

**INSTITUTIONAL COOPERATION
BETWEEN
THE UNITED REPUBLIC OF TANZANIA
AND
THE KINGDOM OF NORWAY
WITHIN
THE UPSTREAM PETROLEUM SUB SECTOR

PROGRAMME DOCUMENT**

2013 – 2015

January 2014

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1. INTRODUCTION

The cooperation proposed in this document will take place in the context of the Norwegian Oil for Development programme. The Oil for Development (OfD) programme provides assistance to resource rich developing countries, upon their request, in their efforts to manage petroleum resources. The operative goal of the programme is "economically, environmentally and socially responsible management of petroleum resources which safeguards the needs of future generations".

The capacity building programme will involve Tanzanian government institutions both on the mainland and on Zanzibar. Zanzibar has been semi-autonomous since unification with Tanganyika in 1964. The Revolutionary Government of Zanzibar has authority in the territories of the Zanzibar Archipelago over all matters which are not defined as Union Matters in the 1977 Constitution of the United Republic of Tanzania.

"Mineral oil resources, including crude oil and natural gas" are according to the Constitution a Union matter. The responsibility for the upstream petroleum sector rests with the Ministry of Energy and Minerals (MEM). The national oil company – Tanzania Petroleum Development Corporation (TPDC), among others, has a task of promoting, exploring, developing and producing oil and gas on the whole territory of The United Republic of Tanzania.

The Department of Energy and Minerals (DOE) in the Ministry of Lands, Housing, Water and Energy (MLHWE) is responsible for the upstream petroleum sector within the Revolutionary Government of Zanzibar. Furthermore, environmental, safety and health issues are not defined as Union matters, and in these areas petroleum exploration and production will have to abide by the laws of Zanzibar.

The formal status of the petroleum upstream sub-sector is being politically discussed between the two governments within the Union, including its definition as a union matter in the constitution, how to split the costs and revenues of potential future petroleum production, as well as how far offshore the Zanzibar authority stretches. Whilst these issues are being negotiated, no exploration activity has taken place under a Production Sharing Agreement (PSA) signed with the company Antrim in 1997, covering 14 000 sq. km on and around Tanga offshore, the islands of Pemba and Unguja. The PSA of 4 blocks offshore Unguja and Pemba islands with Shell International has not yet been signed due to the on-going discussion on the status of the petroleum upstream sub-sector between the two governments within the Union.

A process was instigated in 2008, whereby the two governments agreed on the Terms of Reference and recruited a consultant to look into how costs and revenues from petroleum exploration and production can be shared by the two governments within the Union. Political negotiations of whether petroleum upstream related issues shall continue to be a Union matter is currently being carried out as part of the on-going constitutional review process.

In targeted institutions in the OfD programme, both on mainland and Zanzibar, the capacity building programme shall adhere to politically and legally established institutional mandates, responsibilities and functions. To ensure continued relevance, the programme shall also have to be responsive to changes in institutional responsibilities.

The roles and responsibilities of the key Tanzanian institutions in the upstream petroleum sector are further described in Annex 1.

2. BACKGROUND

2.1 Previous relevant Norwegian assistance to Tanzania

The Royal Norwegian Government began to assist Tanzania's energy sector through Norad in 1975 under the TAN051 funding system which was carried out in three phases namely, 1975-1982, 1983-1987 and 1988-1996.

The funding constituted both technical and financial assistance and covered areas which included: appraisal of the Songo Songo gas field, Songo Songo gas-to-electricity consultancy project, evaluation of the petroleum potential of Tanzania sedimentary basins, exploration and promotion of the basins, seismic re-processing (Songo-Songo field re-evaluation), seismic acquisition and drilling operations, tape transcription and re-formatting, (1/2 inch and 1 inch tape spools into IBM 3480 cartridges), setting up TPDC Archives as well as commissioning a tape data bank in 1993.

Norwegian assistance to Tanzania resumed in January 2005 and lasted until December 2007. The financial and technical funding was limited to data management only (TPDC Tape Data Bank) covering tape transcription of IBM 3480 tapes into IBM 3590 tapes to salvage seismic tape data from damage and loss due to long storage in one tape medium, maintenance and upgrade of the transcription system (hardware and software) and capacity building in the operation of the system. Tape copying was done in Dar es Salaam.

Petroleum data management is a continuous process and in this respect assistance from Norad has been extremely helpful and instrumental in the development and management of Tanzania's National Petroleum Data Repository. The proposed OfD-programme which include a component on data management will boost the country's efforts to develop and maintain its petroleum data management system.

In parallel with the Norwegian support to the energy sector, Norway has assisted in the development of natural resource management in Tanzania since the 1970s. The assistance has mainly been channelled through the Ministry of Natural Resources and Tourism (MNRT) and amounted for the period 1994 to 2006 to around NOK 300 million. Substantial support has also been provided to academic co-operation within the fields of forestry, wildlife and fisheries management. This long term support has made an indirect contribution through education and the creation of baseline competence in the scientific and management communities on natural resources, although with little direct relevance to the upstream petroleum sector.

Norway has also provided significant amounts of budget support to Tanzania, as well as support related to taxation, which has contributed to establishing and implementing a public financial management system in an effort to support transparency and oversight.

2.2 Status of the petroleum sector in Tanzania, as of May 2013

World market prices for crude oil during 2010-13 have varied between \$70 and \$120. The prices are expected to remain within this range for the next couple of years. The

market has seen a dramatic change in gas pricing in some regions due to high availability of shale gas, but the Asian market remains strong. Future development of Tanzania's offshore gas will have to be cost efficient to meet competition in the market, among other supply from new Mozambican discoveries.

A sizeable amount of foreign currency earnings is used to finance petroleum product imports. Gas discoveries currently in production have to some extent saved foreign currency that would have been used to import the replaced fuel. The challenge is to sustain and increase petroleum exploration and production as a basis for new export and a national downstream industry through promotion of private sector participation.

Tanzania has so far discovered several natural gas fields, of which two fields, Songo Songo and Mnazi Bay, are currently in production. 12 discoveries, namely Mkuranga-1, Kiliwani – Ntorya -1, Pweza-1, Chewa-1, Chaza-1, Zafarani-1, Jodari-1, Mzia-1, Tanaawizi-1 and Lavani-1 and 2 are undergoing appraisal and testing programmes. The three fields discovered by Ophir/BG on deep water offshore have an estimated resource potential of 7tcf gas in place and the 4 Statoil/ExxonMobil discoveries (block 2) 15-17 tcf gas in place. The BG discoveries Mzia and Jordari have also been tested and the resource potential is envisaged to improve. The Songo Songo gas field is estimated to contain 1.6 trillion cubic feet (tcf) of natural gas reserves within the main Songo Songo east structure. The current recoverable gas reserves stand at 846 billion cubic feet (bcf). Principally, the gas is utilized for power generation and as a fuel to cement manufacturing. 37 industries in Dar es Salaam are also connected to the gas pipeline enabling them to use the natural gas as a fuel for boilers and furnaces. The current average gas demand for power generation stands at 65 million standard cubic feet per day (mmscfd) while that of industries stands at 10 mmscfd. Recently, there has been an introduction of Compressed Natural Gas (CNG) for vehicles and households. The Mnazi Bay gas field is estimated to contain natural gas resources in excess of 4 tcf. The current confirmed recoverable gas reserves stand at 242 bcf. Only one out of four wells drilled in this field is now in production. This is due to suppressed demand production for power generation in the southern regions of Lindi and Mtwara only. The average daily production is about 1 mmscfd in order to produce around 6 MW of electricity from an installed capacity of 12 MW.

The deep water offshore gas fields are candidates for LNG exports and possibly also supply of dry gas to national and regional markets. Petrobras has drilled a dry well in their deep water block.

