

MAPPING STUDY ON GENDER AND EXTRACTIVE INDUSTRIES IN MAINLAND TANZANIA



Report November 2016







United Nations Entity for Gender Equality and the Empowerment of Women

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Global Affairs Canada Affaires mondiales Canada

TABLE OF CONTENTS

| LIST C | OF TABLES | V |
|--------|--|-----|
| LIST C | VI | |
| ABBR | EVIATIONS AND ACRONYMS | VII |
| EXEC | IX | |
| 1. CO | DUNTRY CONTEXT | 1 |
| 1.1 | Introduction | 1 |
| 1.2 | Why this Study? | 1 |
| 1.3 | Report Structure | 2 |
| 2. ME | THODOLOGY | 3 |
| 2.1 | Secondary Data Collection and Review | 3 |
| 2.2 | Primary Data Collection | 3 |
| | 2.2.1 Sample | 4 |
| | 2.2.2 Key Informant Interviews and Meetings | 4 |
| | 2.2.3 Semi-Structured Interviews | 4 |
| | 2.2.4 Focus Group Discussions | 4 |
| 2.3 | Primary Data Collection in Fieldwork Facilitation | 4 |
| 2.4 | Limitations to Data Collection | 5 |
| 3. A C | GLOBAL OUTLOOK ON GENDER AND EI | 6 |
| 3.1 | Contrasting Views about the Benefits of El for Women | 6 |
| 3.2 | Women in Artisanal and Small-Scale Mining (ASM) | 7 |
| 3.3 | Women Employed in El companies | 8 |
| 3.4 | Women in the Supply Chain | 8 |
| 3.5 | Negative impacts on Women in the Supply Chain | 9 |
| 3.6 | Corporate Social Responsibility | 9 |
| 3.7 | Local Content | 10 |
| 4. PO | DLICY AND REGULATORY FRAMEWORK | 11 |
| 4.1. | . Gender and Human Rights Policies and Frameworks | 11 |
| 4.2 | Mining | 12 |
| 4.3 | Energy | 13 |
| 4.4 | El Transparency, Accountability, CSR and Environment | 14 |
| 4.5 | Employment and Self-Employment | 14 |

| 4.6 | Education, Training and Entrepreneurship | 17 | |
|---------|---|----|--|
| 5. STA | KEHOLDERS | 20 | |
| 5.1 | Government Stakeholders | 20 | |
| 5.2 | Development Partners | 22 | |
| 5.3 | Civil Society | 24 | |
| 5.4 | Education and Training Stakeholders | 27 | |
| 5.5 | Private Sector | 29 | |
| 6. DAT | A ON GENDER AND EI IN TANZANIA | 31 | |
| 6.1 | The Role of EI for the Tanzanian Economy | 31 | |
| 6.2 | ASM Baseline Survey with Data Disaggregated by Gender | 32 | |
| 6.3 | Inclusion of Gender and EI in the Integrated Labour Force Survey (ILFS) | 34 | |
| 6.4 | Register of License Holders | 35 | |
| 6.5 | Data on RUZUKU grantees through the SMMRP | 38 | |
| 6.6 | Overview of the Data from the SSIs | 40 | |
| 7. BAR | RIERS AND OPPORTUNITIES FOR ECONOMIC TRANSFORMATION | 43 | |
| 7.1 | Gold | 43 | |
| 7.2 | Tanzanite | 45 | |
| 7.3 | Gemstones | 47 | |
| 7.4 | Volcanic Rocks | 48 | |
| 7.5 | Gravel | 49 | |
| 7.6 | Gypsum | 50 | |
| 7.7 | Cement | 51 | |
| 7.8 | Salt | 52 | |
| 7.9 | Gas | 54 | |
| 7.10 | Students and Trainees | 55 | |
| 3. CON | ICLUSIONS AND RECOMMENDATIONS | 57 | |
| 8.1 | Common Challenges and proposed Recommendations | 58 | |
| 8.2 | Specific Challenges for Women and Gender Equality | 59 | |
| 8.3 | Sector specific Challenges | 60 | |
| REFER | ENCES | 62 | |
| ANNEXES | | | |
| ANNEX | A: KEY STAKEHOLDERS' INTERVIEWS AND MEETINGS | 65 | |
| ANNEX | B: VALIDATION WORKSHOP PARTICIPANTS | 68 | |
| ANNEX | C: SEMI-STRUCTURED INTERVIEW GUIDE WITH WOMEN AND MEN IN EI | 70 | |
| ANNEX | C: FOCUS GROUP DISCUSSION GUIDE | 74 | |
| ANNEX | D: TERMS OF REFERENCE (TOR) | 76 | |

LIST OF TABLES

| Table 1: | Breakdown of SSIs, FGDs and Key informant interviews per Zone | 4 |
|-----------|--|----|
| Table 2: | Gender Development Policy and National Strategy for Gender Development | 12 |
| Table 3: | Gender considerations in the Mineral Policy and the Mining Act in Tanzania | 13 |
| Table 4: | Gender considerations in the Energy Policy, Local Content Policy for Oil and | |
| | Gas and the Petroleum Act | 14 |
| Table 5: | El Transparency and Accountability Act and CSR and EIA guidelines | 15 |
| Table 6: | Regulatory frameworks related to Employment, Business, Economic Empowerment and Land | 16 |
| Table 7: | Education and Training Policy and Entrepreneurship Training Framework | 18 |
| Table 8: | Matrix of Government institutions of relevance directly engaged in El | 20 |
| Table 9: | Other government institutions relevant for gender and El | 22 |
| Table 10: | Matrix of development partners for Gender and El | 23 |
| Table 11: | Matrix of CSO stakeholders for gender and El | 25 |
| Table 12: | Enrolment of Learners in Education Sector by Level, 2013 (MoEVT 2014). | 27 |
| Table 13: | Trainees enrolment 2015 at VETA, Mtwara | 28 |
| Table 14: | Matrix of Education stakeholders for Gender and El | 28 |
| Table 15: | Number of Employed Persons Aged 15 years in Mining and Energy industries in | |
| | Mainland Tanzania by gender in 2014. | 34 |
| Table 16: | Average monthly income (TZS) of Persons 15+ Years in Mining and Energy in | |
| | Mainland Tanzania by gender in 2014. | 34 |
| Table 17: | Royalty required per category of mineral | 35 |
| Table 18: | Number of active PMLs by commodity in 2015 | 36 |
| Table 19: | Number of active Prospecting licences (PLs) holders by commodity | 36 |
| Table 20: | Active Mining Licenses | 36 |
| Table 21: | Number of active Special Mining Licenses (SML) | 37 |
| Table 22: | Small scale mining beneficiaries from the RUZUKU grant, phase I | 37 |
| Table 23: | Employment in Buzwagi and Bulyanhulu gold mines 2012-2014 | 43 |
| Table 24: | Employment in TanzaniteOne Tanzanite Mine (TTM) 2012-2014 | 45 |
| Table 25: | Matrix of common challenges affecting both women and men | 58 |
| Table 26: | Matrix of Challenges for Women and Gender Equality | 60 |
| Table 27: | Matrix of EI sub-sector specific challenges | 61 |

LIST OF FIGURES

| Figure 1: | Map showing an overview of the locations of fieldwork | 4 |
|------------|---|----|
| Figure 2: | ASM engagement by gender in Tanzania. Source: ASM Baseline Survey 2011 (MEM 2012). | 32 |
| Figure 3: | ASM salt by zone and gender. Source: ASM Baseline survey 2011 (MEM 2012). | 33 |
| Figure 4: | ASM building materials by zone and gender. Source: ASM Baseline survey 2011 (MEM 2012). | 33 |
| Figure 5: | ASM gemstone by zone and gender. Source: ASM Baseline survey 2011 (MEM 2012). | 34 |
| Figure 6: | ASM Gold mining by zone and gender. Source: ASM Baseline survey 2011 (MEM 2012). | 34 |
| Figure 7: | Awarded RUZUKU grants for phase II. Source: MEM 2016. | 39 |
| Figure 8: | Extractive Industry sub sector | 40 |
| Figure 9: | Main source of income | 40 |
| Figure 10: | Age brackets by gender | 41 |
| Figure 11: | Level of education by gender | 41 |
| Figure 12: | Respondent's main occupation by gender | 41 |
| Figure 13: | Second alternative source of income by gender | 41 |
| Figure 14: | Third alternative source of income by gender | 41 |
| Figure 15: | Frequency of seasonal livelihood by gender | 41 |
| Figure 16: | Frequency of registered business/livelihood activity | 42 |
| Figure 17: | Land ownership status by gender | 42 |
| Figure 18: | Migration from place of birth by gender | 42 |
| Figure 19: | Reasons or migration by gender | 42 |
| Figure 20: | Group belonging status by gender | 42 |
| Figure 21: | Community welfare versus presence of extractive companies | 42 |

ABBREVIATIONS AND ACRONYMS

| ACHPR | African Charter on Human and Peoples' Rights |
|----------|--|
| ALAT | Association for Local Authorities in Tanzania |
| AMGC | African Minerals and Geosciences Centre |
| AMV | African Mining Vision |
| ANTHEI | Angola, Norwegian, and Tanzanian Higher Education Initiative |
| ASM | Artisanal Small Scale Mining |
| AU | African Union |
| BG Group | British Gas Group |
| CSOs | Civil Society Organisations |
| CSR | Corporate Social Responsibility |
| DRC | Democratic Republic of Congo |
| DP | Development Partner |
| DTVET | Department of Technical and VocationalEducation and Training |
| EEVT | Enhancing Employability through Vocational Training |
| EISF | Extractive Industry Inter-stakeholder Forum |
| EIA | Environmental Impact Assessment |
| EI | Extractive Industries |
| ERB | Engineers Registration Board |
| ESCBP | Energy Sector Capacity Building Project |
| ESRF | Economic and Social Research Foundation |
| EWURA | Energy and Water Utilities Regulatory Authority |
| FDC | Folk Development College |
| FEMATA | Federation of Mining Associations in Tanzania |
| FGD | Focus Group Discussion |
| FYDP | Five-Year Development Plan |
| ILFS | Integrated Labour Force Survey |
| LNG | Liquefied Natural Gas |
| LSM | Large Scale Mining |
| LVGF | Lake Victoria Gold Fields |
| MEM | Ministry of Energy and Minerals |
| ΜΚυκυτα | Poverty Reduction Strategy for Tanzania |
| ML | Mining License |
| MRI | Mineral Resource Institute |
| MoEVT | Ministry of Education and Vocational Training |
| NACTE | National Council for Technical Education |
| NBS | National Bureau of Statistics |
| | |

| NEEC | National Economic Empowerment Council |
|-----------------|---|
| NTA | National Technical Award |
| ocgs | Office of the Chief Government Statistician Zanzibar |
| ODK | Open Data Kit |
| PL | Prospecting License |
| PML | Primary Mining License |
| RED | Regional and Enterprise Development |
| REMA | Regional Mining Associations |
| SADC | Southern African Development Cooperation |
| SEAMIC | Southern and Eastern African Mineral Centre |
| SEAP | Structured Engineers Apprenticeship Program |
| SDGs | Sustainable Development Goals |
| SIDO | Small Industrial Development Organisation |
| SMAP | Small Scale Miners Assistance Project |
| SME | Small and Medium Enterprises |
| SMMRP | Sustainable Management of Mineral Resources Project |
| SOGA | Skills for Oil and Gas in Africa |
| SHIREMA | Shinyanga Regional Energy and Mineral Authority |
| STAMICO | State Mining Corporation |
| SSI | Semi Structured Interview |
| TAMIDA | Tanzania Minerals Dealers Association |
| TANESCO | |
| | Tanzania Electric Supply Company |
| TAWOMA TCCIA | Tanzanian Women's Mining Association |
| TCME | Tanzania Chamber of Commerce, Industry and Agriculture |
| TGC | Tanzania Chamber of Minerals and Energy |
| | Tanzania Gemological Centre Tanzania Investment Bank |
| TIB | |
| TLED | Tanzania Local Enterprise Development |
| | Tanzania Minerals Audit Agency |
| TPDC | Tanzania Petroleum Development Cooperation |
| TPSF | Tanzania Private Sector Foundation |
| TVET | Technical and Vocational Education and Training |
| TWCC | Tanzania Women Chamber of Commerce |
| TWO | Tanzanite Women Association |
| UDOM | University of Dodoma |
| UDSM | University of Dar es Salaam |
| UNECA | United Nations Economic Commission for Africa |
| VET | Vocational Education and Training |
| VETA | Vocational Education and Training Authority |
| VICOBA | Village Community Banks |
| VSO | Voluntary Services Overseas |
| WEP | Women Empowerment Principles |
| WoMin | African Women Unite Against Destructive Resource Extraction |
| | |

EXECUTIVE SUMMARY

There are many sectors in the Extractive Industries (EI) in Tanzania, ranging from gold and gemstones, to industrial minerals and gas. Mining of building materials including gravel, gypsum, and volcanic rocks is carried out in several parts of the country, whereas salt farming is mainly in the coastal areas. Given the importance of the EI, it is central to know how women and men benefit from these sectors, as well as to identify potential opportunities.

This mapping study aims to identify the key bottlenecks and barriers for women's engagement in EI, and possible areas for support. The objective of this mapping study is to inform policy dialogue and provide concrete interventions and capacity development initiatives. The Government of the Republic of Tanzania, the United Nations in Tanzania, and other developmental partners can support these interventions to ensure that women, as well as men, and girls as well as boys, can truly benefit economically from the EI.

In the literature globally, there is a consensus that if EI activities are gender blind, women will benefit less than men. In addition, the exclusion of women from the sector has negative effects on women, their families, communities as well as EI companies, while diversity has positive effects. There is also a recommendation that more needs to be known about the economic and environmental effects of EI, before further exploration takes place.

In Tanzania, a vast majority of the women and men involved in EI are engaged in artisanal and smallscale mining (ASM), estimated at 700,000 people, among whom 27 percent are women. Gold absorbs the largest number of men as well as women. However, the share of women is higher in other subsectors, notably salt (38 per cent), diamond (37 per cent) and building materials (32 per cent). Less than 34,000 miners have a license. Gender disaggregated license data is not available, but it is estimated that only 10 percent of the total license holders are women. Employment in the large mining companies is limited to around 12,000 people, with women constituting only a small fraction. Energy is a smaller sector compared to mining, but with the recent gas findings, this may shift in the near future. The share of women is also smaller in the energy sector (6 percent) than in the mining sector (20 percent). Education and skills are skewed towards low level of education on the one hand, and high level of education on the other. Few constitute the inbetween segment of semi-skilled workers. The share of girls is small in vocational education of direct relevance for EI. However, girls are in the majority in courses related to food production and food and beverage services, which form an important part of the EI value chain.

Particular focus in this study was on challenges opportunities for women's economic and transformation. However, many of the barriers found affected not only women, but also men. They were also not sector specific. The main divider in terms of the type of barriers for women's engagement in Els was always employment versus self-employment. Women who are employed in the larger companies face difficulties combining family life with being on site for long stretches of time. This becomes critical after a few years when they get married and have children. During this phase, many women try to shift to locations where it is easier to combine working with family life, or they leave the industry altogether. Gender stereotypes related to "suitable" roles for women and men respectively, as well as sexual harassment and exploitation, are barriers that cut across women's engagement in all EI sectors, and are relevant to employment as well as self-employment.

For women who are self-employed, either directly engaged in EI, or as service providers to EI (such as food provision) the challenges put forward were of a different nature. Barriers such as lack of capital, tools and equipment, and entrepreneurship and technical skills were identified. The support mechanisms are limited, only a few women belong to economic support groups, and access to grants, loans and skills development is limited. While access to capital is partly coupled with unequal distribution of land and assets needed as collateral, access to grants and training is related to lack of exposure and information. These types of challenges are common among small and medium size enterprises (SMEs), but there appeared to be very limited linkages between small and medium scale mining and EI related service provision. EI may in fact be a new SME niche to explore.

Health and safety was raised as a concern in all sectors, with need for emergency training of ASMs and the promotion of using safety equipment. Health and safety is a growing component in Vocational Education and Training Authority (VETA) trainings, as demanded by many El companies. This also includes issues of health insurance, as El companies are reluctant to offer field attachment for students who are not covered.

Expanding the opportunities of women in El calls for targeted interventions. The design of interventions would benefit from more evidence, through increased availability of data. Currently, gender-disaggregated data is often not included as a dimension in the data display, nor discussed in the analyses. The potential therefore exists for collaboration with the Ministry of Energy and Minerals (MEM) and other stakeholders to enhance gender-disaggregated data and analysis, and also increase the demand for such analysis. For example, the National Bureau of Statistics (NBS) has a wealth of data on gender and El through the Integrated Labour Force Survey (ILFS), but if analysis and reports related to this theme is not requested by stakeholders, it will remain unprocessed.

From a policy framework point of view, the EI laws, policies and strategies are not all discriminatory against women. However, some of the policies and laws are largely gender blind, in particular laws. There is thus a need to engender policies and laws. This could be done with inspiration from the policies where gender dimensions already feature in a significant way, such as the National Energy Policy (2015). There is also a potential to introduce gender interventions on a strategic level.

Select capacity building programmes initiated by MEM, such as grants for women, men and service providers engaged in small-scale mining, have seen an increase in the number beneficiaries. However, the percentage of women recipients of such grants has unfortunately decreased. It has been identified that such grants require a more gender specific component for women in order to increase women beneficiaries.

The government, development partners, NGOs, educational and training institutions, and private sector stakeholders are involved in important skills development initiatives related to EIs in Tanzania. Some initiatives and scholarships include women and girls as specific target groups, in order to make sure that women benefit, despite invisible barriers. Value would be added by guidance towards reaching targets, showcasing role models, and by advising how a gender perspective can be incorporated into programmes where this dimension has not yet been included. Recent initiatives linking vocational training to the demands in the private sector have had higher success rates when the inclusion of women and girls is listed as a key priority.

Stakeholders with interest in promoting gender equality and women's economic empowerment in Els have an important role to play in increasing women's economic opportunities in the sector. It may not be possible to address all challenges, however, there is an argument for starting with the "low hanging fruits" before moving up. By starting with gender disaggregated data, engendering of policies and laws currently in the making and under revision, by introducing quota on a strategy level, and to incorporate El sub-sectors of small-scale miners into the SME debate and linkages to institutions such as SIDO, positive results can be seen quickly. During this mapping study, several stakeholders have responded positively towards joining hands for greater inclusion of women, which was also put forward during the validation workshop at the end of February 2016. This is promising for the route towards the transformation of women's roles in EI.

1. INTRODUCTION

The United Republic of Tanzania was formed in 1964 as the union of Mainland Tanzania and Zanzibar, wherein Zanzibar has semi-autonomous status, after independence from the United Kingdom in 1961 and 1963 respectively. The country is located on the East coast of Africa, bordered by Kenya and Uganda to the north, Malawi and Mozambique to the south and the Democratic Republic, Congo, Rwanda, Burundi and Zambia to the west. Dodoma, located in central Tanzania is the legislative capital, however most government offices and international companies are based Dar es Salaam, which is the country's largest city and leading commercial centre.

Tanzania is rich in natural resources, such as gold, diamonds, nickel, uranium, and natural gas. It is also home to one of the rarest gemstones in the world, Tanzanite, which is only found in Manyara region. Despite these unique resources and booming economy, a Tanzania rank 152nd out of 182 countries in the Human Development Index, 134th out of 185 countries in favourable business environment, and has a per capita income of US\$ 652. Approximately 70 per cent of the population lives in rural areas where access to facilities is limited or completely absent. As a result, the country continues to face many socioeconomic challenges that are further compounded by high illiteracy and dropout rates, leading to an increase in unemployment. The situation for young women and girls is also very bleak. Tanzania has multiple and contradictory customary, religious and statutory, legal frameworks, that do not adequately protect the rights of women and girls. Discrimination and marginalization of women and girls prevents them from fully reaching their social, political and economic potential.

Economic empowerment and entrepreneurship have been identified by the Government of Tanzania as one of the key priorities in the Five Year National Development Plan Vision 2025, with emphasis on greater inclusion of women in emerging sectors. On such possible industry for great engagement of women is the extractive industry in Tanzania, which is still in the nascent stages of exploration and development. It is estimated that only 10 per cent of the country's mineral deposits have yet been explored for mining and production. Tanzania is also rich in building materials, such as gravel, gypsum and volcanic rocks, in addition to precious gemstones, gold and Tanzanites. Earlier in 2016, vast supplies of gas reserves were also discovered.

Given the potential of the industry to boost the economy and provide lucrative employment options to both men and women, it is important to analyse the current situation, understand how men and women benefit from this sector, what are their main barriers and challenges, and recommend strategic opportunities for improvement.

1.1 Why this Study?

"The Extractive Industry has the potential to drive immense economic and social development. However, it is vital that we consider how everyone is affected: women and men, and entire mining communities. If extractive projects are not inclusive and sustainable — including employment practices that are gender-sensitive, and community investments that impact positively on gender equality and women's empowerment — there are real risks to social stability, inclusive growth and development, and even security."

Under - Secretary - General and Executive Director of UN Women, Ms. Phumzile Mlambo-Ngcuka

This statement by UN Women Executive Director in relation to the Regional share-fair on Gender and Extractive Industries (EI) held in Kenya in October 2015, emphasizes the importance of inclusive development in the extractive sector, where women make up a significant share of the world's workforce. When they are unable to fully participate in the extractive industries and receive full compensation for their work, families, communities and entire countries suffer. While some research on El in Tanzania has been undertaken, little is known about women's engagement and the barriers or challenges they face. With El playing an important role in Tanzania's economy, and with the potential for further exploration of minerals and gas, it is crucial that these sectors are analysed for sustainability and equality to ensure it is beneficial for the communities where El are located.

UN Women globally is committed to the empowerment of all women and girls, as articulated in Goal 5 of the newly adopted Sustainable Development Goals. Increased opportunities for girls and women needs a coordinated and systematic effort, and UN Women works with empowerment ranging from leadership, preventing sexual harassment and violence against women, gender responsive budgeting and women's economic empowerment. Within women's economic empowerment, gender dimensions are, for example, division of labour within the household, and participation in the labour market on equal terms. Gender and Extractive Industries is part of this commitment.1

In October 2015, UN Women Tanzania commissioned this mapping study on gender and El in Tanzania to research the key bottlenecks and barriers for women's engagement, to map out key policies, stakeholders and initiatives, and to inform priority interventions that should be undertaken to empower women in the Els. The study was undertaken in partnership with the Ministry of Energy and Minerals (MEM) and the Canadian High Commission in Tanzania, which for many years has had Extractive Industries as part of its portfolio. The study explored six key themes:

- Evidence and data on gender and EI, globally and in Tanzania;
- Women's and men's engagement in a selection of EI sub-sectors, and their value chains;
- Barriers and opportunities for economic empowerment in EI, in particular for women;
- Education and vocational training opportunities of relevance for EI;
- Gender considerations for Gender and El relevant policies, and their legal framework;
- Stakeholders' engagement and initiatives.

1.2. Report structure

Chapter two covers the research methodology for the mapping study, followed by a brief overview of the findings of related studies on Gender and Extractive Industries from around the world in Chapter three. Chapter 4 contains an overview of gender considerations in relevant policies, the legal framework, and a mapping of stakeholders and institutions of relevance for Gender and EI in Tanzania. Chapter 5 provides data and evidence of the number and characteristics of women's and men's engagement in El value chains in Tanzania. Chapter 6 captures the engagement in El sub-sectors and the barriers and opportunities for economic empowerment, with a particular focus on women's economic empowerment. Chapter 7 concludes the report and contains recommendations.



UN Women Tanzania and the Research Team at the Mtwara Gas Plant in Tanzania, October 2015 (C) UN Women

¹Emphasised during the opening speech by Anna Collins-Falk, Country Director of UN Women Tanzania, at the Gender and El validation workshop in Dar es Salaam.

2. METHODOLOGY

Different methodologies and approaches were applied to conduct this mapping study on Gender and EI in Tanzania, which are briefly described in this section.

2.1 Secondary Data Collection and **Review**

A literature review of related research and initiatives conducted in other countries was carried out to draw from international experiences and best practices. The regulatory framework of relevance for gender and EI in Tanzania was also reviewed with the aim to identify room for improvement and changes that would encourage women's engagement and empowerment in the sector. Secondary sources were used to map relevant stakeholders to identify potential areas of support and strengthening. Previous surveys from Tanzania, such as the Artisanal and Small Scale Mining (ASM) baseline survey (MEM 2012) and the Integrated Labour Force Survey (ILFS) 2014 (NBS 2015) were valuable sources of numerical data on women's and men's engagement in El sub-sectors.

2.2 Primary Data Collection

Women's and men's engagement in EI and opportunities for economic empowerment were explored through primary data collection in different geographical areas in Tanzania, with a focus on nine sub-sectors and their inherent value chains. The EI sub-sectors were:

- Gold 6. Gypsum Tanzanites Cement 2. 7. Salt Gemstones 8. Gas
- 4. Volcanic rocks 9.
- Gravel 5.

1.

3.

In order to capture a variety of perspectives, the focus was on collecting qualitative information. Three different methods were used during the primary data collection: (1) key informant interviews; (2) semi-structured Interviews (SSIs); and (3) focus group discussions (FGDs) with women and men in different El sub-sectors and value chains.



Figure 1: Map with overview of locations of research

The data collection covered four zones, as illustrated in Figure 1:

- 1. The Eastern Zone: Dar es Salaam, Pwani and Tanga regions (gravel, cement and gemstones)
- The Southern Zone: Mtwara and Lindi regions 2. (salt, cement, gravel and gas)
- 3. The Northern Zone: Arusha and Kilimanjaro regions (gypsum, Tanzanite and volcanic rocks)
- The Central-Western Zone: Two sites in Δ. Kahama, Shinyanga region (gold and gravel)

2.2.1 Sample

The table below illustrates the sample, i.e. how many semi-structured interviews, focus group discussions and key informant interviews were conducted per zone.

| Zone | Semi-structured interviews | | FGDs | | Key Informant Interviews |
|-----------------|----------------------------|-------|-------------|-----------|-----------------------------|
| | Men | Women | Women (FGD) | Men (FGD) | Key stakeholders |
| Central-Western | 10 | 10 | 2 | 2 | 5 |
| Northern | 10 | 10 | 2 | 2 | 7 |
| Southern | 10 | 10 | 2 | 2 | 12 |
| Eastern | 10 | 10 | 2 | 2 | 20 |
| TOTAL | 40 | 40 | 8 | 8 | 44 |

Table 1: Breakdown of SSIs, FGDs and Key informant interviews per Zone

2.2.2 Key Informant Interviews and Meetings

Key informant interviews and meetings were conducted with stakeholders within the government, the private sector, civil society organisations, and educational and training institutions in order to explore their engagement, the extent they already capture gender aspects in EI, and the potential for increased engagement and interventions. Different interview guides tailored to each key informant category were produced. A total of 44 key informant interviews were conducted (see annex A).

