



LESOTHO HIGHLANDS WATER PROJECT



LHWP Phase II Procurement and Opportunities



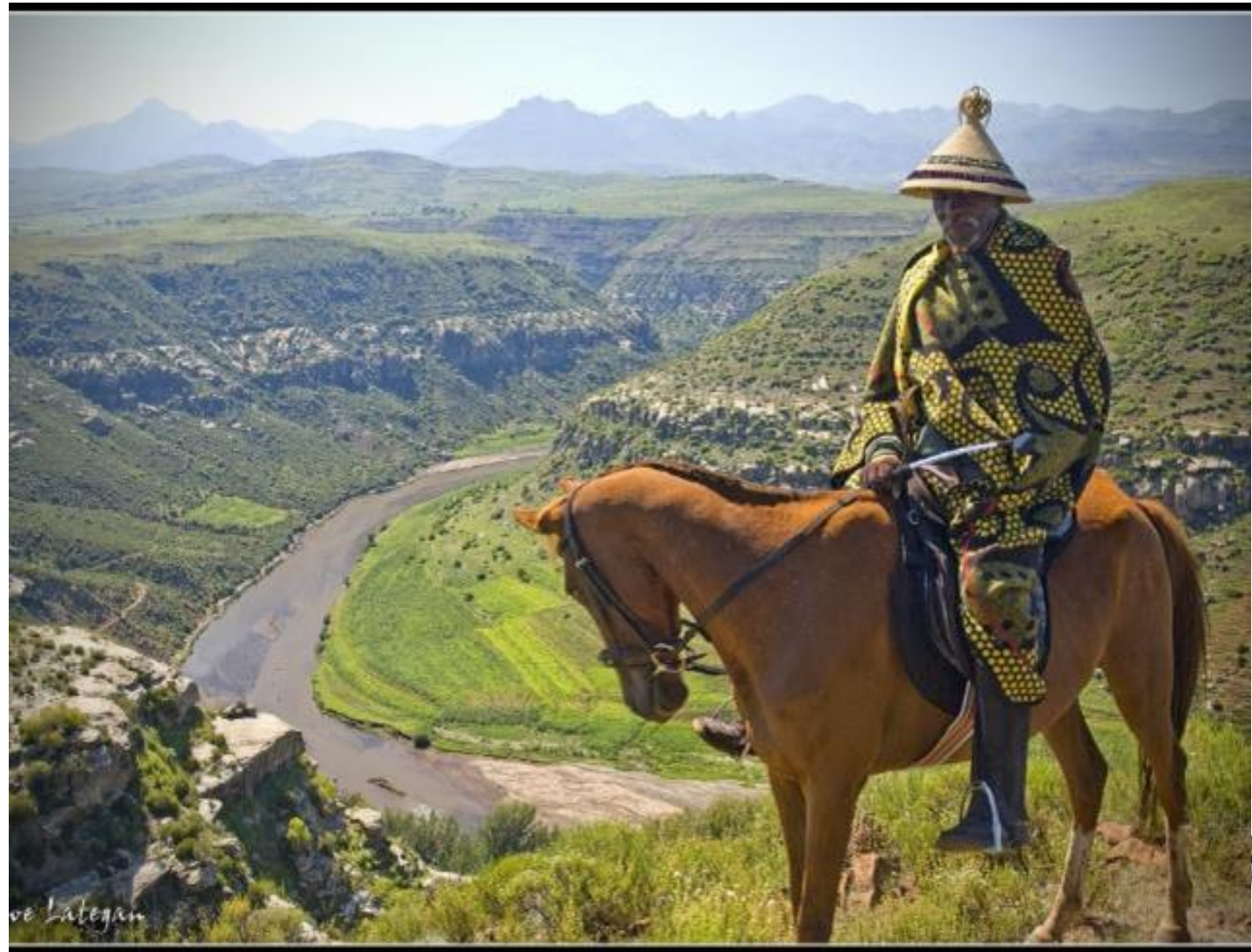
T. TENTE

LHDA

06 MAY 2021

PRESENTATION STRUCTURE

- PHASE I INFRASTRUCTURE
- PHASE II SCOPE
- PROCUREMENT
- OPPORTUNITIES
- CONCLUDING REMARKS



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PHASE I - INFRASTRUCTURE

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LHWP PHASE I – ADVANCE INFRASTRUCTURE