Currently, there are 25 active Production Sharing Agreements (PSAs) being operated by 18 oil companies. Seismic data acquisition has been extensive after carrying out 3D recording in the deep sea basins. Drilling campaign for the committed exploration wells is also on-going. One new PSA is being negotiated in open acreages. The potential for large windfall revenues from petroleum production in Tanzania will require good governance (Transparency, Accountability and Integrity) in order to keep the oversight of sector developments, including revenue streams, moving forwards.

2.3 Status of Environmental Issues relevant to the Upstream Petroleum Sector as of May 2013

The main attention in the development of the Tanzanian upstream petroleum sector currently centres on the potential for offshore discoveries. Large scale commercial discoveries can be expected to lead to increased levels of activity and infrastructure development that is likely to have a significant impact on the residents (pollution of natural resources used in household etc.), traditional and alternative economic activity and the

natural environment of the coastal regions. Artisanal fisheries, the potential for tourism and the biodiversity of the region can be exposed to risk if not properly managed.

The environmental risk is considered to be significantly higher when dealing with oil compared to gas. Petroleum related activities in Tanzania are in the nearest future expected to mainly deal with gas resources.

The Tanzanian coastline runs the length of 1,424 km. The five coastal regions encompass about 15 percent of the country's land area and are home to approximately 25 percent of the country's population. Recent estimates indicate that the population of the five coastal regions has increased to about eight million, with a growth rate ranging between two and six percent. A doubling of the coastal population can be expected in as little as 12 years.

The coastal waters of Tanzania encompass some of the richest marine resources in the Western Indian Ocean. In recognition of this value, at the World Parks Congress in 2003, the Tanzanian government announced its intention to increase the percentage of Marine Protected Areas to 10 percent by 2012 and 20 percent by 2025. To date, progress has been good and the 2012 target has already been achieved. Thus, these and other large areas of pristine coastal environments including mangroves, coral reefs and the biodiversities therein constitute great attractions for the development of the tourism industry.

Among the countries in Africa, Tanzania has the greatest reef area (3580 sqkm). There are fringing and patch reefs along much of the mainland coast and the offshore islands. Coral reefs in the Western Indian Ocean region are well known for their beauty and diversity, hosting large fish populations and offering excellent sites for tourism.

Mangrove is another important ecosystem that is highly threatened by human activities in the Western Indian Ocean Region. The mangrove ecosystem supports a rich bird life and many fish species, as well as invertebrates.

On the other hand, artisanal marine fisheries from these ecosystems of Tanzania contribute over 95 percent of the total marine catch and involve the majority of the coastal population, whose survival is entirely dependent on the coastal fishery resources.

Importantly, all these coastal ecosystems are linked and as one system or habitat becomes disturbed another system or subsystem also gets affected.

3 PROGRAMME SUMMARY

Goals (Long term development goals of the OfD - programme)

The goal of all Norwegian development assistance is to reduce poverty.

The overall goal of OfD-programme is economically, environmentally and socially responsible management of petroleum resources which safeguards the need for future generations. The sub-objectives can be specified as;

1. Policy makers set goals, define and assign responsibilities;
2. The authorities regulating the petroleum sector has the capacity to carry out their assigned responsibilities; and
3. Policy makers and regulatory authorities are held accountable for their management of the petroleum sector

Outcome (The **positive effect** that the programme seeks to achieve for the petroleum sector in Tanzania)

Aiming at an efficient state administration of the upstream petroleum sector, capable of planning, promoting and monitoring petroleum company investments in petroleum exploration and production, and managing state interests and revenues in a sustainable way to the benefit of the economy and people of Tanzania through delivering the following **outcomes**:

1. Petroleum policy document approved providing the government and the industry a framework and predictability for management of the petroleum sub-sector.
2. Legal , regulatory and institutional framework for the resource and environmental management improved providing the government and the industry a framework and predictability for management of the petroleum sub-sector.
3. Knowledge, institutional competencies and regulatory capacities for **resource management** of the upstream petroleum sub-sector strengthened.
4. Knowledge, institutional competencies and regulatory capacities for **environmental management** of the upstream petroleum sub-sector strengthened.
5. Procedures established and institutional competencies and capacities strengthened for management of **Health, Safety, Environment and Security (HSE) issues** in the upstream petroleum sub-sector.
6. Data management systems and procedures developed that gives the government a tool to manage and communicate with stakeholders within the petroleum sub-sector.
7. **Human resources** developed to enable increased local content and government institutions attain competent personnel

Outputs (what the OfD-programme seeks to **achieve** with its **activities**)

The programme areas are described in Chapter 4, including justification, key outputs, indicators (if needed) and corresponding baselines.

Proposed activities, timelines and budgets can be found in Annex 3.

Pending further detailed work programming, below is a tentative break down of the budget. This may have to be adjusted by the Annual meeting.

Programme area	2013	2014	2015	Total
	NOK	NOK	NOK	NOK
Policy	750 000	0	0	750 000
Legal and regulatory framework	1 000 000	2 000 000	1 400 000	4 400 000
Resource Management	250 000	400 000	350 000	1 000 000
Environmental Management	1 000 000	1 000 000	600 000	2 600 000
HSE and security	850 000	1 000 000	750 000	2 600 000
Data Management	550 000	1 000 000	750 000	2 300 000
Human Resource Development	1 600 000	1 100 000	500 000	3 100 000
Programme management	1 300 000	2 600 000	2 000 000	5 900 000
Resident Program Coordinator	1 000 000	2 000 000		3 000 000
Cross Cutting Issues	40 000	40 000	20 000	100 000
Project contingency	250 000	500 000	500 000	1 250 000
Total NOK	8 590 000	11 540 000	6 870 000	27 000 000

4 PROGRAMME DESCRIPTION

4.1 Petroleum Policy

Justification

- The current National Energy Policy (2003) gives general guiding principles of various energy sub-sectors: electricity, petroleum and renewable energies. It does not address specific issues of the relevant sub-sectors.
- The recently developed Gas Policy focuses mainly on down- and mid- stream issues pertaining to natural gas, and a policy framework to cover and focus on up-stream issues is required.
- The fast growing trend of the energy sub-sectors calls for establishment of sector specific policies in order to efficiently monitor and manage the sub-sectors.
- Petroleum sub-sector is one of the fast growing energy sub-sectors which calls for a sector specific policy in order to efficiently monitor and manage the finite energy resources for the lasting benefit of the society. The 25 signed active PSAs, recent deep water discoveries, the on-going offshore drilling campaign and increased interest from petroleum exploration companies in the country, are among the indicators of the fast growing petroleum upstream sub-sector.

- Health, Safety, Environment Management and Security (HSE and Security) is a precondition for a well-functioning petroleum sector. There is need, therefore, to build capacity in auditing and monitoring HSE in petroleum operations. Access to Norwegian experience and lessons learnt from the recent accidents in various places in the world.

The policy issues to be addressed include among others:

- Institutional arrangements: Clear separation of responsibilities between the Government, its institutions and the industry;
- Petroleum licensing strategies;
- Prudent petroleum resource management: Gas flaring restrictions, increased oil recovery, common use of infrastructure, tariffs, gas and condensate management;
- Operational efficiency issues (field operations, technology, use of good petroleum field practice with reference to national and international standards, and sustainable extraction of resources);
- Social and Environmental Management issues, including:
 - Strategic Environmental Assessments/Environmental Impact Assessments,
 - Waste and chemical handling,
 - Licensing and permitting,
 - Environmental monitoring,
 - Environmental levy as per Environmental Management Act and Zanzibar Environmental Act,
 - Oil spill contingency planning,
 - Land use, spatial planning, coastal zone management, and marine environment management,
 - A mechanism for regulating oil spills,
 - Policy on dispersants to disperse oil spillage,
 - Hazardous and noxious substances contingency plan;
- Health, Safety and Environment management issues (responsibility for HSE auditing and supervision, HSE management, risk management, contingency planning);
- Security issues;
- State participation (participation in field development in PSA, need for carried interest or otherwise);
- Local content (industrial training, data bases for contracts and suppliers, specialized vocational training, gender equity measures etc.);
- Procurement issues;
- Capacity building (resource management training, regulatory/agencies training);
- Corporate social responsibility;
- Good governance, transparency, and accountability ;
- Management of expectations;
- Information dissemination policy/strategy;
- Data management (data storage, sharing);

- Abandonment/decommissioning issues; and
- Pricing of petroleum products, serving domestic market(domestic supply obligation).

