REGIONAL OIL AND GAS CAPACITY BUILDING PROGRAMME FOR THE NAIROBI CONVENTION

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1. INTRODUCTION

The oil and gas industry (upstream, midstream and downstream) is showing considerable growth in the Western Indian Ocean (WIO) region, representing both economic opportunity as well as significant risks in terms of the negative impacts on the coastal and marine environment. The deep-sea discoveries have brought about new and ambitious targets in oil and gas exploration and production in the region with positive developments. However, the operational challenges facing the oil and gas development are immense. These include:

- Inadequate management tools, guidelines, and resources to support legal, regulatory, and institutional framework in the region.
- Inadequate capacity to address local content, exploration and production technology, research and development.
- Insufficient level of public awareness, participation and sensitization with regards to the development of the oil and gas industry.
- Inadequate capacity and competence in managing the oil and gas value chain.
- Inadequate environmental, safety, waste and resources management systems to ensure sustainable development of the oil and gas industry in the region.
- Inadequate dispute mechanisms to handle oil and gas related disputes.
- Constraints in managing terrestrial and marine conservation areas, national parks and forest reserves including their constituent biodiversity.

1.1. What's at stake in the oil and gas development in the region?

The WIO region is endowed with high value coastal and marine biodiversity hotspots. The coastal forests, wetlands, reserves and sanctuaries, coupled with mangroves and coral reefs, support sustainable livelihoods for over 60 million people that directly depend on the marine and coastal resources of the WIO Region. Some of the key socio-economic activities along the coastal and marine zones of the region include fisheries, mariculture, maritime transport, tourism and extractive industries. Oil for Development requires a sustainable governance of petroleum resources with integrated development planning, clear development strategies and policies backed up by action. Despite a rapid rise in the offshore extractive industries in the region, most countries in the WIO are faced with debilitating management challenges that can potentially result in environmental risks and threats to their economies and societies.

There are risks of marine oil spill accidents, transboundary resource conflicts, potential degradation of coral reefs, mangrove ecosystems, beach zones that attract millions of tourists every year, coastlines and even pollution of the regional deep ocean seabed areas with their unexplored sea mounts and deep sea biodiversity. There are also issues of inter-migration of human labour within the region due to the rising prospects of oil and gas discoveries across the entire stretch of the Nairobi Convention Area. Such high expectations from the population in the region can result in an increased level of insecurity and conflicts causing a shift in attitudes and a departure from traditional ways of socio-economic sustenance. Moreover, coastal zone exploration and the search for offshore supply bases and routes can trigger a rising demand in land acquisition and force involuntary resettlements or displacements, causing social inequity. Issues of heritage and conservation of sites of high value historical significance can evolve into cultural challenges if not enough preventive measures are taken to address such risks.

Regional piracy which rose into prominence in the last two decades and which has since been suppressed thanks to the efforts of the international maritime alliance to fight and control, could find its way back due to the potential increase of maritime traffic because of the oil and gas economy prospects in the region. Not only that, potential vandalism or sabotage of inland oil and gas pipelines, coupled with potential threats of habitat fragmentation of transboundary ecosystems and terrorism in the region warrants a careful strategic action plan in engaging social, economic, environmental and safety safeguards for the entire region.

It is therefore vital that the region begins to consider its strategic mitigation options to address the above risks, threats and challenges and open opportunities for oil and gas development planning. For example, there are easy no regrets options such as strengthening oil spill contingency and preparedness plan, conflict resolution mechanism, strategic environmental and social assessment including improved tools and guidelines for environmental impact assessments and monitoring systems, provision of alternative livelihoods, enhancement of awareness and education on oil and gas development, mobilization of effective communication strategy on oil and gas industry, resettlement action framework and social equity, and development of instruments and guidelines for an effective and sustainable governance of petroleum industries.