2.2.3 Semi-structured Interviews

SSIs were conducted with women and men who were directly involved in EI sub-sectors as well as those indirectly engaged, such as service providers. SSIs were also conducted with students and trainees in EI related courses. Through the SSIs, demographic information was collected as well as information e.g. about their livelihoods, family situations, opportunities and challenges. Ten SSIs with women and ten SSIs with men were conducted in each of the four geographical areas; resulting in a total of 80 SSIs. The information was captured electronically in Open Data Kit (ODK). A selection of questions was voice recorded and then transcribed.

2.2.4 Focus Group Discussions

FGDs were conducted to encourage different categories of respondents to discuss challenges and opportunities. The groups were separated by gender and sub-sector. In total, 16 FGDs were carried out: two male and two female groups in each of the four zones. These discussions were recorded and transcribed. A total of 49 women and 47 men participated in FGDs.

2.3 Primary Data Collection

At the beginning of the assignment, the researchers were introduced to MEM - the Commissioner for Minerals, the acting commissioner for Energy at MEM, assistant commissioners and other members of the management team. Before the primary data collection in the field began, the research team was formally introduced to the zonal mines offices through a letter from the MEM headquarters. When the data collection began, the zonal officers were well-informed about the assignment, and were available for questions and interviews. They also facilitated liaising with stakeholders in the field. Two research teams with three researchers in each team conducted the primary data collection in the field. One team covered the Eastern and Southern zones, while the other covered the Northern and Central-Western zones.

2.4 Limitations to Data Collection

This is not a nationally representative study and limited in terms of number of respondents. Other studies, referred to in this report, contain estimates of the number of men and women involved in El value chains in Tanzania. This study combines numerical data with the voices from women and men from a variety of value chains, to map out their challenges and opportunities. Not all El value chains and locations for extraction have been included, but rather a purposeful sample has been used to enable in-depth analysis. A limitation in the study is that does not contain information for Zanzibar. There are salt industries in Zanzibar, and oil and gas may be extracted there in the future. Finally, it should be stressed that it was beyond the scope in this mapping study to provide an in-depth analysis of each issue that is relevant for El in Tanzania, including access to and loss of land, health, sexual harassment, effects on adolescent girls, to mention a few. This implies that there is scope for more research, as these themes deserve individual studies as well. Each value chain could also be studied in more depth.



Focused Group Discussion with Men at the Salt farms in Lindi, Tanzania, November 2015 (C) UN Women

3. GLOBAL OUTLOOK ON GENDER AND EI

There is a growing body of literature and evidence around the world on Gender and Extractive Industries. Important contributions to the field have been made by organisations such as International Alert (2014); Oxfam (Lilywhite et al 2015, Oxfam Australia 2009 and Oxfam 2015); African Women Unite Against Destructive Resource Extraction (WoMin 2015); Centre for Governance and Development (Ochieng' Omila 2015); Action Aid (2015); UN Women (2014) and Partnership Africa Canada (PAC) in collaboration with the Development Research and Social Policy Analysis Centre (2016) and The World Bank Group (2015:1-6). From these studies, three key messages emerge and globally applicable to all women in the extractives industries:

- 1. There is overwhelming consensus in all major studies that if policies and legal frameworks that govern and guide EI activities are gender blind, women will benefit much less than men. This is also the case when both men and women are employed at the same level, with similar or equal qualifications.
- 2. The exclusion of women from such sectors results in negative effects on women's economic empowerment, their families, communities, as well as EI companies; while diversity has positive effects.
- 3. A contrasting view also argues that the social, environmental and economic costs of unplanned expansion of the extractive industries may lead to disastrous consequences, which will outweigh benefits. Therefore, greater impact assessments are required to establish facts before further exploration takes place.

3.1 Contrasting views about the benefits of El for women

Evidence from the World Bank's Gender and Extractive Industries Program (2015) shows that inclusion of women in community engagement, and employment in EI, has positive effects for their communities, as well as the EI companies. In many cultures, women have more responsibility for taking care of children and the household, and tend to devote most of their income on food, shelter and education. Therefore, if women are included, there are long-term positive effects on health and education of the families and communities. Therefore, if more women benefit from EI through business and employment, there wil be greater positive returns for the households and communities. In contrast, the exclusion of women from employment in EI will have negative effects for community development, as well as for the EI companies. It has also been found that gender diversity in the workplace is proven to have positive effects for the companies, including reduced rates of gender-based violence. (World Bank 2015, No. 1).

There is also consensus in the literature that if El activities are gender blind, and if gender relations remain the same, women will benefit less than men. A study on gender and livelihoods in relation to oil exploration in Uganda by International Alert (2014) concludes that if men continue to control the household assets, and women have a substantially higher workload, women will benefit less than men from the oil sector.

A more reluctant argument is put forward by African Women Unite Against Destructive Resource

Extraction (WoMin), which has scrutinized the Africa Mining Vision of the African Union (WoMin 2015). It is argues that the social, environmental and economic costs may be far greater than the benefits of mineral- and oil-based projects. Based on empirical evidence from case studies in Burkina Faso, Congo, Ghana, Nigeria, South Africa, Uganda and Zimbabwe, WoMin (2015) estimates that 90 million people have been displaced as a result of mining and oil industry establishment. Loss of farmland, degradation of water, replacement of food production for domestic work around the industry, has severe repercussions on women. The negative effects of such projects have disproportionately affected young women and girls, who as a result, have received limited education, and have resorted to prostitution. Health effects on women have been documented, such dehydration, skin ulcers, skin wounds and inflammation of the uterus as a result of chemicals used. Many women have also had to use their productive time to care for husbands who have been retrenched from the industry due to illnesses caused by working in mines. WoMin calls for national studies on the environmental, social and economic effects of the existing and abandoned mineral- and oil-based developments.

3.2 Women in Artisanal and Small-Scale Mining (ASM)

According to the World Bank (2015), there are 20 to 30 million people globally who are engaged in Artisanal and Small-Scale Mining (ASM), and between 10 to 50 per cent are women. There are many more women who are involved in ASM than in EI employment in large mining companies. Women tend to be in lower-value industrial minerals, which involve intensive extractive processes both in terms of the proportion, as well as absolute number, and exposure to safety risks. Women are involved in a variety of tasks, including digging, panning, processing, transporting and hauling. When mechanization increases, the share of women's involvement tends to decrease. Women tend to be under represented in studies of ASM because they are often engaged in activities that are commonly not identified as mining jobs. These include transporting materials, cleaning, cooking, running small shops, as nightclub entertainers, or sex workers (World Bank 2015, No 4).

Findings by Côté 2014, focusing on women in the Artisanal Gold Mining Sector in the Democratic

Republic of Congo (DRC), can serve as a case study of women's labour in ASM and the negative effects such involvement can have. Côté shows that women and girls are directly engaged in the gold mining, performing tasks such as manually grinding sand and rocks, then transporting them to the crushers, carrying water needed for the crushers, and washing the sand. The level of education of the women and girls tends to be very low, and the tools rudimentary and manual. Women are also indirectly involved in the gold industry, as traders, restaurant operators and alcohol vendors, while some women are involved in agriculture. Prostitution for supplementary income is common. The study found that rape, premature and forced marriage, as well as prostitution of underage girls is common, as well as young, abandoned single mothers. Lack of support from the local police to enforce national laws leads to greater preference and adherance to local traditions and customary laws. Although many women were directly involved in gold ASM, the low status of women in Congolese society has the effect that they do not gain economically. Women tend to have little control over their income and men often cheat them and do not pay for goods and services, even when they are economically capable of paying. From a long-term perspective of women's increased participation in the sector, women's lack of access to capital is seen as a major bottleneck (Côté 2014).

There is increasing consensus globally that ASM activities need to be recognized with formalisation and organisation as a means of improving practices and reducing environmental degradation. Other community benefits can be obtained for women as well as men. This could include gender sensitive financial assistance, and gender appropriate training and capacity building, including training in technical and processing skills, health and safety, financial literacy, legal capacity, bookkeeping, marketing and managerial skills. Other ways of improving women's engagement in ASM is through targeting women in value addition, on-site childcare and support to alternative livelihood pathways, which bring more income and are safer (World Bank 2015, No 4).

Research shows that women in ASM who organise themselves into groups and consortiums tend to use economies of scale, and are better off than those who conduct their mining businesses individually. An illustrative example from Zambia shows the power of associating. In 2001, the Association of Zambian Women in Mining conducted its first international gemstone exchange of 135 kg of emeralds. By belonging to a consortium, the individual miners were in a better position to supply larger volumes, which meant a higher sale value, and spin-offs such as larger operations and job creation (referred to in Ochieng' Omila 2015).

Structural barriers identified for participation of women in ASM globally are: limited access to resources (including land and credit), socio-cultural norms which prevent women from controlling their income, and cultural taboos, which hinder women from entering mine sites to work underground, and to enter a mine site during menstruation (World Bank 2015, No 4).

3.3 Women Employed in El Companies

According to World Bank estimates, women constitute about 10 percent of the employees in large-scale operations on a global level. Among the women who are employed, few are in leadership positions. Only 7.9 percent of people on the board of directors in the top 500 mining companies globally are women (World Bank 2015, no. 2). The 10 percent share of women is consistent on a country level. For example In the case of Uganda, as reported by Ngabiirwe (2014), it is rare to find more than 10 percent female employees.



Women employees at the Gas Plant in Mtwara Tanzania, November 2015 (C) UN Women

Hiring women also has proven positive effects for the EI companies (International Alert 2014). Encouraging women implies a broadened pool of applicants to choose from. Another proven advantage is that workplaces with gender balance have a higher level of innovation as well as better team dynamics and communication. When women are in managerial positions, this also translates into a more dynamic workplace culture and increased productivity (International Alert 2014, Ngabiirwe 2014 and World Bank 2015, no 2). To encourage female applicants, and to get those who are hired to stay, there is a need to make EI workplaces more family-friendly, through childcare, parental leave and health policies (World Bank 2015, no. 2).

Ngabiirwe (2014) puts forward a series of common attitudes and beliefs that influence why formal EI jobs tend to go to men. These include the beliefs that low wage jobs should be performed by women, that only men have the requisite skills and physical strength required, and that export-oriented jobs are for men. Ochieng' Omila (2015) states that gender stereotype beliefs among men as well as women influence what men and women are willing to do. In the coalmine in the Mui Basin in Kenya, women were reluctant to participate in mining activities because this is considered to be men's work, while women were expected to attend to household chores and small-scale gardening for household consumption. However, as Ochieng' Omila (2015) points out, these cultural beliefs are not necessarily homogenous around the world and may also change over time through conscious interventions and activism.

Employment opportunities for women can have substantial positive outcomes for the individual, for their families, as well as for the communities in which they live (World Bank 2015, no. 2). Hence, as argued in a study by International Alert (2014), targeted gender interventions are needed in order for these effects to materialize.

3.4 Women in the Supply Chain

According to the World Bank (2015), only one-third of SMEs globally have women in leadership positions. This gender imbalance is attributed to lack of skills, resources, social capital, and the right and access to economic and financial opportunities. In order to address access to finance as an obstacle for womenowned SMEs to be EI suppliers, the World Bank has introduced small grants to women running SMEs in mining areas. Monitoring of the project e.g. in Papua New Guinea has shown positive results, including increased profits and family benefits (World Bank 2015, no 3). However, within SME finance to women, it is not only a matter of distributing cash. Financial literacy and the ability to pursue economic opportunities is a socio-cultural structural problem that, in turn, is linked to factors such as formal education, finance, skills training, and property rights. Therefore, for sustainable SMEs owned by women, all these obstacles need to be addressed, through companies as well as by governments. NGOs, women's groups, women entrepreneurs, and the local governments are important stakeholders to inform this process (World Bank 2015, no 3).

A gap analysis of local content in EI in Kenya found that for every job created directly in the EI, there are potentially six jobs that could be created in indirect sectors around the industry. Examples of such services are site logistics support, health support, catering, accommodation, environmental services, and general supplies (Adam Smith International 2015). As employment of women in EI can have positive effects for women and their families, the same argument is put forward for women in the supply chain of the industry, notably SME owners.

Interventions such as increased access to capital, financial education, literacy and skills building through vocational training and entrepreneurship are ways to overcome what Scott et al (2013) are referring to as the Gender Asset Gap. Other recommendations to close the gender asset gap are to encourage local recruitment and gender-fair hiring and workplace policies. It is suggested that through legislation, it can be made mandatory for local communities to become shareholders in the project, as well as to grant women equal access to land, credit and property ownership.

3.5 Negative impacts on Women in the Supply Chain

Despite the opportunities that natural resource extraction can bring, there are repercussions, which often affect women disproportionately. Negative impacts range from loss of land, water for drinking and farming, increased social conflict, and increased vulnerability to sexual exploitation (e.g. Côté 2014 and Partnership Africa Canada, 2016). Prostitution and transactional sex are downsides of women's engagement in the supply chain. Due to limited opportunities to gain employment in El sectors, women undertaken positions in the supply change that caters to demands of entertainment, food, hospitality and alcohol. Even when women do manage to secure employment in El companies with better inclusion policies, women are face the unfair expectation to continue taking care of children and household chores. Access to better employment inadvertently increases their daily workload.

Many studies capture that men engaged in EI tend to spend a large share of their income on alcohol and commercial sex (e.g. International Alert 2014, Ochieng' Omila 2015, Lillywhite et al 2015 and Scott et al 2013). This affects women's health with STIs and HIV/AIDS, but also the gender relations within the household. For example, in the research related to the coalmine in the Mui Basin area in Kenya, women were worried that their husbands spend the money on alcohol and are tempted by commercial sex workers. Men on the other hand were afraid that their wives would leave them for wealthy migrants and expatriate workers who had come to work in the mine. There was also a general worry in the community that migrant workers would persuade young women in the community to engage in sexual relationships through financial temptations (Ochieng' Omila 2015). International Alert (2014) found that human trafficking was part of the reality of EI in the oil sector in Uganda. Girls aged 14-17 years old were persuaded by traffickers in their villages that they would get jobs, but were instead forced into prostitution.

3.6 Corporate Social Responsibility

Many EI companies have invested some of their profit into Corporate Social Responsibility (CSR) programmes, such as building schools, hospitals and infrastructure in the communities they operate in. CSR programmes have been encouraged by governments in the host countries, and indeed positive effects have been documented. For example, CSR initiatives by the oil sector in Uganda reported by International Alert (2014), had introduced better access to healthcare. This had significantly reduced the number of women giving birth at home. Women had also benefited from the improved infrastructure with roads, and access to markets and information networks. However, the skills development CSR interventions in Uganda had been gender blind. All who qualified for a scholarship to study abroad and to go for A-levels were men and boys. The report stated that through gender sensitive approaches, El companies could be a positive force. Scholarships provision was highlighted as a unique opportunity to support girls' education and skills needed to access economic and leadership opportunities. An affirmative action suggested was that 50 percent of the selected students should be girls (International Alert 2014). In addition, it should be noted that, CSR tends to be for short periods of time and therefore the long term sustainability of interventions should be considered when planning CSR initiatives so that their positive effects are sustained after the support ends.

3.7 Local Content

Local content is the value brought to the local, regional or national economy from an extraction project, such as hiring local labour and procuring local goods and services. The focus on local content is to make sure that the local economy is improved beyond the revenues they generate (NRGI 2015). It is important that a gender perspective is included so that positive effects on the lives of women are by design, not by chance or as a spill over effect. As women have limited control over assets, fewer skills, experience and qualifications, targeted policies, institutions and programmes by both the public and private sector are needed. Local content in terms of sourcing goods, services and labour locally and domestically is important here, including enterprise development, job creation, new skills and technologies. A gender perspective also needs to be integrated into the policies and legal framework, and in terms of sub-groups of women.

In order for local content to be utilized by the El companies' skills and the workforce for local suppliers, need to meet the standards required. As recommended by Ochieng' Omila (2015), local content legislation needs to be gender-aware so that women as well as men benefit equally from skills development and employment. Expertise in highly technical goods and services take a longer time to build, and tends to be more difficult to source locally. Nevertheless, for the local economy to be sustainable, highly skilled expertise needs to be developed. (Adam Smith International 2015). Local content should be emphasized along the whole value chain, from local SMEs supplying goods and services, to semi-skilled professionals in vocational trades. As argued in Adam Smith International (2015) in the case of Kenya, education, training and certification need to be linked to local suppliers, who in turn can win tenders and generate employment. Local content requirements vary from country to country. It can be encouraged through national legislation, stipulated quotas, and in project contracts in terms of provisions for employment, training and ownership (NRGI 2015).

Training has been promoted in East Africa as a way to encourage local content. An example is the establishment of petroleum institutes and scholarships. For example, the Chinese government offers scholarships and training for Ugandan government officials and the Identification Placement and Review Committee (IPRC) in Canada has offered training programs for professionals and technicians such as mining engineers, geologists, metallurgists, geophysicists and geochemists in Rwanda and Burundi. A gender perspective has been considered in some of the programmes, such as the Tullow scholarship in Uganda, wherein both men and boys, women and girls are sponsored to study post-graduate courses related to oil and gas (Ngabiirwe 2014).

The German Development Corporation (GiZ) has documented best practices on gender and mining (GiZ 2015). The government of Papua New Guinea has committed to a National Women in Mining Action Plan, which is the result of a series of conferences on women in mining, supported by the World Bank. In addition to the National Action Plan, there are project plans for every major mining operation in the country. The Action Plan is led by gender officers of the Mineral Resource Authority, who work with women's associations on issues relevant to extractive industries. They also provide small grants and mediation between women and the companies. As a result, all major mines in Papua New Guinea recruit a gender officer as part of the community relations' team. Another best practice example is the South African government's Equity Employment Act and Mining Charter, which demand that employers recruit a workforce that reflects the country's demographic composition. The Charter requires that a minimum of 10 percent of the workforce in mining companies should be women (GiZ 2015).

4. POLICY AND REGULATORY FRAMEWORK

An overview of key policies and regulatory framework related to EI and the inclusion of a women and gender focus is provided in this section. EI is multi-dimensional and thus includes policies that stipulate the contexts within which EI businesses operate; access to and ownership of mining rights; access to land and capital, human resources, and regulations that protect the communities from social and economic vulnerabilities. Each of these has implications for the status of women in EI and their effective participation in and benefit from the sector.

Tanzania has signed and ratified international and regional instruments for the promotion and protection of women's economic rights and gender equality. After the ratification of these instruments by parliament, the domestication process should follow. When a country has ratified a treaty, it is generally considered to be part of national laws. Rights holders can mobilize for the enforcement of the provisions of the treaty, as they would be able to with any other national law. Countries need to submit reports periodically that outline measures taken to implement the provisions in the treaties they have ratified.

4.1 Gender and Human Rights Policies and Frameworks

Tanzania has ratified the Universal Declaration of Human Rights (1948); the International Covenant on Economic, Social and Cultural Rights (1966); the International Covenant on Civil and Political Rights (1966); the Convention on the Elimination of All Forms of Discrimination against Women (1979); the UN Convention on the Rights of the Child (1989); and the Optional Protocol to the Convention on the Elimination of Discrimination against Women (2000). These treaties and protocols enshrine universal human rights standards. Although not directly related to EI and gender, they could be used as instruments for national policy and lawmakers to address gender injustices and to develop equitable and gender sensitive sector policies and laws that are human rights based.

As a member state of the African Union, Tanzania has signed various continental and regional instruments that are binding. These include the Protocol to the African Charter on Human and People's Rights (ACHPR) on the Rights of Women in Africa (2003), also referred to as The Maputo Protocol. This represents a deepened commitment by member states to guarantee comprehensive rights for women, including the rights to take part in political processes, social and political equality, and to control of reproductive health. Within the ACHPR, there is a Working Group on Extractive Industries, Environment and Human Rights Violations in Africa (2009) to promote investigations and research on human rights violations in El.

Tanzania has signed the SADC Protocol on Gender and Development (2008). Among the targets was 50:50 representation in political and decisionmaking positions, in both the public and private sector, by the 2015. Although this target was not met, it illustrates that it is possible to set measurable targets, timeframes and indicators for gender equality in any sector. This way, it can also easily be monitored—different from frameworks that are silent on gender.

Tanzania has the Women and Gender Development Policy (WGDP) (2000), and the National Strategy for Gender Development (NSGD) (2008). Gender is obviously at the core of both, and aims to achieve gender equality and equity in Tanzania. The NSGD was developed to consolidate and expedite the implementation of the Women and Gender Development Policy, in order to remove gender gaps and inequalities between men and women. The NSGD seeks to guide implementers to engender policies, plans, strategies and programmes with a view to implementing commitments at international, regional and national levels.

| Zone | Semi-structure | ed interviews | FGDs | | Key Informant Interviews |
|-----------------|----------------|---------------|-------------|-----------|-----------------------------|
| | Men | Women | Women (FGD) | Men (FGD) | Key stakeholders |
| Central-Western | 10 | 10 | 2 | 2 | 5 |
| Northern | 10 | 10 | 2 | 2 | 7 |
| Southern | 10 | 10 | 2 | 2 | 12 |
| Eastern | 10 | 10 | 2 | 2 | 20 |
| TOTAL | 40 | 40 | 8 | 8 | 44 |

4.2 Mining

Tanzania is a member of the African Union, which has adopted the African Mining Vision (AMV) (2009), followed by an Action Plan for Implementation of the AMV (2011). These documents are not legally binding, but outline a vision that suggests that mining must be pursued "as the royal road to growth" through sustainability and good governance. The AMV states that greater attention needs to be paid to retaining the benefits of such growth nationally. This includes negotiating fair contracts and ensuring that local communities enjoy a part of the mining revenue. It is stated that activities should be safe, environmentally friendly, socially responsible and appreciated by the surrounding communities. Gender as well as ethnicity inclusiveness are articulated.

Tanzania, as a member of the Southern African Development Community (SADC), has signed the SADC Protocol on Mining (1997) to adopt internationally accepted standards within the mining sector. The United Nations Economic Commission for Africa (UNECA) has produced a framework to harmonize national mining policies in the SADC region (UNECA2009). In the harmonization template, gender is included as a sub-component of social issues. Subsequently, during the development of the Mineral Policy of Tanzania (2009) gender has been included as a crosscutting issue. However, the Mining Act (2010) developed the following year is gender blind. Therefore, a review of the act is recommended so that gender considerations such as benefits for women and men are clearly articulated.

4.3 Energy

There are two policies and one act that were recently developed in relation to energy, namely the National Energy Policy (2015), the Local Content Policy of Tanzania for Oil and Gas (2014), and the Petroleum Act (2015). The inclusion of gender has been prioritised in the National Energy Policy with a specific section on gender mainstreaming. Similarly, the Petroleum Act (2015) makes specific mentions of gender in certain sections. In the Local Content Policy for Oil and Gas, gender is mentioned, but not given high priority. The responsibility for local content in EI has moved from MEM to the National Economic Empowerment Council (NEEC), and it is anticipated that in the future there will be a broader local content policy, which, in addition to oil and gas, includes EI more broadly as well as other types of businesses. A Local Content Act is in the making by NEEC, providing an opportunity for stakeholder engagement in terms of gender integration, which would benefit EI as well as other sectors.