Key outputs and indicators:

S/N	Key Outputs	Key Indicators (only if the output can't be verified)
4.1.1	Conduct workshops, identification of issues, needs and challenges	Issues and challenges identified Justification for sector specific policy known
4.1.2	Establishment of policy guiding principles, goals, objectives, strategies and actions.	Goals, Objectives, guiding principles and actions established.
4.1.3	A Zero Draft Petroleum policy Document prepared by the PPC Task Force.	Zero Draft Petroleum Policy Document developed.
4.1.4	Conduct workshop to deliberate and refine the Zero Draft PPD (PPC and Advosor).	Zero Draft PPD improved.
4.1.5	PPC visit Norway for a study tour	Study tour to Norway.
4.1.6	PPC Task Force develop first draft PPD.to petroleum policy by a task team nominated by PCC	First Draft PPD document developed.
4.1.7	Conduct workshop with second tier stakeholders on the draft PPD	Workshop with second tier stakeholders conducted.
4.1.8	PPC prepare a new draft Policy Document.	Second Draft PPD developed.
4.1.9	MEM conduct workshops/seminars with all relevant stakeholders on the draft PPD.	Workshops/seminars with all relevant stakeholders conducted.

Baseline as of May 2013 (related to the key outputs/indicators)

4.1.3	A task force, with members nominated by the PPC, developed the Draft Zero Petroleum Policy Document (PPD) in March 2013. In developing the zero draft the task force reviewed several documents including Tanzania Energy Policy (2003), petroleum policy of other countries (Uganda, Ghana, Siera Leone, Pakistan etc.) and Draft Gas Policy (October 2012).
4.1.4	PPC has conducted a third workshop in April 2013. During the workshop PPC and the Norwegian advisor Farouk al Kasim reviewed and deliberated on the zero draft PPD item by item for the purpose of improving and refining the document. PPC task force was assigned to incorporate proposed changes in the document. Task Force will exchange notes through email in two rounds with PPC members and advisor on the revised zero draft PPD.

4.1.5	PPC to visit Norway for study tour in June/July 2013.
4.1.6	The PPC plan to produce First Draft within July 2013.
4.1.7	1st tier consultation planned
4.1.8	PPC to prepare 2nd draft for 2nd tier consultation.
4.1.9	MEM conduct workshops/seminars with all relevant stakeholders.

Activities

See separate activity plan for the specific year

4.2 Regulatory/Institutional Framework

Justification

- Legislation and institutional arrangements which will enforce implementation of the petroleum policy.
- New developments in the sector such as deep water activities and giant gas discoveries.
- More focus on HSE and security, lessons learned from the Deep Water Horizon accident in the Gulf of Mexico and other accidents, clarify the responsibility of the Operating Company and PSA partners.
- Optimize the balance of the legal terms and the PSA contractual terms to increase transparency, establish a level playing field and facilitate efficient regulation of the sector.
- Put more focus on local content
- Separate the licensee and commercial roles of TPDC (decision made?).
- Develop sector environmental regulations under the Petroleum (Exploration and Production) Act of 1980 in line with Tanzania environmental legislations. (Decision made?).

Key outputs and indicators:

S/N	Key outputs	Key Indicators (only if the output can't be verified)
4.2.1	Review of current petroleum upstream law to align with the petroleum policy.	NA Key outputs can be verified
4.2.2	Establish baseline regarding existing relevant regulations, guidelines and relevant international standards and develop a plan for the development of the legal framework	NA
4.2.3	Draft main legal framework for the petroleum upstream sub-sector (Laws and standard agreements).	NA
4.2.4	Develop detail framework within Resource management (regulations, standards, guidelines, procedures)	NA

4.2.5	Develop detail framework within Environmental management (regulations, standards, guidelines, procedures)	NA
4.2.6	Develop detail framework within HSE management (regulations, standards, guidelines, procedures)	NA

Baseline as of May 2013 (related to the key outputs/indicators)

4.2.1	Petroleum Upstream legislation of 1980. The work has not started. This needs to be done after the Petroleum Policy has been approved.
4.2.2	The work has not started. This needs to be done after the Petroleum Policy has been approved. Existing documents and institutional mandates related to onshore gas?
4.2.3	The work has not started. This needs to be done after the Petroleum Policy has been approved? Existing documents/mandate that regulates interaction between NEMC and TPDC?
4.2.4	The work has not started. This needs to be done after the Petroleum Policy has been approved? Role of OSHA? Mandate? Documentation
4.2.5	The work has not started. This needs to be done after the Petroleum Policy has been approved? Existing PSA – revised in 2012?

Activities

See separate activity plan for the specific year

4.3 Resource Management

Justification

The significant offshore gas discoveries increases the need for the Tanzanian Government to strengthen capacity to undertake own assessments of the resources for improved decision making regarding future licensing, development proposals for fields and decisions regarding transport, liquification and export facilities.

There is a need for:

- Establishing systems, tools and competence to contribute to the capability of doing own resource estimation, to establish a resource classification system, and to establish and maintain a national oil and gas inventory.
- Develop a licensing strategy that will ensure efficiency in licensing areas with potential for oil and gas resources based on a licensing policy.
- Put in place procedures for monitoring and regulating oil and gas development and production programmes through systems and procedures for review and approval of Field development Plans (FDP) and plans for common infrastructure.
- Ensure that accurate measurements of oil and gas form the basis of the calculation of taxes, royalties and fees etc. to the state. establish requirements to the design and operation of the metering equipment, requirements with regard to how the quantities are to be reported and documented and provide for suitable supervision of the activities.

Key outputs and indicators:

S/N	Key Outputs	Key Indicators (only if the output can't be verified)
4.3.1	Draft Resource Classification System	NA Key outputs can be verified
4.3.2	Improved competence on resource estimation and draft proposal to procedures for resource assessment	NA
4.3.3	Draft proposal to licensing strategy submitted for approval	NA
4.3.4	Draft proposals to internal procedures for handling of FDP's	NA
4.3.5	Improved competence and capacity to review and monitor fiscal metering systems	NA

Baseline as of May 2013 (related to the key outputs/indicators)

4.3.1	A basic system in place at TPDC
4.3.2	Some experience with TPDC
4.3.3	The work has not started. This needs to be done after the Petroleum Policy has been approved.
4.3.4	The work has not started. This needs to be done after the Petroleum Policy has been approved. Role of OSHA? Mandate? Documentation.
4.3.5	The work has not started.

Activities

See separate activity plan for the specific year

4.4 Environmental management

Justification

If not managed properly activities related to onshore and offshore petroleum exploration and production may have negative impact on the environment and subsequently disrupting people's livelihoods and the functioning of natural ecosystems. Common issues, aside from accidental spills, are physical footprint (especially in sensitive areas), operational discharges and emissions of pollutants (including drivers of climate change), use of hazardous chemicals, and waste production. Coexistence with other human activities based on natural resources and pristine environments, such as fisheries and tourism, are also important issues. There is special recognition of environmentally sensitive areas such as National Parks, Marine Parks and Games reserves as well as the risks involved in increased activities in the deep waters.

So far the discovered petroleum resources in Tanzania are mainly natural gas, and the environmental challenges are expected to be less than what would be the case if dealing with oil resources.

Key outputs and Key Indicators (To be aligned with Activityplan!)