There is a need for a multi-national approach to marine security, integrated risk assessment and management approaches, and a multi-disciplinary training in concretizing effective institutional

and regulatory frameworks. Heritage conservation and sustainable tourism is critical in enhancing preservation of cultural values. The importance of a strong regional framework including the utilization of opportunities existing within the regional economic blocks (e.g. SADC, EAC, COMESA, UNECA) is critical towards achieving the needs for capacity building and the future of oil for development in the region. It is certain that, given various gap analysis and priorities/needs assessment in the oil and gas value chain, the WIO Region must put together a regional capacity building programme that puts emphasis on the trans-boundary concerns and issues related to resource management, environmental and social safeguards, safety, data management and good governance for oil for development.

1.2. Need for a mechanism for a regional capacity building programme

On 28th – 29th November 2016, the Nairobi Convention's experts meeting on environmental management of the oil and gas sector development in the WIO region, held in Zanzibar, Tanzania, laid an initial groundwork that aimed at generating policy, business and civil society actions that would contribute towards the sustainable management of the oil and gas resources for the Nairobi Convention Area. In this context, it was proposed that a dynamic partnership involving Governments, Oil and Gas Industry, Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs) and Communities, that ensures effective enhancement of knowledge, skills, good governance while sustainably managing expectations, conflict resolutions, Health, Safety & Environment standards, and natural resources for environment and society - is required for a sustainable development of oil and gas industry in the WIO region. Nairobi Convention Secretariat shall coordinate this partnership for a regional capacity building programme for Oil and Gas for Development (OfD) in accordance with the needs and priorities of the contracting parties.

1.3. The Basis of Capacity Building in Oil and Gas Development

Aware of the economic potential as well as the need for regional and national environmental safeguards, the Eighth Conference of the Parties to the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean (Nairobi Convention) called for concerted efforts in environment management in the oil and gas development. There is therefore an urgent need for strong governance frameworks that are aligned with international best practice to support effective impact mitigation strategies.

Decision 13 of 8th Conference of Parties to the Nairobi Convention urges the Contracting Parties, *inter alia*, to collaborate with partners on capacity building, implementation and sharing of experiences on integrated marine spatial planning in support of blue economy; and to encourage collaboration and communication between Contracting Parties and civil society, private sector, non-governmental organizations, local governments and municipal authorities in the implementation of the work programme of Nairobi Convention. It also calls upon the contracting parties to the convention to promote joint programming between Contracting Parties, United Nations Framework Convention on Climate Change (UNFCCC), UNECA, partners, civil society and private sector for implementation of priority areas and mobilization of resources conservation of coastal and Marine Ecosystems in the Western Indian Ocean for increased science based information sharing.

Furthermore, Decision 7 of 8th Conference of Parties to the Nairobi Convention on environmental management of oil and gas development urges the Contracting Parties to request the Secretariat to, *inter alia*, prepare regional guidelines on environmental management for oil and gas development, based on best practices, and seek support of other countries and partners involved in oil and gas development and to conduct and implement a regionally coordinated strategic environmental assessment, of social and environmental sustainability of oil and gas in the Western Indian Ocean Region, including development of Western Indian Ocean regional compliance monitoring initiatives for oil and gas.

Decision 6 of 8th Conference of Parties to the Nairobi Convention requests Contracting Parties to, *inter alia*, support projects on transboundary marine protected areas, promoted integrated ocean management approach, implementing partnerships on sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the areas beyond national jurisdiction; and guiding environmental management in the context of a rapidly developing oil and gas industry in the Western Indian Ocean Region.

1.4. Rationale and Identification for Capacity Needs

Identification of capacity needs in the oil and gas sector development in the region can be rationalized upon special reference to offshore oil and gas activities currently under way in the region and associated infrastructure; sharing of environmental standards and regional guidelines for oil and gas exploration and exploitation in the Western Indian Ocean, and identifying

common issues and key actions needed to strengthen governance in the oil and gas sector for effective mitigation of environmental impacts. The possibility of engaging key thematic areas such as Environmental and Social Management, Resources Management and Safety Management is crucial in addressing regulatory frameworks, institutional capacity and transparency & accountability in the oil and gas development.

