments, baseline surveys, financial records, geological maps, impact assessments, and mitigation plans. A systematic literature review of academic books on land and livelihood informs the analytical framework adopted in this report.

1.4. Regional profiles: Lindi and Mtwara

Social-economic profiles of the sampled regions of Mtwara and Lindi were obtained from the respective official websites of the Offices of the Regional Commissioners (RCs).²¹ Mtwara's regional profile indicates that the main economic activity in the region is agriculture with 75.35% of the households depending on it for food and income.²² Agriculture land is 1,400,000 hectares and 85% of all the land in the region is considered arable. Its main cash crop is cashew whereas the main food crop is cassava. Other crops that are grown there include coconut, sesame, millet, pigeon peas, peanuts, black-eyed peas, paddy, green lentils and maize. The remaining 24.33% and 0.32% of the households were involved in livestock keeping and fishing, respectively.

Lindi's regional profile also shows that 'about 85% of the population is living in rural areas where principally they are employed in agriculture.'23 Other economic activities include forestry, small-scale mining, agro processing industry, tourism, trade, cement factory, fishing, beekeeping and livestock.

The Tanzania Human Development Report (THDR) 2014 computed a Multidimensional Poverty Index (MPI) which showed that 'Incidence of Poverty' were evident in 81.9% and 69.2% of the population in Lindi and Mtwara, respectively.²⁴ The 'Population in Severe Poverty' was 47.7% in Lindi and 33.5% in Mtwara. Lindi was the second poorest region in the country, the first being Dodoma with 83% of its population exhibiting 'Incidence of Poverty' and 55.8% in 'Severe Poverty.' Both Lindi and Mtwara were worse than the country's average of 64% for 'Incidence of Poverty' and 31.3% for 'Population in Severe Poverty.' In this study, these statistics are used to gauge the state of livelihood in the two sampled regions where the gas pipeline was constructed.

²¹ Also see Grootenhuis (2003), Perfect et al. (2010) & Sigalla (2014).

²² Mtwara region, `Kilimo`, http://www.mtwara.go.tz/pages/agriculture-1

²³ Lindi region, `Strategic Plan`, http://lindi.go.tz/lindi/strategic-plan/#_Toc340737902

²⁴ Tanzania Human Development Report, 2014, `Economic Transformation for Human Development`, http://esrf.or.tz/docs/THDR2014-Main.pdf

PART TWO: LITERATURE REVIEW AND ANALYTICAL FRAMEWORK: LAND AS LIVELIHOOD

2.1. Analytical framework: Literature Review and Legal and Policy Framework

Land is central to the livelihood of the majority of Tanzanians. This assertion stems from the fact that agriculture employs more than 65% of the people.²⁵ As the backbone of the national economy, agriculture is connected to other sub-sectors such as fishery, pastoralism and trade. Since livelihood has been aptly defined as the capabilities, assets and activities a person requires for her/his means of living, it is part and parcel of these sectors in the country.²⁶ It is in this regard that the report also conceptualizes livelihood in terms of citizens' access to land and related resources such as water, pastures and markets. Hence, any form of 'land grab' or 'water grab'²⁷ can have a negative impact on the livelihood of those who rely on these key resources.²⁸

Two concepts are also useful in linking land to livelihood: rights and recovery. Rights have to do with what a person is, or ought to be, entitled to. Similarly, recovery has to do with what a person is supposed to have, or ought to get, in order to retain and maintain her/his original state. When conceptualized in terms of rights and recovery, both land and livelihood become what a person has a right to have or recover. Based on the above, land rights amounts to the right to livelihood. One way of safeguarding rights is to ensure they are legally binding especially by enshrining them in the Constitution. ²⁹

Since the construction of the new pipeline involved land acquisition, this report focuses on how this process affected people's livelihood and the extent of their recovery. This is linked to key concept of sustainability. As Chambers & Conway (1991:6) put it, "a sustainable livelihood is that 'which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.' In order for community members to sustain livelihood after the loss of their land, they would need to at least recover it through fair, timely and adequate compensation.

In Tanzania, the right to own property is guaranteed by the Constitution of the United Republic of Tanzania (1977). Article 24, sub article 1 states that 'Every person is entitled to own property, and has a right to the protection of his property held in accordance with the law.' Sub Article 2 makes it unlawful for 'any person to be deprived of his property for the purposes of nationalization or any other purposes without the authority of law which makes provision for fair and adequate compensation.' Specifically, land rights are incorporated in the Land Act number 4 of 1999, Village Land Act number 5 of 1999 and Land Policy of 1995.³⁰ Section 4.1.1(c) of the policy clearly states that: 'The rights and interests of citizens in land shall not be taken without due process of law.' Section 4.2.16 (iv) of the

²⁵ Minister's (Agriculture, Livestock, Fisheries) speech on budget estimates for 2016/2017 http://www.kilimo.go.tz/speeches/budget%20speeches/Hotuba%20ya%20Bajeti%202016-17.pdf

²⁶ http://www.ids.ac.uk/publication/sustainable-rural-livelihoods-practical-concepts-for-the-21st-century

²⁷ The terms 'land grab' and 'water grab' are used figuratively and not in their literal sense.

²⁸ Rights to Water and Land, a common struggle`, https://viacampesina.org/en/images/stories/pdf/2015-04-Dakar%20to%20 Tunis%20Declaration_EN_finalfinal.pdf

²⁹ Tanzania affairs, 1995, 'The Land Commission's Proposals', https://www.tzaffairs.org/1995/01/the-land-commissions-proposals/

³⁰ Land Policy 1995 was under review since 2016 at the time of this study

policy also categorically states that the "compensation for land acquired in the public interest will be based on the principle of 'opportunity cost.' According to Section 4.2.20, they include: Market value of the real property; Disturbance allowance; Transport allowance; Loss of profits of accommodation; Cost of Acquiring or getting the subject land; Any other costs or capital expenditure incurred in the development of the subject land; Compensation should be paid promptly, and if not paid in time, interest at market rate will be charged. The laws are meant to enforce the policy statements.

The compensation criteria in the Land Act are outlined in Section 22(1)(k); 23(6); and 34 (3) (b) of the Act. These are: Not less than one hundred and eighty days' notice of any requirement to move; The opportunity to reap crops sown before any notice to move was given to those persons; The right to continue to use water which those persons had a right to use before being given notice to move; Prompt payment of full compensation for loss of any interests in land and any other losses that are incurred due to any move or any other interference with their occupation or use of land.

Since the new pipeline primarily passes through villages, it is the Village Land Act that is particularly applicable to the rights of villagers. Section 4 (8) (a) (i) of the Village Land Act categorically states that: 'No Village transfer land shall be transferred' until "the type, amount, method and timing of the payment of compensation has been agreed upon between 'the village council and the Commissioner.' Its Subsection (ii) also provides for other persons, particularly those who occupy the village land that is to be transferred, to agree with the Commissioner.

The Land Act, Village Land Act and the Land Acquisition Act Number 47 of 1967 are applicable. This study also refers to International Finance Corporation (IFC) standards which provide for livelihood restoration and resettlement of affected communities in cases involving physical displacement. The IFC standards also require compensation at full replacement cost for land and other assets lost.

The Land Acquisition Act Number 47 of 1967 as amended provides for compensation and takes into account the following;1) the value of such land at the time of the publication of a notice without regard to any improvement or work made or constructed thereon thereafter or to be made or constructed in the implementation of the purpose for which it is acquired; 2) When part only of the land belonging to any person is acquired, any probable enhancement of the value of the residue of the land by reason of the proximity of any improvements or works made or constructed or to be made or constructed on the part acquired, 3) the damage, if any, sustained by the person having an estate or interest in the land by reason of the severance of such land from any other land or lands belonging to the same person or other injurious effect upon such other land or lands and 4) it does not take into account any probable enhancement in the value of the land in future. ³¹

Land Regulations (Assessment of the Value of Land for Compensation; Compensation Claims: and Scheme of Regularization) of 2001 are also used in tandem with the Land Acts. As the Abbreviated Resettlement Action Plan (ARAP) Report for another project in Mtwara points out, they 'only provide for compensation equivalent to the market value of the affected land, structure or asset (direct comparison method) and standing crops (earnings approach) as determined by the valuation

³¹ The Land Acquisition Act, Chapter 118, http://www.dlawlibrary.org/index.php/acts/1171-chapter-118-the-land-acquisition-act

assessments.'32 The ARAP further notes that this approach to valuation, 'is not consistent with the resettlement measures required by the World Bank OP 4.12 [Policy on Resettlement] which requires that compensation is paid based on the full replacement value (not depreciated) of an asset.'33 In addition, "OP 4.12 strongly prefers the replacement of 'land for land' where appropriate for all Project Affected Persons (PAPs) including those without title/squatters.' 34

The International Finance Corporation (IFC), a member of the World Bank Group, states that the "client will take possession of acquired land and related assets only after compensation has been made available and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons in addition to compensation.³⁵ Tanzania is a member of IFC since September 10, 1962.³⁶

Of particular interest to the conceptual framework of this report are these IFC guidelines on project involving economic displacement only: 'the client will develop a Livelihood Restoration Plan to compensate affected persons and/ or communities and offer other assistance that meet the objectives of this Performance Standard.'³⁷ The mitigation of economic displacement will be considered complete when affected persons or communities have received compensation and other assistance according to the requirements of the Livelihood Restoration Plan and are deemed to have been provided with adequate opportunity to re-establish their livelihoods.