S/N	Key Outputs	Key Indicators (only if the output can't be verified)
4.4.1	<p>Environmental compliance monitoring:</p> <p>Capacity to undertake offshore compliance monitoring developed/established.</p>	<p>Personnell to undergo training identified</p> <p>Training programme for inspectors developed and approved</p> <p>Training courses conducted</p> <p>Joint inspections undertaken with Norwegian counterparts</p> <p>Guidelines for inspections developed and approved</p>
4.4.2	<p>EIA Database at NEMC developed, operationalized and linked with key stakeholders – MEM and TPDC.</p>	<p>Detailed needs assessment completed</p> <p>Design specifications developed and approved</p> <p>Database developed</p> <p>Existing oil and gas EIA certificates, associated permits and compliance monitoring reports available in database</p>
4.4.3	<p>Environmental Impact assessment (EIA):</p> <p>Capacity of NEMC, Environmental Unit at MEM, TPDC and key environmental agencies for Impact Assessment of the Oil and Gas sector Strengthened.</p>	<p>Joint training workshop on real case conducted with Norwegian counterparts</p> <p>Prioritised follow up training defined</p> <p>Review of guideline conducted</p>

4.4.4	<p>Environmental Standards and Guidelines:</p> <p>Environmental standards and guidelines for O&G E&P developed (including waste)</p>	<p>Required standards and guidelines identified</p> <p>Standards and guidelines developed</p> <p>Standards and guidelines approved</p>
4.4.5	<p>Environmental data Management</p> <p>4.4.5 Environmental Data Management strengthened</p> <p>4.4.5.1 Establish system for dissemination of spatial environmental data (GIS portal)</p> <p>4.4.5.2 Database for major marine and coastal ecosystems developed</p> <p>4.4.5.3 Sensitivity Atlas revised</p>	<p>Assessment of existing IT-infrastructure, available software and human resources undertaken</p> <p>Mapping and evaluation of existing data sets (including identification of critical data gaps)</p> <p>Design of database approved</p> <p>Training of staff (database administration and GIS) and data entry undertaken</p>
4.4.6	<p>Oil Spill Response Contingency Plan (OSRCP):</p> <p>Operationalize National Oil Spill Response Contingency Plan</p>	<p>SUMATRA, NEMC and other relevant Tanzanian institutions have participated in Regional Oil Spill Contingency Seminar</p> <p>Table-top exercise based on National Oil Spill Response Plan carried out</p> <p>Training in Environmental assessment during Oil Spill Pollution undertaken</p> <p>Draft policy on use of dispersant submitted for approval</p> <p>Review of the Oil Spill Contingency Response provisions in the Environmental Management Plans submitted by operating oil and gas companies</p>

		undertaken
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Baseline as of May 2013 (related to the key outputs/indicators)

4.4.1	No capacity for offshore compliance monitoring currently in place
4.4.2	No coherent system in place for storing, retrieving and exchanging EIA certificates, permits, compliance and environmental monitoring reports
4.4.3	Capacity to review EIAs for oil and gas industry is not satisfactory
4.4.4	No environmental standards nor guidelines for offshore oil and gas exploration and production in place
4.4.5	Environmental data are not readily available for the decision making process
4.4.6	National Oil Spill Response Plan in place but has not been properly implemented and never exercised. Compatibility with the plans of operating companies is unclear.

Activities

See separate activity plan for the specific year

4.5 Health, Safety, Working Environment and Security (HSE and Security)

Justification

There is a lack of knowledge, competence, framework and clarification of roles and responsibilities for following up risks and prevention of major accidents in the Tanzanian petroleum industry.

Offshore petroleum industry implies high risk activities.

Old production facilities at Songo Songo represent HSE risks and risks for major accidents.

Key outputs and Key Indicators

S/N	Key Outputs	Key Indicators (only if the output can't be verified)
4.5.1	HSE workshops performed	HSE working group established. The group observed gender equality.
4.5.2	Competency on Risk Management and Safety Management Systems increased	Strategy document for following up risk in petroleum activities made by TPDC and OSHA

4.5.3	Procedures for performing HSE audits in place	Performing HSE audits towards petroleum industry according to approved procedures
4.5.4	Sector HSE regulations and guidelines submitted for Government approval	Sector HSE regulations and guidelines signed by Government
4.5.5	HSE Contingency procedures established	HSE Contingency procedures evaluated by authorities

Baseline as of May 2013 (related to the key outputs/indicators)

4.5.1	Partly established by 6th September in Inception Workshop - Bagamoyo
4.5.2	Not started (planned started Q4 2013)
4.5.3	Expected signed 2015
4.5.4	Planned to start up in 2014
4.5.5	Planned to start up in 2014.

Activities

See separate activity plan for the specific year

4.6 Further development of data management systems within the petroleum sector

Justification

Application of computer technology in the petroleum industry requires data to be put into a digital format to enable ease of access, integration, viewing, analysis, value addition and to maintain data integrity for promotional purposes. Data in digital format can also be more easily managed and used to make decisions faster and with more confidence. The same data is often needed by several authorities, and by having a common index (reference database) it will ensure better quality and completeness of data together with faster retrieval of them.

Need to build data management system with a reference database that gives an overview of available petroleum related data to be shared between Tanzanian authorities.

Build a GIS interface on top of the reference database for a better visualization of the data coverage. TPDC has already an operational Tape Store and a Geophysical archive that will be developed further, and will be an integrated part of the reference database.

Put in place procedures that clearly define which authority has the responsibility for maintaining different data types, and give the same authority mandate through legislation or regulatory framework to demand the data from the data owners.

Key outputs and key indicators

	Key Outputs	Key Indicators (only if the output can't be verified)
4.6.1	GIS solution in place where authorities can share the chosen scope of datatypes.	NA Key outputs can be verified
	Resource data management	
4.6.2	Trained key persons in TPDC and MEM i data modelling. Procedure for data maintenance established.	NA
4.6.3	IT needs are identified and documented including ; both hardware, infrastructure, software and staff capacity. The documentation includes cost estimate and how to adress these issues.	NA
4.6.4	TPDC staff are trained in Seismic Inventory Database. Procedures for maintenance of Seismic Inventory database (Tape Store) is developed and implemented.	NA
4.6.5	Exploration Inventory Database to store information, not covered by the Seismic Inventory database, is in place.	NA
4.6.6	Core store index as part of the Exploration Inventory database is in place.	NA
4.6.7	Upstream Petroleum Data Management(UPDM) system including Reference- , Seismic-, Exploration-, Inventory- and Production Data is in place.	NA
4.6.8	GIS system to visualize the E&P data is in place at TPDC	NA
	Environmental (including HSE) data management	
4.6.9	Making environmental data available for proper monitoring of the developments in the sector	NA

4.6.10	Development and management of EIA Database Management System available for and shared between environmental staff	NA
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Baseline (current status related to the key outputs/indicators) as of January 2013

4.6.1	No data management model in place
4.6.2	Tape store exists at TPDC
4.6.3	No GIS system in place
4.6.4	No plan for data repository
4.6.5	Core storage in place with manual index

4.7 Human Resource Strategy: Capacity building and training

Justification

Tanzania has developed several strategies that address the need for capacity building and training. Reference is, among others, given to:

1. United Republic of Tanzania, Tanzania Ministry of Energy and Minerals, The National Energy Policy, February 2003;
2. United Republic of Tanzania, Presidents office, Planning Commission, The Tanzania five year development plan 2011/12 – 2015/16, June 2011;
3. United Republic of Tanzania Ministry of Energy and Minerals, Medium term strategic plan 2012/13 – 2015/16, December 2011;
4. Ministry of Energy and Minerals Petroleum sub-sector proposed human resource development programme; and
5. ECA, Oxford Policy Management, Consulting services for the joint energy sector review, 2011, Consultant Report for 2010/11 Joint Energy Sector.