1.5. Objectives of the Oil and Gas Development Capacity Building Programme

The key objectives of the regional oil and gas capacity building programme are:

1. To establish and strengthen capacity in legal and regulatory framework in the WIO Region including enhancing standards, guidelines and best practices of existing policy, legal and institutional frameworks within the countries.
2. To support the contracting parties to Nairobi Convention, manage oil and gas development sector in accordance with the universal standards and best practices for oil for development.
3. To promote transparency and accountability to the public in the management of the oil and gas sector in the WIO Region.
4. To encourage parties to address good governance, gender perspectives and human rights in resource management while promoting best practices in fighting corruption and inequity in the oil and gas economy.
5. To promote the understanding of the oil value chain and opportunities for employing locals in exploration and processing activities.
6. To integrate risk and vulnerability assessment, climate change adaptation, environmental social and other cross cutting issues into oil and gas development.

2. KEY THEMATIC AREAS OF ENGAGEMENT

It is proposed that the following key thematic areas should be prioritized in engaging oil and gas for development. These are:

1. Resources and Data Management
2. Environmental and Social Management
3. Revenues Management
4. Safety Management

5. Technology development and research

2.1. Resource and Data Management

Capacity building on implementation and operationalization of respective policy, legal and data management frameworks of the contracting parties needs to be supported through the development of petroleum policy, data management and regulatory frameworks at the national level. Aware of the different levels of knowledge and capacity at resource and data management within the WIO region, the proposed programme should support mainstreaming of best practices and standards involving resources and data management.

2.2. Environmental and Social Safeguards & Management

Although the capacity among the contracting parties to regulate the oil and gas sectors has improved, notably in the areas of environmental baseline and knowledge of various environmental safeguard tools, there are some critical challenges in environmental enforcement, compliance, monitoring and ability to readily deploy mitigation options against social and biophysical impacts. The importance of integrating environmental and social safeguards into the mainstream oil and gas sector should be enhanced in developing targeted interventions to address impact assessments, mitigations, enforcement and performance standards, tools and guidelines.

2.3. Safety Management

Aware that contracting parties have different levels of capacity in addressing oil spill contingency plans (OSCP), and that in some countries work to develop climate risks, contingency and oil spill response is ongoing, the key challenges will be to adequately address the operationalization and implementation of the oil spill contingency plan and response frameworks at transboundary emergency level. A regional oil spill contingency plan including the regional marine oil spill response plan cannot be achieved without enhanced capacity support programme for the countries at a regional scale.

2.4. Revenues Management

Transparency and accountability in oil and gas revenues are crucial for sustainable development of the industry. Public finance management (PFM), taxation, and revenue management are critical elements of "responsible management of petroleum resources". Relevant capacity needs and regional collaboration should therefore take place within existing structures and schemes established within contracting parties. Support for the establishment of best practices and

standards for existing fiscal and regulatory frameworks within the WIO countries should be prioritized for effective strengthening and enhancement of the principles of transparency and accountability in revenues management in the WIO Region. Further, the countries need to be supported to share experiences that will enhance and strengthen internal capacities in procurement and contracting procedures.

2.5 Technology Development and Research

New techniques and technologies discovered through research and development are vital in enabling the oil and gas industry to meet global energy demand and are vital to overcome current and future challenges. The WIO countries need to be supported to share experiences that lead to the adoption and development of new technologies or research in the oil and gas industry.

3. KEY TARGETS IN THE CAPACITY BUILDING PROGRAMME

The regional Capacity Building in Oil and Gas Development programme will target the following main stakeholders in the WIO Region:

1. Government
2. Industry
3. Civil Society Organizations & Non-Governmental Organizations
4. Local Communities
5. Academia

3.1. Government

Government entities directly or indirectly involved in oil and gas industry including National Oil Companies (NOCs); Ministries, Department and Agencies (MDAs) including Legal and Regulatory professionals, Fisheries, Tourism, Maritime, Land, Forest, Water, Environment, Finance & Revenues, Safety, Security, and other Regulatory Agencies, Ministry of Water Resources; Local Government Authorities (LGAs); Decision makers such as the Ministers, Members of Parliament, and Cabinet; Legal Professionals in the Public Sector – Attorney General's Office, Focal Points of Nairobi Convention, etc.