In the case of physical displacement, IFC provides these guidelines: 'the client will develop a Resettlement Action Plan that covers, at a minimum, the applicable requirements of this Performance Standard regardless of the number of people affected. This will include compensation at full replacement cost for land and other assets lost. The Plan will be designed to mitigate the negative impacts of displacement; identify development opportunities; develop a resettlement budget and schedule; and establish the entitlements of all categories of affected persons (including host communities).'38

IFC asserts the Performance Standard for both forms of displacements may apply simultaneously. This is because 'land acquisition and/or restrictions on land use may result in the physical displacement of people as well as their economic displacement.'³⁹ Its formulation captures the concept of land as livelihood.

³¹ The Land Acquisition Act, Chapter 118, http://www.dlawlibrary.org/index.php/acts/1171-chapter-118-the-land-acquisition-act

Presidents Office – Regional Administration and Local Government, 2016, `Abbreviated Resettlement Action Plan Report for the Buffer Zone for the Mtwara Mikindani Municipal Landfill`, http://documents.worldbank.org/curated/en/333441468299709614/text/SFG2072-V2-REVISED-RP-P111153-Box396251B-PUBLIC-Disclosed-5-5-2016.txt

³³ Ibid.

³⁴ Ibid

³⁵ International Finance Corporation, 2012, `Perfomance Standard 5 : Land Acquisition and Involuntary Resettlement`, http://www.ifc.org/wps/wcm/connect/3d82c70049a79073b82cfaa8c6a8312a/PS5_English_2012.pdf?MOD=AJPERES

³⁶ Leipziger Deborah, 'The Corporate Responsibility Code Book – Third Edition', page 109

³⁷ The World Bank Group, `Member Countries`, http://www.worldbank.org/en/about/leadership/members#3

³⁸ Leipziger Deborah, 'The Corporate Responsibility Code Book – Third Edition', page 109

³⁹ IFC Performance Standards on Environmental and Social Sustainability, http://www.ifc.org/wps/wcm/connect c8f524004a73daeca09afdf998895a12/IFC_Performance_Standards.pdf?MOD=AJPERES

The Natural Gas Policy of 2013 and the Petroleum Act of 2015 indicate how the gas industry would impact on the land rights and livelihood of community members. The Petroleum Act protects the rights of the licensee (companies) involved in the gas industry and may lead to discrimination of land owners. Its Section 186 (2) states that. 'Owners of property on or bordering a wayleave shall not interfere with a licensee's acquired rights.'⁴⁰ The case below from an Environmental and Social Impact Assessment (ESIA) of a pipeline proposed to end where the new pipeline starts, illustrates such discretionary powers of a licensee:

The issue of major land acquisition will not be there as the land under the wayleave for the pipeline project (30m wide) was acquired by the government in 2006 except for the last 2.8km (equivalent to 8.4ha) where the pipeline will be diverted to join the new Gas Processing plant at Madimba. The land acquisition for this stretch is now in progress under a separate arrangement by the license holder (TPDC) and the information will be contained in the separate RAP document prepared by the respective institution. It was assumed that the 30m wide wayleave will allow for installation of a second pipeline in the future, should the growth in demand for gas at Mtwara exceed the capacity of the installed 8 inch line. Since a major part of the land has already been obtained, further compensation for the 8.4ha of land would be required. As for the crops which were allowed in the wayleave, project proponent will provide notification of construction well in advance to ensure farmers have harvested all crops prior to the commencement of construction in the wayleave. In case there are contractual obligations on the proponents side that force cultivators to forfeit their crops as they will not mature then compensation will be carried out to the losers. 41

The Petroleum Act of 2015 was enacted after the construction of the new pipeline, its provisions apply to the current use of the wayleave. However, in terms of providing for the acquired rights of the licensee, it does not depart significantly from the previous Petroleum (Exploration and Production) Act of 1980 that prohibited a landowner to build on it.⁴² Its main focus, as Jacob et al. (2016:20) points out, 'is the license-holder's wayleave, that is, access to surface land under which resources may be found (for upstream), the land upon which petroleum infrastructure is to be constructed (midstream), or the land upon which associated petroleum-related investments will be carried out (downstream).'⁴³ By referring to the Land Acquisition Act rather than the relatively protective Land Act, the Petroleum Act limits the land rights of smallholders.⁴⁴ In this sense, extractive rights continue to supersede surface rights.

³⁹IFC Guidance Note 5 – Land Acquisition and Involuntary Resettlement https://www.ifc.org/wps/wcm/connect/4b976700498008d3a417f6336b93d75f/Updated GN5-2012.pdf?MOD=AJPERES

The Petroleum Act of Tanzania, 2015, https://mem.go.tz/wp-content/uploads/2014/02/17.06.15A-BILL-PETROLEUM-ACT-2015-Updated-version-15.6.15.pdf

MSP Exploration Production Tanzania Limited, 2014, `Environmental and Social Impact Assessment for Proposed Upgrade of Mnazi Bay Gas Facilities in Mtwara Rural District in Mtwara Region – Tanzania`, http://documents.worldbank.org/curated/en/621871468172139606/pdf/E45230Final0ES0grade07th0April02014.pdf

Tanzania Petroleum (Exploration and Production) Act, 1980, http://www.tpdc-tz.com/wp-content/uploads/2015/04/psaandact1980.pdf

⁴³ Jacob T, et al, 2016, 'Rights to Land and Extractive Resources in Tanzania (2/2): The Return of the State', http://pure.diis.dk/ws/files/706392/DIIS_WP_2016_12.pdf

⁴⁴ Ibid

The Petroleum Act of 2015 is national, rather than ethnic or regional, in its outlook of who should be the primary beneficiary. 'Natural gas resources found in Tanzania belong to the people of the United Republic of Tanzania,' the policy that informs the new Act states, 'and must be managed in a way that benefits the entire Tanzanian society.'45 Its rationale is ethical and political, that is to curb regionalism and tribalism that tend to develop when resources are not shared nationally. However, such policy statements and legislations have not been fully translated in such a way that the communities where those resources are found have been uplifted from poverty relative to other areas that benefit from them.

The Local Content section of the natural gas policy recognizes the issue of general shortage of skills and capital and adds that, 'successful maximization of local content benefits require implementation of sound policies, strategies, action plans, continuous consultation amongst key stakeholders and strengthening capacity of various institutions such as local government authorities (LGAs) and Community Based Organizations (CBOs).'

It is important to note that the policy emphasizes participation of community members. 'participation of Tanzanians in areas where natural gas activities are intensive is important for the industry's stability, integration into local economies and poverty reduction.'46 This is an explicit reference to sub-national distribution of local content benefits. However, the objective and the specific policy statements are not explicitly directed to address them in order to develop the skills required to be able to benefit from the process and the gas industry. The relevant local content policy objective is 'to develop the capacity of Tanzanians to participate strategically in the natural gas value chain.' Yet the Policy Statements are formulated in a language that puts the private sector and citizens who already have certain capabilities and skills to engage in the industry at the center stage. These statements are as follows;

- Work with International Oil and Gas Companies to ensure opportunities for supply of goods and services, employment and investments are made available to Tanzanians;
- Work with International Oil and Gas Companies to ensure that the capacity of Tanzanians is developed in the natural gas value chain through skills development, transfer of technology and applied research;
- Strengthen the capacity of national oil company to participate strategically in the natural gas industry;
- Work with International Oil and Gas Companies to explore possibilities that companies participating in natural gas value chain are listed on the Dar es Salaam Stock Exchange; and
- Establish oil and natural gas centre of excellence and strengthen capacity of the training institutions to impart requisite knowledge skills and innovations to Tanzanians.⁴⁷

The National Natural Gas Policy of Tanzaniahttp://www.tanzania.go.tz/egov_uploads/documents/Natural_Gas_Policy_-_ Approved_sw.pdf

⁴⁶ Ibid, page 14.

⁴⁷ Ibid, p. 15.