Even though the lead time on gas field development is long, it is important to have a capacity building strategy in place. Such a strategy will have to be based on various assumptions for the future manpower need in the petroleum sector and in the governmental institutions. A coordinated effort between Tanzanian training institutions and donors will then be needed to cover the future demand for manpower at all levels. As emphasized in the ECA report on natural gas development strategy, this will significantly increase the demand for specialized workers and managers trained, skilled and experienced in regulatory and micro-economics, engineering, geology, chemistry, underwater techniques, etc. To meet these demand, plans for skills development are required.

A study on mapping and analysis of the needs for petroleum related education in Tanzania is planned to be conducted in 2013. The main objective for this analysis is to set basis for a long term investment and implementation plan for petroleum related education. The study will be funded by Norad over and above the OfD program. Input to the analysis will be given by resource persons involved in the OfD program.

The following areas of expertise lacking are addressed in MEMs "Medium term strategic plan 2012/13 – 2015/16: contract negotiation skills, energy economists, energy modelling, legislative drafting and geochemists.

It is also stated that there is a need to clarify roles, responsibilities and accountabilities of stakeholders in the sector.

MEM has stated an ambition to recruit 440 skilled personnel by June 2016 as a part of their Human Resource (HR) Strategy, ref Medium term strategic plan 2012/13 – 2015/16.

With reference to the document "MEM Petroleum sub-sector proposed human resource development programme" provisional training requirements have been defined on an individual level.

Status and challenges regarding capacity building and training as per 6th September 2012 in some institutions involved in petroleum activities are described further in Annex 2.

Key outputs and key indicators

S/N	Key Outputs	Key Indicators (only if the output can't be verified)
4.7.1	Trained core staff from relevant Tanzanian institutions to meet adequate competence needs in upstream petroleum sector.	Number of trained people (male and female) in identified categories
4.7.2	Strengthened HR strategy within upstream petroleum in relevant institutions.	Updated HR strategy in place.

Baseline (current status related to the key outputs/indicators) as of January 2013

There is no set baseline regarding trained core staff from relevant Tanzanian institutions to meet adequate competence needs in upstream petroleum sector. The baseline will be set by conducting Training Needs Assessment (TNA).

Activities

See separate activity plan for the specific year

5 PROGRAMME MANAGEMENT

The OfD-programme will be governed through the Annual Meeting between the Norwegian Embassy in Dar es Salaam and the United Republic of Tanzania Ministry of Energy and Minerals (MEM) on the basis of the Country Agreement between the two countries. The Annual Meeting shall normally take place in the 1st quarter of the year.

An Institutional Agreement between MEM and the Norwegian Ministry of Petroleum and Energy (MPE) has been entered into under the Country Agreement. The MPE has assigned the implementation of the Institutional Agreement to the Norwegian Petroleum Directorate (NPD) who will work closely with the Ministry of Environment (MoE) on the implementation of the environmental component.

The Annual Meeting will discuss and approve the annual budget and work plans and the annual accounts and reports on achieved outputs. If deviations to the plans and objectives of the programme occur, or if changes or new activities are considered beneficial to the programme, the Annual Meeting may agree on corrective actions or to approve changes to the programme. Documentation to the Annual Meeting should be presented minimum 4 weeks before the meeting.

A Programme Coordination Committee (PCC) for the management of the programme has been established. MEM chairs the PCC. Relevant Tanzanian and Norwegian institutions are members of the PCC. The PCC will follow up the implementation of the programme and will conduct minimum one meeting per year to prepare the documentation to the Annual Meeting. More meetings, physical or by ICT, may be called by the Chairman as and when needed.

The technical support and procurement related to the implementation of the programme will be coordinated by the NPD through the use of own personnel, other Norwegian institutions like MPE, the Ministry of the Environment (MoE) with subordinate institutions, the Petroleum Safety Authority (PSA), from Petrad, universities or other training or research institutions, or from consulting companies. A Resident Programme Coordinator has been contracted to support implementation of the programme activities.

Regional cooperation with relevant institutions in East Africa should be considered.

On the Norwegian side the OfD-secretariat has established a country coordination group for informal coordination between the Norwegian institutions which will provide services to Tanzania under the programme.

6. RISK ASSESSMENT

Risk factor	Assessment	Consequence	Mitigation
<p>6.1 Petroleum upstream sector as a Union Matter</p>	<p>The definition of upstream petroleum as a Union Matter in the constitution is disputed and under political negotiations.</p> <p>The legal and institutional framework may undergo developments that bring significant changes in the roles, responsibilities and influence of the different institutions in the sector.</p>	<p>Political tension between the mainland and Zanzibar. This has been reduced.</p> <p>Institutional tension and lack of cooperation.</p> <p>The programme priorities become irrelevant</p> <p>Halt or even termination of the programme.</p>	<ul style="list-style-type: none"> • Flexibility and adaptability in programme management to ensure continued relevance with changes in political priorities • Transparency and inclusion of all relevant stakeholders • Active involvement of the Parliaments and supplementary efforts to share experiences and international best practice with politicians.
<p>6.2 Institutional limitations and limited competent technical staff</p>	<p>The resources available for institutional capacity building are not sufficient and institutions compete to cover their needs.</p> <p>Limited staff and significant workloads to meet increasing sector management challenges.</p> <p>A significant share of the staff in MEM and TPDC is reaching retirement.</p> <p>Key staff opts for greener pastures.</p> <p>Loss of personnel due to sickness and accidents.</p>	<p>Extensive delays in programme implementation and reduced absorption capacity for technical assistance with negative implications for the efficiency, effectiveness and sustainability of the programme.</p>	<ul style="list-style-type: none"> • Top management support • Good activity planning and programme management • Good coordination between programme activities • Duplication of core positions • Management training • Teamwork training • Strategic approach to HR management, including succession planning.

	<p>Lack of delegation of responsibility can be a bottleneck for efficient programme implementation and decision making</p> <p>Lack of cooperation between technical disciplines</p>		<ul style="list-style-type: none"> • Incentives and obligations to ensure those who receive training through master scholarships are legally required to return to the Tanzanian public petroleum sector to work for a specified number of years
6.3 Corruption	<p>Corruption in Tanzania is a problem, systemic and endemic with clientelistic relationships, immature political institutions and weak financial management control mechanisms.</p> <p>Significant revenue streams from the petroleum sector may fuel increased corruption.</p> <p>Only a minimal share of the programme budget will be disbursed through the recipient system. Ensuring integrity of programme funds is therefore not a major issue for the programme</p>	<p>Missing out on the targeted outcomes</p> <p>Reduced sector efficiency</p>	<p>The programme is in itself expected to have a preventative effect related to corruption in the sector by helping to establish a sound legal framework and by increasing the transparency of the sector:</p> <ul style="list-style-type: none"> • Strong legal framework, with clarified decision-making power • Data sharing • High quality information to the industry and the public • Reduced use of confidential petroleum contracts to manage the Sector

7. Cross cutting issues

Good governance and anti-corruption

There are specific features that accompany large scale natural resource extraction that pose particular challenges to governance. The volume of transactions, the high level of rents, a concentration of revenue flows, technical complexities of the sector, easily formed natural monopolies, strategic significance, and negative spill-over effects are some of the key features that make the petroleum sector particularly vulnerable. These are all exacerbated when a technically complex sector of strategic significance starts up in a developing country with weak public sector capacity (OPM 2012).

Given the unique features of the petroleum sector, and its implications for national economies, a variety of possible vulnerabilities to corruption present themselves that run along the value-chain of an extractives industry. We find corruption risk all along the different stages of the value chain from exploration, award of contracts, production, through to tax collection, revenue management and investment decisions.

The OfD-programme supports partner countries to strengthen the management of petroleum resources in a sustainable way. In line with the Norwegian experience and drawing on experience for working in over 20 countries over several decades one key lesson has emerged; operating successfully in high risk sector and environments intensifies the need to integrate a pro-integrity perspective that tackles corruption as an integrated component of all programme areas/policy processes and institutional reform processes.