3.2. Industry

This includes Oil and Gas industry, Tourism & Hospitality industry, Chamber of Commerce Industry and Agriculture, Aquaculture and Mariculture; Confederation of Industries; Critical Infrastructure (pipeline, roads, marine, communications, energy, etc), maritime, fisheries, etc.

3.3. Civil Society Organizations

Civil Society organizations (CSOs) including those dedicated to carrying out advocacy, scientific research and promotion of transparency, accountability and equity in oil for development.

3.4. Communities

These include Leaders, Youth, Elders, Vulnerable Groups such as Women and Children, Fishermen, community based organizations (CBOs) etc

3.5. Academia

These include researchers, trainers, sociologists, teachers, research and academic institutions, Universities, Vocational Training Schools/Institutes, etc.

4. KEY AREAS OF INTERVENTION

The Oil and Gas Capacity Building Programme should be centered upon the following engagement approaches:

- Mainstreaming of Universal Oil for Development Standards and Best Practices – Sector-wide
- Project Management or Programme Objectives
- State of Environment, Awareness, and Sensitization
- Training of Trainers
- Corporate Social Responsibility
- Risk and Contingency
- Industrial value Chain
- Certificate and Competency.
- Training Needs Assessment.
- Capacity gaps and existing capacities.
- Formal, Informal Education, or Networking,

The Regional programme should target Senior Executives, Practitioners & Experts and CEOs of the Civil Society Organizations and Leaders of the Communities. The intervention areas should be based as follows:

4.1. Resource and Data Management

It is proposed that key areas of intervention under the above thematic area should include the following:

- Procurement, Contract Negotiations and Marketing.
- Primary Technical Data Assessment and Ownership Rights.
- Training on Resource Data Management Systems.
- Training on block delineation methodologies (e.g. Australia, UK, Norway, France)
- Financial Mechanism (like the Global Environmental Facility for the WIO Region)
- Marine Spatial Planning
- Integrated Coastal Zone and Marine Management Tools
- Ecosystem Based Management Tools
- Critical Habitat and Mitigation Measures Data Management.
- Marine No-Net-Loss Data Management Tools
- Training on United Nations Convention on the Law of the Sea (UNCLOS)

4.2 Environmental and Social Management/Safeguards

It is proposed that key areas of intervention under the above thematic area should include the following:

- Development and Strengthening of National and Regional Environmental Action Plans on Waste Management, Oil Spill Contingency Plans,
- Strategic Environmental Assessment for the WIO Region
- Dispute Resolution Mechanism on Transboundary incidents
- Sustainable Management of Oil and Gas in the WIO Region to avoid potential environmental destruction of coastal and marine resources.
- Regional Guidelines to address Transboundary environmental inputs
- Capacity and gaps assessment on transboundary exploration and production
- Environmental Monitoring and Evaluation Approaches in Offshore Oil and Gas Development.

- Legal and Policy Framework (National and Regional approaches)

- Resettlement Action Framework

- Environmental Education, Training and Public Awareness

- Research and Systematic Observation in coastal and marine ecosystems including collection of baseline data.

- Data Management and Data Collection Systems

4.3. Safety Management

It is proposed that key areas of intervention under the above thematic area should include the following:

- Training on development of local and regional sensitivity maps and atlases.

- Risk Mapping and Vulnerability Assessment Methodologies related to oil and gas operations.

- Capacity building in Oil Spill Contingency Plan (OSCP) and Marine Oil Spill Response Plan (MOSRP)

- Capacity in Emergency and Safety Operations including Anti-Piracy and Marine Surveillance programs.

- Conducting Systematic Health, Safety and Environmental Audits of Oil and Gas operations.

4.4. Revenues Management

It is proposed that key areas of intervention under the above thematic area should include the following:

- Training on Transparency and accountability of oil revenue management

- Capacity in Local Content Needs Assessment, Policy and Implementation.

- Best Practices & Standards in Tax application and revenues collection.

- Equity in resources revenues and sharing.

- Cultural values and conflict management over resource allocation and distribution.

- Public expenditure and petroleum revenues.

