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**Extractive Industries and Sustainable Job Creation**

**Local Content in the Petroleum Sector in  
the Republic of the Sudan**

By

**Dr. Mohamed Zayed Awad  
Minister of Petroleum and Gas  
Republic of the Sudan**

The views expressed are those of the author and do not necessarily reflect  
the views of UNCTAD.



Republic of Sudan  
Ministry of Petroleum and Gas

# Local Content in the Petroleum Sector in the Republic of the Sudan

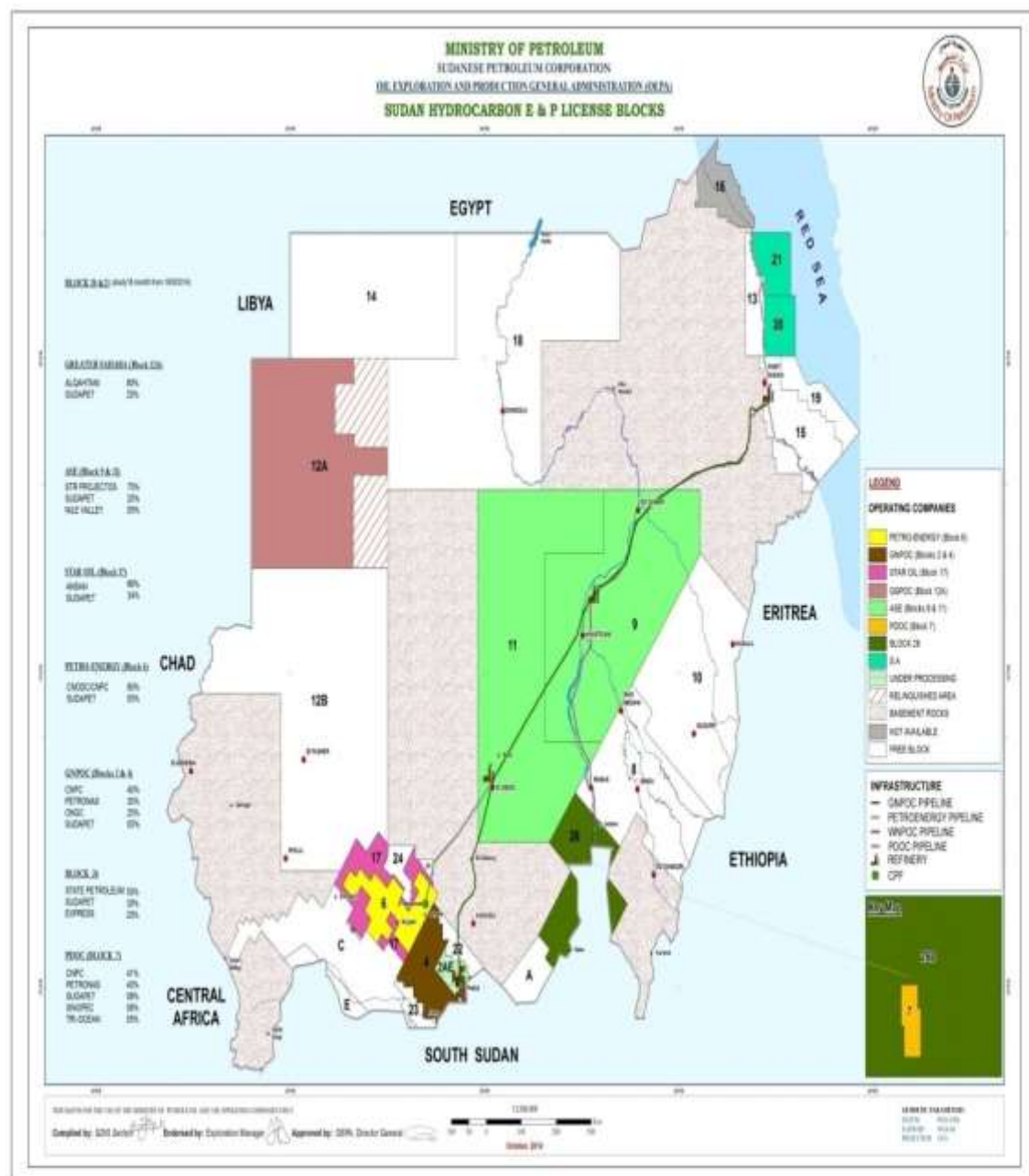
## An Overview

**Dr. Mohamed Zayed Awad**  
Minister of Petroleum and Gas



Cubic Globe

# Petroleum Infrastructure in Sudan



## Export Pipelines and Marine Terminals

1. Block 1,2&4 Pipeline is 1510 km, 28 inch, with 6 pump stations, a daily capacity of 500 thousand barrels, and 1 Marine Terminal capable of storing 1.8 million barrels
2. Block 3&7 Pipeline is 1472 km, 32 inch with 6 pump stations, a daily capacity of maximum 750 thousand barrels and 1 Marine Terminal capable of storing 3 million barrels.
3. Block 6 Pipeline is 716 km, 24 inch with 6 pump stations, a daily capacity of maximum 250 thousand barrels to Khartoum Refinery.
4. Total pipeline **3700 km** with a capacity of **1.5 million** barrels of oil per day and Marine Terminal storage capacity of **4.8 million barrels**.