Research has also shown that it is far less costly to work on corruption prevention and working on the issues in a systematic manner up front rather to deal with the problem downstream as they multiply and become entrenched. This programme internalizes much of the sentiment of this literature and acknowledges potential hotspots for weak governance ahead of time, which allow those planning interventions to work proactively on possible responses.

In this light, the programme may choose to target the anti-corruption efforts of Parliament. Parliament's reach can potentially stretch into its role as lawmaker, political oversight watchdog and accountability mechanism. Other interventions that may prove a degree of positive returns is simplifying bureaucratic procedures, moving to systems of e-government, where more processes are automated, hence removing unnecessary discretion and override powers, and finally rationalizing, improving, and formalizing human resource management within government. Transparency of course, and the capacities of stakeholders to engage – media, professional organizations, labour unions etc.

As a rule of thumb, the Norad opinion is to work on goals that are identifiable, practical and manageable, specifically where local leadership has already shown commitment to reform. Without domestic political leadership championing reform, even with strong civil society, it is unlikely much will be accomplished.

Gender

Gender equality will strengthen the institutions credibility and ensure that the interests of a larger portion of the population will be incorporated in the development of the petroleum sector.

Gender issues in the sector are related to employment and capacity building of female personnel in petroleum institutions, as well as including gender issues in policy, legislations and processes. Gender issues will be incorporated in the OfD-programme in Tanzania, mainly through identifying appropriate programme activities as part of the processes of developing annual workplans. It could also be relevant to establish a working group in order to ensure that the programme implementation is in line with gender mainstreaming policies.

8. EXIT STRATEGY

Underlying the Programme and its specific programme activities is the premise that the Norwegian contribution is a transitory phenomenon. The main objective of the cooperation is to enable the United Republic of Tanzania to manage the petroleum resources in a sustainable manner through an effective state administration system. The programme is based on the expectation that the Norwegian input over time shall become superfluous and be phased out gradually.

Signed by:

Commisioner of Energy & Minerals

Chair of Program Steering Committee

Ministry of Energy & Minerals, Tanzania

Date

2. Institutions involved in the programme

2.1 PETROLEUM SECTOR AUTHORITIES.....	
2.1.1 MEM.....	
2.1.2 TPDC.....	
2.1.1 MLHWE (ZANZIBAR).....	
2.2 HEALTH, SAFETY AND ENVIRONMENT	
2.2 MINISTRY OF LABOR (MLEYD).....	
2.2.1 OSHA.....	
2.3 AUTHORITIES AND INSTITUTIONS WITH RESPONSIBILITY FOR ENVIRONMENTAL ISSUES.....	
2.3.1 VICE PRESIDENT’S OFFICE.....	
2.3.2 NEMC.....	
2.3.3 SUMATRA.....	
2.3.4 MNRT.....	
2.3.5 UNIVERSITY/MARINE LABORATORY.....	
2.4 DFSA	

2.1 Petroleum sector authorities

2.1.1 Ministry of Energy and Minerals (MEM)

Mission Statement:

Set and monitor implementation of policies, strategies and laws for sustainability of energy and mineral resources to enhance growth and development of the country.

Vision Statement:

To be an effective institution, contributing significantly to the acceleration of socio-economic development through sustainable development and utilization of energy and mineral resources in Tanzania by 2025.

The Core Values are:

Customer Focus; Results oriented; Accountability; Efficiency; and Teamwork.

Guided by the Vision and Mission and critical issues identified in the situation analysis, the revised Medium Term Strategic Plan 2009/10 – 2011/2012 addresses six main objectives as follows:

1. HIV/AIDS infection reduced and support services to employees improved;
2. Implementation of the National Anti-Corruption Strategy effected, enhanced and sustained;
3. Human Resource and financial management improved;

4. Management, coordination, monitoring and revenue collection from energy and minerals sector improved;
5. Access to modern and renewable energy services and supply of reliable and quality energy improved; and
6. Mineral sector developed and environmental management improved.

At the end of 2011 xxx staff in MEM were working on issues related to petroleum resource management, x% had a BSc education or higher.

2.1.2 Tanzania Petroleum Development Corporation (TPDC)

Roles and tasks, Current technical capacity

Following the liberalization of petroleum trading in Tanzania in 2000, the roles of TPDC has changed to reflect the new economic and policy dispensation. TPDC's roles as per the Establishment Order of May, 1969 are as follows:

- To promote development of the petroleum industry and production of petroleum;
- To carry on the business of prospecting, production, refining, storing, supplying and distribution of petroleum;
- To conduct or engage in petroleum prospecting operations including exploration, drilling, testing, appraisal, extractions, production, treatment, storing, transporting and such other activities relating thereto as the Board may from time to time decide;
- To acquire by agreement and hold interest in any undertaking enterprise or project associated with the exploration and production of petroleum and for such purpose to obtain, exercise, carry out and use any mining lease, license, concession, franchise, authority, power, right or privilege which any Government, Corporation, public body or other authority may be empowered to grant;
- To manage the affairs of any Corporation, company, firm or other body the interests of which are transferred to or acquired by the Corporation under the provisions of the Act or this Order;
- To carry on the business, operations and activities either within the United Republic of Tanzania or elsewhere, whether as principal, agent, contractor or otherwise and either alone or in conjunction with any other persons, firms or bodies of corporate;
- To do all such acts and things as may be necessary to uphold and support the credit of the Corporation and to obtain and justify public confidence and to avert or minimize any loss to the Corporation; and

- To do anything or enter into any transaction which in the opinion of the Board is calculated to facilitate the proper and efficient carrying on of its activities and the proper performance of its functions as specified in this paragraph.

The new TPDC roles following policy changes of the 1990s are as follows:

- To promote and monitor exploration for crude oil and natural gas;
- To develop and produce crude oil and natural gas;
- To conduct research and development of the oil and natural gas industry in the country;
- To manage exploration and production data;
- To advise the Government on petroleum related issues;
- To market and sell natural gas;
- To undertake the management of strategic fuel reserves; and
- To undertake trading in petroleum products.

A Gas Regulatory and Legal Framework study was carried out by M/S BeicipFranlab of France whose final report was submitted to the Ministry of Energy and Minerals in March, 2007 together with recommendations on draft legislations to be enacted. One of the draft legislations is the Draft Gas Act which gives the legal and regulatory framework for developing and monitoring the gas sub-sector in Tanzania and the role of TPDC.

TPDC also completed preparation of a Ten Year Corporate Strategic Plan in October, 2008. TPDC's main source of funds is through Government budget allocations.

Tasks and Responsibilities, Organogram, manpower and Competency of TPDC.

2.1.3 Ministry of Lands Housing Water and Energy (MLHWE) Zanzibar

Mission Statement:

A Ministry is committed to provide affordable, sustainable, accessible and quality services to all with respect to supply of water, Housing, Energy and Lands for the economic and social development with strong respect to cultural heritage of Zanzibar.

Vision Statement:

All beneficiaries in Zanzibar to enjoy quality water supply services, adequate and affordable housing, utilization and sustainable Energy supply for Development.

Objectives:

- Increased access to clean and safe water supply to all water users to 95% in urban areas and 75% in rural areas by 2015
- Increased access to adequate and affordable housing by 50% for the community particularly the poor by the year 2015
- Created conducive working environment to the staff by the year 2015 for efficient and effective delivery of services
- Improved government revenue collection for efficiency, effectiveness and sustainability of services delivery by 2015
- Conserved and sustained Stone Town as both cultural and historical heritage site that improve and promote the living standard of its habitants by 2015
- Ensured energy security and improved energy management system by year 2015
- Develop land use planning and registered planned/surveyed land, and promote security of land tenure for different purpose by 2015
- Promoted good governance in service delivery within the Ministry by 2015
- Develop Modern Land Information System by the year 2015
- Mainstreamed gender and HIV/AIDs issues in the Ministry's activities by 2015

All Energy matters in Zanzibar are under the Ministry of Lands Housing Water and Energy (MLHWE) through Department of Energy and Minerals. So far, Petroleum Exploration and Production is a union matter. At present The Department of Energy and Minerals lack of Oil and Gas Professionals. In 2008, Oil for Development had assisted the Department of Energy and Minerals in developing Training Needs Assessment; however, it has not been implemented since then.