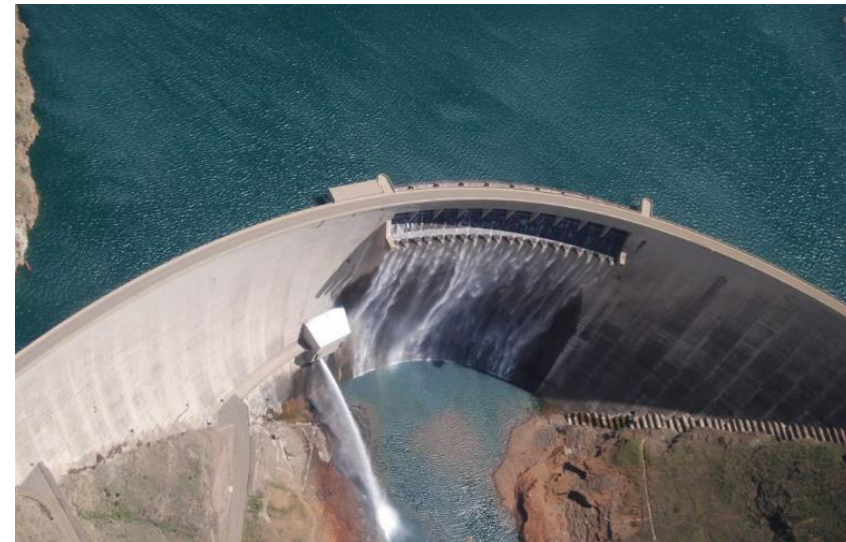
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LHWP – PHASE IA

Yield = $17\text{m}^3/\text{s}$:

- Katse Dam - 185m double Curvature Arch Dam
- Transfer Tunnel - 45km



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LHWP – PHASE IA

- 'Muela Hydropower - 72MW
- Delivery Tunnel - 37km



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Yield = $9\text{m}^3/\text{s}$:

- Mohale Dam - 145m CFRD
- Mohale Tunnel - 31km
- Matsoku Diversion Tunnel - 6km



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PHASE II - SCOPE

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POLIHALI VILLAGE – HOUSING



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POLIHALI LODGE



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UPGRADE TO KATSE LODGE



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POLIHALI OPERATIONS CENTRE



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ANCILLARY PUBLIC FACILITIES



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SENQU BRIDGE

Bridge Deck Type
Concrete Box Girders
50 m Spans

Bridge Length
875 m

Road Length
1.6 km



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POLIHALI DAM – ARTISTIC IMPRESSION



Polihali Dam

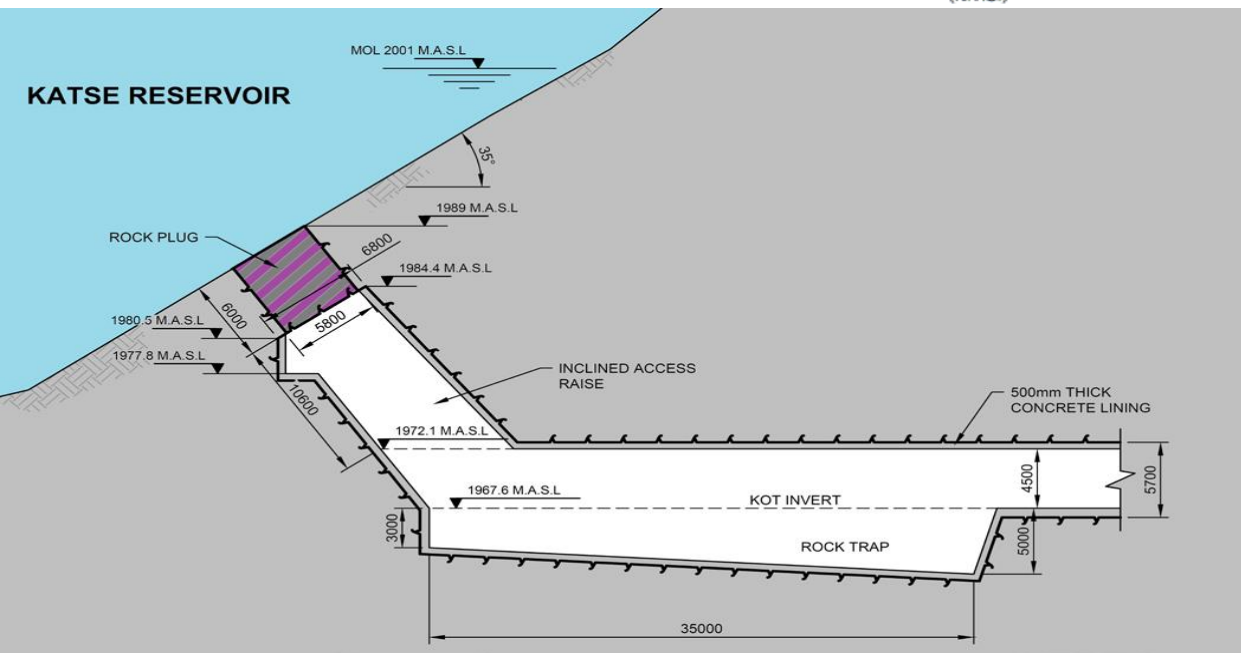
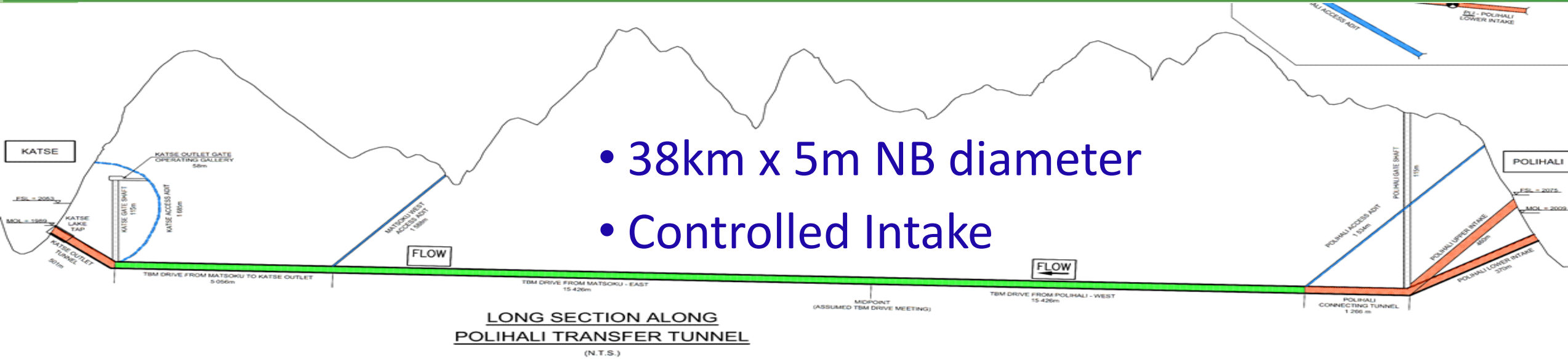
- 165m high CFRD
- 50m high Saddle Dam