## Central Processing Facilities (CPF)

1. Heglig CPF: 350 thousand barrels per day
2. Jabalyn CPF: 300 thousand barrels per day
3. Fula CPF: 200 thousand barrels per day
4. Total processing capacity: **850 thousand** barrels per day

## Refineries

1. Khartoum Refinery: 95,000 BOPD (plans to upgrade)
2. Obeid Refinery: 15,000 BOPD
3. Port Sudan Refinery : To be Refurbished
4. Total domestic refining capacity: 110,000 BOPD

**Sudan has a Robust petroleum infrastructure**



# Integrated Oil Industry

**E&P Business**

**Petroleum Services**

**Downstream Business**

Regulatory Body  
(OEPA, DGD, GDES)

Enhanced  
Oil  
Recovery

Gas to  
Liquid

EPCC  
Asawer  
Petrolines

PMC/  
O&M  
Centroid

Training  
PTC

Gas for  
Power  
Generation

**Operators**  
GNPOC  
Petro-Energy  
Staroil  
Rawat  
Petrodar

Sudapet  
as  
Full-  
Fledged  
Operator

**Petroleum Value Chain**

Crude Oil Sales and  
Marketing

Geophysical  
Acquisition  
BGC

Seismic  
Processing  
BPC

Drilling  
NUS  
ADF

Distribution  
Business  
Nile Petroleum

Private  
Businesses

Refining  
Khartoum  
Obeid  
Port Sudan

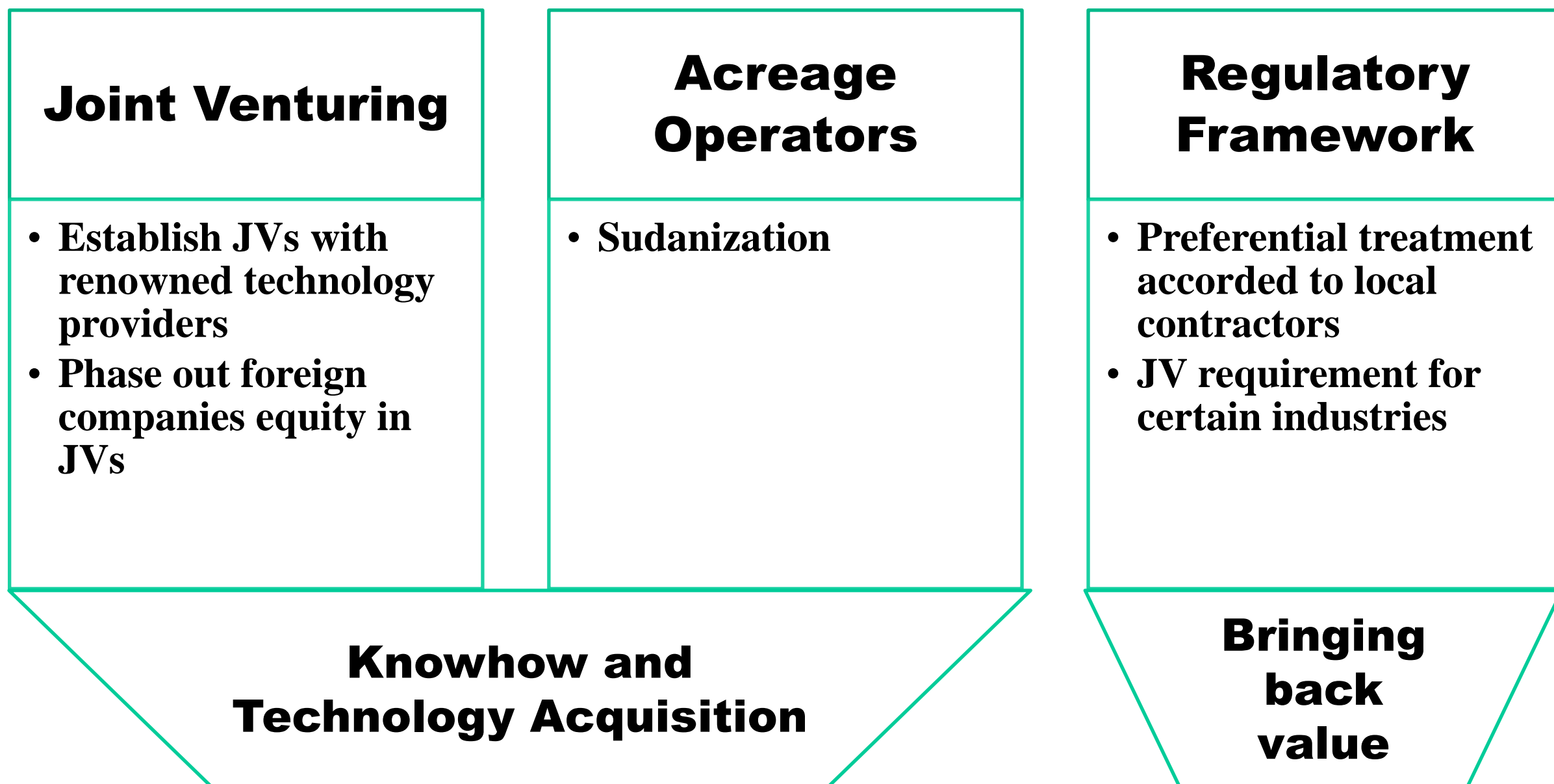
Alternate  
Energy

Investment Vehicles:  
Sudapet (Upstream) and  
PETCO (Midstream)

Bring back value from the Value  
Chain



# Methods for Injecting Local Content





# Exploration

- Comprehensively explore Sudan's sedimentary basins according to ranked exploration prospects
- Aim for an exploration success rate of 40% and a reserve target of 2.5 billion BBLs
- Appraise all existing gas discoveries to achieve economic break-even
- Appraise un-appraised oil discoveries

Sudapet:  
Investment

BGC:  
Seismic  
Acquisition

BPC:  
Seismic  
Processing

NUS  
Drilling Services



# Development

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- Fast track development of existing discoveries
- Fast track development of Gas trends
- Fast track appraisal and development of Red Sea offshore gas and condensate

Sudapet:  
Investment

PLRS:  
EOR Lab Services  
Studies

Asawer:  
Field Facilities

NUS  
Drilling Services



# Production

- Production

- Implementation of IOR/EOR
- Facilities construction, management and maintenance

Sudapet:  
Investment

PLRS:  
IOR studies

Asawer:  
Field Facilities

NUS  
Drilling Services

Centroid  
PMC and O&M





# Transportation

- Optimize existing pipelines
- Construct necessary tie-ins
- Facilities construction, management and maintenance

PETCO:  
Investment

PLRS:  
Studies

Petrolines:  
Pipeline  