Table 3: Gender considerations in the Mineral Policy and the Mining Act in Tanzania

| Policy or Act | Content | Women and gender focus |
|--|--|---|
| The Mineral Policy of Tanzania (2009) | Aims to strengthen integration of the mineral sector with other sectors of the economy, improve economic environment for investment, maximise benefits from mining, improve the legal environment, strengthen capacity for administration, develop small-scale miners, promote and facilitate value addition and strengthen environmental management. | Gender is only mentioned among crosscutting issues: promotion of women's participation in mining activities. Law enforcement among child labour is also mentioned, but is not gender specific. Policy Statement: "The Government will continue to promote participation of women in mining activities; The Government will ensure that all programmes related to mining, including education and training opportunities, are based on gender equality and equity." (URT 2009, p. 24). |
| The Mining Act (2010) | Provides for the regulation of prospecting for minerals, mining, processing and dealing in minerals, including granting and renewal of licenses, royalties and fees. | This law is gender blind and bears no reference to human rights or women's rights in mining activities. |

4.4 El Transparency, Accountability, CSR and Environment

Relevant for gender and El is the regulatory framework around transparency, accountability, CSR and the environment. The Tanzania Extractive Industries (Transparency and Accountability) Act (2015) stipulates that there should be a national committee that ensures that Tanzania benefits from the extractive industries, but neither the committee nor the activities include a gender dimension. The Guidelines for Corporate Social Responsibility and Empowerment in the Extractive Industries (2015) identifies women's groups among the key target groups. The Mineral Sector Environmental Impact Assessment (EIA) Guidelines (2015) reference to gender is made both in terms of information availability, negative effects of unplanned expansion, and ensuring gender-disaggregated data collection.

| Act or Guideline | Content | Women and gender focus |
|---|--|--|
| National Energy Policy (2015) | Aims to enhance energy security, generate income, create employment, mitigate climate change and ensure sustainability, diversification and efficiency. | The policy contains a specific section on gender mainstreaming in the energy sector. It is here stated that the government shall: "Promote gender equality within energy sub-sectors both on the demand and the supply side; Ensure equitable gender participation in formulation and implementation of energy interventions; Promote awareness about gender issues concerning men's and women's social roles in the energy sector, including training on appropriate technologies; Undertake public education and awareness creation on cultural structures and practices hindering access by both men and women to alternative sources of energy; Enhance gender and environmental considerations in energy planning and development." (URT 2015a, p. 31). |
| The Local Content Policy of Tanzania for Oil and Gas (2014) | Aims to develop and promote competitive, capable, and sustainable local labour with the necessary knowledge and skills. It also aims to adopt strategies for technology and knowledge transfer and to promote research and development. Furthermore, it aims to set up a mechanism that will enable Tanzanians and their businesses to provide services, goods, management and labour. | Gender considerations are not given high priority, but are included. It is mentioned in one of the specific objectives coupled with HIV/AIDS and other infectious diseases. The policy also states that the government should ensure active participation and training of females in the oil and gas industry. The policy states: The Government shall: <i>"Ensure that all projects in the oil and gas value chain including, training opportunities are based on gender equality and equity;"</i> |
| The Petroleum Act (2015) | Regulation of upstream, midstream and downstream petroleum activities and the establishment of the Petroleum Upstream Regulatory Authority (PURA). | On the establishment of the PURA Board Clause 18:(3) <i>"The appointment of the Board shall</i> <i>have regard to gender balance."</i> On training and succession planning Clause 221:(2) <i>"The programme shall provide training</i> <i>and recruitment of Tanzanians in all phases of</i> <i>petroleum operations and gas activities and</i> <i>take into account gender, equity, persons with</i> <i>disabilities, host communities and succession</i> <i>plan in accordance with the Employment and</i> <i>Labour Relation Act"</i> |

4.5 Employment, and Self-Employment

Relevant for Gender and El in Tanzania is the regulatory framework around employment, business, economic empowerment and land. This framework is not exclusively for El, but is relevant as El businesses constitute large-scale companies and SMEs with employees, as well as self-employed miners and service providers. The Employment and Labour Relations Act (2004) articulates gender, but the Worker's Compensation Act (2003) makes no reference to gender or women. Women are mentioned as a disadvantaged group in the SME Policy (2002), but not identified as a group in the National Economic Empowerment Policy (2004). Extractive Industries tend to require large amounts of land and often result in community members losing control or access over traditionally owned and used land, as land is re-appropriated. In the land policy, both women and men are mentioned as entitled to own land, but customary law can be followed as long as it is not against the constitution. This has been traditionally disadvantageous to women in terms of land inheritance. Efforts to strengthen women's rights in terms of land were made during the constitutional review process, a process that was put on hold for the 2015 national elections.

| Table 5: Gender considerations in | the Energy Policy, Local Content Po | olicy for Oil and Gas and the Petroleum Act |
|-----------------------------------|-------------------------------------|---|
| | | |

| Act or Guideline | Content | Women and gender focus |
|---|---|--|
| The Tanzania Extractive Industries (Transparency and Accountability) Act (2015) | Outlines the formation of the Tanzania Extractive Industries (Transparency and Accountability) National Committee that ensures benefits of extractive industry are verified, duly accounted for and prudently utilized for the benefit of the citizens of Tanzania. Five of the 15 members of the committee should be representatives of civil society organisations (CSOs). | The composition of the committee does not establish a minimum number of women to be in the committee, and therefore does not establish a gender balance. |
| The Guidelines for Corporate Social Responsibility and Empowerment in the Extractive Industries (2015) | Guidelines to El companies to implement their CSRE policies and community priorities by putting the rights of indigenous people and special groups at its centre. | The guidelines specify women's groups among the key target groups (other identified groups are small-scale miners, youth groups, community based organisations and disadvantaged groups). |
| Mineral Sector Environmental Impact Assessment (EIA) Guidelines (2015) | The guidelines focus on mitigating the negative effects of mining such as destruction of rivers, deforestation, influx of people, water pollution, land degradation, and noise pollution. The guidelines include legal and technical recommendations and cover exploitation and environmental issues. The EIA outlines requirements of reporting, and roles of key stakeholders, and public participation. | In the context of public hearings and community meetings, women are mentioned as a group that needs information. It is mentioned that both women and men benefit from job creation. The guidelines recommend conducting a survey to evaluate the socio-economic status of local inhabitants, including data collected from both women and men. |

| Policy or Act | Content | Women and gender focus |
|---|---|--|
| The Employment and Labour Relations Act (2004) | To make provisions for core labour rights, to establish basic employment standards, to provide framework for collective bargaining, prevention and settlement of disputes, and to provide related matters | TDiscrimination based on sex and gender is prohibited, and representation in trade union is demanded. The Act states in Article7(4)(i) "No employer shall discriminate, directly or indirectly, against an employee, in any employment policy or practice, on grounds of gender." |
| The Workers' Compensation Act (2008) | To provide for compensation to employees for disablement of death by or resulting from injuries or diseases sustained or contracted in the course of employment; to establish the fund for administration and regulation of worker's compensation and to provide for related matters | Gender blind |
| The Small and Medium Enterprise Development Policy (2002) | The overall objective is to foster job creation and income generation through promoting the creation of new SMEs and improving the performance and competitiveness of the existing ones to increase their participation and contribution to the Tanzanian economy | There is mention of measures to be taken to encourage women and other disadvantaged groups, and that funding mechanism schemes should include a women development fund, managed by the Ministry responsible for women. The policy states under the section on gender and disadvantaged groups <i>"Government will ensure that gender mainstreaming is enhanced in all initiatives pertaining to SME development"</i> (URT, 2002, p. 25) |
| The National Economic Empowerment Policy (2004) | It is envisaged that by the year 2025 a large segment of the national economy will be owned by Tanzanians. This process will embrace all Tanzanians by availing equal opportunities to all groups to develop themselves, particularly the poor. In addition, a more favourable business environment will be created to foster a strong economy that is capable of competing effectively in a globalised world market. | The policy refers to all Tanzanian citizens and targets farmers, livestock keepers, fishermen, employees, traders and other groups of individuals conducting economic activities. However, it makes no reference to women and men or gender dimensions. |
| The Land Policy (1997) | The overall aim of National Land Policy is to promote and ensure a secure land tenure system, to encourage the optimal use of land resources and to facilitate a broad based social and economic development without upsetting or endangering the ecological balance of the environment | The policy stipulates that women are entitled to acquire land, but that customary law should be respected as long as it is not against the constitution. On page 12 the policy states: "In order to enhance and guarantee women's access to land and security of tenure, women will be entitled to acquire land in their own right not only through purchase but also through allocations. However, inheritance of clan land will continue to be governed by customs and tradition provided such custom and tradition is not contrary to the constitution and not repugnant to principle of natural justice." (URT, 1997) |

| Table 6: Regulatory | frameworks related to | Employment, Business | , Economic Empowerment and Land |
|---------------------|-----------------------|----------------------|---------------------------------|
| | | | , |

In the year 2000, the United Nations Global Compact Principles were launched, targeting businesses to set standards to be environmentally conscious and responsible. The principles are not legally binding, but signing up implies a commitment to strive for UN standards such as the Rio Declaration. In Tanzania, a global compact network was initiated in early 2016. At the launch, it was pointed out that with the recent discoveries of gas, and prospects for oil, more efforts are needed for strategic and integrated perspectives for development (The Guardian 2016-01-16). The Women Empowerment Principles (WEPs) (2011) as developed by UN Women complement the UN Global Compact Principles by bringing a gender lens to business practices. Among the aims are corporate leadership for gender equality, decent work situations for women and men (health, safety and non-discriminatory) and promotion of education, training and professional development for women. Important are also the implementation of enterprise development and supply chain and marketing practices that empower women, promotion of equality through community initiatives and advocacy, and to measure and publicly report on progress to achieve gender equality.

4.6 Education, Training and Entrepreneurship

There are two documents that are particularly relevant when it comes to skills building in EI; namely the Education and Training Policy (2014) and the National Entrepreneurship Training Framework (2013). The Education and Training Policy makes no reference to gender or sex, but is inclusive in the sense that it mentions all groups. The National Entrepreneurship Training how entrepreneurship Framework outlines should be included in all levels of education, from pre-primary education to tertiary education. It includes non-formal education, but not technical and vocational training. The reference to gender is very weak in the document with the only reference to gender being that at tertiary education level, and that students should be able maintain a work-life balance.

A number of skills development scholarships have been funded by private sector EI companies, and benefitted both women and men. British Gas (BG) has supported a Tanzania Scholarship Project administered by the British Council, in which eight Tanzanian students per year pursue postgraduate education at Tanzanian higher education institutions. It focuses on 15 energy-sector related engineering courses relevant for the development of Tanzania's natural gas sector. The BG Tanzania International Postgraduate Scholarship Scheme for Geoscience and Engineering is aimed at Tanzanian graduates who want to complete their postgraduate education in the UK and access future employment opportunities in Tanzania's emerging natural gas and related sectors (British Council 2015).

Mandawa Basin Project is a collaborative twoyear programme started in 2013 between the University of Dar es Salaam and Oslo University, funded by Statoil. Under the Geology Department at University of Dar es Salaam, two students of either gender received scholarships during the first intake at the Master's level. Coursework is done at the University of Dar es Salaam while lab work is partly done in Norway. In 2015, the project also funded two students who will study for a Master's degree in Petroleum Engineering. Statoil also funded the Heroes of Tomorrow business plan competition in 2014 as a way to promote SME development related to EI in Mtwara. The project did not have a particular gender focus but two of the eight finalists were women (Statoil 2014).

The Angola, Norwegian, and Tanzanian Higher Education Initiative (ANTHEI) aims to promote academic advancement in the disciplines of natural sciences, engineering and other related areas. Statoil has financed the programme since mid-2013, allocating USD 2.3 million to the project until 2017. The postgraduate degree is a two-year programme that allows a student to spend a year each in Norway and Tanzania. Every year, ten students are take part in the ANTHEI Master's programme. These students are recruited from both the Engineering and the Geology departments of UDSM. There was only one women out of 10 students in 2012 and in 2013 respectively.

Ghati, Tanzania's first female petroleum engineer

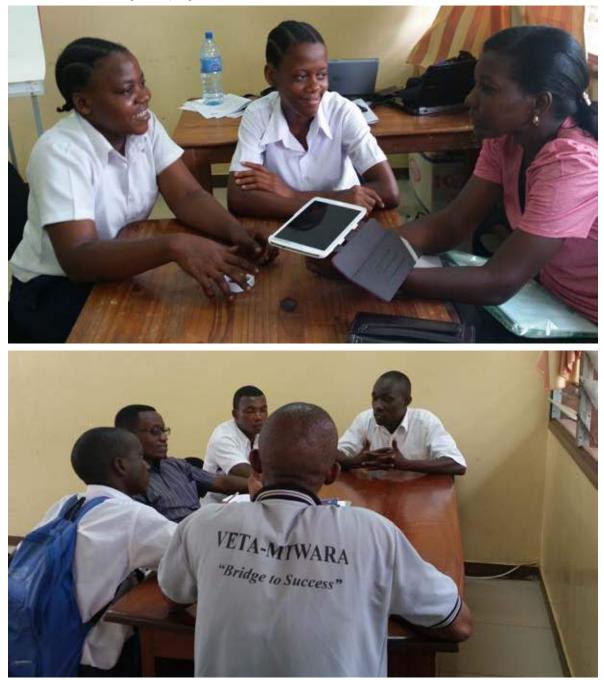
Twenty-nine year-old Ghati from Tarime is the first Tanzanian woman to work offshore in the oil and gas industry as a petroleum engineer. Ghati dreamt of becoming an engineer since she was a child. After completing science A-levels, she joined the university of Dar es Salaam pre-entry programme for young women and girls. She passed the course, which enabled her to enrol in a degree in mineral processing engineering. She focused on petroleum engineering and while at university, she applied for a Master's scholarship within the ANTHEI programme. Ghati was among ten Tanzanians who were sponsored to study for one year in a Norwegian University. Upon return to Tanzania, she enrolled in a practical training programme for local engineers, also sponsored by Statoil.

"I want to be a successful engineer who can contribute to the growth of the oil and gas industry and bring development to our country," says Ghati. In the future, she hopes to pursue her PhD.

| Policy or Framework | Content | Women and gender focus |
|--|---|---|
| The Education and Training Policy (2014) | To guide and promote the development and improvement of the personalities of the citizens of Tanzania, their human resources and effective utilization of those resources in bringing about individual and national development. To promote the acquisition and appropriate use of literary, social, scientific, vocational, technological, professional and other forms of knowledge, skills and understanding for the development and improvement of the condition of man and society | Recognises that the government will continue to increase opportunities to training equally for all groups at all levels, including children with special needs, but does not make reference to girls and boys, women and men. |
| National Entrepreneurship Training Framework (2013) | The overall objective is to provide a minimum of learning outcomes, methods, guidelines for the quality of facilitators and assessment techniques to be used in entrepreneurship training so that the efforts contribute more effectively towards empowering Tanzanians in terms of attitudes, knowledge and skills, as envisioned in the National Vision 2025 as well as in various sector policies. | Weak gender perspective. The only reference is that students at tertiary level should be able to handle key issues such as gender and family when it comes to managing the business. |

Table 7: Education and Training Policy and Entrepreneurship Training Framework

In conclusion, there are frameworks that govern and guide EI in Tanzania—by the UN, AU, SADC and the Nation. Some are legally binding while others are promotional tools and guidelines. However, it is not by default that one framework addressing EI, and another capturing gender, are harmonized, even within the same institution or protocol. It is recommended that relevant policies are harmonized, that indicators are defined, quantifiable targets are set and that concrete timeframes are outlined in order to monitor change and progress over time. It is apparent from the review of the national policies and regulations related to EI that the degree of gender sensitivity varies considerably, and that laws tend to be less gender inclusive than policies. This calls for a review of laws to become more gender responsive. Inspiration can be found in the policies with strong gender dimensions, notably the National Energy Policy (2015). In such a process, stakeholders with a gender interest in EI would add significant value.



Focused Group Discussions with students at VETA in Mtwara, Tanzania, November 2015 (C) UN Women

5. STAKEHOLDERS

This section outlines some of the key stakeholders for gender and EI. This section is not intended to be exhaustive but rather to give examples of the sort of initiatives that exist in the EI Sector in Tanzania and to identify some of the stakeholders.

5.1 Government Stakeholders

The Ministry of Energy and Minerals (MEM) is the main government stakeholder concerned with gender and extractive industries in Tanzania and has a mandate to regulate the El sector in Tanzania. MEM is structured with two divisions one for energy and another for minerals, each with its own commissioner. Unlike the energy division, the mineral division has 6 sections each with its own assistant commissioner and an oversight office in each zone as well as mining officer in each zone. This ranges from development of policies and strategies, to issuing El licences, collecting royalties and ensuring guidelines are observed. The minerals division includes:

- 1. Mines inspectorate
- 2. Small scale mining development
- 3. Licensing and mineral rights management
- 4. Minerals economics and trading

5. Explosives management

6. Mineral beneficiation and value addition

The energy division does not have zonal offices or resident offices, but works closely with the Tanzania Electric Supply Company (TANESCO) that has offices in the regions. The energy division consists of five sections:

- 1. Petroleum
- 2. Electricity
- 3. New and Renewable energy
- 4. Energy development
- 5. Gas utilization

There are agencies and institutions linked to MEM. The most relevant for this study are Tanzania Minerals Audit Agency (TMAA), the State Mining Corporation (STAMICO) and the Tanzania Petroleum Development Corporation (TPDC), described in the matrix below.

| Stakeholder | Responsibilities and programmes | Gender and El engagement |
|--|---|--|
| The Ministry of Energy and Minerals (MEM) | Develops policies and regulatory frameworks and issues licenses, collects royalties and oversees licence holders. The division of minerals has Zonal mines offices and resident mines offices while the energy division works closely through the TANESCO offices in the regions. | Few women in managerial positions. Data on beneficiaries of programmes is disaggregated by gender, but license holders are not. There is a first come first served policy, and no female/male quotas for programmes, services and grants. Disaggregation of all data by gender would facilitate analysis. Quota system for the benefit of women would increase opportunities. Potential for both gender audits, such as share of women employed and in which positions, licence holders, beneficiaries of CSR etc. |

Table 8: Matrix of Government institutions of relevance directly engaged in EI

| Tanzania Minerals Audit Agency (TMAA) | Conducts yearly audits of the large scale mining companies and increasingly also of SMEs. Apart from financial audits, TMAA also conducts environmental audits and reports on incidences of illegal trading and smuggling of minerals. | So far, gender issues have not been included in the audits, but there is potential for both gender audits and for the inclusion of gender disaggregated data. |
|---|---|---|
| | "TMAA is a public parastatal established through Government Notice No. 362 of 6th November, 2009 under the Executive Agencies Act, Cap. 245. | |
| | It took over the functions which before undertaken by the Minerals Auditing Section in the Minerals Department under the Ministry of Energy and Minerals. Its main responsibilities is monitor and audit quality and quantity of minerals produced and exported by large, medium and small scale miner." | |
| State Mining Corpora- tion (STAMICO) | STAMICO operates some of the mines in Tanzania, some of which have been handed over by private companies due to insufficient quantities. | Very few female employees and no gender interventions. |
| | "STATE MINING CORPORATION (STAMICO) is a public parastatal under the Ministry of Energy and Minerals established by the Public Corporation Act cap 257 through State Mining Corporation Establishment Order No. 163 of 1972 as amended in 2014. | |
| | The Corporation which became operational in 1973 was formed to perform functions stipulated under Section 4 of its Establishment Order, 1972" (http://www.stamico.co.tz/). | |
| Tanzania Petroleum Development Cooperation (TPDC) | Operates the Madimba Natural Gas Plant in Mtwara. | Very few women employees and no gender interventions. |
| | "Tanzania Petroleum Development Corporation (TPDC) is the National Oil Company of Tanzania through which the Ministry of Energy and Minerals implements its petroleum exploration and development policies. TPDC has about 400 employees. | |
| | TPDC was established through the Government Notice No. 140 of 30th May 1969 under the Public Corporations Act No.17 of 1969. The Corporation began operations in 1973. TPDC is a wholly owned Government parastatal, with all its shares held by the Treasurer Registrar". | |

Other government stakeholders of relevance for Gender and El are the National Economic Empowerment Council (NEEC), Small Industrial Development Organisation (SIDO), and the Association for Local Authorities in Tanzania (ALAT), described in the matrix below. Although, El is not their primary focus, their remit is of relevance for gender and El.

| Stakeholder | Responsibilities and programmes | Gender and El engagement |
|--|---|---|
| National Economic Empowerment Council (NEEC) | Responsible for the National Economic Empowerment Policy, The National Entrepreneurship and Training Framework (NETF) and Local Content policies and strategies. | So far no specific interventions or strategies to promote women's economic empowerment in EI, but the organisation is responsible for important frameworks and policies. |
| Small Industrial Development Organisation (SIDO) | Builds business skills for SMEs and facilitates SMEs access to technology, infrastructure, finance, markets and information. Provides training in handicraft and light manufacturing in trades such as food processing, tailoring and food processing. The main clients are formal and informal sector enterprises ranging from micro to medium size. SIDO houses a business incubation programme which provides space, training, encourages associations, work in clusters and facilitates links to financial institutions. | Women constitute an important target group for SIDO and many clients are women. The indirect economic opportunities for women and men in El could be improved through closer links between El stakeholders (including MEM) and SIDO. |
| Association for Local Authorities in Tanzania (ALAT) | Supports Morogoro Mining Cooperative Society (MOMICOSO). MOMICOSO promotes value addition and fair trade and ethically mined gemstones in Morogoro Municipal Council, with tourism as an entry point by collaborating with hotels in Morogoro. ALAT collaborates with The Federation of Canadian Municipalities (FCM) in the programme Municipal Partners for Economic Development (MPED). | Gender equality is emphasised in the programme. Keen on sharing the approach so that it can be replicated in other places. |

Table 9: Other government institutions relevant for gender and El

5.2 Development Partners

This section includes a mapping of Development Partners (DPs) working in the area of EI in Tanzania, with explicit or non-explicit gender dimensions and targets in their programmes and support. Of particular relevance are UN Women, Canada, GiZ, the Royal Norwegian Embassy, DFID and the World Bank. While UN Women and Canada are relevant for women's economic empowerment related to mining and its value chains, GiZ, Norway and DFID are all contributing to the Skills for Oil and Gas in Africa (SOGA) programme. The World Bank has previously worked with gender and EI in many different countries, with the footprint in Tanzania mainly being through the Sustainable Management of Minerals Resources Project (SMMRP) and the Energy Sector Capacity Building Project (ESCBP), implemented by MEM.

Table 10: Matrix of development partners for Gender and EI

| Stakeholder | Responsibilities and programmes | Gender and El engagement |
|---|--|---|
| UN Women | In Tanzania, regionally and globally, UN Women is committed to promoting gender equality in El. Works closely with governments on policy revision, gender budgeting, coordination and information sharing e.g. through the electronic platform empowerwomen.org and share fairs, such as a regional share fair on Gender Equality in the Extractives Industry in 2015. | Gender equality and the empowerment of all women and girls and gender equality is at the core of the work of UN Women and the Extractive Industry is a priority. |
| Canada through Global Affairs Canada | Lead development partner on the Tanzania-G7 Partnership on Transparency in the Extractive sector, supports the Tanzania El Transparency Initiative, Tanzania Minerals Audit Agency, the Energy Sector Capacity Building Program (with the World Bank), the Tanzania Local Enterprise Development project (TLED) (implemented by CUSO International in partnership with VSO), the Strengthening Small Business Value Chains project (implemented by the Mennonite Economic Development Associates – MEDA) and the Improving Skills Training for Employment Program (implemented by CICan). | Gender equality and promotion of women and men, girls and boys, is an important dimension of Canada's portfolio. |
| Germany through GIZ | Supported MEM to develop a communications strategy for improved community engagement. Lead in the Skills for Oil and Gas programme in Africa (SOGA), which is part of the portfolio on Employment for Sustainable Development in Africa (E4D). SOGA was initiated as a response to a demand from the private sector, notably British Gas, that there is need for skilled and semi-skilled labour in the oil and gas sector. SOGA is implemented in Uganda, Kenya, Tanzania and Mozambique. Soga is also supported by the UK government through DFID/UK AID. SOGA is geared towards construction and catering services. | SOGA targets 35 percent of the beneficiaries to be women. There is also an age target aiming at 40 percent youth between 15-24 years. In order to be able to reach the target of female beneficiaries, GiZ is in the process of commissioning mapping studies on gender and El in the focus countries. In Tanzania, the SOGA initiative will partly be able to build on the current study by UN Women. GiZ is planning a media campaign against gender stereotyped livelihoods and identities and to promote women to seek male dominated professions and vice versa. |

| Norway through Royal Norwegian Embassy | Energy is a strong component of the Norwegian development cooperation in Tanzania from an environmental, resource and revenue point of view. The Norwegian Embassy works with the programmes Oil for Development (OfD) and Taxation for Development. The OfD supported the development of the National Petroleum Policy in 2014. Norway supported the Structured Engineers Apprenticeship Program (SEAP) between 2010-2015, implemented through the Engineers Registration Board (ERB) which is currently been considered to be extended. | A gender and energy study was commissioned in 2014. However, how to best integrate gender dimensions in order to make sure that women and girls are benefitting is still something they are struggling with. The SEAP programme successfully contributed to increase the number of female registered engineers with more than 200 between 2010 and 2015. Before the programme started, there were only 96 registered female engineers in the country (Norad 2015). The embassy is currently considering extending the programme and may gear it towards oil and gas (interview). |
|---|--|---|
| United Kingdom through UKAID | Partner in the SOGA programme and supports the Regional and Enterprise Development Initiative (RED) in Lindi, implemented by VSO (see VSO in the next section). | As a partner in SOGA programme, and women are key target population |
| The World Bank | The World Bank has globally focused on Gender and Extractive Industries since 2007, with Tanzania as one of the participating countries. The Sustainable Management of Minerals Resources Project (SMMRP) and the Energy Sector Capacity Building Project (ESCBP) in MEM are supported by the World Bank. Components in these programmes are related to the policy and legal framework, coordination and governance, strengthening institutional management, and education and skills development, and private public partnership (PPP) support. | Both the SMMRP and the ESCBP programmes are relevant from a gender point of view. Gender disaggregated data has been produced and it was mentioned by MEM staff that women are encouraged to apply for training opportunities and for grants to develop EI SMEs |

5.3 Civil Society

Many civil society organizations work on gender and EI, some of which have a particular interest in promoting economic empowerment and have a gender focus. In the mining sector, CSOs range from associations of men and women miners, to NGOs that advocate for rights of miners and mining communities, to advocacy for increased transparency in the sector. Some NGOs also work with government and ASMs to build their capacity of both sides and increase collaboration.