However, the framing of the discourse on Corporate Social Responsibility in the policy is locally oriented because it is primarily about what is in the vicinity of a company. The Policy Objective is 'to substantially improve Corporate Social Responsibility in communities neighboring natural gas facilities and operations.' The Policy Statements are: 'Ensure there is a contractual obligation to all investors and contractors in the natural gas activities to undertake locally prioritized community development programmes; 'Ensure companies in the natural gas industry submit credible Corporate Social Responsibility action plans to the appropriate authority.'⁴⁸

The Petroleum Act of 2015 has provisions on Local Content and Corporate Social Responsibility (CSR) that are more specific to local communities. Section 220 (2) stipulates that companies have an obligation to prepare a detailed program for recruitment and training of Tanzanians with consideration to host communities. However, the provisions in Section 219 (1-3) are still general and can end up benefitting the private sector or Tanzanians who are not in the host community. Section 219 (2) provides for outside companies to have joint ventures with Tanzanian companies, if products cannot be sourced locally. Yet, in practice, a Tanzanian company that can get into a joint venture with a foreign company tends to already be established. In such cases, any host community that is still living in poverty would easily be left out.

It is in this regard that scholars such as Jacob et al. (2016: 4) argue that 'Local Content' tends to be reinterpreted as 'National Content' with the potential effect of favoring people nationally at the expense of those who host resources locally. The respondents in the study were concerned about the risk of an 'elite capture' of Local Content benefits. Although there are provisions for Local Content in both the policy and Act, the issue is the lack of strategies and preparations for building capacity of 'our people' in order to meet the 'high standards' for the products and services.⁴⁹

2.2. Background: Pipes among Pipelines

Exploration of natural gas in Tanzania started in the 1950s. However, the initial discoveries were made in the 1970s and 1980s in Songo Songo Island in Lindi and Mnazi Bay in Mtwara respectively. The plans to construct gas pipelines started in the 1990s. TPDC attributes this delay to perceived uneconomical viability. The country was also recovering from an economic crisis. The country was also recovering from an economic crisis.

The construction of the first gas pipeline in the country took place between 2001 and 2005. It combined a 25-kilometer marine gas pipeline of 12-inches and a 207-kilometer terrestrial gas pipeline of 16-inches diameter from Songo Songo Island to Ubungo in Dar es Salaam via Somanga Fungu in Lindi. The project appraisal indicates that 27 assessments, investigations and research were conducted between 1993 and 2001 to identify its possible negative impact alongside related initiatives. ⁵² It was noted that there were 'limited environmental impacts on forests, and fauna, and on sea grass

⁴⁸ Ibid, p. 16.

⁴⁹ CSOs officers based in Dar-es-Salaam

TPDC, `Taarifa ya Utekelezaji wa Ujenzi wa Miundombinu ya gesi asilia kutoka Madimba – Mtwara, Songo Songo – Lindi na Pwani hadi Dar es Salaam`, 2015 , http://www.tpdc-tz.com/pdfstuff/TAARIFA%20YA%20B0MBA%20LA%20GESI%20March.pdf

⁵¹ ESRF, 2009, `A Baseline Survey Report`, http://www.policyforum-tz.org/files/ESRFNPAPetroleumSectorBaselineReport.pdf

The World Bank, 2001, `Project Appraisal Document on a Proposed Credit to the United Republic of Tanzania`, http://documents.worldbank.org/curated/en/418391468761059141/text/multi0page.txt

beds along the marine part of the pipeline' whilst 'major impacts' were 'due to resettlement and land acquisition.'⁵³ In order to mitigate the impact, Songas Limited, as the implementer of the project, submitted to the lenders of the project (World Bank and European Investment Bank) 'A Summary of Environmental and Social Impact Studies and a Detailed Management Plan' in 2001, and obtained required approvals.⁵⁴

Artumas Group & Partners (Gas) Limited, constructed a 27-kilometer marine and terrestrial gas pipeline of 8-inches diameter from Mnazi Bay gas field to Mtwara Power Plant in 2006. One of its plans, according to its 2004 annual report, was to hire 2,000 Tanzanians out of 3,000 workers for this phase that involved the construction and other related activities. Its 2005 annual report indicates that it was granted an Environmental Impact Assessment (EIA) certificate on December 20, 2005. The Environmental and Social Impact Assessment (ESIA) for a proposed upgrade observed that land acquisition was one of the major impacts of the initial construction. However, It noted that some conditions on the use of the wayleave were relaxed to allow the residents to plant crops not exceeding 1.8m in height but no houses or permanent structures were permitted within the permanent pipeline wayleave.

This historical background is important given that the new gas pipeline partly overlaps with, or runs parallel with, relatively older ones. Hence, some of the areas and communities have experienced similar, or additional and related, impacts in their construction. Figure 3 below from the *Oil and Gas Year* 2014 illustrates this connectivity and parallelism in the case of Mnazi Bay.⁵⁹

⁵³ Ibid,page 14

Songas, `SongoSongo Gas to Electricity Project – Environmental and Social Assessments and Management Plan`, 2001, http://documents.worldbank.org/curated/en/688801468761107162/pdf/multi0page.pdf

⁵⁵ Artumas Group Inc, Annual 2004 Report, http://www.ageorg.ca/Reports/Artumas-Annual-Report_2004.pdf

⁵⁶ Artumas Group, 2005 Annual Report, http://www.wentworthresources.com/pdf/reports/2005_Annual_Report.pdf

⁵⁷ M&P Exploration Production Tanzania Limited, Op.Cit

⁵⁸ Ibid, p. iv.

⁵⁹ The Oil and Gas Year, `Mnazi Bay Development Tanzania`, http://www.theoilandgasyear.com/market/tanzania/

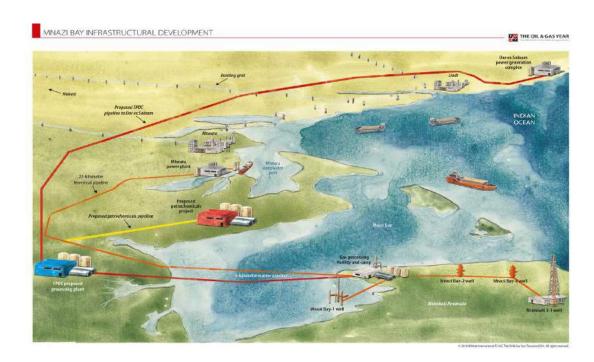


Figure 3: The Overlap Between the New Pipeline and Older Pipelines

A TPDC report shows that, three years after the inauguration of Songo Songo infrastructure, the demand for natural gas in the country increased and the then existing infrastructure was unable to accommodate it. As such, Songas was given the 'right of refusal' to invest in expansion of gas processing and distribution infrastructure, in line with a 2001 agreement. Songas employed an interimmeasure i.e. adjustment of 'Thompson valve', in order to increase the processing plant capacity from 70 mmscf to 110 mmscf. The company put in place a long term infrastructure development plan but by 2008, it was clear the company had failed to implement it. Songas (the implementer of the Songo Songo project) and Pan-African Energy (the sponsor) made at least two other attempts to implement infrastructure development plans but such initiatives were not successful.

Following the failure of Songas to construct a bigger pipeline, the government started to look for funds elsewhere. It managed to secure a soft loan from the Export-Import (EXIM) Bank of China for constructing the new pipeline and two processing plants; one in Songo Songo and another in Mnazi Bay. Government report on initial financing estimates of such infrastructures shows that the cost of the pipeline was \$875,715,000, Songo Songo processing plant, \$151,735,000 and Mnazi Bay processing plant, \$197,877,000. The initial total cost of the project was estimated at \$1.225 billion i.e. 95% from concessional loan and 5% as government contribution. Upon completion, the project total cost turned out to be \$1.3 billion. The report indicates that the government shouldered some significant additional costs, outside the initial estimated 5%.

⁶⁰ TPDC, March 2015, Op.Cit

⁶¹ TPDC, March 2015, ibid

⁶² Shirika la Maendeleo ya Petroli Tanzania, `Taarifa ya Garama za Ujenzi wa Bomba la Gesi na Mitambo ya Kuchakata Gesi – Madimba (Mtwara) na Songo Songo (Lindi)`, http://tpdc-tz.com/wp-content/uploads/2016/04/TAARIFA-KWA-UMMA-GHARAMA-ZA-MRADI-WA-BOMBA-LA-GESI-fnl.pdf

⁶³ Shirika la Maendeleo ya Petroli Tanzania, Ibid

Expectedly, the China Petroleum Technology & Development Corporation (CPTDC), a subsidiary of China National Petroleum Company (CNPC), constructed the pipeline. Construction was officially launched on November 8, 2012 and the Tanzanian President inaugurated the constructed pipeline on October 10, 2015.