- Capacity building in resource ownership rights

4.5 Technology Development and Research

It is proposed that key areas of intervention under the above thematic area should include the following:

- Development of infrastructure and upgrade of facilities
- Identifying opportunities for local suppliers.
- Local Business and supplier's enhancement.
- Development of specialized skills in the oil and gas sector.
- Skills acquisition programme.

5. HOW REGULAR SHOULD THE CAPACITY BUILDING PROGRAMME BE?

The regional training architecture which is designed to target the senior executives of the Governments, Experts & Practitioners, Heads of the Civil Society Organizations, and Leaders of the Communities has considered the importance of the training packages and availability of the categories of the trainees. It is expected the frequency and duration of the training packages for the targeted trainees will play a key part in determining the longevity of the training programs and how these programs should be carried out. The following table is a proposal that attempts to illustrate how the frequency/duration of training should be carried out.

Table showing the frequency and duration of the proposed training packages			
Target Group	**Type of Training**	**Duration**	**Frequency**
Senior Executives	• Resources and Data Management • Environmental and Social Management • Revenues Management • Safety Management	• 1-3 Days	Phased approach will apply: exploration phase, exploitation phase and decommissioning phase.
Practitioners and Experts	• Resources and Data Management • Environmental and Social Management • Revenues Management • Safety Management	• 1 Week	After 2-6 Months
		• 1-3 Months	After 6 Months
		• 1-2 years	After 2 years
CEOs of Civil Society Organizations	• Environmental and Social Management • Safety Management	• 1-5 days duration	Half yearly (6 Months)
Leaders of the Communities	• Environmental and Social Management • Safety Management	• 1-3 days (site visits, onsite training, workshops)	Annually

6. THE RESULT FRAMEWORK.

This section attempts to illustrate training needs requirements based on four key thematic areas of the proposed capacity building programme. The table is divided into three columns. The first column addresses the long-term result or the outcome of the proposed training need requirements. The Baseline column describes the current situation and existing gaps that are in need of immediate intervention while the Target column addressed framework interventions or training needs that are desired.

Resource and Data Management		
Outcome	Baseline	Target
1. **Strengthened institutional capacity that enables the government to implement the resource management aspect of policy, legal and regulatory framework for the upstream petroleum sub-sector.**	• Inadequate or in some cases non-existence of legal and regulatory framework for the oil and gas industries for the upstream, mid-stream and downstream sectors in the WIO region. • Low levels of knowledge and capacity at resource and data management; within the WIO region. • The need for a strong regional framework / Economic Block that utilizes the existing regional blocks policy makers	• Contract Negotiations, Licensing & Marketing. • Block Delineation Methodologies and Management. • Marine Spatial Planning • Training on UNCLOS convention and protocols.
2. **Strengthened institutional capacity that enables the government to implement data management related to oil and gas resources**	• Inadequate capacity in developing, processing, storing and managing primary technical data for oil and gas exploration.	• Primary Technical Data Management and Assessment
3. **Strengthened institutional capacity that enables the government to address coastal and marine conservation and protection of biodiversity and ecosystems.**	• Inadequate capacity in developing, processing, storing and managing environmental database systems for monitoring and compliance in the oil and gas exploration and production areas	• Training on Resource Data Management Systems. • Integrated Coastal Zone and Marine Management Tools • Ecosystem Based Management Tools • Critical Habitat and Mitigation Measures Data Management. • Marine No-Net-Loss Data Management Tools • Research and Systematic Observation in coastal and marine ecosystems including collection of baseline data

Environmental and Social Management and Safeguards Monitoring		
Outcome	**Baseline**	**Targets**
1. **Relevant Government Authorities ensure that environmental aspects of the oil and gas sector are addressed in their policies, legislations, regulations, standards, guidelines and agreements.**	• Inadequate capacity to develop instruments and guidelines for implementation of extractives activities (oil and gas) and emerging issues. • Need for development of appropriate instruments and tools to ensure environment for sustainable development in the WIO • Inadequate mechanism to address conflict resolution and management. • Lack of clear mechanism to address the need for provision of Alternative livelihoods or equitable resource allocation • Concerns over migration of labour and cultural values.	• Capacity in Legal, Policy and Regulatory Framework (National and Regional approaches) including best practices, environmental standards, guidelines and tools. • Development and Strengthening of National and Regional Environmental Action Plans on Waste Management, Oil Spill Contingency Plans, Strategic Environmental Assessment, EIA, Environmental Monitoring and Evaluation Approaches etc. • Dispute Resolution Mechanism on Trans-boundary incidents / conflicts. • Capacity building in Fair valuation/ compensation & Resettlement Action Framework. • Capacity Local Content implementation tools