Table 11: Matrix of CSO stakeholders for gender and EI

| Stakeholder | Responsibilities and programmes | Gender and El engagement | |
|--|--|---|--|
| Tanzania Women's Mining Association (TAWOMA) | The members in Tanzanian Women Mining Association (TAWOMA) are female small-scale miners and aims to promote working conditions, skills development and business environment for women miners. TAWOMA has active chapters in Tanga, Dar es Salaam and Morogoro. According to TAWOMA representatives, the members support each other and conduct joint activities but only around 100 of the 600 members pay the annual fee. Has one mining machine which members can borrow, but would like to offer more resources and build a value addition training centre for female miners (interviews). | Has been represented in numerous trainings, capacity building projects as well as government dialogues. Well recognised by the government, but also put forward that TAWOMA needs to do more to represent small-scale miners as it has been criticised for being an organisation which mainly benefits the leader- ship. | |
| Federation of Mining Associations in Tanzania (FEMATA) | FEMATA is an umbrella organisation that unites regional mining associations. Several stakeholders interviewed mentioned that FEMATA has recently regained strength under its new leadership. The Regional Mining Associations (REMAs) exist in several regions representing miners. | There is a women's wing of FEMATA, but it was reported to not be active. According to stakeholders interviewed, FEMATA could do more to lobby for their members' engagement in the mining industry, including the promotion of women miners. | |
| Haki Madini (means Rights and Minerals in Kiswahili) | HAKI MADINI which translates to Mineral Rights is a national NGO advocating for social justice for small-scale miners and communities where EI companies operate, as well as for accountability, and social and economic rights. The organisation aims at linking grassroots minerals sector with national, regional and international policy processes. | Haki Madini is part of the international feminist organisation AWID which advocates for gender equality, women's rights and sustainability. | |
| Voluntary Services Overseas (VSO) – EEVT, YEE and RED | VSO is a volunteer sending organization and has implemented the Employability through Vocational Training (EEVT) project since 2012 by working with VETA in Mtwara and Lindi to improve the skills of students and teachers to meet the demand of private sector in oil and gas. The courses in focus in phase I were carpentry and joinery, electrical installation, food and beverage services, motor vehicle mechanics, plumbing and pipefitting, and welding and fabrication. International certification, industry field attachment and mentorship are part of the programme. EEVT is funded by British Gas and the LNG Plant project. | Currently, all students enrolled in the earmarked VETA courses in Mtwara and Lindi benefit from the programme. This means that more men than women benefit as women are in the minority - apart from in food and beverages services. The EEVT is entering phase II and is being incorporated into SOGA, which implies a target of at least 40 percent female beneficiaries. Role modelling of successful young women who have entered non-traditional careers could explored. | |

| | As a complement to EEVT, VSO has introduced YEE (Youth Economic Empowerment), which offers certification for vulnerable youth out-of-school in Lindi, Mtwara, Dar es Salaam and Morogoro. The project is implemented together with Plan International. The youth are trained by a Master Craft who is qualified from VETA or other TVET institutions. | |
|--|---|---|
| | The Regional and Enterprise Development Initiative (RED) focuses on Lindi. A comprehensive study has been undertaken to identify opportunities for investments, capacity building support to the regional administration, as well as opportunities for workforce skills development. The focus of RED has shifted to investment opportunities which include mining. This in turn would make the Lindi region more prepared in terms of local content when the LNG investment is realised (VSO 2015). | It is clear from the RED study VSO (2015) that there is a need for coordination of local institutions as well as of development partners. Gender and EI stakeholders could play an important role to make sure that regional and enterprise development in relation to EI in Lindi benefits women and girls. |
| CUSO and VSO – the TLED project | The Tanzania Local Enterprise Development (TLED) project was initiated in September 2015 and is implemented in partnership with VSO with SIDO, TCCIA and TWCC as collaborating partners. TLED aims to support SMEs at different scales to overcome barriers for enterprise development, including technical skills, capital for tools and to promote local content through demand side links. TLED focuses on three geographical regions and themes - Mining in Mwanza, Agriculture in Iringa and Gas in Lindi. | Inclusion of SMEs run by women is a clear aim of the project and the target is at least 40 per cent women. TLED is interested in exploring entry points to find suitable participants for the project (interview). Stakeholders in El could therefore through the mapping study contribute with such a link, as female miners are part of the target group. |
| The Tanzania Women Chamber of Commerce (TWCC) | Businesswomen association with a vision to empower women economically by building female entrepreneurship and female business owners. TWCC is partner in the recent TLED programme. | Empowerment of women is at the core of the association's activities. The Extractive sector is among the sectors in which TWCC works. |
| Tanzania Chamber of Minerals and Energy (TCME) | Membership organisation for companies and institutions in the mineral sector. Members are some of the largest mining firms as well as smaller companies, individuals and training institutions. Part of their work is to promote education and best practice employment. | Gender equality is not specifically part of the objective of the associa- tion, but there is a willingness for diversity and inclusiveness. They have a non-discrimination policy and strive for a family friendly environment for the employees and their TCME may be a suitable entry point for gendered interventions targeting the largest companies. |

5.4 Education and education and training stakeholders

It is estimated that 800,000 young men and women graduate from the school system every year (primary school up to university), searching for gainful employment. Only a small number, around 40,000, are successful in obtaining formal employment (World Bank 2014a). While primary and secondary school enrolment rates have been increasing, a lower percentage of girls graduate from secondary school in comparison to boys: 11.6 per cent compared to 14.2 per cent respectively (NBS & OCGS 2015).

Data from the Ministry of Education and Vocational Training shows that technical education, folk and vocational education and trainings constitute a very small part of the total enrolment in education institutions in the country as shown in Table 12.

| Table 12: Enrolment of Students Sector by Level, 2013 |
|---|
| (M0EVT 2014). |

| Education Level | Enrolment percentage (%) |
|-------------------------------|-----------------------------|
| Pre-primary Education | 8.9 |
| Primary Education | 71.5 |
| Secondary Education O-level | 15 |
| Secondary Education A-level | 0.7 |
| Teacher Colleges | 0.4 |
| Technical Education | 1 |
| Folk and Vocational Education | |
| and Training | 1.1 |
| Higher education | 1.4 |

The Department of Technical and Vocational Education and Training (DTVET) in the Ministry of Education, Higher Learning, Vocational Training and Technology coordinate all matters related to TVET in Tanzania Mainland. DTVET oversees two regulating bodies: the National Council for Technical Education (NACTE) and the Vocational Education and Training Authority (VETA). In 2012, NACTE registered 301 public and private Technical Institutions and VETA registered 759 public and private Vocational Education and Training and Folk Development Centres, referred to as Vocational Education and Training (VET) institutions including 28 VETA centres. The ownership of the VET institutions ranges from central government, civil society organisations,

faith-based organisations, local government, private companies and private individuals (MoEVT 2014).

Mineral and energy related education in Tanzania receives considerable priority both from government and non-governmental institutions. The emerging natural gas and wider energy sector provides greater employment opportunities within the sector. Those possessing relevant technical and professional skills are potentially able to access formal employment opportunities with energy companies and other companies participating in the sectors' supply chain. Following the discovery of natural gas and growth in the mineral sector in general, training opportunities provided to Tanzanians have increased importance.

Although there are jobs created directly and indirectly as a result of EI, there is still a mismatch between demand and supply of training activities. The private sector has expressed that it is a challenge to find labour and service providers with relevant skills that match the quality demanded. Initiatives such as EEVT and SOGA are important responses to bridge this gap. Although there are over 1,000 VET institutions with 121,348 students enrolled in the country, priority has been given to only 28 VETA for capacity building and quality assurance, marginalizing the majority of the VET providers and their students.

Women constitute a significant share of the enrolment in VET institutions – 47 per cent (VETA 2013). However, the enrolment follows traditional gender norms with very few girls studying professions that are perceived masculine, such as carpentry, mechanics, etc. Conversely, very few boys are seen studying professions perceived feminine, such as design, sewing and cloth technology and food, beverage and services. This is illustrated in table 13.

Shinyanga Vocational Training Centre is the only TVET in the country where courses related to mining are offered. The courses provided are Plant Operation and Gem Cutting (VETA 2015). However, many courses offered at VETA are relevant for El related value chains. For example, with an influx of foreign El employees, hospitality and tourism related services are required. Similarly, plumbers, welders and carpenters are in higher demand when new offices and buildings are being constructed.

Table 13: Trainees enrolment 2015 at VETA, Mtwara

| COURSE | LEVEL I LEVEL II | | LEVEL III | | | | | | |
|-----------------------------------|------------------|-------|-----------|------|-------|-------|------|-------|-------|
| | Boys | GIRLS | TOTAL | Boys | GIRLS | TOTAL | Boys | GIRLS | TOTAL |
| Auto Electrical | 28 | 1 | 29 | 19 | 1 | 20 | 0 | 0 | 0 |
| Carpentry and Joinery | 13 | 0 | 13 | 12 | 0 | 12 | 0 | 0 | 0 |
| Commerce & Computer | 10 | 15 | 25 | 12 | 9 | 21 | 0 | 0 | 0 |
| Design, Sewing & Cloth Technology | 1 | 12 | 13 | 0 | 4 | 4 | 0 | 0 | 0 |
| Electrical Installation | 21 | 8 | 29 | 16 | 4 | 20 | 16 | 2 | 18 |
| Food and Beverage Services | 2 | 10 | 12 | 0 | 0 | 0 | 4 | 14 | 18 |
| Food Production | 4 | 21 | 25 | 0 | 0 | 0 | 4 | 17 | 21 |
| Laboratory Assistant | 9 | 23 | 32 | 10 | 16 | 26 | 0 | 0 | 0 |
| Masonry and Bricklaying | 25 | 1 | 26 | 20 | 0 | 20 | 7 | 0 | 7 |
| Motor Vehicle Mechanics | 28 | 0 | 28 | 21 | 0 | 21 | 6 | 0 | 6 |
| Painting and Signwriting | 0 | 0 | 0 | 17 | 4 | 21 | 4 | 2 | 6 |
| Plumbing and Pipe Fitting | 26 | 6 | 32 | 16 | 9 | 25 | 0 | 0 | 0 |
| Secretarial and Computer | 0 | 0 | 0 | 0 | 29 | 29 | 0 | 0 | 0 |
| Welding and Fabrication | 0 | 0 | 0 | 41 | 7 | 48 | 4 | 0 | 4 |
| Τοται | 167 | 97 | 264 | 184 | 83 | 267 | 45 | 35 | 80 |

Source: VETA Mtwara, 2015

Access to higher education in universities has also increased over the past decade, due to shift in government priorities and introducing private universities. However, fewer women graduate from university, in comparison to men; 1.7 per cent versus 2.9 per cent (NBS & OCGS 2015). Various skills development courses relevant for EI are offered at universities and other higher learning institutions. In addition to this, there are also courses tailored specifically for EI, such as value addition in training institutions.

| Stakeholder | Responsibilities and programmes | Gender and El engagement |
|---|---|--|
| 759 registered public and private Vocational Education and Training (VETs) and Folk Development Colleges (FDCs) and 301 public and private technical institutions. | A range of technical and vocational training, such as carpentry, electrical installation, food processing and tourism. | VETA is a partner in the EEVT programme with VSO. FDCs promote girls' access e.g. through Mama courses tailored for young mothers. Most courses offered at VET are relevant for the Extractive sector, as service and goods provision. |
| The University of Dar es Salaam, University of Dodoma and Nelson Mandela African Institute of Science and Technology | Offers courses both at undergraduate and master's level. These courses include geology, engineering in oil and natural gas, petroleum and gas, energy science, and engineering and petroleum geosciences. | Promotion of enrolment of women at the University of Dar es Salaam through a one-year university pre-entry programme for girls to improve their grades in order to qualify for science subjects. |
| Dodoma Mineral Resources Institute (MRI), also known as Madini Institute | Specialises in training, research and consultancies related to EI, both the mining sector and oil and gas. Madini institute is regulated by NACTE and offers short and long courses (Certificate and Diploma). Diploma programmes in geology and mineral exploration, mining engineering, mineral processing engineering, and petroleum geosciences (MRI 2016). | According to one of the female respondents who had attended MRI favoured MRI over the University of Dar es Salaam due to its focus on practice rather than theory. In 2014, there were 68 female students out of 368 who graduated from the MRI at the level of National Technical Award (NTA) (MEM Budget report 2014/15). |

| Tanzania Gemological Centre (TGC), Arusha | Offers courses in lapidary for value addition of stones, minerals and gemstones. | There are currently 18 lapidary students, all women, funded by the Tanzania Minerals Dealers Association (TAMIDA) with MEM. 15 students, all female, have graduated from the first cohort, also sponsored by this programme. Enrolment of men will start in 2016 (interview with TGC staff). |
|--|--|--|
| The African Minerals and Geosciences Centre (AMGC), formerly known as Southern and Eastern African Mineral Centre (SEAMIC), Dar es Salaam | Regional centre of knowledge and information for Southern and Eastern Africa under the umbrella of the UNECA. The focus is on value addition of gemstones and AMGC offers training, information, grading and certification (AMGC/SEAMIC 2015). | The organization is gender blind. |

5.5 Private Sector

With the increased petroleum exploration, several large-scale international companies have recently started operations in Tanzania. These companies have created great economic impact on the communities around their offices. It is hoped that such companies will contribute to the economy through local vendors, increase employment and raise the standard of living. The private sector partners are key stakeholders in the research on gender in extractive industries.

BG Group

The British Gas Group (BG) Group is among the major operators of two offshore gas blocks in Tanzania. It has discovered around 16 trillion cubic feet (Tcf) of gross resource. The BG group supports skills development programmes through collaboration with VSO and VETA, as well as scholarships administered by the British Council.

Statoil

In 2007 Statoil signed a production sharing agreement (PSA) for Block 2 with Tanzania Petroleum Corporation (TPDC). Statoil Tanzania AS is an operator with 65 per cent working interest with ExxonMobil Exploration and Production Limited as a partner with 35 per cent interest. The block covers an area of approximately 5,500 square kilometres and lies in water depths between 1,500 to 3,000 metres.

In 2012 and 2013 Statoil and its partner ExxonMobil made the significant Zafarani, Lavani, Tangawizi and Mronge discoveries. In 2014, the Piri and Giligiliani discoveries were made. In 2015 Statoil made the Mdalasini discovery. The discoveries combined have proved around 22 Tcf of in-place volumes and mark an important step towards a possible natural gas development in Tanzania. Statoil acquired a 12% interest in the Petrobras operated Block 6 in May 2013. The block covers 5,549 square kilometres in the Mafia basin, with a water depth of 1,800 metres. The transaction is subject to approval by Tanzanian authorities. Statoil also supports a number of scholarships related to the El sector.

Exxon Mobile

ExxonMobil Exploration and Production Tanzania Limited (EMEPTL) is a fully owned subsidiary of ExxonMobil, with a 35% working interest in Block 2 Deep water prospect offshore southern Tanzania. Exxon Mobile has a partnership with Statoil.

Swala Oil and Gas

Swala Oil and Gas Tanzania is a Tanzanian oil and gas exploration company that is actively exploring the East African Rift System. Swala has a 50 per cent equity in, and is operator of, the Kilosa-Kilombero and Pangani licences, where it completed its first year work commitments some five months ahead of schedule. Swala has approximately 17,300km2 of net acreage, with five prospective basins, making it one of the largest acreage footprints in Tanzania.

PanAfrican Energy

PanAfrican Energy is Tanzania's first natural gas producer – supplying gas for power generation at the Ubungo Power Plant in Dar es Salaam. PanAfrican Energy also supplies natural gas to 38 industrial and commercial customers in the Dar es Salaam area reducing their operating costs and contributing to Tanzania's industrial growth. In addition, the company supplies Compressed Natural Gas (CNG) for use in vehicles.

PanAfrican Energy (and its predecessor companies) have been active in planning the development of Tanzania's Songo Songo gas field since 1991. Much of the first decade was used to evaluate existing nonproducing wells, find partners, secure financing and negotiate a Production Sharing Agreement (PSA) with the Government of Tanzania.

Acacia Mining

According to Acacia Mining, formerly Africa Barrick Gold, is the largest gold producer in Tanzania and has been operating in Tanzania for over a decade. With nearly 8 million ounces of gold produced per year, Acacia Mining is the largest gold producer in Tanzania. The mines are all located in the northwest of Tanzania with both open pit and underground mine operations.

Acacia Mining plc is a UK public company with its headquarters in London. They are listed on the Main Market of the London Stock Exchange under the symbol ACA and have a secondary listing on the Dar es Salaam Stock Exchange in Tanzania. Acacia also has exploration projects in other countries, including in Western Kenya, Western Burkina Faso and Western Mali.

Anglo Gold Ashanti

AngloGold Ashanti has one wholly owned and managed operation in Geita, Tanzania, the largest single gold mining operation within the group. The Geita gold deposit is mined as a multiple open pit operation with underground potential and is currently serviced by a 5 metric tonnes per annum carbon-in-leach processing plant.

Tanzania Oil and Gas Suppliers Conference

Tanzania Oil and Gas Suppliers Conference (TOGSC) is a conference cum exhibition which according to the website aims at bringing together key players from the supply chain together with stakeholders from the government and the oil and gas industry. This is in order to discuss and engage on the different opportunities and challenges within the East Africa with a focus on Tanzania. The conference aims to bring together suppliers from along the value chain with an emphasis on local suppliers.



Validation Meeting with Stakeholders in Dar es Salaam, Tanzania, March 2016 (C) UN Women

6. DATA ON GENDER AND EI IN TANZANIA

This chapter provides an introduction to EI in Tanzania and the role of EI for the economy. After this follows a description and analysis of available data on women's and men's engagement in the sector, including the primary data collected in this study.

6.1 The role of El for the Tanzanian economy

The Structural Adjustment Programmes in the mid-1980s and the subsequent policies of liberalisation and deregulation triggered growth in the small and large-scale mining sectors. The Mining Act was enacted in 1998 and in the Mining Regulations of 1999, small-scale miners were allowed to own Primary Mining Licenses (PMLs) (Bryceson and Jonsson 2010). From independence until the early 1990s, there had been very limited mineral extraction and mining activities (ESRF 2015).

Mining has become one of the largest recipients of foreign direct investment. The sector contributed around 3.5 per cent of GDP in 2012, up from 1.8 per cent in 2001. Large quantities of natural gas have also been discovered in Southern Tanzania and attracted considerable attention and potential investment (ESRF 2015). As stated in the Tanzania Human Development Report 2014, the lessons learned from the rise of the mining economy are useful for the planning of the gas economy (ESRF 2015). Such lessons include a need for moderate pace in extraction of resources, fair distribution of natural resource revenues, proactive management of health and the environment, and control of potential land use conflicts (Shangvi and Jingu 2013).

Tanzania is the fourth largest gold producer in Africa (after South Africa, Ghana and Mali) and gold constitutes the largest mineral export product (TMAA 2015). However, there is a wide range of other minerals available including coal, nickel, diamonds and a variety of gemstones. There are also many building materials including gravel, gypsum, limestone and volcanic rocks. Salt farming is also considered to be an extractive industry. Revenues collected from the mining sectors have increased since the take-off of formal mining in the country in 1998, but figures from 2011 show that revenues from mining constituted only 2.3 per cent of the domestic revenues (ESRF 2015). In 2001, the tax and royalty payment from the nine major mines was TSH 20.13 billion. Since the establishment of the Tanzania Minerals Audit Agency in 2009, both the tax and royalty collection have increased. There was a peak at TSH 713 billion in 2012, but with the decline in the price of gold globally over the past few years, the tax and revenue have also decreased. In 2014, TSH 414 billion, USD 184.5 million, was collected (TMAA 2015, p. 27).

Extractive Industries are important sources of employment and self-employment. However, across EI subsectors, women are in the minority. Between 6 and 28 per cent of those directly involved are women, depending on the sector (MEM 2012 and NBS 2015). Apart from those who are directly employed or selfemployed in the sector, there are indirect livelihoods and employment created through EI. This includes provision of services and goods, including food and accommodation, where women are active, but could potentially benefit more.

Tanzania has a vision to become a middleincome country by 2025. Combining core human development indicators of income, education and health, there is still has some way to go. It is currently ranked at 160 out of 187 countries in the world, despite an economic growth of around seven per cent per year (ESRF 2015 and UNDP 2014). Poverty alleviation and economic growth are at the core of the 2025 vision, which has been guided by the Five Year Development Plans, MKUKUTA I and II. The second Five Year Development Plan focused on a range of themes and priorities, including the economy, education and skills, the business and fiscal environments, and health. In the 2025 vision, the target is that mining should contribute to 10 per cent of GDP, up from the current 3.5 per cent (ESRF 2015).

6.2 ASM baseline Survey with Data Disaggregated by Gender

One of the objectives of this study was to provide evidence-based information of men and women engaged in the value chains of oil, gas and minerals in Tanzania. The baseline survey on artisanal and small-scale mining (ASM) activities from 2011 (MEM 2012) offered important information and statistics about the population of men and women engaged in small-scale mining in Tanzania. Although the study focused mainly on ASM, it offered valuable insight into the mining sector as a whole. It concluded that a vast majority of those engaged in the mining sector in Tanzania are involved in ASM.

The ASM baseline survey was commissioned by MEM in 2011 within the Sustainable Management of Mineral Resources Project (SMMRP). The main objective was to provide reliable quantitative information on the role performance of ASM activities. As it contains data disaggregated by gender, it is highly relevant for gender analysis of EI. The ASM study also contains information on the different types of minerals and the regions in which women and men are engaged. However, the data does not provide information about social demographic characteristics of men and women engaged in ASM activities.

According to the ASM baseline, the number of artisanal and small-scale miners had increased from 150,000 in 1987 to 550,000 in 1996. In 2011, it was estimated to be 680,385 ASMs, of which only 187,575 were women (27.6 per cent). The survey contains limited information on large-scale mining. It is estimated that there are around 12,000 people employed in large-scale mining, although this data is not gender disaggregated (MEM 2012).

ASM activities in Tanzania were mainly observed in mining of gold, diamonds and coloured gemstones; in addition to construction materials such as sand mining, aggregate crushing, gypsum, dimension stones and lime burning.

Figure 2 below shows that the majority of people are engaged in small-scale mining of gold (396,310), followed by building materials (160,744), gemstones, including Tanzanites (81,710), diamonds (16,800), salt (14,321) and, finally, copper (10,500). In general, the share of men in all of the above figures is much higher than that for women, with women ranging between 25 and 38 per cent of the sector specific workforce. Although the total number of people engaged in small-scale mining of salt is relatively small compared to other sub-sectors, the percentage of women working in the subsector was the highest of all at 38 per cent.

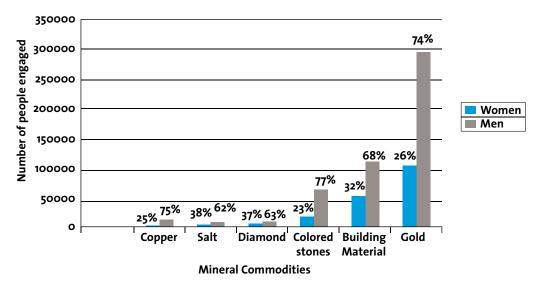


Figure 2: ASM engagement by Gender in Tanzania.

Source: ASM Baseline Survey 2011 (MEM 2012).

Figure 3 illustrates the ASM population engaged in salt disaggregated by zone. As shown, there is more salt activity in the Eastern zone, but a lower percentage of women compared to other zones. However, in each zone the proportion of women is higher than the average of all sub-sectors.

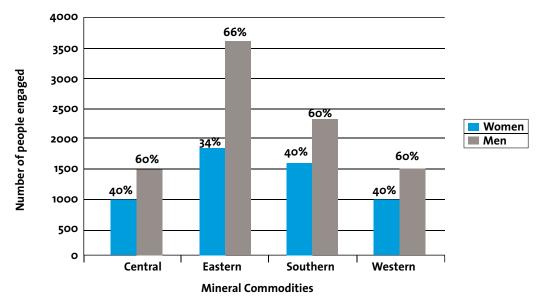


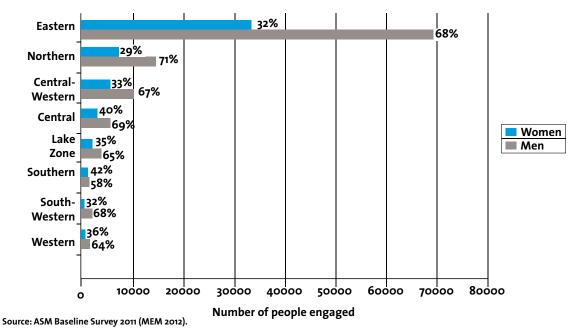
Figure 3: ASM engagement in salt by zone and Gender.

Source: ASM Baseline Survey 2011 (MEM 2012).

Figure 4 presents the ASM population engaged in mining of building materials: sand, aggregates, dimension stones and gypsum in different zones. It also gives the gender breakdown in each zone. The information shows that the Eastern zone has a much higher population of ASM engaged in mining of building materials compared to other zones. Of the total 160,744 ASM engaged in mining of building materials across all eight zones, 101,265 operate in the Eastern zone (MEM 2012).

According to the ASM survey, small-scale mining of gemstones is widely distributed in Tanzania. Figure 5 shows that there is a higher concentration ASM engaged in mining of gemstones in the Eastern zone, followed by the northern zone, and the southern zone.

Figure 4: ASM engaged in mining of building materials by zone and Gender.



In all zones, the study shows that the number of men engaged in small-scale mining of gemstones is higher than that of women. The concentration of ASM in the Eastern zone is because most of the gemstone deposits are located on the Usagaran-Mozambique belt, Usambara and Uluguru Mountain ranges (MEM 2012).

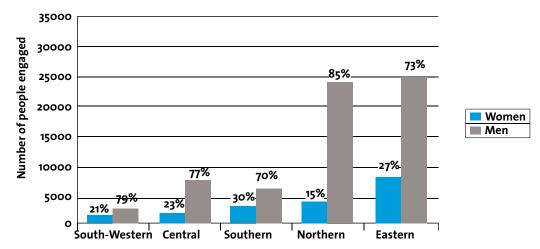


Figure 5: ASM engaged in mining of gemstone by zone and Gender.

Source: ASM Baseline Survey 2011 (MEM 2012).

Figure 6 shows that there is a high concentration of ASM engaging in the mining of gold in the Lake zone, Central Western zone and Central zone. Eighty five per cent of the population of ASM engaged in gold mining is concentrated in these three zones. This can be attributed to the fact that these zones are on the Lake Victoria Gold Fields (LVGF), where most of the gold deposits in the country are located. The population of ASM engaged in the mining of gold is dominated by men in each zone. The share of women ranges between 21 per cent in the Eastern zone and 38 per cent in the South-Western zone.

In conclusion, women are much less involved in ASM than men and women constitute between 20 and 30 per cent. However, salt is a subsector where women

constitute a relatively high percentage. Building materials engages many men, but also women, in particular in the Eastern zone where the commercial capital, Dar es Salaam, is located. In terms of number of women and men, gold is by far the largest subsector, with women constituting the highest share in the South-Western zone.

6.3 Inclusion of gender and El in the Integrated Labour Force Survey (ILFS)

Data on the population of men and women engaged in the EI is also available in the nationally representative Integrated Labour Survey (ILFS) 2014 by the National Bureau of Statistics. The ILFS contains

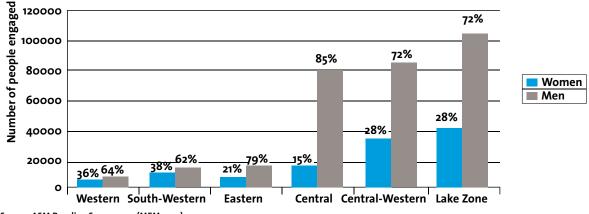


Figure 6: ASM engaged in mining of Gold by zone and Gender.