As Figure 4 below shows, the 542-kilometer marine and terrestrial gas pipeline has 4 parts: (i) 290-kilometer terrestrial pipeline of 36-inches diameter from Madimba in Mtwara to Somanga Fungu; (ii) 25-kilometer marine pipeline of 24-inches from Songo Songo Island to Somanga Fungu; (iii) 197-kilometer terrestrial pipeline of 36-inches diameter from Somanga Fungu to Kinyerezi in Dar es Salaam; (iv) 30-kilometer terrestrial pipeline of 16-inches diameter from Kinyerezi to Tegeta in Dar es Salaam. It passes through 1 marine park, 4 regions, 8 districts, 41 wards and 113 villages.⁶⁶ 'The capacity of the main (36 inch) pipeline is rated at 784 MMscfd [Million Standard Cubic Feet per Day],' according to the Natural Gas Utilization Master Plan 2016-2045, but can handle up to 1002 MMscfd with compression. ⁶⁷ It is the longest gas pipeline that has ever been constructed in Tanzania. ⁶⁸

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⁶⁵ Hotuba ya Rais, Jakaya Mrisho Kikwete, 2013, http://www.tanzania.go.tz/egov_uploads/documents/H0TUBA_YA_RAIS_WA_sw.pdf cf. https://mem.go.tz/wp-content/uploads/2016/09/28.09.2016Final-ESQD-4TH-QUARTER-APRIL-TO-JUNE-2016-final-draft.pdf & https://mem.go.tz/wp-content/uploads/2014/02/National-Energy-Policy_December-2015.pdf

⁶⁶ These statistics are derived from TPDC's map of the pipeline and list of villages in the wayleave.

⁶⁷ United Republic of Tanzania, Natural Gas Utilization Master Plan, https://mem.go.tz/wp-content/uploads/2016/09/21.09.2016NGUMP-DRAFT-FINAL-REPORT-May-2016-CLEAN.pdf

Tanzania Zambia Mafuta (TAZAMA) is 1,705 kilometers, however, it is a crude oil pipeline: http://www.tazama.co.zm cf. plans to construct a 1,410-kilometer Uganda-Tanzania crude oil pipeline: http://bdi.eu/media/themenfelder/internationale_maerkte/publikationen/NCIP_Report_The_Investment_Opportunities_for_the_East_African_Private_Sector_under_the_NCIP__September_2016.pdf



Figure 4: The New Gas Pipeline from Mtwara to Dar es Salaam (Detailed map)

PART THREE: FINDINGS: ASSESSMENT OF IMPACTS

3.1. Overview of Key Findings

The new wave of gas discovery brought a ray of hope to the communities in Lindi and Mtwara. For a region that is perceived as being relatively poor compared to other parts of the country, it was to be a moment of salvation from poverty. As such, they generally expected the 'South' to be given the first priority in reaping its benefits. The construction of a pipeline to Dar es Salaam was a disturbing experience as they felt that 'their' gas was being taken away again. To

As one faith leader put it, 'we the people of the South, have been treated unfairly in regard to gas.' Similarly, one elder lamented that, 'this gas has hurt us so much.' Yet his fellow elder insisted that, 'gas activities should continue, but it should ensure that we at least get a decent burial.' Another elder said that, 'the government should uphold the value of the people of the South so that we can develop, we are supposed to feel human.'71

For the majority, their contention over entitlement to gas was a matter of materiality as it is of dignity. When the research team listened to them, it thus noted that their perception on the impact of the construction on livelihoods and land rights was generally negative. However, there were some indications of some positive impacts. The subsections below present these dual impacts, respectively. The report discusses mitigation of negative impact and focuses on consolidation of positive impact.

3.2. Impacts of the Pipeline on Land Rights

3.2.1. Positive Impacts and their Consolidation

(a) Compensation

Some community members were relatively satisfied with the compensation package as it had a positive impact on their livelihood. These community members possessed other plots that they could move to and rebuild their houses by using the money that TPDC paid to compensate them for the loss of land. In this sense, the livelihood of a few people was positively impacted individually rather than collectively as a community.

At the community level the relative improvement in accessing water seems to be the most positive outcome. In Madimba, TPDC drilled a water borehole that pumps about 75,000 liters a day. This initiative considered the priority of the whole community given that shortage of water was their long-term problem. The Madimba village Chairperson and the Village Executive Officer (VEO) informed the research team it was one of the promises that TPDC fulfilled, among many others, which they had given to the

⁶⁹ See Wembah-Rashid (1998), Killian (2007), Katera & Johnsøn (2015)

Kamndaya S & Bakari A, 2013, `Chaos hits Mtwara after gas project confirmation,` http://www.thecitizen.co.tz/News/-/1840392/1860180/-/ewg3dez/-/index.html

⁷¹ Interview conducted in February 2016.

REPOA & CMI, 2015, `Public Expectations to Gas Revenues & Trust in Governance Institutions`, http://www.repoa.or.tz/documents_storage/20ARWS1C_PPT.pdf

villagers during the initial meetings on the gas pipeline construction. It also became a source of income for the village. The village government sells water on a subsidized price (Tsh. 50 per bucket) to the community as a way of maintaining the borehole and financing development projects. From November 2015 and February 2016, it collected Tsh. 1,006,500 that was deposited in the village's development fund.



Figure 5: Fetching Water from Tanks in Madimba Village 73

There were complaints from the community that water had not been distributed across the village. Since the water tanks are stationed in one place as Figure 5 above shows, villagers have to walk there. While those who live nearby can access it easily other villagers lament that they still have to walk up to 5 kilometers to draw water from the tanks. Media reports also include complaints that the tanks in Madimba were damaged hence they incurred the cost of repairing them. However, according to TPDC officials, the company has decided to survey the area and drill water wells in each 'valve' to help distribute water widely to community members.

⁷³ `Wakazi wa Kijiji cha Madimba walalamikia ubovu wa matank ya kuhifadhia maji`, http://habari24.blogspot.com/2016/07/wakazi-wa-kijiji-cha-madimba-kata-ya.html

⁷⁴ Ibio

⁷⁵ Via an email sent on November 2, 2016 from TPDC.

(b) Short term business and employment opportunities

During the construction phase, there were opportunities for small businesses for female food vendors especially in areas such as Kiranjeranje where there were already such businesses that catered for workers involved in gypsum quarrying. One of the female food vendors pointed out that, "the catering business boomed during the pipeline construction, but I am still in the business till today." This indicates that the impact was short-term as the research team could not find any evidence that they used the boom to scale up their business or initiate other startups that were sustainable. The construction boom boosted their state of livelihood as the women could use the additional money to improve the living conditions in their household and the overall wellbeing of children.

In the construction phase youth also had an opportunity to get short-term employment. This can be perceived as positive given that it gave them money that they could use in their daily lives. However, most of the jobs they got were manual rather than technical and casual instead of contractual. As such, there was no security of tenure or 'in-service training' that could have enabled them to acquire transferable skills that could be useful in related projects in the gas industry. Lack of skills has been used to justify hiring the majority of the workers from outside the regions or abroad. To mitigate this disparity, the Ministry of Energy and Minerals (MEM) and TPDC, in collaboration with Non-Governmental Organizations (NGOs), have been granting a number of scholarships for youth in Mtwara and Lindi to be trained at the Vocational Education and Training Authority (VETA).⁷⁶

(c) Pipeline protection payment to villages

TPDC has also entered into a 5-year contractual agreement with village governments to protect the pipeline. It provides a monthly security fee to each village through which the pipeline passes. Each village thus is responsible to guard a piece of the pipeline and report on any incident that may affect it. According to TPDC officials and village authority leaders, the rate is Tsh. 250,000 for a length of 0.5km up to 2km. Hence some villages get more than others, depending on the length of the pipeline in their respective areas. It is the village authorities that decide on how to use the money.

Some villages, such as Madimba, have decided to put the money in the village development fund. It is then used for basic social service needs such as health or education. Other villages plan to use the money to pay youth or anybody who will be called upon to work on the pipeline areas, for instance, removing weeds and grass in the wayleave. According to TPDC officials, the company's rationale for providing this fee is to promote good neighborliness and ownership of the pipeline by community members. However, by February 2016, TPDC had not finalized security agreements with all villages. For instance, Kiranjeranje village and the villages in Msimbati ward had not yet signed the contract with TPDC although they were informed about it. Even though some signed the agreement, they had not yet started receiving the money. It is these kind of delays

⁷⁶ Shanghvi (2015:63)

that tend to create tensions amongst community members in the villages hence the need for promptness.

(d) Learning clubs in primary and secondary schools

TPDC has also started gas clubs in primary and secondary schools in Lindi and Mtwara. The purpose of these clubs is to teach and create awareness among school children about natural gas and the gas economy in their area. This is to ensure they understand gas holistically as a step towards realizing opportunities and developing skills for capturing them. Listening sessions with primary and secondary school students in Madimba confirmed that the clubs have been established. However, in Somanga Fungu, where the research team conducted a listening session with primary schools children in February 2016, the clubs had not yet been established.