Environmental and Social Management and Safeguards Monitoring		
Outcome	**Baseline**	**Targets**
2. Strengthened institutional capacity in integrated development planning and ecosystem valuation and management.	Need to create awareness and education on importance / value of culture and heritage to Tourism / Protection of traditional attitude, beliefs and sites.	• Capacity building in the use of System Dynamics Scenarios to engage an integrated development planning for oil and gas development • Environmental Education, Training and Public Awareness on oil and gas development. • Cultural and Heritage Preservation (UNESCO Heritage Sites).

Safety Management		
Outcome	**Baseline**	**Targets**
1. **Established and strengthened Institutions on Emergency Response, Safety Management and Risk Assessment for the oil and gas sector at the national and in the WIO region**	• Potential of large-scale environmental and human destruction from oil spill accidents. • Inadequate personnel with skills to develop Oil Spill Contingency Plans and Marine Oil Spill Response Plan.	• Training on development of local and regional sensitivity mapping & atlas. • Risk Mapping and Vulnerability Assessment Methodologies related to oil and gas operations. • Capacity building in Oil Spill Contingency Plan (OSCP) and Marine Oil Spill Response Plan (MOSRP).
2. **Regional framework established in the WIO region with the capacity and competence to implement environmental and disaster management policies, legislation, regulations, standards and guidelines for the oil and gas industry**	• Need for Inter-state agreement coupled by inter-state technical experts / committee to address inter-state environmental pollution and accident to advice political decisions. • Need for multi-national approach to marine security. • Need for Risk Assessment management (Oil Crime, Black Market.	• Capacity in Emergency and Safety Operations including Anti-Piracy and Marine Surveillance programs. • Conducting Systematic HSE Audits of Oil and Gas operations

Oil & Gas Revenues and Tax Management		
Outcome	**Baseline**	**Target**
1. **Strengthened institutional mechanism for effective, transparent and efficient management of oil and gas revenues.**	• There is lack or inadequate capacity to effectively monitor resource production and tax and revenues collection. • Inadequate assessment of tools or instruments to ensure Good governance (accountability, transparency, integrity) in revenues and tax issues.	• Training on Transparency and accountability of oil revenue management • Public expenditure and petroleum revenues. • Equity in resources revenues and sharing. • Best Practices & Standards in revenues collection. • Cultural values and conflict management over resource allocation and distribution • Capacity in Local Content Policy and Implementation. • Capacity building in resource ownership rights

7. CONCLUSION

It is important that the Nairobi Convention focal points and the oil and gas experts from the region need concrete support to enable them provide for sufficient advocacy for decision makers within their respective countries of the WIO region, and to empower them develop strong communications strategies necessary for mobilization of a regional oil and gas for development capacity building initiatives. In addition, there is a potential for a regional collaboration between the countries of the WIO – learning from the existing knowledge and capacity levels within the countries - and with the support of the Nairobi Convention to develop a capacity building programme able to target existing and new gap analysis and needs assessment studies. These include identifying multiple donors e.g. UNEP OfD supported by Norway, Sweden, World Bank, etc. and raise an added value at the regional level for a capacity building programme which may or may not be already available at the national level.

As such, there is a need to harmonize approaches at the regional level, show interlinkages and cross references from the countries, and to quantify national effects existing capacities into a regional goal. Nevertheless, there are potential synergies between Nairobi Convention and other Multilateral Environmental Agreements (MEAs) which have relevant capacity building programs dedicated towards sustainable development of extractive industries, including oil and gas. The Nairobi Convention Secretariat could beef up extra support for WIO capacity building programme on oil and gas for development.