Source: ASM Baseline Survey 2011 (MEM 2012).

labour force data per sector, and includes formal as well as informal activities. As part of the labour force in Tanzania Mainland, the analytical report provides relevant figures for men and women aged 15 years and above engaged in mining and energy industries. Although the analytical report does not offer detailed analysis of the social demographic characteristics of men and women engaged, this information was collected during the survey and further analysis can be done. Stakeholders with interest in gender and El analysis are recommended to approach NBS and request such data.

Data from the ILFS 2014 analytical report in Table 10 below shows that there are more men than women

employed in the two sub-sectors mentioned, and that energy has a smaller share of women than mining. Comparing with the ASM baseline survey 2011 (MEM 2012), the number of people engaged differs substantially as the ASM baseline concluded close to 700,000 people are engaged only in ASM. This may imply that ASM to a large extent was not captured in the ILFS due to definition or level of formalisation, but the description of the data is not detailed enough to make such a conclusion. The share of women in mining and quarrying is not substantially different from the ASM, which reported around 27.5 per cent women.

Table 15: Number of Employed Persons Aged 15 years in Mining and Energy industries in Mainland Tanzania by gender in 2014.

| EI SECTOR | MEN | FEMALE | TOTAL % | WOMAN |
|---|---------|--------|---------|-------|
| Mining and quarrying | 173,926 | 44,098 | 218,024 | 20% |
| Electricity, gas, steam and air conditioning supply | 18,473 | 1,125 | 19,598 | 5.7% |

Source: ILFS 2014 analytical report (NBS 2015).

The ILFS 2014 also provides information on average monthly income disaggregated by gender. As illustrated in Table 16 below, the average monthly income for men and women working in the two sub sectors mentioned differed between employed and self-employed, as well as between men and women. On average, monthly income for men employed in mining and quarrying is higher than that of women. On the other hand, the average monthly income of women employed in electricity, gas, steam and air condition supply is higher compared to that of men.

Table 16: Average monthly income (TZS) of Persons 15+ Years in Mining and Energy in Mainland Tanzania by gender in 2014.

| | Paid Employed | Mean (men) | Mean (women) | Mean (men & woman) | % Mean for women compared to men |
|---|--|---------------|-----------------|-----------------------|-------------------------------------|
| | Mining and quarrying | 587,426 | 433,337 | 578,313 | 74% |
| | Electricity, gas, steam and air condition supply | 676,854 | 979,012 | 696,086 | |
| Ī | Self Employed | | | | |
| Ī | Mining and quarrying | 146,411 | 61,286 | 131,482 | 42% |
| | Electricity, gas, steam and air condition supply | 313,672 | 0 | 313,672 | |

Source: ILFS 2014 analytical report (NBS 2015).

6.4 Register of license holders

There are five main categories of mining rights in Tanzania (MEM 2015), regulated in the Mining Act (2010):

 Primary Mining Licence (PML) - granted for 7 years. The application fee is Tsh 50,000² (Tsh 100,000 for renewal), the preparation fee is Tsh 50,000 and the annual rent is between

² Tsh 50,000 was in February 2016 equivalent to approximately USD 23.

Tsh 40-80,000 per hectare, depending on the mineral.

2. Prospecting Licence (PL) - granted for 9 years for metallic and industrial minerals and 1 year for building materials and gemstones excluding kimberlite (rock known for containing diamonds). The application fee and preparation fee is between USD200 and 500, and the annual rent is USD 100 per square kilometre.

- 3. Mining Licence (ML) granted for 10 years. The application fee is USD 2,000 and the preparation fee is USD 1,000. The land rent is between USD 2,000-3,000 per square kilometre.
- 4. Special Mining Licence (SML) granted for the estimated lifetime of the mineral. The application fee is USD 5,000, the preparation fee is USD 2,000 and the annual rent is USD 5,000 per square kilometre.
- 5. Retention Licence (RL) granted for a maximum of 5 years. The application fee is USD 4,000, the preparation fee is USD 2,000 and the annual rent is USD 2,000 per square kilometre.

There are also licenses for mineral brokers and dealers. While a broker is a person who is authorized to trade in minerals within Tanzania, a dealer is permitted to export minerals. These licenses are also regulated by the Mining Act (2010).

- The application fee for broker licence is Tsh 50,000 and the license fee is Tsh 200,000 and is renewable for Tsh 50,000.
- The application fee for dealer licence is USD 200 and the licence fees vary between USD 500 to USD 2,000, depending on the type of mineral. A dealer also needs to apply for export permit (USD 100) and import permit (USD 300). In addition, there are special export permits required for minerals purchased at gem trade fairs, for tourists and for residents.

Careers as brokers and dealers are more lucrative and less labour intensive than mining itself and could therefore be a recommended career path for women's economic empowerment. Individuals, companies and groups can apply for a license through the resident mines office, the zonal mines office or at the MEM headquarters. It is also possible to register the application online. If MEM concludes that a designated area for mining is vacant, permission is granted provided that all documentation and payments are in order. An Environmental Protection Plan is needed, and the approval process for this is free of charge. A gender equality plan is not required (interviews with MEM officers). A recommendation to stakeholders in gender and El is therefore that for those who are required to do an environmental protection plan, gender considerations should be made, based on a set of gender indicators.

When the operation starts, royalties must be paid on the gross value of the mineral as per Table 18 below. For value added to gemstones, the royalty is low in order to encourage value addition.

Table 17: Royalty required per category of mineral

| Mineral | Royalty on Gross Income |
|------------------------------------|----------------------------|
| Rough gemstones | 5% |
| Value added gemstones | 1% |
| Industrial minerals (e.g. salt, | |
| gypsum and graphite) | 3% |
| Building material (e.g. sand | |
| and gravel) | 3% |
| Metallic minerals (including gold) | 4% |

Source: Interviews with MEM staff.

MEM has a substantial database for all registered mining firms, small scale and large scale. However, the data is not segregated by gender, which makes it difficult to assess gender dynamics of license provision. MEM has a first-come first-served policy, and has no gender quota. It is recommended that MEM disaggregate it data by gender.

Table 18 shows that in 2015, there were 33, 855 Primary Mining License holders (PMLs), operating, over 105 different mineral commodities. Gold is by far the most common mineral commodity among the PMLs.

Table 18: Number of active PMLs by commodity in 2015

| Mineral Categories | Mineral Commodities | Number of PMLs |
|---------------------|---------------------|----------------|
| Metallic | Gold | 12, 275 |
| | Copper | 4, 784 |
| | Iron | 747 |
| Building materials | Building materials | 5, 171 |
| | Sand | 999 |
| Industrial minerals | Diatomite | 325 |
| | Gypsum | 1, 802 |
| | Limestone | 525 |
| | Salt | 555 |
| Gemstone | Gemstones | 2, 958 |
| Not categorised | Others | 3, 714 |
| | Total | 33, 855 |

Source: MEM database, 2016

A total of 2,653 Prospecting Licences (PLs) were issued out, as illustrated in table 19 below. These were granted for 66 different mineral commodities, the majority of which are in gold. PLs operate on a larger scale than those with primary mining license. They mainly consist of registered companies, which may make it more complicated to disaggregate by male and female ownership. Assessing the feasibility for this could be useful, as it would add value from a gender perspective.

| Mineral Categories | Mineral Commodities | Number of active license holders |
|---------------------|---------------------|----------------------------------|
| Metallic | Gold | 1,709 |
| | Copper | 139 |
| | Nickel | 120 |
| | Iron | 35 |
| Industrial minerals | Graphite | 63 |
| | Gypsum | 24 |
| | Limestone | 40 |
| | Coal | 134 |
| Energy minerals | Uranium | 119 |
| Not categorised | Others | 270 |
| | Total | 2, 653 |

Table 19: Number of active Prospecting licences (PLs) holders by commodity

Source: MEM database, 2016

Data from MEM shows that there are 314 Mining Licenses (MLs) and 14 Special Mining Licenses (SML), which are the largest mining firms operating in Tanzania, illustrated in Table 20 and 21 below.

Table 20: Active Mining Licenses

| Mineral Categories | Mineral Commodities | Number of Active license holders |
|---------------------|---------------------|----------------------------------|
| Metallic | Gold | 81 |
| | Copper | 15 |
| Building materials | Building materials | 69 |
| Gemstone | Gemstone | 33 |
| Industrial minerals | Limestone | 30 |
| | Salt | 10 |
| Not categorized | Others | 76 |
| | Total | 314 |

Source: MEM database, 2016

Table 21: Number of active Special Mining Licenses (SML)

| Mineral Categories | Mineral Commodities | Number of Active license holders |
|---------------------|---------------------|----------------------------------|
| Metallic | Gold | 6 |
| | Coal | 2 |
| | Iron | 1 |
| Gemstone | Gemstone | 1 |
| Industrial minerals | Graphite | 1 |
| | Limestone | 1 |
| | Uranium | 1 |
| | Diatomite | 1 |
| | Total | 14 |

Source: MEM database, 2016

6.5 Data on RUZUKU grantees through the SMMRP

There are over 680, 000 people engaged in artisanal and small-scale mining, of which 27 per cent are women (MEM 2012). However, many are mining without a licence. Registration of ASMs is being reinforced for increased revenue and control. Increased interaction between the Ministry and miners is currently being encouraged. Zones and resident mine offices here play an important role as extension officers.

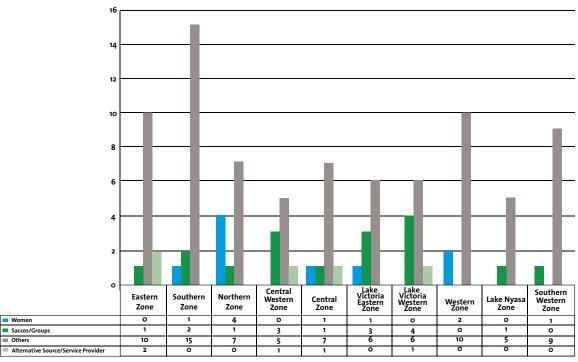
MEM is currently addressing capital and equipment bottlenecks for small-scale miners, including female miners. Under the Sustainable Management of Mineral Resources Project (SMMRP), Ministry of Energy and Minerals is providing capital grants to small scale miners the intention of strengthen local miners called the RUZUKU grant. The SMMRP programme is supporting the establishment of Centres of Excellence to build expertise in the ten zones with formalization at the centre of the agenda. Individuals and groups with licenses may be offered, for example, gemstone lab and extension services. There will be closer follow-up and capacity development support through extension work. This is similar to interventions previously implemented in sectors such as agriculture and livestock. There is no gender quota planned in terms of services. It is therefore recommended as an intervention that would benefit woman miners.

As shown in Table 23 below, there were a very few beneficiaries during the first phase of the RUZUKU grant. In total, there were 11 beneficiaries, of which only three were women, two were SACCOs groups and the remaining six grants were labelled as 'other', which includes individuals, and PML holders with partners. The data does not provide a complete gender breakdown of beneficiaries. It should therefore be noted that the number of women beneficiaries might be more than three since SACCOs groups as well as the 'other' categories may also contain women.

| Beneficiaries | Number |
|---|--------|
| Women (individuals) | 3 |
| Other (men and PML holders with partners) | 6 |
| SACCOs Groups | 2 |
| Total | 11 |

Source: MEM database, 2016

There was a significant increase in the number of beneficiaries during the second phase of the RUZUKU grant for small-scale miners. As shown in Figure 7 below, the total number of beneficiaries increased from 11 in during the first phase to 111 in the second phase. The number of grants benefitting women increased from three during the first phase to ten in the second phase. The second phase added a new category of alternative sources or service providers. There were five beneficiaries from this category. As in phase I, the phase II data does not give a complete picture of the women and men beneficiaries as there is only one category which specifically spells out participation of women. However, despite its success, the second phase saw the total number of women benefitting from the programme decrease from 27 per cent to only 9 per cent.





According to both representatives from MEM as well as TAWOMA, the increase in the number of totql beneficiaries for Phase II was a result of improvements made to the application process. Phase I was a centralised process with managed by Tanzania Investment Bank (TIB), including the research on feasibility studies. The Phase I process for acquiring a grant was complicated and not clearly understood by many. During Phase II it was specified that grants were awarded for equipment only. The whole process, including the application process, is now supervised by MEM, and is much more transparent.

Resident mining and zonal officers provided an insight into the RUZUKU II grant distribution. In Kahama, there were only three women who had received the grant. In Mtwara and Lindi, 19 were awarded the grant during phase II; 13 were in salt,

one in gypsum and four in building material (gravel and sand). Only one of the grantees was a woman, Mama Lishe, who had qualified through the alternative source/service provider category. She had received the grant to buy a gas fridge and establish a conducive place for the business, which serves the mining industry. The small share of grants received by women (27 percent during the first phase, and only 9 per cent during phase II), could be because there is a small share of female licence holders. MEM staff that responded to this study all mentioned that there were few female licence holders, which was a requirement for the grant. However, as there is no gender breakdown of the licence holder data from MEM, it is difficult to know the precise share of women. There is a 30 per cent gender target for the RUZUKU grant. Although it was possible during phase II to apply for the grant through

Source: ASM Baseline Survey 2011 (MEM 2012).

the resident mine offices, it still required a formal process involving form filling etc. This suggests that empowerment of women, role models, guidance and quota, would all be interventions that could increase the share of women accessing the grant and is thus recommended.

To conclude this data section, the limited extent of gender-disaggregated data is a challenge. However, this also implies an opportunity for stakeholders in EI to demand for gender-disaggregated data on the different aspects on EI. There are different institutions (MEM, NBS, TMAA and others) that collect and maintain records on population of people engaged in El in Tanzania. Stakeholders in gender and EI could play an instrumental role in stimulating such interest, which would increase the demand for gender statistics in El.

6.6 Overview of the data from the SSIs

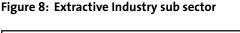
In this section, an overview of the findings from 80 respondents in the SSI's are illustrated, and shown in figure 8 below (not including the respondents who were students). The sample was purposefully drawn to include a variety of EI sub-sectors and gender balance, and to include self-employed ASMs as well as employed in large-scale EI companies and service providers. Data on the characteristics of men and women engaged in the EI was collected during the primary data collection of this gender and EI

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mapping study. Socio-demographic characteristics such as age, education level, marital status, migration experiences and others were collected from respondents interviewed in all the locations. The results provide a valuable indication on the characteristics and occupations of women and men in FL

In summary, the data shows that:

- 5 of the 80 respondents were students
- The largest share was in the gold, gravel and cement sub-sectors
- Other respondents were from salt, Tanzanite, volcanic rocks and gas
- 70 per cent were self-employed
- Most were between 22-60 years old with many in their 30s
- Education was characterised by both very low and very high
- Half had a second source of income, slightly more for men
- A majority of the self-employed were not registered; fewer women than men were registered
- More women than men were renting a house
- More men than women had migrated for • opportunities and work
- Fewer women than men who thought that EI companies have contributed positively to their community's well-being



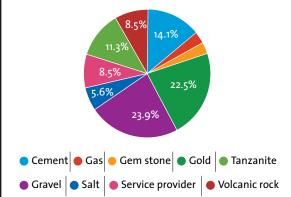


Figure 9: Main source of income

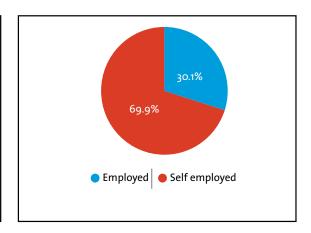


Figure 10: Age brackets by Gender

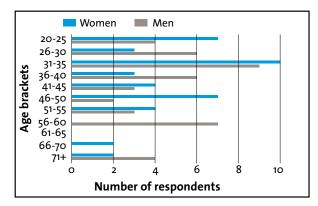


Figure 12: Respondent's main occupation by Gender

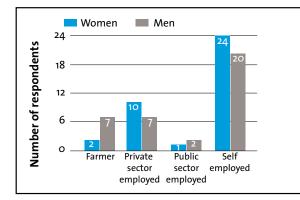


Figure 14: Third alternative source of income by Gender

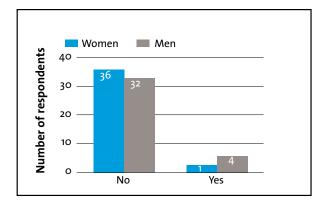
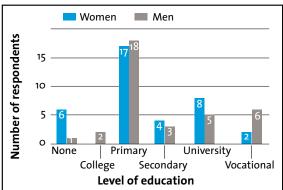
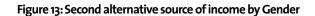


Figure 11: Level of education by Gender





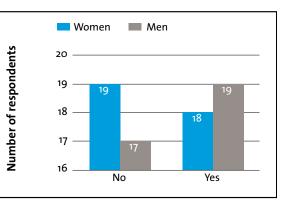


Figure 15: Frequency of seasonal livelihood by Gender

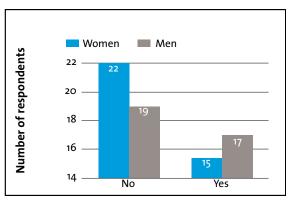


Figure 16: Frequency of registered business/ livelihood activity

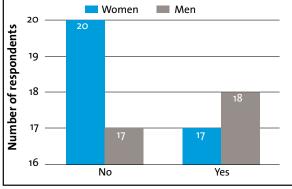
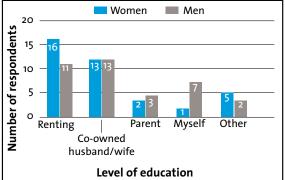


Figure 18: Migration from place of birth by gender



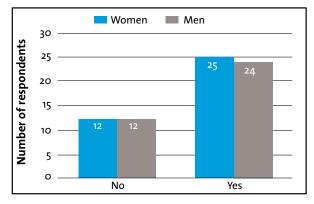


Figure 20: Group belonging status by Gender

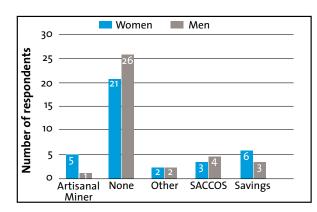


Figure 19: Reasons or migration by Gender

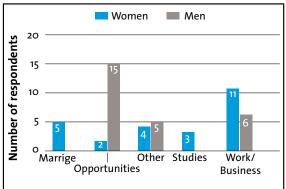


Figure 21: Community welfare versus presence of extractive companies

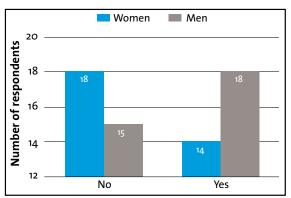


Figure 17: Land ownership status by Gender

7. BARRIERS AND OPPORTUNITIES

This section explores the characteristics of the women and men engaged in a selection of EI subsector and the barriers and opportunities they see. The potential opportunities for economic transformation are explored. The information is based mainly on the primary data collected during the mapping study through semi-structured interviews (SSIs), focus group discussions (FGDs) and key informant interviews. The primary data is triangulated with secondary sources such as from TMAA, MEM, other studies on Tanzania and the global literature on gender and EI.

7.1 Gold

The Central Western Zone is well known for its gold and diamond industries. More than 100,000 ASM operate in the gold sector in this zone and about 28 per cent of them are women (MEM 2012). Many operate without a license and MEM estimates that among the license holders, only around ten per cent are women. However, many women are involved in service provision around the gold mines, such as running restaurants and bars. Many women are also involved in the sector as brokers. An intervention for formalisation of ASM is planned by the Zonal Mines Office, and in conjunction with this, STAMICO is planning to conduct training for both men and women on how to obtain a license. There is potential for the inclusion of gender components in such trainings.

Two of the major gold mines in the country are located in the Kahama district. Bulyanhulu is an underground mine, and Buzwagi is an open pit. Both formerly belonged to Acacia Mining, but Bulyanhulu has been handed over to the government owned STAMICO. TMAA collects data about the largest mines. As shown in table 18 below, the number of employees, local as well as expatriates, has decreased over the past few years because the price of gold globally has declined (TMAA 2015). The data available is not disaggregated by gender, only by local versus expatriate. Acacia officers provided an overview of the gender distribution in the mines during the data collection, and informed the team that there were fewer women employees on site. Out of the 40 in management positions in Buzwagi, only ten per cent were women and out of the semiskilled staff (e.g., dump truck drivers) only five per cent were women.



| MINE | 2012 | 2013 | 2014 |
|--------------------------|-------|-------|-------|
| Buzwagi (BZGM) - total | 1,168 | 836 | 953 |
| Local | 1,064 | 787 | 934 |
| Expatriate | 104 | 49 | 19 |
| Bulyanhulu (BGM) - total | 2,716 | 2,457 | 2,166 |
| Local | 2535 | 2,290 | 2,028 |
| Expatriate | 181 | 167 | 138 |

Table 23: Employment in Buzwagi and Bulyanhulu gold mines 2012-2014

Both the major mining sites of Buzwagi and Bulyanhulu have a well-established infrastructure with good roads, housing for employees, schools, and a district hospital of decent standard. The gold mining sites for ASM on the other hand are characterized by poor infrastructure. The roads are almost impassable during rainy season; the houses around the mining areas are of poor quality, and lack clean, safe water; and they lack health centres. The market for gold was said to be unreliable, because the small-scale miners depend on brokers who pay them a low price, while the prices have further decreased.

Among the 16 SSIs conducted in Kahama, eight men and eight women; seven were employed in the Buzwagi and Bulyanhulu mines; six were ASM and three were service providers in El. Half of the respondents had completed primary school and five had university education. Many had a second source of income, but few had a third source. A majority were satisfied that the mining companies are contributing to the wellbeing of their communities.

The respondents who were employees in Buzwagi and Bulyanhulu were generally happy with their salary levels and working conditions. The women respondents were professionals such as a mining engineer and a medical doctor, with no plans of leaving. However, they stressed that adjusting to a male-dominated environment and being away from their families for six weeks at a time was challenging. One of the women said that the only reason she would leave the company would be in order to be closer to her family. There was a demand among the women employees for more flexible working hours to be able to cope better with family responsibilities. Several men respondents were of the opinion that some work was not suitable for women. They also citied maternity leave as a loss to the company.

In relation to gender interventions in the mine, the Buzwagi mine management mentioned that the company is planning to develop a gender policy as part of the system alignment principle. There was a recognition that sexual harassment exists at the mine site and that it is treated very seriously, sometimes resulting in staff dismissals. There is a hotline to the Acacia general counsel in London, which is open for staff to report misconduct of any kind, including sexual harassment. Acacia urged the Tanzanian government to use the levy paid by the mining companies to develop the local community in a sustainable manner. It was also suggested that tax relief incentives could be used to encourage women to seek employment in mining. For example, women in the sector could be allowed to pay lower taxes or Pay As You Earn (PAYE). The majority of the women working with Acacia are in human resources and communications. Both management and employees stated that in order to obtain a more gender-balanced workforce, there is a need to encourage girls to study science.

Regarding ASM and LSM links, Buzwagi no longer provides training for ASMs, but provides support for emergency and accidents in the ASM mines whenever these occur. In 2008, when the company was Africa Barrick Gold, they supported a pilot project on ASM near North Mara Mine, in the Tarime district. The idea was to build a modern mine and train small-scale miners in modern mining activities, provide financial support for licenses and access to land as well as to provide training, tools and technology. Through the initiative, four mining SACCOs were registered (UNECA 2015).

In Nyangarata, one of the small-scale mining areas visited, it was clear that the mine had attracted a large number of people of all ages. Their livelihood was driven by the hope that they would find large quantities of gold that they could sell for a profit. Despite their failure to find any gold, many have

continued mining. Miners also face the constant threat of mines collapsing, and recent incidents have led to loss of life and livelihood for several miners. Two respondents that had rented a small mining area for TSH 5,000 per month, with an additional payment of three bags for every ten bags of gold stones they extracted, had to restart their extractions after two pits were destroyed with the collapse of a mine.

Health challenges are also documented in other studies on mining in Tanzania. The respondents put forward that unsafe work environments, health hazards and communicable diseases were the major challenges for them. Housing infrastructure is weak, and there are instances when more than 10,000 people were sharing only five toilets. As a result, many people did not use toilets, causing the spread of communicable diseases. There were also respiratory problems due to lack of protective equipment from dust and sand. Other health concerns included were HIV/AIDs, malaria, backache and urinary tract infections. Barriers to health services were also mentioned, including loss of working time, long waiting period before seeing a doctor, and unaffordability of services and transport to health facilities. It was reported that when workers fall ill, they opt to stay at home to recuperate, or go back to their villages for treatment. This results in great loss of working hours. Young women that move to the mining area in search of work in service provision to the industry are particularly vulnerable to HIV/AIDS (IOM 2014).

Both men and women miners cited lack of training on entrepreneurship, proper equipment and machinery, and capital to buy and replace tools as one of the main challenges. Some women respondents invested substantial portions of their savings in buying land near the mines, which they would rent out for additional income. To reduce their dependence on a secondary source, many women desired to get permanent employment in the mining companies.

Men in service provision in the gold mining industry worked primarily as community security guards and where paid by the mine through village officials. However, many security guards work long hours, are paid below the government-established minimum wage, and have to pay hefty penalties in case of theft on their watch. Some guards were paid as little as TSH 60,000 (USD 28) per month.

In conclusion, there are challenges that affect both men and women who are formally employed, and a systematic approach to address them needs to be developed. These jobs are dependent on global commodity prices and can results in large-scale retrenchment. The non-flexible working hours and isolation from the family for long stretches of time affects women more, as they traditionally have more responsibility for the family. This is often a determining factor in deciding whether or not they choose a career in mining. Sexual harassment was a problem, although it was handled in part by a hotline where any misconduct could be reported.

For both women and men in ASM, major bottlenecks were capital for tools and entrepreneurship training, as well as access to reliable markets. Health and safety, sanitation and poor infrastructure in the smaller mining sites was a problem facing the whole community. Service providers, men as well as women, cited small incomes as their main grievance. Similarly, wages for unskilled workers wages were very low for positions such as security guards. To encourage formalisation of ASM, the Zonal office were sensitising the miners, and STAMICO was planning to use this avenue to provide training to ASM.

7.2 Tanzanite

The Northern Zone is also rich in mining. The famous blue Tanzanite, found only in Tanzania, is mined on the slopes of Kilimanjaro in the Mererani area in Manyara region.