(e) Corporate Social Responsibility

The Chinese company that constructed the pipeline, i.e. CPTDC, contributed Tsh 12 million for the completion of a school laboratory in Madimba. According to community members, villagers also asked it to use the company excavator to level the football ground. Its official website states that, between 2013 and 2014, it 'organized several donations in Msijute Primary School [in Mtwara] to give away school supplies, sports shoes, uniforms, water tanks, library and playground.'77 CPTDC also states that it trained 120 talents from Tanzania.⁷⁸ Media reports also indicate in 2015 it donated about Tsh 85 million for an ambulance boat to ease the transport for patients from Songo Songo Island to Kilwa District Hospital, in Lindi region.⁷⁹ Since health and education are social services that are central to the wellbeing of the community members, one can argue that CPTDC's CSR has a positive impact on their livelihood.

(f) Power generation: Domestic and industrial use

Overall increase in power generation is another positive impact. The completion of the new pipeline and the inauguration of new processing plants has increased the total volume of gas available for power generation in the country. For instance, by March 2017, electricity from natural gas accounted for more than 50% of the country's total electricity in the national grid.⁸⁰ For the first time in the history of the country, nonhydro source contributed more to total share of energy output than hydro sources.

^{77 &#}x27;CPTDC's Project Department in Tanzania Made Donations in Msijute Primary School', 2014, http://www.cptdc.com/content/details15 342.html

⁷⁸ 'The First Batch of Tanzanian Petroleum Talents ''Having Been Trained in China'' Took Up Their Posts in Tanzania', http://www.cptdc.com/content/details15_343.html

⁷⁹ Songo Songo Gets Ambulance', http://allafrica.com/stories/201502180420.html

Ministry of Energy and Minerals, 'Zaidi ya asilimia 50 ya umeme wa gridi ni gesi – TPDC', 2017, https://mem.go.tz/zaidi-ya-asilimia-50-ya-umeme-wa-gridi-ni-gesi-tpdc/

Rural Energy Agency, `Uzinduzi wa Mpango wa Kuendeleza Usambazaji Umeme Vijijini`, http://rea.go.tz/NewsCenter/TabId/130/ ArtMID/639/ArticleID/79/Uzinduzi-wa-Mpango-wa-Kuendeleza-Usambazaji-Umeme-Vijijini.aspx

The increase in total energy output enhances initiatives by Rural Energy Agency, which strives to significantly, increase the number of rural inhabitants who have access to electricity. It is important to note that, Mtwara began to benefit from gas-fired electricity since 2006. However, recent affordable household connection rates as offered by Rural Energy Agency (REA) have made it possible for low income, rural dwellers to get connected. As

The increase in total energy output has also expanded opportunities for provision to big companies. For instance, according to TPDC officials, the construction of a pipe to connect the Mtwara-Dar es Salaam pipeline to Goodwill Ceramic Tanzania Limited in Mkuranga, which was underway in 2016, has now been completed.⁸⁴ TPDC expects to finish connecting Dangote Cement in Mtwara in August, 2017. In a way, these initiatives are expected to be beneficial to the local communities in terms of providing employment and through Corporate Social Responsibility (CSR). For instance, Dangote Cement 'is expected to generate 3,000 direct employment opportunities and 2,000 indirect employment opportunities, and about 75% of the total employees are expected to be Mtwara residents.' ⁸⁵

3.2.2. Negative Impacts and Proposed means of Mitigation

(a) Land access and resettlement

Community members were generally not satisfied with the consultation process and compensation package for their land. Interviews with community members highlighted several issues with the process of land acquisition, compensation and consultation. Once the pipeline project was commissioned, TPDC informed the Local Government Authorities as well as the village authorities about the pipeline construction project. The village authorities organized village meetings and community members were informed of the project and the subsequent land acquisition. However, in the listening sessions community members complained that they were not sufficiently informed or involved. This is arguably because the use of village meetings as a sole forum to inform communities about pipeline project is not an effective means since citizen participation in the village is low. REPOA (2014) found out there was 13% decline in participation in council meetings in rural areas from 2006 to 2013 and 16.1% in village planning meetings in the same period. The turnout and participation in village meetings is low and women attendance is even lower. This was also reflected in the listening sessions whereby most women said they were not aware of the pipeline at all before the actual construction started. 86

⁸² REA, `Faida ya Gesi Asilia Mikoa ya Lindi na Mtwara`, 2013, http://rea.go.tz/NewsCenter/TabId/130/ArtMID/639/ArticleID/19/FAIDA-YA-GESI-ASILIA-MIKOA-YA-LINDI-NA-MTWARA.aspx

Prime Ministers Office, 2014, `Serikali Yashusha Garama za Kuunganisha Umeme`, http://www.pmo.go.tz/index.php?option=com_content&view=article&id=403:serikali-yashusha-gharama-za-kuunganisha-umeme&catid=47:pm-newsc&Itemid=128

Kolumbia L, 2017, `Repaying \$1bn loan may be difficult, govt told`, http://www.thecitizen.co.tz/News/SPECIAL-REPORT---Repaying--1bn-loan-may-be-difficult--govt-told/1840340-3900348-ny071dz/index.html

⁸⁵ Shanghvi (2015:55)

⁸⁶ Chaligha E.A, 2014, `Citizen Participation and Local Governance in Tanzania`, REPOA, http://www.repoa.or.tz/documents/REPOA_ BRIEF 41.pdf

In accordance with the law, TPDC compensated landowners before they vacated the land required for the wayleave. However, what people found problematic was the issue of the time frame between the day they were told about the need to move and when TPDC compensated them to effect the movement. Uncertainty about when the construction would commence, made land owners apprehensive because they could not use the land to grow crops necessary for sustaining livelihood.

In Ziwani ward, community members waited for about 6 months hence they missed the entire farming season. A woman from this ward stated that, "People did not farm anything from the moment they were told that there will be a construction of the pipeline." Officials had promised to compensate for their crops. However, when land valuers came to assess and validate their properties, they did not find cassava and groundnuts as expected hence they were not paid for the missed crops and this led to contentions about the actual value of the land. This is a clear case of miscommunication whereby a promise was made and accepted on the basis of what community members thought they would have planted in the land prior to acquisition.

Most of them also felt that they were 'forced" to accept the rates that the government set. A female respondent in Ziwani village stated that, 'Once the government sets the rates, you are not in position to argue.'87 Similarly, youth in Msimbati ward thought that TPDC took advantage of their ignorance of the law. 'They tell us in accordance to the land law of the United Republic of Tanzania and once they say so, we cannot challenge because we do not know the law very well and we no longer understand what they say.' They also complained about the low rates of compensation, and shared this example to build on the issue: 'From one coconut tree, for every month you can get 10 coconuts, each priced at Tsh 500. If you take a whole year, how much is that? But then they come with Tsh 25,000 for the price of the whole coconut tree.'

This calculation on a crop that is crucial to the livelihoods of coastal areas is critical given the conventional criteria is Tsh 240,000 for a full grown coconut tree.⁸⁸ According to the Land Rights and Resources Institute-HAKIARDHI (2012:42), even an amount that is based on 240 coconuts per year at the cost of Tsh 1,000 is not sufficient because to bear fruit requires '10 years' so "the value should be 240,000x10=2,400,000.'89 However, the tendency is to pay Tsh 20,000-Tsh 40,000.90

It is important to note that, in Tanzania, once the land has been determined to be in public interest by the authorities, ownership rights can be revoked, regardless of the owners preference. This is a typical case of involuntary resettlement as described in IFC Perfomance Standard 5 http://www.ifc.org/wps/wcm/connect/3d82c70049a79073b82cfaa8c6a8312a/PS5_English_2012.pdf?MOD=AJPERES

⁸⁸ See Shanghvi (2015:54) downloadable at: http://esrf.or.tz/docs/NGBRRe.pdf

⁸⁹ The report is downloadable at: http://www.hakiardhi.org/index.php?option=com_docman&Itemid=80

⁹⁰ Shanghvi (2015:34)

According to TPDC officials, the compensation for 3500 households took place between 2012 and 2014. The cost was Tsh 15 billion. If all the money were to be used to compensate them equally, then each household would have got about Tsh 4.2 million. However, this was not the case. Rather, it was based on the respective value of the land that a consultancy firm determined on behalf of TPDC. However, TPDC officials assert that its records on compensation are for internal purposes only.

Interviews and listening sessions with community members indicate that the packages were not the same for every ward. In Msimbati ward, although there were five gas wells, the compensation package appeared to be better compared to other areas such as Ziwani (Mtwara), Madimba (Mtwara), Somanga (Lindi), and Kiranjeranje (Lindi). According to community members, in the case of Msimbati, the package included a compensation for 'disturbance,' money for 'starting a new life' and 'rent' for the entire year. In contrast, some people in Kiranjeranje had to use their own money to travel all the way to the district headquarters in Kilwa town to collect their compensation payment. A male respondent whose fare was not covered in the compensation lamented, 'This was not fair.' However, TPDC officials confirmed that all the 3500 households were paid 'full compensation, which included "transportation fee, disturbance and a rent for 36 months as stipulated in the compensation law of 2002.'91

The above-mentioned contentious compensation had a negative impact on access to land as it widened the scope for speculation. It became difficult for the majority of those who were compensated to afford land as its value kept increasing. TPDC did not have a Resettlement Action Plan (RAP) that ensures that community members are provided with alternative land as part of the compensation. TPDC officials stated that paying full compensation is an alternative to RAP. However, previous experiences indicate that it has been the tendency to avoid providing a land substitute.