LESOTHO
HIGHLANDS
DEVELOPMENT
AUTHORITY



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POLIHALI TRANSFER TUNNEL



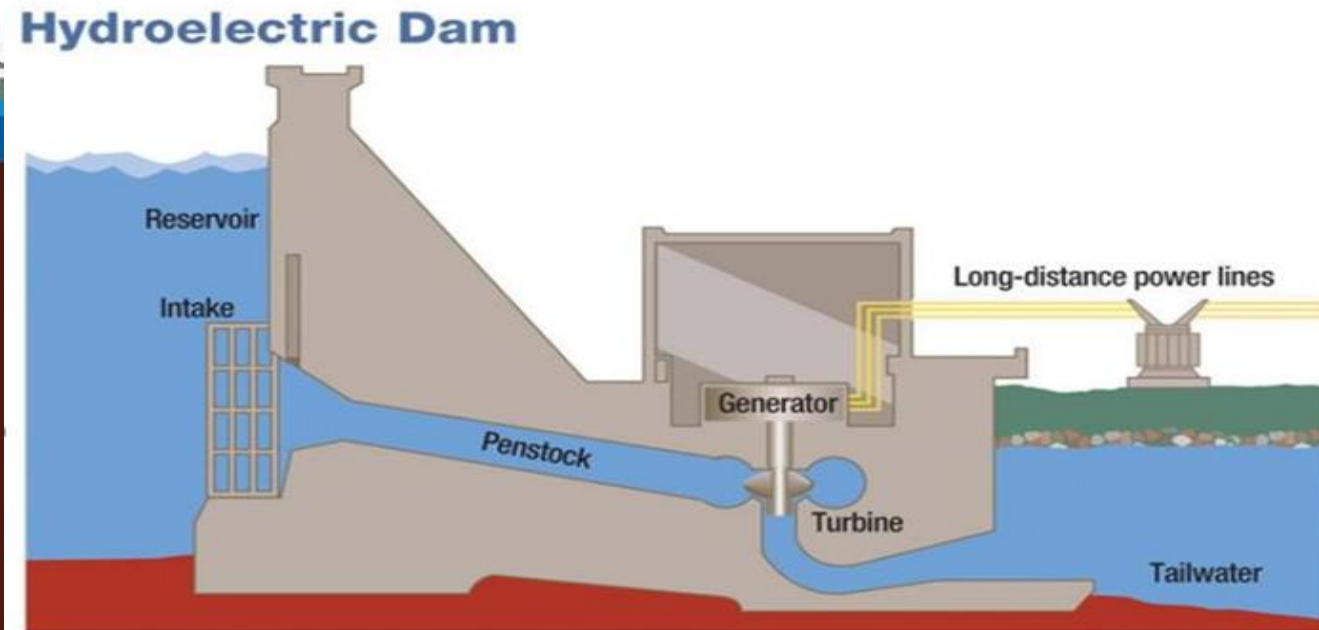
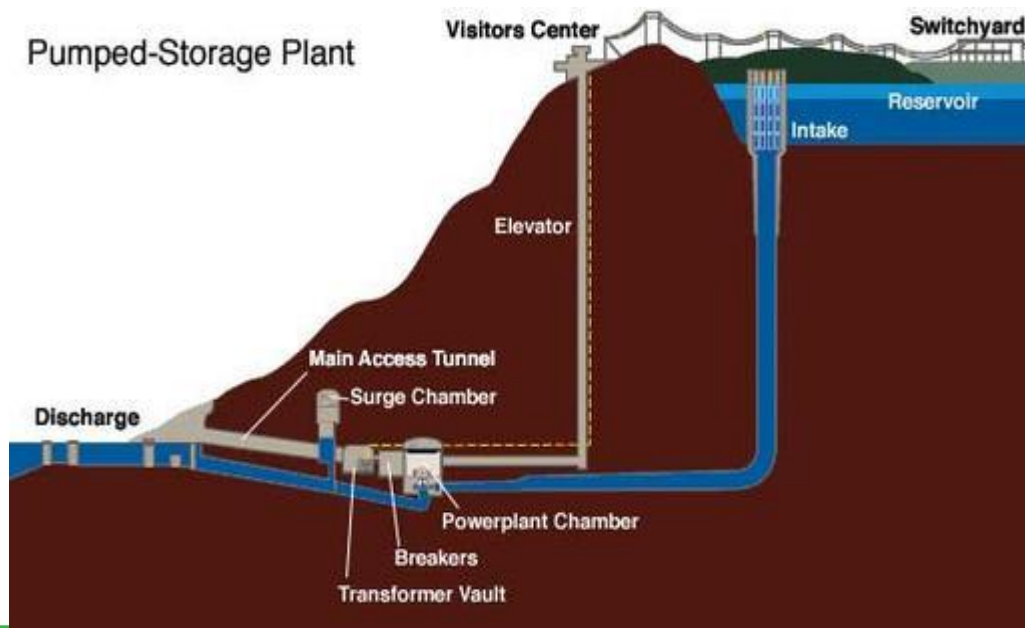
FURTHER HYDROPOWER FEASIBILITY STUDIES