Department of Energy and Minerals, Zanzibar

The main objective of the Department is to meet the energy needs of the Zanzibar population for social and economic development in an environmentally sustainable manner.

Under Zanzibar Energy Policy, the goals of the Departments are to:

- increase the energy efficiency within the energy sector of Zanzibar
- increase the supply of energy from indigenous renewable energy sources

- increase the reliability, affordability and independence of modern energy supply in Zanzibar
- implement a regulatory regime for the energy sector in Zanzibar to act as a coherent and coordinated framework for all development efforts within the sector
- achieve free market principles within the energy sector, with only well founded transparent regulatory interventions
- involve all main stakeholders in coordinated actions while considering related documents regarding the future social and economic development and poverty reduction in Zanzibar.

2.2 Health, Safety and Environment (HSE)

2.2.1 Ministry of Labour Youth and Employment Development (MoLEYD)

In Tanzania (mainland) the Ministry of Labour, Youth and Employment Development (MoLEYD) has overall responsibility for labour inspection.

In Zanzibar, general responsibility for labour inspection rests with the Ministry of Labour, Youth, Women and Children Development.

Department(s) responsible for Labour Inspection

In Tanzania (mainland) the MoLEYD unit with specific responsibility over labour inspection is the Labour Administration and Inspection Section. This Section is headed by an Assistant Labour Commissioner and includes six labour officers. Even though its name includes a reference to labour administration, this Section deals only with the labour inspection system, and thus functions as a central labour inspectorate. Its main functions include:

- overall coordination of labour inspections carried out by the area offices;
- preparing, reviewing and recommending guidelines on the labour inspection services and compliance with labour legislation in general;

- providing legal guidance upon request (in this capacity, the inspectorate may consult other governmental legal units including the Attorney General's office);
- ensuring dissemination of information to employers and employees on their rights and obligations; and
- where such need arises, assisting the area offices in conducting labour inspections.

Responsibility for labour inspection is split between labour officers working in MoLEYD (i.e. monitoring employment contracts, wages, working time etc.) and occupational safety and health inspectors who are part of the semi-autonomous Occupational Safety and Health Agency (OSHA). Other government institutions such as the National Social Security Fund also carry out autonomous inspections but with little coordination with MoLEYD or OSHA. Labour officers in the regions carry out inspections in addition to other labour administration tasks.

In Zanzibar, the Labour Commission, which is part of the Ministry, has direct responsibility over labour inspection matters. Also in Zanzibar, the OSH function is carried out by the Occupational Safety and Health Directorate. The OSH Directorate is formally a part of the Labour Commission, but its offices are located in the Ministry of Education and Vocational Training.

Law that covers organization and functional composition

In mainland Tanzania, the Government has undertaken comprehensive labour law and regulatory reform relating to various aspects of employment and labour relations. The reform process was supported by the ILO, and culminated in the enactment of a number of new laws, including the following:

In mainland Tanzania, the Government has undertaken comprehensive labour law and regulatory reform relating to various aspects of employment and labour relations. The reform process was supported by the ILO, and culminated in the enactment of a number of new laws, including the following:

- The Occupational Health and Safety Act, 2003
- The Employment and Labour Relations Act, 2004
- The Labour Institutions Act, 2004
- Workmen's Compensation Act, 2008
- Social Security (Regulatory Authority) Act, 2008

These laws have been supplemented by a number of regulations, including the following:

- The Employment and Labour Relations (Code of good practice) Rules, 2007
- The Labour Institutions (Mediation and Arbitration), Rules 2007.
- The Employment and Labour Relations (Forms) Rules, 2007
- The Labour Institutions (Code of Conduct for Mediators and Arbitrators) Rules, 2007
- The Industrial Court Rules ,2007
- The Labour Institutions (Mediation and Arbitration Guidelines), 2007

Labour law reform efforts in Zanzibar have paralleled those on the mainland. This process was likewise supported by the ILO, and resulted in a number of new laws relating to various aspects of employment and labour relations, including the following:

- The Employment Act No. 11 2005.
- The Labour Relations Act No.1 of 2005.
- The Occupational Safety and Health Act No. 8 of 2005.
- The Workers Compensation Act No.5 of 2005.
- The Zanzibar Social Security Fund Act No 2 of 2005

Zanzibar is in the process (2010) of drawing up draft regulations for the first two pieces of legislation, with assistance from the ILO.

Scope of labour inspection

The labour inspection staff in MoLEYD is in charge of coordinating the labour inspection system for all area offices. They are responsible in particular for planning, reporting, general guidance and the preparation of inspection forms.

On the occupational health and safety side, the services of OSHA include:

- work inspections;
- industrial hygiene surveys;
- medical health examinations;
- registration of new workplaces;
- training and awareness raising programmes;

- investigation of accidents; and
- gathering data and monitoring workplaces.

In Zanzibar, the main function of labour inspectors in the regional offices is to carry out inspections. They do however maintain some responsibility for the settlement of labour disputes and may act as representatives for the labour commissioner by request should the need arise in the regions (in their general capacity as labour officers). Another function of the regional labour inspectors is the attestation or approval of employment contracts.

2.2.2 Occupational Safety and Health Agency (OSHA)

Role of OSHA at National Level

- To review legislation from time to time
- To issue or approve regulations, codes of practice etc.
- Undertake or promote OHS studies and research
- Provide specific measures to prevent accidents and injuries at workplaces
- Provide information and advice
- To ensure consistency of regulations
- To ensure applicability of ILO Standards (e.g. C 155 and C 161)

Role of OSHA at Enterprise Level

- Setting the condition to minimize hazards
- Verify the safety of technical equipment
- Identify work processes or substances to be prohibited

Establish procedures for notification of accidents and occ. illness

- Hold inquiries in case of accidents and occ. illness
- Introduce systems to examine chemical, physical, biological agent, ergonomics and psychosocial hazards.

Services Provided by OSHA

- Workplace inspections (general, plant and electrical)

- Industrial hygiene surveys
 - Medical health examinations
 - Registration of new factories and workplaces
 - Conducting awareness Programmes
-
- Training services
 - Monitoring of OHS situation
 - Investigation of accidents
 - Provision of OHS statistics
 - Scrutinise workplace Drawings

2.3 Authorities and institutions with responsibility for environmental issues

Institutions with enforcement role in environmental management include Sector Ministries and some affiliated agencies, the National Environment Management Council (NEMC) and Local Government Authorities.

2.3.1 Vice President's Office – Environment Division

The Environment Division is responsible for the overall environmental policy and regulation, formulation, coordination and monitoring of environment policy implementation in the country.