Construction and  
Operation

Centroid  
PMC and O&M



# Downstream

- Iron ore reserve development in South Kordofan, Khartoum, River Nile and Red Sea states
- Optimize refining to “local market requirement” as priority A and “export requirement” as priority B
- Fertilizer plants may be constructed to provide fertilizer for local agricultural industry
- Gas-To-Liquid plant is already under process to utilize flared gas to produce liquid fuel types
- LNG businesses will be established upon discovery of large enough quantities

Sudapet

Khartoum and  
Obied Refineries

Crude Oil  
Marketing

Gas to Liquids

Nile Petroleum



# Petroleum Services

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- Sudanese Companies to focus on high value Projects to bring back value from the value chain
- Strategic services such as EOR services, drilling etc... to be domesticated
- Service providers to act as “training vehicle”
- Provide legislative framework to cater for local content in petroleum services



# Human Resources

## Sudan's Upstream Business: an example of successful local content policy in human resources

Electrical Engineering	723
Mechanical Engineering	712
Petroleum Engineering	513
High Secondary School	330
Geology	296
Chemical Engineering	231
Finance Accounting	203
Others (Interior Design, Tourism, Secretary, Press & Media	184
Bussines Administration	133
Technical School	132
Civil Engineering	123
Computer Science	113
Economics	87
Medical Sciences	51
Commercial	43
Law	41
Arts-English Language	35
Political Science	34
Organization Managment	32
Architecture	31
Lab Science	27
Information Technology	24
Surveying Engineering	23
Aviation	22
Agricultural Economy	21
Miliatry College	21

**SUDANIZATION  
BY  
QUALITY**

**Over 95%  
of  
positions  
Sudanized**



# Regulatory Framework

- Preference given to local contractors in certain services
- Quoted price margins for local contractors in tenders
- Sudanization of positions held by expatriates in petroleum operating companies
- Development of manpower in Sudapet and service providers

EPSA

Sudanization

Petroleum Wealth  
Act

Local Content  
Policy

# Challenges

## Brain Drain

- Gulf represents attractive market
- Sudanese are now a target of IOCs to work in gulf states
- New emerging markets e.g. Iraq

**Overcome by:**  
Better remuneration  
Better education

## Sanctions

- Smaller number of technology providers
- Importation of equipment and payment for services are grave challenges

**Overcome by:**  
R&D  
Domestication of services