TPDC took 33 acres from Madimba for a processing plant; it did not give the owners any land as a substitute. It also acquired 150 acres, as reserve land, for its future expansion of the processing plant, but it only compensated in monetary terms. It is thus not surprising that community members are generally critical of reducing the compensation to money. In addition, money-oriented compensation setup also affected those whose land depreciated. In one case, the pipeline cut across a farm and the farm owner complained about how unfair the compensation process was. 'Even if they compensated us, fellow villagers also complained, it is like you have a divided land and farming is no more the same.' Such complaints could have been avoided if the compensation followed the following domestic standards and procedures carefully as provided in the Land Acquisition Act (1967), article 14, sub-article a –f;

⁹¹ Via an email sent on November 2, 2016 from TPDC

⁹² The appreciation of the value of land is a general trend in Mtwara and Lindi.

- (a) When part only of the land belonging to any person is acquired, take into account any probable enhancement of the value of the residue of the land by reason of the proximity of any improvements or works made or constructed or to be made or constructed on the part acquired;
- (b) Take into account the damage, if any, sustained by the person having an estate or interest in the land by reason of the severance of such land from any other land or lands belonging to the same person or other injurious effect upon such other land or lands.⁹³

The compensation process also highlighted the difference between the customary right of occupancy and the granted right of occupancy, although the Village Land Act 1999 stipulates in Section 18 (1) that they are 'in every respect of equal status and effect.'94 Ownership of village land tends to be defined in terms of the former right whereas land in urban areas tends to be defined in terms of the latter right. According to the Village Land Act, there are only three categories of land in Tanzania, village land, general land and reserve land hence what one might call 'urban land' would be 'general land.' Thus, in Mtwara Municipal, the compensation was done differently because the areas where the pipeline passes are urban and had certificates of granted right of occupancy. Land with title deeds tend to have more value hence their compensation rates were higher. However, some of the owners who had not yet collected their title deeds were paid a lower amount and this led to complaints, which the municipal addressed with TPDC on their behalf and the difference was paid. In contrast, most of those who own village land for usufruct do not even have a Certificate of Customary Rights of Occupancy (CCROs) that, in any case, is not as valued as other title deeds.⁹⁵

During the interviews, one of the Municipal Planning Officers stressed that the rationale of compensation is to "restore" the compensated person to his/her existing state or propel him/her to a better state. According to the Planning officer, TPDC should not only compensate in monetary terms, but to also provide substitute land. He further stated that TPDC did not take the resettlement plan into consideration. 'Bypassing of international standards, was possible because it was Chinese companies that primarily financed and constructed the pipeline. As the critical literature on loans and investments from China underscore, they hardly give conditions that would otherwise ensure that the international standards are adhered to. ⁹⁶ The Chinese Ambassador to Tanzania, Youqing (2014:19), asserts, 'Ultimately, whether the Chinese companies will invest in Tanzania's

⁹³ The Land Acquisition Act, Op.Cit.

⁹⁴ The Land Act, http://lands.go.tz/uploads/documents/sw/1455879632-The%20Land%20Act%201999.%20Cap%20113.pdf

See Stein et al. (2016), https://experts.umich.edu/en/publications/the-formal-divide-customary-rights-and-the-allocation-of-

⁹⁶ See Zafar (2007), Gu (2009) & Jiang (2009).

hydrocarbons industry should remain an economic issue, not a political issue.' However, as the protests against its construction in early 2013 and the public debates show, the issues are also political.⁹⁷

These findings are consistent with both the Economic and Social Research Foundation (ESRF) and Oxfam America's Baseline Surveys that were conducted in May and November-December 2014, respectively. ESRF reported that Land disputes also prevail in areas where the gas pipe passes, 'caused by unfair compensation for land-use reassignment and failure to review land use plans for the respective areas (i.e.another activity had been planned for implementation in the same areas where gas pipes were later on prioritized).'99 Oxfam America observed that the 'process of land acquisition,' was commented on critically by most respondents in Mtwara and Lindi.¹⁰⁰

It is important to recall that in early 2016, an official from the Gas Supply Company Limited (GASCO) a subsidiary of TPDC responsible for natural gas transmission pipelines in the country informed the research team that they had compensated villagers in accordance with the market price that the Land Officers in the respective villages and districts set. ¹⁰¹ I am confident that 98% of the people have been paid their compensation. ¹⁰² As for the remaining 2%, the official stated that they were either not happy or the compensations were paid to the wrong people. Hence they had the option of either taking their case to court or settling outside the court with TPDC. However, District land officers stated that the consultancy firm that TPDC contracted to conduct the land valuation did not have adequate capacity to carry out the exercise compared to them since they are the ones who know their governing areas and communities. For them, this lack of capacity contributed to the complaints among community members about compensation. Other Local Government Authority's (LGA) officials observed a number of shortcomings in the compensation process, attributing them to factors such as corruption and cheating.

Land is used as a religious and spiritual site for the community. Interfering with its ritualistic aspects impact on cultural connections and historical roots that give its members the meaning of life and enable them to sustain their livelihood. In this regard, one of the sensitive issues raised was the relocation of graveyards. Community members were unhappy with the compensation package since the Tsh. 100,000 paid per grave did not cover the cost of religious and traditional reburying services. Relocation of graveyards follows certain rituals, hence for the community members the matter was not simply about money. An elderly woman from Msimbati bitterly recalled a desecration,

The East African, 2013, `Tanzania Police arrest 90 after Mtwara gas pipeline protest`, http://www.theeastafrican.co.ke/news/Tanzania-police-arrest-90-after-Mtwara-gas-pipeline-protest-/-/2558/1860394/-/75wlm0/-/index.html; http://www.policyforum-tz.org/sites/default/files/TANZANIAGOVERNANCEREVIEW2012revised_0.pdf; http://www.policyforum-tz.org/sites/default/files/TGR2013FINALwebsite.pdf

⁹⁸ See Shanghvi (2015) and Denny (2015), respectively

⁹⁹ See Denny (2015:81)

¹⁰⁰ Shanghvi (2015:17)

¹⁰¹ Interviewed in TPDC offices

¹⁰² Interview with TPDC Official 2016

'My grandmother's grave was excavated, her bones were put on a white sheet then were buried somewhere else. TPDC only paid the youth who did that task.' Subjection to such emotional trauma affects the wellbeing of a person.

Interviews with Local Government Authority (LGA) officials in Mtwara and Lindi also revealed that issues and land conflicts are on the increase in the areas due to awareness and expectations about the increased value of land. In Kilwa District Office, officials noted that there was an increase in community members filing land border cases between villages as compared to the previous years. Similarly ESRF's survey made this observation in 2014: 'Land conflicts exist, fuelled by the presence of natural resources. For example, there are conflicts in Somanga and Njia Nne villages (among other villages) where the gas pipe passes but at the same time there is a wealth of timber forest.' ¹⁰³ This survey also observed that:

There is a conflict between Somanga and Tingi villages in Kilwa Masoko district caused by the gas pipe crossing the area from Songo Songo to connect with the one running from Mtwara to Dar es Salaam. Each of the two villages claims the pipe passes within its boundaries. The company contracted to lay down the gas pipe was supposed to provide Tshs 60 million for compensation, which sparked a conflict on which of the two villages deserves it. This will be solved by splitting the sum into half for each village. The two villages are also in a tug of war over their anticipations on who will benefit from the royalties to be paid by the gas companies following the boundaries controversy. ¹⁰⁴

It is also important to note that the increased land value and associated speculations have pressured community members and citizens in urban areas, particularly in Mtwara, to sell land to local investors. The trend may potentially increase the number of landless community members. This tendency will have serious implications in the future livelihood of these people.

(a) Environmental impact

In terms of environmental impact, there were complaints that the pipeline is close to water sources. In Ziwani ward, a woman lamented that, 'the pipeline passes along a pond which is a source of water for the community.' As a result, community members were scared that an accident or leakage might contaminate their water. To mitigate this, they committed themselves to protect the pipeline. Acutely aware of this threat, one woman aptly stated that, 'if it was the water pipeline I'd break it to get the water but since its gas I will protect it because gas is very dangerous.' The envisaged environmental impacts prior to its construction included: 'Surface water pollution/Decreasing water (physicochemical, biological) quality.' The subsection on positive impacts discusses TPDC's water provision project, which, in a way, attempts to mitigate these environmental threats.

¹⁰³ Shanghvi (2015:61)

¹⁰⁴ Ibid., p. 66.