More specifically, the Environment Division is mandated to:

- Coordinating various environment activities in country
- Advise the Government on legislative and other measures for the management of the environment including developing, reviewing and coordinating implementation of environmental policies, acts, regulations, guidelines, programmes and strategies which are related to natural habitats and environmental conservation and preparation, review and provision of advice on policies, legislation and guidelines which are related to environmental management of pollution.
- Advice Government on international environmental agreements

- Monitor and assess activities, being carried out by relevant agencies in order to ensure that the environment is not degraded, including preparing and reviewing environmental management policies, legislatives, regulations, guidelines, criteria and procedures for environmental impact assessments, risk assessments and Strategic Environmental assessments. Some of the specific areas of focus include climate change; poverty and environment mainstreaming; approval of Environmental Impact Statement (EIS) and Strategic Environmental Assessment (SEA)
- Coordinate implementation of the National Environmental Policy

2.3.2 Vice President's Office – National Environment Management Council (NEMC)

NEMC is responsible for general supervision and coordination over all matters related to environment management. It is mandated to:

- To enforce and ensure compliance of the national environmental quality standards.
- To review of Environmental Impact Statements (EIS) and conduct environmental monitoring and auditing of projects and facilities.
- To undertake and co-ordinate research, investigation and surveys in the field of environment and collect, and disseminate information.
- To carry-out research and surveys for the proper management and conservation of environment.
- To render advice and technical support to entities engaged in natural resources and environmental management.
- To initiate and evolve procedures and safeguards for the prevention of accidents which may cause environmental degradation.
- To enhance environmental education and public awareness; and establish and operate national environmental information system for sound environmental management.
- To publish and disseminate manuals, codes and guidelines relating to environmental management and prevention or abatement of environmental degradation.
- To issue restoration and recommend for easements orders, and save prohibition notice.
- To undertake any other functions assigned by the Minister such as Integrated Coastal Zone Management (ICM).

2.3.3 Surface and Marine Transport Regulatory Authority (SUMATRA)

The functional scope of the Authority relates to its jurisdiction over competition policy (economic regulation) as well as safety, security and environment regulation.

As part of its mandate in the area of Marine Safety and Security, SUMATRA is responsible for overseeing matters related to the prevention of marine pollution from ships, including initiating the ratifications and implementation of the relevant maritime conventions.

Surface and Marine Transport Regulatory Authority (SUMATRA) is, furthermore, responsible for the implementation and enforcement of all matters related to the Marine Oil Spill Contingency Planning and to ensure the mobilization procedures in the contingency plans.

2.3.4 Ministry of Natural Resources and Tourism (MNRT)

The mandate of MNRT is to protect and manage natural and cultural resources and to develop tourism. The legal basis for MNRT to act in coastal and marine areas is the Wildlife Conservation Act, the Marine Parks and Reserves Act and the Fisheries Act and Forest Act (mangrove). MNRT formulates and reviews laws and regulations, enforces laws, formulates policy, identifies research needs and monitor and coordinates activities.

2.3.5 DSFA - Deep Sea Fishing Authority

The Deep Sea Fishing Authority (DSFA) is a regulatory agency whose mission is to adopt measures necessary to ensure the conservation of target and non-target species including prevention of significant adverse impact on VMEs and the protection of marine biodiversity that the ecosystem contain and vision is to promote responsible fisheries that provide economic opportunities while ensuring the conservation of marine living resources and the protection of marine biodiversity by ensuring the long term conservation and sustainable use of marine living resources in the deep sea and preventing significant adverse impacts on vulnerable marine ecosystem

DSFA Vision

To promote responsible fisheries that provide economic opportunities while ensuring the conservation of marine living resources and the protection of marine biodiversity by ensuring the long term conservation and sustainable use of marine living resources in the deep sea and preventing significant adverse impacts on vulnerable marine ecosystem.

DSFA Mission

To adopt measures necessary to ensure the conservation of target and non-target species including prevention of significant adverse impact on VMEs and the protection of marine biodiversity that the ecosystem contain.

DSFA Activities

These include Fisheries management, Fisheries research, Licensing, Monitoring, Control & Surveillance

Human Resource Strategy: Capacity Building and Training

Status and **challenges** as per 6th September 2012 in some institutions involved in petroleum activities regarding capacity building and training

Ministry of Energy and Minerals (MEM)

Two sections that deal with oil and gas; Petroleum and Gas utilization section; Gas section established recently (March 2012) dedicated to serve the gas industry, currently has 9 staff, 4 with Masters, 2 on-going Masters and 3 with Bachelors. All are medium experienced. Two principal officers and the rest are just junior.

Petroleum section: introduced in 1985, 9 staff; 3 on Master training, 5 with Master degrees and one with Bachelor.

Challenges: Still need more staff especially geologist, engineers and economists. The current capacity should be doubled when development of gas starts. Most of the staff (50-60%) is to retire in 5 to 6 years to come. However, training programme is in proposal. The challenge is that newly recruited staff are leaving to other attractive places. The most challenge is on the upstream sector. An arrangement has been underway in establishing oil and gas courses in local institutions.

The Tanzania Petroleum Development Corporation (TPDC):

TPDC has built three directorates; exploration, production and technical services; Marketing and investment, finance and administration. 4 units: the legal unit, internal audit unit, procurement management unit and risk management unit. The training is prepared based on the need assessment for each unit and directorate and it is done every year and included in budget. There is on job training, short courses and MSc and PhD trainings. The sample of need assessment will be availed to the facilitators. The staff are well trained especially those with 10 years in service. But still more trainings required for the newly recruited staff for the demand is growing and most staff are expected to retire in the few coming years.

Tanzania Revenue Authority (TRA):

TRA consist of 10 sections; 3 directly deal with oil and gas: Large taxpayer department; Investigation department; Custom department; HR department; Policy and research department; ICT department; Finance department; audit and legal dept. 1 geologist and 1 chemical engineer at the large taxpayer dept. There is high collaboration with MEM and MoF especially when it comes to tax exemptions. Staff turnover, corruption and integrity, and there is political interference too. TRA does not have expertise to audit the oil and gas companies. HR development is in place for downstream operations at the TRA training institute. The training needs assessment is done internally.

Zanzibar:

Zanzibar is a partner state to United Republic of Tanzania. They have the ministry of energy with department of energy and minerals. The plan is to establish an oil and gas department. Not more than 15 staff, 5 with Bachelor degree, 2 – 3 with diploma and the rest has certificates. Some staff has gone for Bachelor and Master degrees but they have not come back to Zanzibar. The government is now on the way to develop the training needs assessment.

Ministry of Natural Resources and Tourism (MNRT):

MNRT consist of 6 divisions and 6 units: Divisions: Forest and bee keeping; Tourism; wild life; HR; Policy and planning; and Antiquities. Units: communication, finance, legal, procurement, audit and ICT. HR department did prepare a training need assessment plan and submitted to directors. The document is due to be compiled for 3 years plan. Challenge in getting training fund from the allocated budget, there is fund misallocation problem. There is a try in long courses like master degrees. There is political interference and lack of updated knowledge on fighting crime in illegal hunting. Not sure if there is a map showing sensitive areas.

National Environment management Council (NEMC):

NEMC is build up with 4 technical directorates and 4 units (gender balance – statistics?) . The capacity in dealing with environment in mining and minerals is challenged by lack of skilled staff capacity and equipment. There is a component of GIS and remote sensing and library that keep information on environment activities, however, these units are not functional due to lack of office space resulted in sifting to a new office building. Equipment and software are very expensive and the available ones are outdated especially in GIS and remote sensing activities. A need for support is important to go along with oil and gas including establishment of an office in the southern zone (Mtwara) to meet the need for oil and gas activities which are mostly concentrated in Mtwara and Lindi regions. Also, a need to have mobile laboratory to facilitate field testing for compliance and monitoring purposes are needed. Furthermore, field attachments and visiting countries with high expertise for sharing experience will help improve the functions of the council.

Number of personell with petroleum related education as pr November 2012

4.7.1	UDSM=2PhD, MSc= 0, BSc=0, UDOM = 0 NEMC = 0 OSHA = 1 short course MEM= TPDC = 50 VETA= 5 short courses Zanzibar=?
4.7.2	UDSM=2PhD, UDOM = 0 NEMC = 0 OSHA = 1 trainer MEM=? TPDC =10 VETA= 5 trainers Zanzibar=?
4.7.3	UDSM=HR strategy in place but not for upstream petroleum, UDOM = HR strategy in place including upstream petroleum NEMC = HR strategy in place but not for upstream petroleum

	OSHA = HR strategy in place but not for upstream petroleum MEM= HR strategy in progress TPDC =HR strategy in place including upstream petroleum VETA= HR strategy in place including upstream petroleum
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