The research team observed that the TanzaniteOne mining area differs substantially to those in the gold mines of Kahama in terms of infrastructure. In Kahama, despite poor infrastructure around the ASM mining sites, there are very good hospital, schools, and good roads surrounding the main mining sites. In contrast, the area in Mererani has poor infrastructure overall, particularly the roads. A unique challenge faced by the research team was that of "research fatigue" – many organizations had conducted similar studies and interviews in the past, with limited outcomes or changes in policy after the data was shared and published. While interest in the industry was great, the Tanzanite miners were pessimistic on the impact of such studies due to lack of tangible



interventions that would benefit them. In general, self-employed Tanzanite miners were very hesitant to talk to the research team.

As shown in table 24 below, according to the TMAA audit 2014 there were fewer employees in 2014 compared to in 2012, with a peak in local staff in 2013. The available data is not available disaggregated by gender (TMAA 2015).

Table 24: Employment in TanzaniteOne TanzaniteMine (TTM) 2012-2014

| Mine | 2012 | 2013 | 2014 |
|------------------------|------|------|------|
| TanzaniteOne Tanzanite | | | |
| mine (TTM) - total | 667 | 670 | 590 |
| Local | 630 | 645 | 574 |
| Expatriate | 37 | 25 | 16 |

Source: TMAA 2015.

Among the eight SSIs conducted in the Tanzanite sub-sector, four men and four women, three were employed and the rest were self-employed, with one person being a farmer providing services. Four of the respondents had primary education; two people had been to secondary school; and the other two had attended vocational training colleges. Apart from their main income, four had a secondary source of income and three had a third source of income. At the time of the data collection in November 2015, management representatives interviewed said that TanzaniteOne had 1,252 employees, i.e. a higher number of staff than illustrated in the table above. It may be that the total number also includes day labourers. At the time, only five per cent of TanzaniteOne employees were women.

It was said that women had been removed from some of the sections in the workplace, due to fear of theft. In addition, the long-term women employees felt they were being exploited, and felt disadvantaged compared to the new employees: "We are being undermined. Previously, the section that dealt with mineral cutting also employed women. The company suddenly barred all women from working in that section, claiming that women can steal the minerals and hide them in their private parts. All women working in that section were removed overnight. Our employers don't pay us overtime. Sometimes we leave the office around 9 PM. Additionally, the salary of the newly employed worker is the same as the longstanding employees. There is no benefit for seniority." (SSI Tanzanite One - Mererani, woman employed).

The company does not have a formal gender policy. However, the management stated that priority was given to women when jobs are advertised, and that the mine provides 20 internships per year for women who stay for a period of three months. It was stated that it is difficult to get women with the requisite skills to work in the sector, and the women who have been recruited are mainly working in the mine clinic, not in the actual mining operation. There appeared to be little gender awareness among the management, but there was an interest in the issues and is thus a possible entry point for gender equality interventions.

The area in which the mine operates is very poor. Sexual harassment, transactional sex and alcoholism among men as well as women, were mentioned as serious problems within the community. CSR polices were not being systematically implemented and promises of hospitals and schools had not been fulfilled. The well-established relationship between TanzaniteOne and the community is on the decline.

Men who are self-employed workers in Mererani said that they would stay in the business despite the hardships and declining relationship with the mining company. They are counting on the hope that one day they will find large quantities of Tanzanites and earn a substantial amount of money. All of the men that were interviewed had up to date mining licenses.

As part of their CSR policy, in the past, TanzaniteOne gave away unusable bags of surplus semiprecious stones to women's Maasai groups in the neighbouring areas. The stones could not be used by the company, but could be used for making local and traditional jewellery for additional income. However, this has been discontinued, causing a decline in individual income, with financial implications for their households. With the additional income from the jewellery sales, which were also marketed online for global sales, many women had opted to send their children to better, more expensive schools. Once the additional income stopped, the women could no longer afford the new schools, forcing many students to drop out mid-year. Despite decreased incomes, the women would not leave the business. They felt that they were still in a more financially advantageous position than other small-scale miners the in gold, gravel and gypsum mining industries.

The repercussions were serious for the selfemployed women who previously had relied on the semi-precious stones and the sale of their goods to global markets. This situation makes the women very vulnerable and desperation may accentuate the already existing problems in the community of alcoholism and transactional sex. Lack of capital and tools were also mentioned as additional constraints among the self-employed women.

Many of the self-employed women in the industry cited the need for action and tangible interventions, instead of further research. This research fatigue highlights the need for interventions on education, skills training, and provision of tools, equipment and machinery; in addition to support in capital to grow their businesses.

7.3 Gemstones

Ng'ombeni village in Tanga region is an extremely poor village, but is known for its wealth of green tourmaline, red granite and Rhodonite. It is a mining village where most residents are involved in mining, as licensed and informal miners and brokers. Two FGDs and 2 SSIs were conducted in Tanga, one for men and one for women for each category. Two of the key informants, both women, were gemstone miners themselves.

During the data collection, it was mentioned that there are 132 miners in the village. Both women and men in the village are pit owners, but it is men who do the digging. Fifty-two of the miners are women and 80 are men, while only 10 women and 30 men have a license. The diggers are paid with food, and a promise by the pit owner that if they find high quality gemstones, they will receive a part of the profit. Often after digging four to five feet with no result, the mine is abandoned and attempts are made in another place. A good quality stone can be sold to a broker for Tsh50-70, 000 (USD 23-32) per gram, and a stone can weigh anywhere between 0.1 gram to 20 grams. If it has cracks, the price is only Tsh 5,000 (USD 2) per gram. Most brokers are in Arusha, but there are also a few brokers who live in the village.

Lack of capital for tools and equipment was mentioned as a challenge. The tools used were very simple and detectors and other machines were not used. Very few are engaged in subsistence farming as an alternative livelihood.

As in Mererani, research fatigue was also prevalent. This was not the first time they had spoken to researchers, representatives of the government and other organisations about their struggles, but so far this had not resulted in any assistance. One of the men miners with a license mentioned that he has heard about the RUZUKU grants provided by the government for small-scale miners, but cited doubts if the grant would ever benefit one of them. His perception was that the grant usually benefits those who do not need the financial assistance or those who have contacts and can do them a favour. When this was discussed in the men's FGD, most wanted to obtain funding but were not aware of the process needed to apply for the grant.

Despite hardship and poverty, the villagers were determined to continue with mining in the hope of success. The women miners were keen to continue, despite limited tools and equipment.

"We start with something we call Alunzio, the lower grade semi-precious gemstones. We sell the stones and then we divide the income between the miners. The deep inner rock is very hard. It needs tools and resources such as dynamite, oil and fireworks in order to mine it. We don't go deeper just because we haven't got these tools. As a result, we end up mining on upper layers and we fail to extract the precious stones. The stones we get on upper layers are less precious and their sale only provides us with little income for food and clothes. There are lot of customers because stones are taken from here to abroad" (FGD Female Gemstones - Ng'ombeni, self-employed miner).

The chair of TAWOMA in Tanga region lives in Ng'ombeni. The main challenges she sees in the mining business are lack of education, access to tools, but also a failure of her fellow miners to be proactive. In previous efforts to secure grants, she brought application forms for the RUZUKU grant to her village and offered to fill out the forms for those who were interested. Miners were unwilling to go through the procedures of giving out information to fill the form, yet felt disgruntled that they did not benefit from the grant.

However, members of TAWOMA also try to support each other and conduct joint activities. TAWOMA had started a Village Community Bank (VICOBA) group in the village. The group had paid Tsh 300,000 (USD 137) and received a start-up kit and training.

The research team was accompanied to Tanga by the National Chairperson of TAWOMA, who herself is a miner of gemstones. She concurred with the TAWOMA Tanga Chair that the main challenges for women (as well as men) in mining are poor tools and equipment, along with lack of capital, low levels of education and entrepreneurship. She also stated that it is a problem that many think that they would never be able to benefit from any support. Similar to the TAWOMA Tanga Chair, she had brought the RUZUKU forms to the villages she had visited but nobody had taken the initiative to engage with the process. The TAWOMA chair also provided insights into the cost of equipment. A SIDO produced crusher costs Tsh 10-12 million (USD 4,500-5,500). However, some other necessary equipment is less expensive, such as dumpers, excavators and detectors.

In conclusion, the main challenges faced by the small-scale miners of gemstones, for both men and women, are education, tools, equipment and limited motivation to formalize mining activity. The gemstone sub-sector also shows that although the RUZUKU grant is perceived as beneficial, there are not yet mechanisms in place to encourage miners to apply for it. Such financial interventions can only be successful if the applicants trust the application process, which requires extensive advocacy to inform and educate miners on the application process.

The opportunity for collaboration between women in EI and SIDO emerged in this sub-sector. SIDO is a parastatal institution with representation in 22 regions. Although SIDO has been involved in many SME development initiatives and produces machinery for mining, it is not known for EI activities. The feasibility for establishing a value addition and equipment production centre within some of the SIDO estates around the country would be advantageous to the industry. Principles of gender equality should be built into such initiatives, facilitated by SIDO, which also has women as a particular target group in their strategic plan (SIDO 2014).

7.4 Volcanic Rocks

Large volcanic rocks used for construction are mined in Holili, on the border of Tanzania and Kenya. Two focus group discussions and four SSIs with female and male volcanic rock miners were conducted. The respondents were all self-employed. As miners in other sub-sectors have said equipment remains a challenge. The miners use manual hand equipment to extract bricks from rocks, which makes the process cumbersome and time consuming. However, mining has also enabled men and women to succeed in life, such as by building houses and providing their children with good education. A complementary livelihood through farming is also part of the accomplishment.

Poor infrastructure and bad roads add to the challenges of the miners working near the border, who face double taxation when taking trucks into Kenya. Several Tanzanian miners also cited complaints of unfair monopoly on mining sites by Kenyan miners. For women miners, cheating, threats and demand for sexual favours are particular challenges. Despite the harassment, the women continue to work in the mines due to financial obligations to their families. However, they want something different for their children. Several of the miners also cited concerns about seeking alternative sources of income, as they grow older and are unable to perform some of the more physically taxing labour.

It is recommended that the government and local authorities communicate the rationale for taxes and royalties to the miners, who have voiced frustration with recent increment in mineral loyalties and double taxation. It is not sufficient to demand payment from the miners. How the taxes are used and their long-term benefits also need to be explained to miners, which will address concerns of lack of transparency and accountability raised by the miners. Like other EI sub-sectors, the volcanic rocks sub-sector illustrates that mining is an important source of income, particularly in combination with farming. Better protection mechanisms also need to be implemented to protect harassment and sexual violence against women.

Case Study

Anna³ is in her 40s, married with four children. She is one of the founders of a mining site called '*Machimbo ya Wanawake*' (Mines for Women). When it first became operational, only women worked in the mine. However, now the mining site now has more men than women. Many women have left mining because it is a tough job and it is regarded to be more appropriate for men. The women who Anna started this project with have all abandoned mining. Mining has helped Anna to build two modern houses in Kenya, and to pay for her children to attend private schools. According to Anna, perseverance and hard work are the keys to success for a career in mining. She emphasised that in order to enjoy the fruits of mining one must be patient. Through mining, Anna became less dependent on her husband, and she can even support him in his agricultural business when required. Her fellow miners regard Anna as their role model and one of the most successful women in mining.

7.5 Gravel

With a growing and developing economy, demand for new infrastructure arises. This results in greater demand for construction material, which includes the mining of gravel. In Tanzania, demands for new buildings, houses, hotels, offices, has been steadily increasing, leading to an expansion in the construction industry, specifically for gravel. Twentynine per cent of small-scale miners in Tanzania engaged in mining building materials are women (MEM 2012).

Two FGDs and 17 SSIs were conducted with smallscale miners in the gravel sector, in Dar es Salaam, Kilimanjaro, Kahama and Mtwara. One FGD was held with women and one with men, while nine SSIs were carried out with women and eight were with men. All respondents were self-employed and a majority had primary education. More than half had a second source of income and few belonged to a group. In contrast to respondents from other EI sub-sectors, the majority of the miners in the gravel sector did not think that the industry contributes to the welfare of their communities.

There are large-scale aggregate gravel industries in Tanzania that use machines for mining and processing gravel from stones to the size needed. As machines do most of the work, employment is limited. However, for many women and men, smallscale gravel mining provides a livelihood. Kigamboni, across the channel from the central business district in Dar es Salaam, housed two gravel mining sites: Mjimwema and Maweni. However, they were mining without a license and the machines were abandoned after the government became stricter in enforcing regulations. At the time of the data collection in November 2015, the government was about to close down the mines, but people were still mining in the area and selling their houses to miners. Fishing and mining are the main livelihoods in the area, and as there are no alternatives. Both the men and the women were very worried about their future, and that of their sons and daughters, and hoped for trainings in entrepreneurship.

"I don't see any opportunities here. We have registered our savings group but we have never been taught even how to run our businesses. If these teachers, leaders or trainers were teaching us about entrepreneurship thoroughly, I would then say there are opportunities." (SSI Male Gravel Respondent -Mjimwema, self-employed)

Only one of the self-employed gravel miners had a license. He operated in Kahama and used a stone-crushing machine. He brought stones from small-scale miners who were operating informally, and leased the mining area from individual landowners. These miners have little awareness about how and the necessity to register for a mining license. They used very rudimentary tools for mining,

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<sup>3</sup> Name has been exchanged to protect the respondent's identity
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and would often injure themselves in the process of either mining or breaking the gravel.

Respondents agreed that this line of work was very laborious, for both women and men, but in particular for women due to the high demand for physical strength. With limited education and employment options, women continued to work in this sector. Majority of their income goes towards financing their children's education. Several of men who were interviewed asserted that they would not permit their wives to mine gravel, as it was too dangerous.

Major challenges in the sub-sector were lack of equipment, machinery and capital, as well as lack of land to mine. Some of the miners reported that were currently mining on another owner's plot, and feared that they could be asked to leave without notice. It was also reported that women owners often discover that men are trespassing on their land to mine on their plots without permission. Brokers presented another challenge to the gravel miners, as they negotiate prices that are far below the market price. Several respondents said that if they had capital to do something else, they change professions. Some had already made plans for other businesses.

Unlicensed small-scale miners in Kahama feared eviction from licensed companies and the government, and in some cases both husband and wife are engaged in gravel mining as their primary source of income. Few are engaged in agriculture as a complementary livelihood, but the threat of loss of income due to closure of unlicensed mines made many miners reluctant to give interviews.

In contrast, gravel miners in Mtwara were much more positive, due to the influx of developmental activities. This has resulted in an increase in the price of gravel.

"I see many opportunities for what we are producing. Mtwara is expanding. Construction of hotels, offices and houses gives us new hope. We believe that in five years to come, our lives won't be the same" (SSI Female respondent Gravel - Mtwara, self-employed).

Despite the physical ordeal of mining, many women opt for gravel mining due to lack of alternative opportunities for employment. Many miners do not have a license to mine, nor do they have an alternative income. When mines are closed down, whole mining communities suffer grave economic consequences. It is recommended that relevant stakeholders work towards expanding women's economic opportunities in Els by encouraging licensing and alternative livelihoods, most notably farming.

7.6 Gypsum

In Makanya, gypsum stones were piled along the main road ready for transportation. According to the village chairman in Makanya, the villagers have mined gypsum since the 1960s. Over time, women have become an integral part of this economic activity as they inherited mining claims (areas for mining) and also purchased claims from other villagers. Women miners in this sector are some of the most economically empowered miners in the extractive industries in Tanzania. The economy of the village depends primarily on the mining of gypsum. Key challenges faced by the self-employed villagers are lack of capital, water and reliable markets.

Some experienced miners have diversified into beekeeping and agriculture, including watermelon and onion farming. Despite the steady demand gypsum, its extraction remains at a smaller scale due to lack of upgraded and mechanized tools available to the miners. Bad roads and high cost for transportation to markets further away prevent women from selling their products with great profit margins. Instead, they are forced to sell at lower prices to local brokers, and are given credit as a means to keep production moving. To supplement their income, the miners are also active farmers, especially the women, and regularly sell their crops at the local markets.

According to the resident mining officer, MEM has issued 250 licences in Makanya. Out of those, only 57 are active (25 women and 32 men). The cement companies control the price of gypsum all year round by issuing annual tenders to local providers. There are a total of 30 gypsum companies with tenders with cement companies, 13 owned by women, 15 by men and 2 are mixed. Among the seven most successful gypsum companies in Makanya, three are owned by women and four by men. Women, however, face an unique disadvantage – women in this sector seem to be less confident than men when it comes to negotiating tenders, and risk losing out on competitive offers. The gypsum miners find that the mining has made a big difference for them, as

Case Study: Woman Gypsum Miner from Makanya

Doris⁴ was born and raised in Makanya and attended primary school level before she started mining in 1988. She owns a mining site and a company. Doris received her first business tender from Mbeya Cement, and used the profit to invest in building a guesthouse. In 2003 she purchased a truck to ease the transportation of gypsum, and in 2013 took a loan of TSH 120 million (USD 55,000 USD) to expand and improve her business. Doris was among the 12 miners from the Northern zone who received the RUZUKU grant of TSH 60 million (USD 27, 400) from the Ministry of Energy and Minerals. The grant money will be spent on transportation of the stones to cement factories across the country. Doris was very happy with the initiatives that the government is taking to support self-employed miners. Doris emphasized the role agriculture played in her success, as a single income from mining alone would not be sufficient.

it has enabled families to build houses and educate their children:

"There is a big difference between our community and other communities. The majority of us are involved in mining activities and we have been able to pay for a good education for our children. Previously, they used to drop out of school or just stop after standard seven. They can now go up to secondary school and college." (Women's FGD Gypsum - Makanya, self-employed)

Second generation of miners however, with greater education and awareness, tend to leave the gypsum mining business and hired hands, and opt for other jobs. Greater marketing skills training are also required for both men and women involved in gypsum mining.

Ruvujiunge village has mined gypsum for almost as long as Makanya but only began registering claims in 2015. Respondents in a focused group discussion in Ruvujiunge stated that 12 local providers with the most competitive bids are selected to supply the cement companies with gypsum for a period of 12 months. It was noticed that companies owned by men usually won these tenders, forcing women claim holders to sell gypsum at very low rates. Women gypsum miners in Ruvujiunge were therefore in a more disadvantageous position in comparison to in Makanya.

Furthermore, the extraction of gypsum is laden with multiple taxes: Annual Mining license, municipal vehicle tax at village and ward level, and a tax per 30 tonnes. This calls for interventions from the government in terms of reviewing the license fees and taxes for small-scale miners. In addition, there is a need to take up the respondents on the demand for training in marketing skills and to make the business more attractive for the younger generation.

7.7 Cement

A major investment in Mtwara region is the Dangote cement factory. It is an investment built to operate for at least 70 years and was established in 2012. Dangote is already one of the largest employers in Mtwara with 1,400 Tanzanian employees in 2015. When the plant is in full operation, there will be 450 -500 employees: 50 per cent semi-skilled, 25 per cent skilled and 25 per cent low skilled. In addition to this, there will be a fleet of 300 - 400 trucks, which will require drivers and mechanics.

Apart from discussions with the Dangote management, SSIs were conducted with employees as well as with service providers in the Twiga cement factory in Dar es Salaam, which is the most established cement factory in the country. Four of the SSI respondents were employed and six were self-employed, with an equal gender split. Primary education as well as university education dominated among the respondents, illustrating that the same sector can have very different education profiles depending on the role they play in the sector. A majority of the respondents agreed that the EI companies contributed to the welfare of their communities.

⁴ Name changed to protect identity.

Regarding employment of women, Dangote management states that there are women at all levels, albeit as a minority. There are also no women operators. The management attributed this to a low level of education and skills among women, which are below the required level for women as well as men, and is a general problem in Mtwara. One of the women respondents at Dangote reported that there are many opportunities available for women to work at the plant. However, there are also several challenges, such as issues of safety and security. Workers lack safety equipment such as helmets and masks, although the company has been promising to acquire them for some time. A second woman respondent employed at the experienced gender discrimination and harassment by the workers that work under her supervision in the production unit. She complained that men do not let her do her job and disrespect her authority.

Dangote is currently recruiting from VETA from mines undertaking retrenchment. However, it is not enough. To address this problem, as well as to get the specific skills required at the factory, a specialized training facility is being set up to provide on-site trainings to staff. Many of the employees are not from Mtwara, due to the lack of skilled labour in the region. However, one respondent from Mtwara was optimistic that the factory will be very beneficial for the people of Mtwara in the long run, even if it does not directly employ its residents. Dangote is also setting up a microfinance scheme for self-employed miners, and is currently negotiating with two banks. The microfinance scheme is part of their CSR initiative and also aims to build additional services around the factory.

The oldest cement factory in the country, Twiga Cement, is a landmark in Dar es Salaam, situated on Wazo Hill. There are a number of service providers around the Twiga cement premises, notably women selling food and small kiosks. Like in other El sub-sectors, the income they earn enables them to build houses and send their children to school. Most customers are factory employees and cement customers. However, both men and women in the service provision industry around the factory, that interviewed for this study, voiced concerns over the long term health effects of dust from the cement mining. Few also reported cases of losing customers due to the dust. In Mtwara, poor infrastructure and insufficient availability of people with the relevant education and skills were the key challenges to the mining of cement. Staff at Dangote also raised concerns about safety equipment, women felt discriminated at the workplace, and held very few senior positions. In contrast, direct and indirect employment from the cement factory in Dar es Salaam, increased income, security and education for children of the workers.

An important observation is the transfer of skilled labour from the gold sector to cement. Although they are vastly different industries, similar skills are in required. The planned Dangote Academy and the microfinance scheme for self-employment in the area, as well as the linkage with VETA, provides opportunities to improve women's and men's skills in El. However, if women and gender dimensions are not actively promoted, women will not benefit from such initiatives.

7.8 Salt

Salt can be mined or farmed. As an extractive industry, licensing is administered through the Ministry of Minerals and Energy. In the Eastern Zone of Tanzania, some salt factories are registered, but many more are not. Between Dar es Salaam and Bagamoyo, within a stretch of less than 100 km, there are approximately 13 salt works, most of which are operating without licenses. The Southern Zone also has some salt works, particularly in Lindi. The main salt harvest seasons are between July - September, and December - January. It is difficult to farm salt during the rainy season. Apart from interviews and discussions with the owners and management of two salt works, two focus group discussions (one for men and one for women) and four SSIs (two with women and two with men) were conducted. The salt is sold on the domestic market, and is also exported, through formal or informal routes. There is a high demand for salt in the Democratic Republic of Congo and Burundi.

The research team visited the HG Stanley salt works in Bagamoyo and Adela Enterprises salt works in Lindi. In both salt works, majority of the labourers were women. Depending on the season, over 200 workers, mostly women from areas around Bagamoyo, work at the salt works as day labourers. Majority are not employed by the salt work. The day the research team visited HG Stanley, 98 workers were present. Of the 98, 17 workers who were employed were all men, and worked as pump attendants, mechanics, technicians, etc. The company had never employed a woman for any these positions. The day labourers are allocated a designated saltpan area of 25 square metres. It can take up to a week to harvest salt from that area. Upon completion of one saltpan, the group is paid TSH 130, 000 (USD 60). Day labourers also have the option to choose how many hours they work at the salt pan per day, giving them the flexibility to undertake other household tasks and responsibilities. This works in favour of the women day labourers, who have greater familial obligations, which often prevents them from securing employment. More men are willing to allow their wives to work in saltpans because of flexible working hours.

Majority of the salt works in the Southern Zone do not package their product for sales. One exception is the Sungura salt work, run by a local owner who employs 14 women to work from a small house in his backyard. The salt is grinded, stored and then packaged for sale. The owner avoids selling unpackaged fresh salt in bulk, as the profit is considerably less. For retail sales, individual packets of salt carry Sungura branding, and contact information of the owner for direct orders. Such minimal marketing and branding has enabled the owner to cut out the middlemen and brokers, resulting in greater income.

Respondents at the salt works did not articulate major health concerns. Health effects on women and men documented during the literature review were dehydration, skin ulcers, skin wounds and inflammation of the uterus of women workers from the chemicals used in salt mining (WoMin 2015). However, during the data collection in Tanzania, respondents noted that chemical use was limited in salt farming, making it a much safer work environment compared to other EI sub-sectors. Prolonged exposure to sun and salt water was reported as minor concern.

The main challenge of salt harvesting is the seasonality of the work for both self-employed and employed workers. Women who are employed as salt packers say that they often have to wait for several weeks, or months, as the salt is being harvest.

Despite the seasonality of the activity, they do not have another source of income.

"The challenge we face here is that our work is not permanent. Sometimes we can stay for weeks and months without any work because salt is not prepared from the farm and we only do the packing. Our income is therefore very low." (Woman salt work labourer during FGD in Lindi).

Few engage is subsistence farming for family consumption, with no surplus to trade or generate any income from it. An indirect repercussion of economically empowering women in the salt industry is that their husbands are more likely to abandon their families, as they are no longer perceived as the breadwinners. The women can manage their households and earn decent wages to support the family. The changing power dynamics within families as a result of women's economic empowerment, release men from greater financial responsibilities to the family. It was also reported that often men opt to invest their income into a new marriage. However, there is also evidence to suggest that more men are getting involved in the salt industry, which may lead to equal distribution of labour between women and men.

To conclude, despite dominating the workforce in the salt industry, there are still fewer women license holders than men. Although the industry has health challenges, such as constant exposure to the sun and salt water, it is free from the use of chemicals during the harvest as well as in processing. The industry offers an economic opportunity for many women, and despite the hard work, it is relatively well paid. The flexible working hours are an advantage for women with household responsibilities. Unfortunately it also implies a double burden for women who are still required to fulfill household duties and familial obligations. In terms of interventions that would benefit women, involving men with a focus on more equal division of labour and further economic empowerment of women is necessary. Systematically promoting the complementary seasons of salt harvest and agricultural production is also necessary for increasing financial stability of the workers. Any extra income from the salt mining can be invested in agriculture to reduce economic vulnerability.