¹⁰⁵ EJ Atlas, 'Mtwara – Dar es Salaam Gas Pipeline', https://ejatlas.org/print/mtwara-dar-es-salaam-gas-pipeline

TPDC officials confirmed that the loss of natural vegetation, soil erosion and land degradation in the wayleave were among the negative impacts. However, these were short-term given that the contractor mitigated them by putting back the soil to enable the renewal of the natural vegetation. ¹⁰⁶ It would be informative to evaluate its adherence to the Environmental Impact and Social Assessment (ESIA). ¹⁰⁷

¹⁰⁶ Via an email sent on November 2, 2016 from TPDC.

¹⁰⁷ Circumstantial evidence and interviews with other pipeline researchers indicate that it is classified

PART FOUR: RECOMMENDATIONS AND CONCLUSION

4.1. Overview of Part four

All stakeholders ought to collaborate in managing expectations and addressing grievances and resentments in 'the pipeline corridor' if the gas economy is to be of less risk and sustainable. This can be achieved when the central government, local government authorities, gas companies, Civil Society Organizations (CSOs) and Community Based Organizations (CBOs) communicate and involve the communities, proactively, not only in decision-making process but also in sharing monetary benefits. Hence, these stakeholders should have in place a communication strategy that is specific for the gas sector as this is crucial for mitigating risks and diffusing potential future tensions. In this regard, TPDC and the Ministry responsible for energy have a special role in ensuring that the centrality of the community is systematically mainstreamed in the activities of the private sector. CSOs/CBOs have a crucial role of monitoring, promoting and advocating for the rights of communities. Below are seven specific recommendations on land and livelihood issues that emerged in this research.

4.2. Recommendations: Policies into Actions

I. Prioritize Land Use Planning and Titling

Survey each piece of land in Mtwara and Lindi, prepare Village Land Use Plans (VLUP), and issue title deeds or Certificate of Customary Rights of Occupancy (CCROs). As this report has shown, especially in relation to land use and compensation, this will not only protect ownership rights but also increase the value of land. Land use plans and strict adherence to them will help in conflict prevention and resolution and ensure fair compensation during acquisition.

The village governments in collaboration with stakeholders ought to ensure that every villager and investor use their land in accordance with the VLUP. Without prejudice to the laws of the land, villagers and investors should have a binding agreement about the use of a gas pipeline wayleave that passes by, or is in the vicinity of village land.

The government has made land use planning and titling a priority, in recognition of the fact that, 'only 1645 villages (13.1%) out of 12,545 villages in Tanzania have land use plans.'¹⁰⁹ Under this initiative, the government intends to prevent future land use conflicts and facilitate their resolution, where unavoidable. The government should, as part of this initiative, consider Lindi and Mtwara as priority regions.

II. Uphold Free, Prior and Informed consent in community consultation

Findings from this study have shown shortcomings in relation to community consultation and transparency. It is recommended that the government seeks to uphold Free, Prior and Informed Consent (FPIC) in all land acquisition processes as an important procedural safeguard for people's rights.

The Tanzanian government has been preparing, in collaboration with the German International Cooperation (GIZ), a communication strategy to specifically deal with the Oil and gas sector. However, the strategy has not yet been finalized.

Namkwahe J, 2015, 'Sh 2.3 Trillion required for land use planning', The Citizen, 12th September 2015

To make consultation meaningful, transparency is as important as the space used for consultation. The effectiveness of village meetings, which are known to be highly hierarchical and restrictive, as a consultation space has been questioned. There is evidence that village meetings tend to record low turnout and are exclusionary especially when it comes to participation of women.

This study recommends improvement of community consultation by broadening engaged stakeholders to include civil society organizations including, faith based and community based organisations, media, and marginalized groups. The use of alternative spaces for engagement is important. For instance, instead of using village meetings, consultations can be broken into smaller, manageable sub-village/hamlet meetings. It is easier to ensure inclusion and participation at the hamlet level than at the village level.

The government should display compensation schedules and rates in village government offices. This will promote transparency and prevent misunderstanding.

III. Preserve the Sanctity of Land to Maintain Harmony

Consult religious and traditional leaders at the beginning of any extractive activity that will require land acquisition to ensure that cultural and spiritual aspects of land are honored. This entails that graveyards, sites of rites and memorials are preserved or moved with respect to community beliefs and practices. All the laws that govern land and extractives should be harmonized with the Cultural Policy of 1997.

IV. Develop and implement Resettlement Action Plan (RAP)

Implement a Resettlement Action Plan (RAP) to ensure that every community member who is affected by any construction in the gas industry is provided with a substitute land for sustaining his/her livelihood. TPDC should involve LGAs and CSOs/CBOs in the designing of RAP to ensure that the alternative land has the quality of retaining or improving the state of livelihood of those whose land is being acquired. To domesticate this international standard, the new land policy should include RAP and the land laws amended accordingly to provide for its enforceability.

V. Consider remitting a fair share of Service Levy Directly to host communities to improve local Livelihoods

Amend the Local Government Finances Act of 1982, the Petroleum Act of 2015, the Oil and Gas Revenues Management Act of 2015 to ensure that 30% percent of the levy is directly paid to the host village government. The amendments should stipulate that the money is used to specifically improve the provision of social services such as, health, education, water and other key infrastructures as identified by the people.

In the interim, LGAs ought to be encouraged to disburse the revenues from service levy in a way that ensures the pressing needs of the host villages are met. As a parliamentary oversight body, the Local Authorities Accounts Committee (LAAC), should monitor the funds to ensure that they are used prudently. CSO/CBOs employing Public Expenditure Tracking (PETS) as well as Social

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Accountability Monitoring (SAM) should also monitor the LGAs so as to ensure accountability.

VI. Prioritize Livelihood in Corporate Social Responsibility

Ensure that the livelihood of community members is the main priority in performing Corporate Social Responsibility (CSR). In this regard, the government has to enforce the provisions in the Natural Gas Policy and the Petroleum Act that require the participation of host communities in the preparation of CSR plans and the approval of Local Government Authority.

The Petroleum Act requires companies to have recruitment and training plans for Tanzanians. In practice, this arrangement should specifically include a quota system for the host communities to ensure they acquire the necessary skills required in earning a living from the gas industry. CSOs/CBOs ought to monitor the planning and implementation to ensure that companies adhere to the priorities of the communities.

4.3. Conclusion

This research study has attempted to document the impacts of the construction of the Mtwara-Dar es Salaam gas pipeline. In its initial phase, the project had the potential of impacting positively on the wellbeing of the people in Southern Tanzania who had a lot of expectations from the discovery of gas. However, perceptions that the wealth from the South was being taken out of their land to be enjoyed in Dar es Salaam and other parts of the country aroused their historical feelings of being discriminated. As such, the inadequacy of the monetary compensation for the acquired land had negative impacts on the livelihood of the majority of them.

Loss of farmland without resettlement, coupled with the lack of the necessary skills required in the gas industry has negatively affected citizen's prospects for benefitting from the natural gas wealth. As a result, there are grievances that need to be addressed.

Addressing grievances requires multiple interventions in the areas of poverty eradication, community education, public communication and citizen participation. It is by participating proactively in making decisions regarding the natural resources found in their area that the host communities can benefit from them. On the basis of the evidence presented in this report, a case has been made for the government and other stakeholders in the gas industry to ensure that the land rights and livelihood of the affected communities is respected, promoted and upheld.

4.4. Areas for further research

(a) Improvement or restoration of the livelihoods and standards of living of the displaced persons

This study has attempted to examine impacts on land rights. In the process, the report has also shed light on potential impacts on livelihood. Given the findings unearthed, a follow up study could focus on examining the impact on livelihood of the Project Affected People (PAP) over the medium and long term period. It could also be more specific by interrogating

whether compensation achieved its primary objective of either restoring and/or improving their livelihoods and living standards. 110

(b) Sub-national distribution of resources

Unlike other countries, for instance Uganda and Ghana, Tanzania does not provide for 'revenue sharing' in extractive industry. Service levy, an increasingly popular source of revenues for districts with significant investments such as gold mines, natural gas operations or coal mining is designated as a source of revenue for all districts across the country, by the Local Government Finance Act of 1982. The Act mandates district councils to collect a service levy of 0.3% on annual turnover from companies operating in their respective districts.¹¹¹

In the course of conducting this study, researchers had an opportunity to scrutinize accounting books in Songo Songo village in February 2016. The research team realized that Kilwa District Council has a unique revenue-sharing arrangement whereby it remits 20% of revenues from service levy to Songo Songo village. However, the practice has not been consistent, as disbursement records (2012 - 2014) below show;

Table 2: 20% of Service Levy disbursed to Songo Songo village112

No.	Year	Month	Amount
1.	2012	April	24, 200, 000
2.	2012	September	17, 766, 433
3.	2012	November	21, 800, 000
4.	2013	September	23,114,689.40
5.	2013	November	27, 958,636.80
6.	2014	January	24, 760,433.80