7.9 Gas

The discovery of gas Mtwara and Lindi in 2013 has had a big impact on infrastructure in the Southern Zone. Prior to the construction of the Rufiji river bridge in 2003, access to the region was limited during the rainy season. Discovery of gas accelerated the construction of better roads, housing, and services in the region, and has also provided for new avenues of employment for residents. Concessions acquired by British Gas and Statoil, and the in-country establishment of multinational service providers such as Artumas and Schlumberger, has increased the demand for technically skilled labour, hospitality and services.

However, recent reductions in oil prices have also decreased the demand for gas, and the decision from the government about where the LNG plant would be placed has been delayed. Some companies have shut down their operations, and others have shifted to Mozambique, where large gas deposits have also been found. The expectations of the anticipated boom with the gas industry in Mtwara and Lindi are still high, but they have been lowered (Must et al 2015).

Apart from key informant interviews and meetings, four SSIs were conducted in relation to the gas industry, four with employees and two with service providers. Growth in the gas industry has also aided greater employment in the service provision industry in surrounding areas. Interviews in the region reported an increase in customers and wages for those in the transportation and hospitality sector.

The Madimba Natural Gas Processing Plant is owned by TPDC (20 per cent), the French company Maurel and Prome (48 per cent) and the Canadian company Wentworth (32 per cent). In a meeting with the management team, it was explained that the plant was built by a Chinese company and was still in the commission phase. At the time of the data collection in December 2015, the plant had been in operation for three months with gas from Mnazi Bay and Songo Songo islands.

There are 51 employees, who have been trained in China for one month. Of these, only five are women. One is a mechanical technician while the others are graduates and work in administration. Priority was given to applicants from the region, but only four from Mtwara were recruited, all of whom were men. They were employed as field operators, labour laboratory technicians, and in CSR and Community engagement. Interviews from the gas industry report great interest in the sector, with calls for greater government interventions in providing adequate education to interested young men and women.

Cleaning, cooking, transportation and security services were outsourced to a Dar es Salaam based company through a national tender. All 14 employees of the service provider and 23 casual labourers are from the neighbouring area. The level of education of the service provider's staff is low, with only a few workers competing primary education. Contractors were asked to buy local produce when possible, but the quality of products remains an issue. The nonfamily duty station is a dry camp with 28 days on the plant and 28 days off. At one time, there were seven women working on the plant, but two have shifted back to TPDC headquarters in Dar es Salaam because they wanted to be closer to their families. Most respondents citied time away from family as the primary challenge of working in this sector. Conversely, when offered the option of housing a nursery school for the children of employees at the plant or nearby, majority of the women were reluctant. They cited concerns of loss of concentration or distraction if their children were close by. Women in the sector are a minority, but enjoy their highly respected and recognized positions in the sector, where they are breaking gender norms.

Similar to the cement industry, potential for employment and businesses related to the gas industries in Mtwara is enormous. This will require significant investment in higher and specialized education, skills training to meet technical demands, particularly for young women and girls. The region has select NGOs that address the technical skills gap, but there is room for other stakeholders to scale up efforts. For both men and women, challenges in the gas industry are similar to the situation to other mining companies, i.e., the nature of their work requires staying away from their families for long stretches of time. Making the environment a more suitable place for families would benefit women as well as men. With facilities such as schools, housing and health care onboard the plant, workers have the option to bring their families, or leaving them behind. Currently, they do not have this choice.

Case Study of a woman TPDC employee in Mtwara

Happy is in her thirties and is working for TPDC at the Madimba Natural Gas Processing Plant in Mtwara. She is married and has one child. Her husband and child live in Dar es Salaam and while she is a way, her husband takes full care of their child. She studied engineering at university and is the only woman in the camp who is employed as a mechanical technician. She feels accomplished working in an environment that has traditionally been dominated by men. Happy sees many opportunities in the gas industry in the near future, including getting scholarships for further studies because the gas industry is new in Tanzania and will need many local experts. Her main challenges were the weight of the machines she has to sometimes work, especially during pregnancy, unwelcome advances made by other men colleagues, being far away from her family for long periods of time. However, she is determined to continue working in this industry.

"I have no plans of leaving my current job. I am proud to be a woman in this industry and I am excited that I am working in a new and emerging industry. It feels good to practice what I have learnt in theory at university. I also see many other opportunities for further studies. There are so many who have applied and been successful."

7.10 Students and trainees

Several students and trainees in El related sectors were also interviewed as part of this study. Two FGDs (one for men and one for women) and six SSIs were conducted. Furthermore, a group discussion with VETA graduate who have formed a service provision group was conducted. The locations were VETA in Mtwara, the University of Dar es Salaam and the Tanzania Gemological Center (TGC) in Arusha.

Some of the respondents who participated in the study were students who studied courses that were part of the EEVT programme at VETA in Mtwara. Both men and women respondents stated that preconceived notions of which courses are appropriate for each gender prevents students from diversifying. Courses such as welding, carpentry and plumbing have very few or no women students, while others like food production have no men. When students do register for non-traditional options, they risk harassment and bullying, and are humiliated by their peers. Unfortunately, most revert back to courses that are perceived to be more appropriate for their gender.

A culture of traditional norms about what women and men should study and their roles in society

⁵Name changed to protect the identity of the respondent.

has made it difficult for women to pursue careers in El. Strategic interventions by the government, academic institutions and service providers are needed to breakout of traditional gender norms.

Vocational training was the last resort for students who did not meet minimum qualifying requirements for university. However, among men respondents at VETA in Mtwara, the arrival of EI companies in the gas sector and the Dangote cement factory has renew interest in vocational trainings, increasing the popularity VETA.

Students who have graduated from the EEVT selected courses in VETA were also trained how to manage businesses, customer care, proposal writing, in addition to general career guidance. This component of the programme has been supported by International Citizens Services (ICS) through a network of 40 volunteers from the UK and Tanzania. Plumbing, Electrical, Carpentry and Welding courses (PECAW) initiated in March 2015, consists of a group of 16 men and 4 women who have graduated from VETA. Through VETA, the PECAW members have obtained certification from city guilds, which has increased willingness of the gas companies to work with them. Dangote cement factory has also subcontracted some of the members and two out

Case study of woman VETA student in Mtwara

Zainabu is 23 years old and studies plumbing and pipe fitting at VETA in Mtwara. She is the only woman doing this particular course at her college, and says that many people regard the work as more appropriate for men than for women. She is ridiculed and insulted by her peers and outsiders for opting for profession dominated by men. She also lacks the trust of potential clients who have not worked with her before, and find it difficult to believe that a woman can do the job of a plumber properly. Zainabu has reported instances when clients have initially been hostile and averse to letting her perform her job, but have been appreciative after successfully finishing the assignment with no problems. Some clients have also apologized for their unfriendly attitude. Zainabu enjoys working as a plumber and she sees a bright future ahead. Besides being a student, she works with installation and repair of drainage systems.

of 25 members had secured full time employment. PECAW also has an office, it is registered and at the time of the data collection in December 2015, they were waiting for the business license. They engage in electrical installation, plumbing, fixing water tanks, post-electrical installation banners and furniture building and repairs. Similarly, Mtwara's Own Fast Food is composed by a group of young women who have graduated from VETA, and opened a restaurant in the city centre.

Science and geology students at the University of Dar es Salaam studying courses related to Extractive Industries were also interviewed, some who had were awarded full scholarships from Statoil. They were excited about the new opportunities offered by the discovery of gas in Tanzania, and in the EI generally. However, they also saw challenges, such as migrating to new regions in order to pursue a career, which was identified as a problem in particular for women with families. It was also noted that there is insufficient equipment at the university for handson training, leaving the students with no other option but to go apply to international universities for specialization.

At TGC in Arusha, lapidary courses are offered to train students how to engrave on stones, minerals and gemstones for value addition. There are currently 18 women students funded by the Tanzania Minerals Dealers Association (TAMIDA) and MEM. The first 15 students sponsored by this fund have graduated, and their main challenge was the lack of capital to buy the lapidary machines, which can be very expensive. It was also mentioned that most lapidarists are men because traditionally very few women were involved in this profession. Women have cited their challenges in convincing employers and clients of their abilities, and have to work harder to gain credibility in the industry. However, MEM, asserts this line of work is highly suitable for women as it does not demand intensive manual labour, and is a lucrative career option.

In conclusion, restrictive gender norms about what careers are appropriate for each gender are a challenge for both women and men at VETA, at university-level and for trainees. Relevant technical and vocational training is in high demand by EI companies, and the EEVT model developed by VSO and VETA with international certification, field affiliation and mentoring has been a productive approach. However, nation-wide implementation of such approaches across all sectors is much needed. Setting gender targets to ensure at least 35 per cent women benefit from such programmatic interventions will ensure greater opportunities for young women and girls in careers that are traditionally seen to be suitable only for men.

⁶Name changed to protect the identity of the respondent.

8. CONCLUSIONS AND RECOMMENDATIONS

The study has also identified potential entry points for interventions by stakeholders in order to improve the situation of both women and men, but with greater emphasis on women and girls, as they are in disadvantageous positions across the board. Strategic interventions are required at all levels, ranging from gender-disaggregated data to gendered policies and strategies, as well as support in concrete programmes working in skills development. This chapter identifies general challenges and opportunities across sectors facing both women and men. It then continues to identify specific challenges for women, follwed by sectorspecific constraints.



(L-R) Packaged Salt with contact details Sungura Saltworks in Lindi; Tools used for making Tanzanite jewelry in Mererani, Tanzania, November 2015 (C) UN Women

8.1 Common challenges and proposed recommendations

Across all sectors, some of the recurring concerns for both men and women employed, self-employed, formally, and informally, were lack of updated tools and professional equipment, capital for investment, and entrepreneurial skills. There was also a common call for the inclusion of EI related service provision as an SME so that the input of those employed in service provision could also be accounted for. Lack of coordination between relevant stakeholders is also a key issue that needs to be addressed to ensure sectors are not missing out on opportunities for joint collaboration and development. For example, currently, MEM and SIDO do not have a partnership, even though SIDO is a potential provider of both training and equipment in the minerals and mining sector.

In order to address lack of capital for investment and savings, it is imperative to promote financial inclusion, local savings groups, micro-finance, in addition to providing information on banking and management of finances. The Financial Sector Deepening Trust (FSDT) promotes financial access to individuals, as well as SMEs. Capacity building of zonal and resident officers to better communicate important information to small-scale miners will also be beneficial. For this, the officers need to be empowered with relevant information that would be useful to small-scale miners, in addition to providing generic information about trainings and licenses. Agricultural extension officers are also recommended to complement the efforts of the mining officers, by promoting seasonal farming, such as in the case of salt farming.

Health and safety concerns were raised in all sectors, with the need for emergency training of ASMs, to promoting safety equipment and training. At VETA, there is an increased effort made to include health and safety as a crosscutting issue, as demanded by the El companies. Health and safety trainings also include importance of proper insurance for workers in the El sub-sectors. It was reported that companies are reluctant to offer field attachment to uninsured workers.

A stronger link between EI and existing or potential service providers needs to be developed, as goods and services should ideally be sourced and recruited locally. For this to become reality, quality and quantity of goods, and qualifications and reliability of locally recruited personnel must be ensured. Profits made by the companies can only benefit surrounding communities if the service provision of the sub sector is done locally. This is crucial for the growth of the local economy.

There is an urgent need for stakeholder coordination across the EI sub-sectors, governmental actors, and relevant CSOs. Information sharing platforms and mechanisms must be established to enable timely distribution of data on projects, plans and progress; to identity possible joint interventions, and to prevent duplication of efforts.

| Challenges | Recommendations |
|---|---|
| Lack of tools and equipment | Ensure grants for tools have a wide reach through quota, and gender targets; explore local manufacturing of tools and equipment; promote value addition through SIDO |
| Lack of capital | Assist greater access to finance through savings groups (e.g. VICOBA) and better financial literacy and inclusion |
| Lack of technical skills and/or exposure to appropriate industry | Promote vocational education and entrepreneurship; supply relevant information and guidance about available opportunities; link private sector to schools and groups training students to employed in El |
| Lack of alternative sources of income during low season, low yield | Promotion of complementary and secondary livelihoods between seasons, such as salt farming and agricultural farming |
| Lack of proper safety and security provisions | Implement compulsory safety equipment for hazardous workplaces; emergency trainings on health and safety; facilitate the process of acquiring health insurance to meet eligibility criteria for field placements by El companies |
| Time away from families while on non-family duty stations | Build family – friendly infrastructure that gives both men and women option to bring family with them |
| Limited formalisation and doubts about the benefits of registration of businesses | Systematic dissemination of information about licensing, its benefits, services provided and legal requirements; development of trust about mutual benefits |
| Poor infrastructure in the communities around EI companies, notably roads | Income from licenses and taxes to be allocated into infrastructure for communities around El companies. |
| Decline in local businesses and reduced clientele | Encourage local recruitment for service provision staff by providing better trainings and linkages with EI companies. |
| Lack of coordination between relevant stakeholders | Establish information sharing platforms and mechanisms to assist coordination between El companies, governmental partners, CSO and training institutions; link TVETs with the private sector. |

8.2 Specific challenges for women and gender equality

this section, In specific challenges and recommendations for women's economic transformation are summarised and discussed. Although there are several overlapping concerns for both men and women employed in the extractive industries; it is important to address challenges faced specifically by women and girls due to prevailing traditional norms and practises that limit their economic participation.

Women and girls face the unfair burden of household responsibilities, familial obligations, reduced or unequal opportunities to education and acquiring technical skills. Once employed, formally or informally, women face added challenges of unfair competition, lack of confidence, sexual harassment, gender stereotyping, and undermining or disrespecting authority. Lack of experience and negotiating power also prevents many women from wining competitive bids and tenders.

Furthermore, women also face unique health concerns, which not only prevent their economic participation, but also affect their families adversely. In the gold sector women are exposed to mercury; long days in salt pans increases exposure to the sun and chemicals; and normalization of transactional sex in service provision industries near mining areas puts them at the risk of HIV/AIDS. An unintended consequence of greater economic independence in women has resulted an increase in partner violence and husbands abandoning their families for second marriages.

Some interventions are easier to implement in the short term for quicker results. Success from such interventions will generate momentum and interest in the sector. In order to accurately address challenges specific to women, it is important to encourage the collection of gender-disaggregated data. Analysis of such data will enable identification of the shortcoming in each sector, and gaps that need to be addressed in terms of equal participation and equal opportunities. Such data has been collected in the past, but has not been fully utilized to provide recommendations for interventions that strategically benefit women. It is therefore recommended that reports, such as those published by TMAA, include sex-disaggregated data, and when possible, include additional demographic variables such as age, and level of education.

Furthermore, several policies and laws related to the extractive industry and currently under revision. It is highly recommended that policy makers use this process to engender policies to include specific provisions, such as temporary special measures and quotas, to promote equal opportunities. The review of the Local Content Act, led by the National Economic Empowerment Council, is one such strategic opportunity for the inclusion of gendersensitive policies. Similarly, the introduction of gender targets in the RUZUKU grant schemes, in the private sector, and training institutions would allow for greater inclusion and participation of women in the extractive industries.

For long-term economic benefits of empowering women, attitudes and behaviour towards gender equality need to be addressed. Non-stereotyped enrolment in professions will only increase if stakeholders promote greater inclusion of women across all sectors and jobs. Advocacy campaigns through SOGA, where information as well as the promotion of women role models, should be included. Such campaign can only influence attitudinal and behavioural changes with the aid of coordinated efforts from governmental agencies, relevant stakeholders and CSOs. Setting gender targets in initiatives such as TLED are also vital to ensure great participation of young women in El companies and beyond. Identifying specific targets in relation to women beneficiaries makes it possible to monitor and evaluate the impact of such interventions.

Table 26: Matrix of Challenges for Women and Gender Equality

| Challenges | Recommendations |
|---|--|
| Lack of gender-disaggregated data | Ensure that demographic characteristics of women and men is collected and included as a dimension in datasets and reports |
| Lack of emphasis on women and gender dimensions in polices, guidelines and laws | During the revision of policies and laws, encourage the inclusion of gender-targets, gender responsive budgeting, and include components of monitoring and evaluating |
| Disadvantageous gender blind strategies that award grants on first come first served, which benefit men more than women | Introduce quota and gender targets for women and actively promote inclusion of women |
| Lack of information and access to grants and services | Encourage information sharing groups for increased access to grants and services |
| Lack of modern tools to replace physically intensive manual labour | Facilitate access to tools; promote value addition through training |
| Limited and/or unequal representation of women in the El | Promote women and girls from an early age to enrol in subjects traditionally considered appropriate for men; provide scholarship quotas for women scholarships; earmark budgets and services for women; encourage women work in the sector through tax relief |
| Gender stereotyping in El courses and professions | Nationwide advocacy campaigns to promote changes in perception of which professions are considered appropriate for each genders |
| Sexual harassment and sexual exploitation | Implement systems for reporting instances of harassment and exploitation for women engaged in small-scale EI activities as well as for employees; Gender policy to be required in EI companies |
| Lack of confidence and negotiation skills | Empower women through trainings on negotiation skills, exposure and implement quotas in tendering for women suppliers and service providers |
| Lack of strong institutions and associations advocating for women in El | Strengthen existing associations in their outreach programs, and encourage partnerships between EI companies and institutions that provide trainings on skills and business development |
| Short term and sporadic CSR interventions | Institutionalise CSR policies in all EI companies |
| Limited information sharing about women and gender in El among stakeholders | Increase coordination between relevant stakeholders, EI companies, academic institutions and CSOs. |

8.3 Sector specific challenges

Some sector-specific challenges and constraints require targeted interventions that will yield tangible results and benefits to employees in that EI sub-sector. For example, in the gold subsector health, water and sanitation challenges are the biggest concerns for both men and women miners. Disappointment with new management was specific for Tanzanite, while research fatigue was mentioned for both Tanzanite and gemstones. A sub-sector where both women and men have been successful is gypsum – however, the youth do not want to take over their parents' businesses. The seasonality of salt makes the income irregular, but there is great potential to promote farming during complementary seasons. In gas and cement sub-sectors, low levels of education in Mtwara and Lindi, made finding qualified staff and services very difficult.

Table 27: Matrix of El sub-sector specific challenges

| El sub-sector | Challenges | Recommendations |
|----------------|---|---|
| Gold | Challenges Artisanal and Small scale Mining (ASM): Health and sanitation challenges in informal mining sites; risk of accidents and injuries from collapse of mines | Formalization and implementation of health and safety codes to be encouraged |
| | Lack of modern equipment and protective gear expose workers to dust and mercury | Implementation of health and safety codes |
| | Large Scale Mining (LSM): Non-flexible working hours; difficult to combine with family life | Recommend private sector to introduce flex time in all locations to ensure greater work-life balance. |
| Tanzanite | Lack of opportunities for local companies and communities | Encourage local content and recruitment to uplift communities around companies, and create conducive work places and community relations |
| | Research tiredness | Implement immediate relief measures to address long-standing concerns |
| Gemstone | Income largely depends on luck; miners are at mercy of brokers | Formalize the extraction of gemstones with the aid of better equipment and tools; increase exposure to larger markets by facilitating transportation |
| Volcanic rocks | Lack of clarity in taxation rules between Kenya and Tanzania and reasoning for increasing royalties | Provide relevant information to minor about the reasons and rationale behind taxes and increased royalties |
| | | Encourage licensing and alternative livelihoods, notably farming beyond subsistence farming |
| Gypsum | Youth do not want to take over the business; and miners are at the mercy of middlemen | Promote market linkages and invest in the modernization of the extraction process to encourage greater youth participation |
| Cement | Service providers affected by dust from the factories resulting in loss of clientele | Implement health and safety codes that prevent hazardous conditions for workers and those in surrounding areas |
| Salt | Irregular income due to seasonality; health risks due to prolonged exposure to the sun and salt water | Opportunity to promote the complementary seasons of salt harvest and agricultural production |
| | Raising sea levels will affect salt industries along the coast | Increase emphasis on alternative sources of income to reduce vulnerability in the event of loss of employment |
| Gas | Insufficient availability of people with relevant education and skills | Increase investment in providing skills training and relevant education from early age. |



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Annex A: Key stakeholders' interviews and meetings

| | Institution | Representative | Location |
|----|------------------|---|---------------|
| | Eastern Zone | | |
| 1 | | Commissioner Paul M. Masanja (now Deputy Permanent | |
| | MEM | Secretary) with Minerals management team | Dar es Salaam |
| 2 | | Latifa M. Mtoro, Assistant Commissioner, Minerals | |
| | MEM | Beneficiation and Value addition section | Dar es Salaam |
| 3 | | Energy division, new and renewable energy - Acting | |
| | | Commissioner Edward Leonard Ishengoma with Energy | |
| | MEM | management team | Dar es Salaam |
| 4 | STAMICO | Zena Kongoi, Acting Managing Director | Dar es Salaam |
| 5 | Canadian High | Marie-Helène Coté, First Secretary, Development - Sustainable | |
| | Commission | growth | Dar es Salaam |
| 6 | | Mehjabeen Alarakhia and Tertula Swai, Women's Economic | |
| | UN Women | Empowerment | Dar es Salaam |
| 7 | Royal Norwegian | | |
| | Embassy, Dar es | Svein Olav Svoldal, Country Economist, and Monica Blaalid, | |
| | Salaam | consultant Clean Energy Initiative | Dar es Salaam |
| 8 | GiZ | Regine Qualmann, head of mission and Sabine Klaus, SOGA | Dar es Salaam |
| 9 | VSO and CUSO | Josephine Ndao, Head of Project, TLED | Dar es Salaam |
| 10 | VSO | Rose Tesha, Program Manager – Secure Livelihoods, VSO | Dar es Salaam |
| 11 | | David Simmonds, Local Content Advisor & Regional and | Dar es |
| | VSO | Enterprise Development (RED) | Salaam/Lindi |
| 12 | MEM Zonal Mines | | |
| | Office, Eastern | | |
| | Zone | Tekla Anton Mponda, Inspector of Mining and Explosives | Dar es Salaam |
| 13 | MEM Zonal Office | | |
| | - Eastern Zone | Tumaini Lyuvale, Senior Mining Technician | Dar es Salaam |

| - | 1 | | 1 |
|----|--------------------|--|-------------------|
| 14 | MEM Eastern | | |
| | Zone | Hamisi M. Komba, Assistant Commissioner for Minerals | Dar es Salaam |
| 15 | H.G Stanley and | | |
| | Sons | Richard Stanley, owner | Dar es Salaam |
| 16 | Lapidary Training | | |
| | Centre | Noreen Masaki, owner | Dar es Salaam |
| 17 | Ward Office, | | Kigamboni, Dar es |
| | Mjimwema | Asha, Konyo, Mtaa Executive Officer | Salaam |
| 18 | H.G Stanley and | | |
| | Sons | Nickolas Enoch, Manager at Bagamoyo Saltworks | Bagamoyo |
| 19 | TAWOMA | Eunice Negele, Chairperson TAWOMA, nationally | Tanga |
| 20 | TAWOMA | Salma Kundi Ernest, Chairperson TAWOMA, Tanga | Tanga |
| | North-Western Zone | | |
| 21 | MEM Zonal Mines | | |
| | Office, Central | | |
| | Western Zone | Mr H. Mbando, Zonal Mining Officer | Kahama |
| 22 | Acacia Buzwagi | | |
| | Mining | Mr S. Sanga, HR Director | Kahama |
| 23 | Acacia Buzwagi | | |
| | Mining | Mr. G. Mkanza, Sustainability Manager | Kahama |
| 24 | Acacia Buzwagi | | |
| | Mining | Mr. Amos John, Commercial Manager | Kahama |
| 25 | Resident Mining | | |
| | Office | Sophia Omary, Resident Mining Officer | Kahama |

| 26 | Resident Mining | | |
|----|--------------------|--|-----------------|
| | office | Fatuma Kyado, Resident Mining Officer | Kilimanjaro |
| 27 | Makanya village | Rep of the Makanya Village Chairman (Male) | Kilimanjaro |
| 28 | Ruvujiunge village | Ruvujiunge Village Chairman (Male) | Kilimanjaro |
| 29 | Ruvujiunge Village | Member of the Village Government (Female) | Kilimanjaro |
| 30 | TanzaniteOne | | Manyara, Arusha |
| | Mining Company | Kiriya Laizer, Human Resources Manager | region |
| 31 | Tanzanite One | | Manyara, Arusha |
| | Mining Company | Pratik Kaushik, Operations Manager | region |
| 32 | TAWOMA and | | |
| | Tanzanite | | |
| | Women's | Rachel Njua, Chairperson TAWOMA and Tanzanite Women's | Manyara, Arusha |
| | Organisation | Organisation (TWO) | region |
| | Southern Zone | | |
| 33 | MEM Zonal Mines | | |
| | office, Southern | | |
| | Zone | Benjamin J. Mchwampaka, Assistant Commissioner | Mtwara |
| 34 | MEM Southern | Aidan Gumbo Mhando, Senior Mining Engineering, Inspector | |
| | Zone | of Mines and Explosives | Mtwara |
| 35 | MEM Zonal Mines | | |
| | office - Southern | | |
| | Zone | William Hamis, Geologist | Mtwara |
| 36 | Regional | | |
| | Commissioner's | | |
| | office | Halima Omari Dendego, Regional Commissioner | Mtwara |
| 37 | VETA | J. M. Kibehele, Principal, VETA | Mtwara |
| 38 | VSO | Asaku Richard, VSO volunteer | Mtwara |
| | | | |

| 39 | Dangote Cement | | |
|----|-------------------|--|--------|
| | Factory | D. Simgh, Project Manager | Mtwara |
| 40 | Dangote Cement | | |
| | Factory | Manoj Thakuv, Plant Manager | Mtwara |
| 41 | TPDC-Madimba | Leonce Mrosso, Plant Manager (with Kassim - plant intendent, | |
| | Natural Gas | Frank Ikonde - security and Susan Masabu - Health and | |
| | Processing Plant | Security officer. | Mtwara |
| 42 | Schlumberger | Jamila Chavula, Human Resources | Mtwara |
| 43 | Adela Enterprises | Mustafa Kimaro, owner | Lindi |
| 44 | Sungura | | |
| | Saltworks | Adam Ally, owner | Lindi |

Annex B: Validation workshop participants

| | Name | Institution | Station |
|----|---------------------|--|---------------|
| 1 | Aidan Gumbo | MEM | Mtwara |
| 2 | | Assistant Commissioner, Ministry of Energy and Minerals (MEM) - Zonal | |
| | Benjamin Mchwampaka | Mines Office | Mtwara |
| 3 | Ebeneza Mollel | MEM | Dar es Salaam |
| 4 | Eugenia Kafanabo | University of Dar es Salaam (UDSM) | DSM |
| 5 | Fatuma Kyando | MEM - Resident Mining Officer | Kilimanjaro |
| 6 | J.M. Kibehele | Vocational Education and Training Authority (VETA) | Mtwara |
| 7 | Josephine Ndao, | Voluntary Services Overseas (VSO) and CUSO | Dar es Salaam |
| 8 | Joyce Msangi | MEM | Dar es Salaam |
| 9 | Mr H. Mbando, | MEM - Zonal Mines Office | Kahama |
| 10 | | Tanzanian Women's Mining | |
| | Rachel Njau | Association (TAWOMA) | Arusha |
| 11 | | GiZ (German Development | |
| | Sabine Klaus | Cooperation) | Dar es Salaam |

| 12 | Tekla Anton Mponda, | MEM | Dar es Salaam |
|----|---------------------|-------------------------------------|---------------|
| 13 | Tumaini Lyuvale | MEM - Zonal Mines Office | Dar es Salaam |
| 14 | Zena Kongoi | State Mining Corporation (STAMICO) | Dar es Salaam |
| 15 | Theresia Ntuke | MEM - Zonal Mines Office | Dar es Salaam |
| 16 | | Economic and Social Research | |
| | Ian Shanghri | Foundation (ESRF) | Dar es Salaam |
| 17 | Augustina Mosha | Norwegian Church Aid (NCA) | Dar es Salaam |
| 18 | Julius Sarota | MEM | Dar es Salaam |
| 19 | Hashim Njowele | National Bureau of Statistics (NBS) | Dar es Salaam |
| 20 | | Tanzania Women Chambers of | |
| | Aureus Ndunguru | Commerce (TWCC) | Dar es Salaam |
| 21 | | National Economic Empowerment | |
| | Anna Dominick | Council (NEEC) | Dar es Salaam |
| 22 | Nyaso Makwaya | MEM | Dar es Salaam |
| 23 | | Small Industrial Development | |
| | Stephen Bondo | Organisation (SIDO) | Dar es Salaam |
| 24 | Marie-Helène Coté | Canadian High Commission | Dar es Salaam |
| 25 | Julie Granlund | Royal Norwegian Embassy | Dar es Salaam |
| 26 | Noreen Masaki | Lapidary Training Centre | Dar es Salaam |

Annex C: Semi-structured interview guide with women and men in El

Date

Place

Name of interviewer

Introduction of the purpose of the interview:

Thank you for agreeing to this interview. We appreciate that you are very busy, so are grateful you could take the time to talk to you and we will try to use your time well. I am (interviewer) accompanied by from Development Consultant Pioneers (DPC) in Dar es Salaam. DPC has been assigned by UN Women and the Ministry of Energy and Minerals to learn about women and men's engagement in the Extractive Industries (Mining of for example Gold, Tanzanite, salt, gravel, gypsum, as well as Gas). We are interested in the activities of women and men and the challenges and the opportunities they have.

A: Socio-economic characteristics

Name (option)

Male/Female

Age

Marital Status

- Widowed
- Married
- Divorced/separated
- Cohabitation
- Single

Number of children

How many girls?

How many are boys?

Education

His/her education (get education path, from primary school) - Primary, secondary (O-level, A-level), Vocational training (type of training - data entry field), university level (type - data entry field). Other (for example short courses etc). choose same education categories throughout

B: Migration

In which region were you born? Drop down list

In which district were you born? Data entry field, enter the district

In which region are you living now? Drop down list

In which district are you living now? Data entry field, enter the district

In which street or village are you living now? Data entry field, enter the district In which region did you live one year ago? Drop down list In which district did you live one year ago? Data entry field, enter the district Has the respondent migrated? Yes/No

If migrated, why? Choose from the list main reason, only one

- Work/business
- New farmland
- Studies
- Got married
- Look for opportunities
- Others

C: Livelihoods

What is your main source of income? Invite respondent to describe the main source of income and audio record field, then tick

Don't ask the respondent but interviewer select after listening to the response

- Farmer
- Employed
- Self-employed
- Student (if/when question, if student is mentioned, there will be additional questions at the end, only for those)
- No work

For farmers and self-employed, who are your customers?

Do you have a secondary source of income? Yes/No, If Yes invite respondent to describe the main source of income and audio record field

Do you have another third source of income? Yes/No, If Yes Invite respondent to describe the main source of income and audio record field

Are any of these livelihoods seasonal?

- Interviewer select which of the above mentioned sources of income are seasonal (multiple choice)
- Main source
- Secondary source
- Third source

Are you registered with any of the livelihoods above?

How does your partner make a living? Choose from the main source of income

If self employed, what is the nature of business/work? Audio record field

If public employed which position? Audio record field If private employed which position? Audio record field

D: Group belonging and finance

Do you belong to any group? Data entry field multiple response

- Savings group
- SACCO
- Religious
- Artisanal minor group
- Student association/union
- Other Please describe? data entry field

Which saving group do you belong?

- ROSCA
- SILC
- VSLA
- Other
- Other Please describe?

Do you use any financial service with any of these providers?

- Bank,
- SACCO,
- Savings group
- ROSCA
- SILC
- VSLA
- Other
- None
- Only ask those who use financial services

Did you have or currently have a loan with any of these institutions?

- Bank,
- SACCO,
- Savings group
- ROSCA
- SILC
- VSLA

- Loan Board
- Other
- None
- Only ask those who said they had or currently have a loan

What was the purpose of loan with any of these institutions?

- Business
- Private (anything related to family, private consumption)
- Studies
- Other
- Only ask those who took a loan for business

What kind of business did you take the loan for? Audio record

How was the loan used? Audio record

E: Land ownership

Who owns the land where you stay? (Options:

- Co-owned with husband and wife,
- Myself
- Only husband,
- Only wife
- Mother
- Father
- Other

Do you own land elsewhere? Yes/No

Who decides over the land if is sold?

- Joint decision
- Husband?
- Wife
- Mother
- Father
- Other

F: Participation

During the past 12 months, have you ever attended a village/Mtaa/student/union meeting?

Interviewer: You should probe, depending who you interview. Student, employee or ASM/self-employed. Audio record

Challenges

In your livelihoods/workplace/studies, do you face any particular challenges? Please explain.

Audio record

Interviewer: if they haven't mentioned anything related to their livelihoods in EI we should probe.

If student, ask, in your studies, do you face any particular challenges

If employee, livelihood refers to employment

Opportunities

Do you see any opportunities for you to develop your livelihood(s)/workplace/studies? Please explain.

Audio record

Interviewer: if they haven't mentioned anything related to their livelihoods in EI we should probe.

If student, ask, in your studies, do you face any particular opportunities

If employee, livelihood refers to employment

How?

Do you want to continue with these livelihoods/employment/studies or change? Within the sector? Outside the sector? Why? To do what?

Opportunities for courses and skills development?

H: Interaction with the El companies around

In your community, there is company/ies (interviewer to mention the company in that particular area)

How do you view them?

Positive? Negative?

Are these company /ies contributing to the well-being of your community?

Only ask those who say 'yes'. If yes in what ways?

Children's future

What do you want your sons to study? Work with? Probe on EI, audio record

What do you want your daughters to study? Work with? Probe on EI, audio record

Where would you like your children to live when they grow up?

- Here or
- Somewhere else?

Explain why audio record

Success stories

Do you know about any women or men who have been successful in EI?

Tell us about them. Probe on: How did they succeed?

Ask only those who responded in the livelihood question 'student'

Extra questions for students

What course are you studying?

Where are you studying?

Source of funds for studies

If scholarship, from where did you get the scholarship?

How did you hear about it?

Do you recommend other youth to study the same course as you do? Yes/No. Explain

Before thanking respondent, ask for additional comments

Annex C: Focus group discussion guide

Introduction (facilitator)

Thank you for agreeing to this discussion. We appreciate that you are very busy, so are grateful you could take the time to talk to you and we will try to use your time well. I am (interviewer) accompanied by from Development Consultant Pioneers (DPC) in Dar es Salaam. DPC has been assigned by UN Women and the Ministry of Energy and Minerals to learn about women's and men's engagement in the Extractive Industries (Mining of for example gold, Tanzanite, salt, gravel, gypsum, as well as gas). We are interested in the activities of women and men and the challenges and the opportunities they have. As you are involved in this area, your feedback will be extremely valuable. We would like you to feel free to speak openly. We will listen carefully to what you say and opinions will be respected. Since it is a bit difficult to capture all the information in writing, we would also like to record the session. But this is only for the research team to listen to. When we present the information later, we will not use your names in the report, unless you would like us to. We expect that this discussion will take about 1 to 1,5 hour. Let's begin and let's make sure all get the chance to speak and give their opinion.

Introduction

In order to get to know you better, it would be great if we could start with a round of introduction, where you mention your name and what you do for a living.

Type of activities/studies

- Could you describe your main livelihoods in more detail, for example the process of how you work, until you get income from your work. Who buys your products and services?
- Do you also have additional sources of income? Please describe.

For students: Describe the courses they are studying

Opportunities

How come you started to engage in this livelihood/studies? What are the opportunities?

Are there particular opportunities for women? For men?

Challenges

In your livelihoods/workplace/studies, what are the challenges? If not mentioned, probe on health, capital, and market for their products? Equipment, time to be with children, sexual harassment? Probe on particular challenges for women? For men?

- To men: Is your livelihood suitable for women? Why/why not?
- To women: Is your livelihood suitable for men? Why/Why not?
- The presence and Interaction with EI companies
- In your community, there are X companies in El. Do you interact with them and how? Probe on supply for food, catering, goods and services.
- Approximately how many men and women work in these type of jobs?
- Do you know how many people are working in the company itself? Approximately, how many men and women work there? If women are not represented what are the barriers?

- Would you say that the jobs created by EI has increased incomes of both men and women in the community? What do they spend this money on? What has been the positive and negative changes in spending the money?
- Does the EI companies in your community consult with the community? When they started? Currently? Who do they talk to?
- Does the EI company provide the community with any benefits apart from job? (Water, school, health facilities, roads etc). Were you consulted in the designing of these investments? Does the investments meet your priorities as community? If not, why not? Do you think that men and women have different priorities? If yes what are the differences? If you were to recommend to the company how to improve their communication and consultation, how would you say?
- Are there negative effects of EI in your community? Probe on health, gender roles, environment, land, water
- In those communities with different kinds of EI (gold and gravel, or gas and salt, or gypsum and gas) how do you compare these sectors? Some better than others? Why?
- Education empowerment
- What kind of training enables men and women access jobs in EI? How many men and women have acquired these training in this community? if women are less represented why? Is there programs to encourage women undertake these training?
- What other skills/trainings are needed for women engage in El value chain activities? i.e. supply of services and goods (security, food, catering, cleaning, laundry etc.)
- Traditions and culture
- What are typically the roles of men and women in this community? Probe on Land ownership, decision on cash income.
- Have there been changes since El companies were established? Probe on family structure; land ownership, what money is spent on, who decides? Or other reasons for change?
- Transformation and the future
- Would you say that the EI sectors in your community are transforming people's lives? Probe on for women, for men, for formally employed? Are there negative transformations? For particular groups (children, women, youth etc.)
- Are there those who have been successful in EI in your community (women and men)? How did they succeed?
- How do you see the future in your community? Probe on interaction with community and El in the future, will they stay for a long time or do you think they will leave? What would you like to see happening? A future for your children in El? Why and how? Why not?

Additional information and comments

Are there any additional points you would like to make?

Close

Thank you very much for your time, information and opinions! Do you have any questions or clarifications you would like us to make?

Annex D: Terms of Reference (TOR)

Gender and Extractive Industries in Tanzania: Mapping Study

BACKGROUND

UN Women, grounded in the vision of equality enshrined in the Charter of the United Nations, works for the elimination of discrimination against women and girls; the empowerment of women; and the achievement of equality between women and men as partners and beneficiaries of development, human rights, humanitarian action and peace and security.

The UN Women Tanzania Country Programme is part of United Nations Delivering as One and its programmatic activities constitute part of the UN Development Assistance Programme (UNDAP) 2014- 2016. UN Women is member of the UN Programme Working Groups on Economic Growth and Environment that 'host' UN agency activities on Natural Resource Management in general and Extractive Industries in particular.

Under its Strategic Note for 2014-2016, UN Women has committed to work on Gender and Extractive Industries with particular focus on delivering results around two key outcomes:

- Priority policies and strategies for women's economic empowerment adopted and implemented in selected sectors, including in the Extractive Industries;
- Women's sustainable livelihoods enhanced by gender responsive services and employment opportunities in mining and overall in extractive industries.

Alignment with Government of Tanzania (GOT) priorities and plans

The Tanzania Minerals Policy (2003) makes specific note of the need for women's inclusion in the sector, however, does not specify any particular areas for engagement. However, women miners are often out of sight because the type of jobs they do (transporting and processing materials) and because they often work from home.

The World Bank estimates that 1 million Tanzanians may be involved in Artisanal and Small Scale Mining (ASM), approximately 25 percent of whom are women. In addition, direct and secondary employment from ASM may exceed 7 million Tanzanians, or 31.5 percent of the country's working-age population. The ASM sector produces about 85 per cent of the world's gemstones and 20-25 per cent of all gold.

A multi-country case study by the World Bank in 2010 found that Tanzanian women are largely excluded from the highest paying roles in ASM of owner or operator because of cultural obstacles to women exerting ownership rights over land and property, including inheriting land. Tanzania's National Land Policy recognizes women's rights to own land. Despite this positive recognition however, customary and traditional inheritance mechanisms essentially prohibit women from owning land in parallel with the Civil Land Act. In addition, women's awareness on their right to acquire and own land is low. Land rights issues in Tanzania mean that Tanzanian women are excluded from owning mines. Women are also faced with other systemic barriers to participation in the sector, including low literacy rates and general discrimination in the employment market, which often leave women employed in low-paying formal work. As an alternative to the formal labour market, women have adopted other income generating activities around areas where extractive industries operate. Typically this is within the informal economy, such as brewing and selling beers and washing clothes for workers. Work as sex workers around ASM mining camps is also part of reality.

Despite the recognition of and the roles of women in some of the aspects of the extractive industries sector in Tanzania, there is a need to ensure that the opportunities for women in the Extractive Industries (EI) sector more broadly are realized and that appropriate steps are taken to ensure the equitable benefit from the country's resources. To this end, UN Women seeks the services of a Competent Institution to conduct a

comprehensive study on women's engagement in extractive industries and an assessment of the quality of their employment.

A preliminary review of oil and gas policies by the Ministry of Energy and Minerals (MEM) has demonstrated the inclusion of gender equality as a concern. Although the National Natural Gas Policy of Tanzania (2013) and the Local Content Policy of Tanzania for the Oil and Gas Industry (2014) mention gender imbalances and inequalities in the sector, they fail to include specific measures and recommendations for improvement with a view to further strengthening women's engagement in El. Furthermore, the reflection on the gender issues in the extractive industries is not accompanied by specific data and analysis of women's participation and economic opportunities emerging from the extractive industries' operations. The MEM has also shared draft Corporate Social Responsibility and Empowerment (CSRE) guidelines which mentions that women's groups will be empowered. The study will provide an opportunity to look into the extent to which the CSRE programmes for various companies have integrated gender considerations.

JUSTIFICATION

Considering the recognized impacts and opportunities for women in the EI sector globally, there is now a pressing need to uncover the specific issues with regard to gender equality and women's engagement in the dominant extractive industries sector in Tanzania; specifically in terms of its contribution to inclusive development.

The aim of the study is to inform the programmatic approach by UN Women as well as influence ongoing and upcoming initiatives in the sector by stakeholders with a view to uncovering the key bottlenecks and barriers for women's engagement in the sector, and potential areas for support. The research will inform the selection of appropriate partners and entry points for UN Women's engagement in the sector and inform the interventions that should be supported.

Beyond UN Women's own programming and advocacy work, the data and analysis produced through the mapping study will inform policy dialogue and capacity development initiatives supported by the Government, the UN and other development partners to ensure that these are responsive to the differentiated needs and priorities of women and men, boys and girls, in particular in communities with El operations. In addition, women from outside these communities who come in to look for job opportunities will also benefit.

The key areas to be uncovered through the study fall under three broad areas:

- Policy environment, frameworks and stakeholder engagement;
- Evidence, data and best practices/knowledge management; and
- Women's opportunities and barriers in the value chain and opportunities for economic empowerment.

DEVELOPMENT OBJECTIVE

The development objective underlying the proposed consultancy is the empowerment of women and girls to engage in the extractive industries sector in Tanzania. In particular, the aim is to enable national institutions, policy makers, and stakeholders to effectively support women to benefit economically through engagement with and within the extractive industries.

IMMEDIATE OBJECTIVE

- A comprehensive analysis of the opportunities and challenges faced by women in engaging in the extractive industries and the resulting value chains including a review of policy, culture, education and vocational training opportunities.
- A comprehensive database of where and how many men and women are engaged in the Extractive Industries sector in Tanzania.

EXPECTED OUTPUTS

The consultancy firm will deliver on the following results:

- A report documenting an in-depth mapping and understanding of the extent of men and women's
 engagement in the extractive industries sector (in terms of numerical data, sector of activities,
 opportunities and challenges encountered as relates to their general environment, as well as their socioeconomic situations) and the barriers and opportunities for their economic engagement in and around
 the value chains of gas, oil and minerals in Tanzania.
- A searchable database (in excel) with reliable sex-disaggregated data related to men and women's engagement in the extractive industries sectors and the resulting value changes.

Details of the scope of the study:

Relevant policies, frameworks, structures, initiatives and stakeholders with regards to women's engagement in the extractive sector:

- Comprehensive mapping of relevant policies, frameworks, strategies and laws which exist, are being developed and/or are under review; the extent of the inclusion of gender considerations in the above strategies, policies and plans; and key recommendations to improve women's engagement in the identified areas;
- Comprehensive mapping of relevant stakeholders in the gas, mineral and oil sectors and what is their role and contribution in relation to advancing the engagement of women in the value chains- and the sector over all. Stakeholders include government (key sectors), CSOs, NGOs, Development Partners including UN Agencies and private sector;
- Mapping of ongoing and emerging education and vocational training initiatives being undertaken by institutes, NGOs, training centers and government bodies, and an assessment of the extent to which education and vocational training programmes promote gender equality in the sector;
- Data or evidence reporting:
- Tracking and gathering of data and figures on the nature and types of men and women's engagement in the value chains of oil, gas and minerals (metals and non-metals);
- Number of men and women engaged in extractive operations and value chains in relation to mining, oil and gas as well as economic opportunities emerging in the communities surrounding the extractive sector;
- The occupation of the men and women, i.e. whether they are directly into mining (formally or informally), are employees in the extractive companies, government or subcontractors, or whether they are suppliers providing services like food, water, equipment, uniforms, etc.;
- Number of men and women participating in educational/vocational/and skills' development programs related to the sector;
- Women's engagement in the minerals, oil and gas value chains and opportunities for economic empowerment therein:
- Identification of the opportunities and specific barriers for women's engagement in the value chains of the oil, gas, and mineral (metals and non-metals) industries; the value chains should include the large scale as well as the small and artisanal operations and opportunities for women's economic engagement should be considered in the extractive processes themselves as well as the indirect and supporting economies in which marketplace transactions take place;
- Identification of processes and structures in which women are already engaged and opportunities for engagement including consultative processes, advocacy and accountability structures, and inputs

in policy frameworks, community groups/forums/networks in place, or that have been developed for women's economic engagement in communities surrounding extractive industry operations;

- Analysis of the transformation in the roles women play in the extractive industry; gathering data on any changes in regards to women's involvement in both formal employment in large scale, formalized operations, as well as small scale and artisanal operations in the extractive industry;
- Mapping the environmental, socio-economic considerations (e.g. Age group, educational status, health, livelihood, family power structures), and cultural beliefs and practices (e.g. customary laws that prohibit land ownership) that may act as barriers to women's engagement and potential recommendations to relieve these barriers for increase of women's engagement in the sector;
- Collection of exemplary 'success stories' of women who have benefited from or in the oil, gas and minerals value chains. These shall include examples of good practices with regards to initiatives spearheaded by women's/community groups, government, CSOs, NGOs and the private sector;
- Documentation of successful models, with evidence of approaches which can be replicated and scaled-up. For example these may include government and/or private sector strategies to enhance the participation of women in the sector – within the operations and the surrounding economies, through for example employment policies and procurement procedures;
- Identification of specific issues and recommendations for further research on issues relating to gender equality in the extractive industries;

ACTIVITIES

Inception Report and Work Plan:

The Inception Report and Work Plan will provide the client with an overview of the logistics involved, the consultant methodology and modalities for undertaking the field work, the requirements, and any other eventualities that need be known beforehand.

Literature Review report:

Literature Review Report with different chapters on how policies, strategies and regulatory frameworks in the mining sector have included women and gender issues. The report will include a collection and analysis of available data from different sources within the country on women's involvement in the minerals and gas sectors.

Field Visit and Report:

- Identifying the key issues and recommendations for greater gender equality and women's economic empowerment in the minerals and gas sector. Interviews with key stakeholders and Field Study:
- The mapping study will involve interviews with a number of key stakeholders in Dar Es Salaam on the level of integration of gender issues in ongoing policy and programmatic initiatives supported by the Government;
- The mapping study shall also involve visiting a selection of public and private stakeholders from select geographical areas where the Extractive Industry (EI) is currently active/dominant, such as Mtwara (e.g., Oil and Gas), Geita (e.g., large scale and small scale mining of Gold), Arusha (e.g., gemstones and semi-precious stones), Ruvuma (e.g., gemstones);
- The field study shall also include comprehensive community-based consultations (with women and men) in extractive communities and relevant CSOs as well as private sector players operating in the respective selected areas. This could include focus group discussions and other methods of triangulation.

Draft Report

At least two weeks before the validation meeting the consultancy firm will provide UN Women with a draft report and database for comments and review as per the objectives listed above. UN Women will review this and provide the consultancy firm with any inputs prior to the validation meeting.

Validation workshop support and report

The validation workshop shall aim at enabling the stakeholders from the government, development partners and relevant CSOs, as well as private sector players operating in the respective selected areas, to engage with and buy-in to the observations and suggestions for forward action with regards to gender equality in the Tanzanian minerals and oil and gas sectors. The validation workshop will also involve sessions whereby key stakeholders will reflect on the implications of the findings for their own strategies and programmes setting the way for more in-depth discussions and initiatives in the future; as a result of the workshop the consultants will develop a framework for follow up action and interventions by relevant stakeholders. The consultancy firm will produce a powerpoint presentation of the work done to be made at the validation meeting.

Support to UN Women with the dissemination of final version of the Study.

The Mapping Study will be disseminated to key stakeholders with a view to enhancing broader ownership of the results. This will include development of presentations and other documents for the dissemination meeting.

Follow up meetings will be held with stakeholders among government and civil society organizations as well as development partners to discuss further the findings as well as the recommendations that have emerged from the analysis.

Final report:

The Final report will be submitted three (3) days before the end of the contract indicating achievements made during the execution of the contract and recommendations to the UN Women.

INPUTS

UN Women:

The UN Women Country Office in Tanzania will provide the consultants with background information/ information material. In addition, UN Women will organize introductory meetings for the consultants with the relevant government partners, and logistics for the validation workshop and the dissemination meeting.

Consultancy firm:

An international team leader, senior specialist with experience in consultative processes with a) government, preferably in Tanzania or the region. This person will have an overall responsibility to lead the consultancy, to produce reports, and to liaise with UN Women. He/She will also have the overall responsibility of executing the consultancy in regard to the immediate objectives and activities above including producing reports against these specific objectives. He/She will have a Masters Degree in Economics, Law, Sociology or any other relevant field and a PhD is added advantage. The team leader will have at least 7 years' experience working in women's economic empowerment preferably in value chain development approaches; significant experience in carrying out gender analysis, and applying gender mainstreaming to natural resources/extractive sectors; familiarity with social economic and in particular gender impacts of artisanal and small scale mining (ASM) and extractive industries in developing countries; understanding of social and labor issues in ASM and extractive industries in general, the empowerment of women and women's rights; good mastery of technical tools including mapping and good analytical skills; excellent communication and report writing skills; and a high proficiency in written and spoken English and knowledge of Kiswahili is an added advantage. The expected working days would be approximately 35 days including field work.

- b) A national consultant, with experience in the extractive industries research including policy analysis. He/she will possess excellent verbal and oral communication skills to be able to liaise with Government officials, international organisations and NGO representatives. He/she will have a Masters degree in Economics, Law, Sociology or other relevant field and at least 5 years' experience working in women's economic empowerment related issues, preferably in relation to the natural resources and extractive sectors. He/She will have prior experience of conducting research on policies, strategies and programs on WEE (women's economic empowerment) in Tanzania; have a good knowledge of the legal, policy and institutional framework relating to mining, extractive industries, environment and community development in Tanzania; familiarity with the Tanzania Development Cooperation framework and sector development plans; good analytical and communication skills in both English and Kiswahili. The expected working days will be approximately 50 days including field work.
- c) Field data collection team, with experience in data collection using both qualitative and quantitative methods will be responsible for data collection under the guidance and supervision of the team leader. The team should be fluent in Kiswahili. The expected working days will be approximately 50 days (not including the international and national consultants).

TIMING

The work is expected to commence by October 01, 2015.

REPORTING

The consultancy firm will produce:

- A detailed literature review report
- A field report within 5 days of the completion of the field visits
- A draft report as outlined in the expected outputs within 10 days of completion of the field visits for UN Women inputs
- An excel database as outlined in the expected outputs
- A presentation for the validation workshop and a draft report for sharing at the validation meeting incorporating UN Women's comments
- A validation workshop report
- Final report incorporating stakeholders and UN Women's inputs
- · A presentation for the dissemination meeting.
- The reports will be submitted both electronically and in hard copy in the number of two (2) copies to UN Women. The reports must be submitted in English.