A number of other studies have also highlighted the significance and potential the levy has, without forgetting to take note of the challenges of charging companies. The table below shows the amount of service levy (in absolute figures), received by Kilwa District Council from 2011/2012 to 2013/2014. The table below shows the amount of service levy (in absolute figures), received by Kilwa District Council from 2011/2012 to 2013/2014.

http://www.tic.co.tz/media/Local%20goverment%20Finance%20Act%201982.pdf

¹¹² Interviews and accounting books in Songo Songo village

Pedersen & Bofin , 2015: 26, `The Changing Politics of Natural Gas in Tanzania`, http://www.diis.dk/en/research/the-changing-politics-of-natural-gas-in-tanzania, Roe (2016: 26), Shanghvi (2015:64), Friedrich-Ebert-Stiftung (2015: 39)

Ngowi H.P, 2015, `Contribution of Service levy from Gas Companies in Mtwara and Kilwa District Councils Revenues`, Policy Forum, http://www.policyforum-tz.org/sites/default/files/AnalyticalThinkPiecefinal.pdf

Table 3: Revenues from Gas Company Received by KDC

No.	Year	Source of revenue	Amount received
1	2013/14	Service levy	480,000,000.00
2	2012/13	Service levy	480,000,000.00
3	2011/12	Service levy	480,000,000.00
4.		Total	1, 440, 000,000

The arrangement between Kilwa District Council and Songo Songo village provides a precedent that should be studied in detail especially in light of the existence of localized demands for compensation in different parts of the country where natural resource exploitation is taking place.

REFERENCES

Bakari A. and Kamndaya S. (2013). Chaos hits Mtwara after gas project confirmation. The Citizens, 22nd May. Available at http://www.thecitizen.co.tz/News/-/1840392/1860180/-/ewg3dez/-/index.html

Brown David, E (2014) `Africa`s Booming Oil and Natural Gas Exploration and Production : National Security Implications for the United States and China`, 2013, Strategic Studies Institute

Chambers R. & Conway G. (1991). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century

Denny R. (2015). Accountability through Active Citizenship: Improving Petroleum Governance in Ghana, Mozambigue and Tanzania. *Baseline Survey Report*. Oxfam

Deloitte (2016). *Oil and Gas Taxation in Tanzania*. Available at https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-oil-and-gas-tax-guide-tanzania. pdf

Gu J. (2009). China's Private Enterprises in Africa and the Implications for African Development. *The European Journal of Development Research*. 21/4, pp. 570-587.

Gender Action & Friends of the Nation (2011) Broken Promises: Gender Impacts of the World Bank-Financed West-African and Chad-Cameroon Pipelines, http://www.genderaction.org/publications/11/chad-cam-wagp-pipelines.pdf

International Finance Corporation (2012) Perfomance Standard 5: Land Acquisition and Involuntary Resettlement, http://www.ifc.org/wps/wcm/connect/3d82c70049a79073b82cfaa8c6a8312a/PS5_English_2012.pdf?MOD=AJPERES

Jiang W. (2009). Fuelling the Dragon: China's Rise and Its Energy and Resources Extraction in Africa. *The China Quarterly.* 199, pp. 585-609.

Katera L. & Johnsøn J. (2015). Public Expectations to Gas Revenues & Trust in Governance Institutions. *Presentation at the 20th Annual Research Workshop.* REPOA. Available at http://www.repoa.or.tz/documents_storage/20ARWS1C_PPT.pdf

Killian B. (2007). Popular dissatisfaction and the erosion of political support in Mtwara and Lindi Regions, in Gould J. & Siltonen L. (Eds.) (2007). *Anomalies of aid: a festschrift for Juhani Koponen,* Interkont Books, no. 15, University of Helsinki, Institute of Development Studies, Helsinki

Koponen J. (1998). *People and Production in Late Pre-colonial Tanzania:* The Case of Makonde. Evanston: Northwestern University Press.

Ladesma D. (2013). East Africa Gas — Potential for Export, Paper NG 74., The Oxford Institute for Energy Studies, Available at http://www.investment-hr.com/oil_gas_docs/eastafrica%20gas%20-potential%20for%20export.pdf

Lillywhite, S., Kemp, D. and Sturman, K., (2015). *Mining , resettlement and lost livelihoods: Listening to the Voices of Resettled Communities in Mualadzi, Mozambique*. Oxfam. Melbourne

Msaky, E., (2013). A presentation to the delegation from the Tanzanian Private Sector Foundation. Dar es Salaam: Tanzania Petroleum Development Corporation.

NaturalResourceGovernanceInstitute(2015)CountryStrategyNote,http://www.resourcegovernance.org/sites/default/files/documents/nrgi_tanzania-strategy_20160629.pdf

Ministry of Energy and Minerals (204) Draft Local Content Policy of Tanzania, https://mem.go.tz/wp-content/uploads/2014/05/07.05.2014draft-local-content-policy-of-tanzania.pdf

Oxfam (2009). Lifting the resource curse: how poor people can and should benefit from the revenues of the extractive industries. *Oxfam Briefing Paper, 134.* Available at https://www.oxfam.org/sites/www.oxfam.org/files/bp134-lifting-the-resource-curse-011209.pdf

Perfect J, and Majule A. (2010). Livelihood Zones Analysis: A tool for planning agricultural water management investments: Tanzania. FAO.

Pedersen H & Bofin P (2015) The Changing Politics of Natural Gas in Tanzania, Danish Institute for International Studies, http://www.diis.dk/en/research/the-changing-politics-of-natural-gas-intanzania

Parasie N (2016) `Dodsal Group Discovers Gas Reserves Worth \$Billion in Tanzania`, The Wall Street Journal, http://www.wsj.com/articles/dodsal-group-discovers-gas-reserves-worth-8-billion-intanzania-1459171005

REPOA (2014). Citizens Participation and Local Governance in Tanzania. Available at http://www.repoa.or.tz/documents/REPOA_BRIEF_41.pdf

Reuters (2011) 'Highlights from Africa Oil Week Conference', http://af.reuters.com/article/nigeriaNews/idAFL6E7M42I220111104?pageNumber=1&virtualBrandChannel=0

Seppala P. and Koda B. Eds. (1998). The Making of a Periphery: Economic Development and Cultural Encounters in Southern Tanzania. Nordiska Afrikainstitutet. Uppsala

Shanghvi S.I (2015) Effective Management of the Tanzanian Natural Gas Industry For an Inclusive and Sustainable Socio-Economic Impact, http://esrf.or.tz/docs/NGBRRe.pdf

Sigalla H. (2014). Poverty and Livelihood of Coastal Communities in Tanzania Mainland and Zanzibar. Journal of African Studies and Development. 6/9, pp. 169-178

Sulle E, et al (2016) 'Making Tanzania's National Land Policy Inclusive and People-Centred http://www.plaas.org.za/blog/making-tanzania's-national-land-policy-inclusive-and-people-centred

49

Stein, et al (2016) The Formal Divide: Customary Rights and the Allocation of Credit to Agriculture in Tanzania, https://experts.umich.edu/en/publications/the-formal-divide-customary-rights-and-the-allocation-of-credit-t

TPDC (2015). Taarifa ya Utekelezaji wa Ujenzi wa Miundombinu ya Gesi Asilia Kutoka Madimba –Mtwara, Songo Songo- Lindi na Pwani hadi Dar-es-Salaam.

The Oil and Gas Revenues Management Act (2015) http://www.tpdc-tz.com/wp-content/uploads/2016/02/SHERIA-OIL-AND-GAS-REVENUE-1.pdf

United Republic of Tanzania (2013) The National Natural Gas Policy of Tanzania, http://www.tanzania.go.tz/egov_uploads/documents/Natural_Gas_Policy_-_Approved_sw.pdf

UN (2011). Guiding Principles on Business and Human Rights. United Nations Human Rights, Geneva . Available at http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR EN.pdf

UNDP/IRS (2010). *Guidance Note on Recovery: Livelihood*. Available at http://www.undp.org/content/dam/india/docs/guidance note on recovery livelihood.pdf

United Republic of Tanzania (URT) (2014). *Tanzania Poverty and Human Development Report,* Dar-es-Salaam

Voipio T. (1998). "Poverty reduction in Mtwara-Lindi 1972-1995. A history of paradigm shifts" in Seppala P. and Koda B. Eds. *The Making of a Periphery: Economic Development and Cultural Encounters in Southern Tanzania*. Nordiska Afrikainstitutet. Uppsala

Wembah-Rashid J.A.R (1998). "Is culture in south-eastern Tanzania development unfriendly? In Seppala P. and Koda B. Eds. The Making of a Periphery: Economic Development and Cultural Encounters in Southern Tanzania. Nordiska Afrikainstitutet. Uppsala

Wielders I. (2011). Listening to the impacts of PNG LNG Project: Central Province, Papua New Guinea. Oxfam. Australia

Zafar A. (2007). The growing relationship between China and Sub-Saharan Africa: Macroeconomic, trade, investment, and aid links. The World Bank Research Observer.



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