Hydropower Generation

- Desired Outcome - Bankable Feasible Project

Investigated Options

- Pump Storage Scheme (PSS)
- Conventional Hydropower
- Assessment of Existing LHWP Installations (Mini- Hydro, Revamping of 'Muela Hydro)



ENVIRONMENTAL MITIGATION



- Environmental Baseline Studies
- ESIA's & Environmental Management Plans
- IFR/EFR
- ICM



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NATURAL DAM – WETLAND



Wetlands Rehabilitation



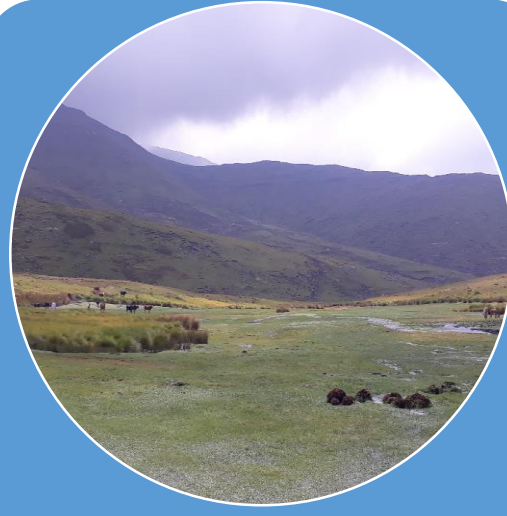
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UNDERSTAND LHWP MODEL



Inputs



Processing
Plant



Output



Warehouse

LHWP Input - Output Model

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POLIHALI RESERVOIR

- 17 Villages
- 1597 Households
- 7992 People
- 329 Households to be relocated



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ADVANCE INFRASTRUCTURE - MONETARY SHARE



PARTICIPATION GOALS

DESCRIPTION	EXPENDED TO DATE (March 2021)	LESOTHO	RSA
FEES	339 390 341	40%	60%
DISBURSEMENT	80 850 312	71%	29%
CONSTRUCTION	1 340 144 656	44%	56%
TOTAL	1 760 385 309	44%	56%

- Note

1. Auditing of the above figures being finalized

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MAIN WORKS- MONETARY SHARE

PARTICIPATION GOALS

DESCRIPTION	EXPENDED TO DATE (March 2021)	LESOTHO	RSA
FEES	439 757 557	22%	57%
DISBURSEMENT	114 461 581	65%	35%
CONSTRUCTION	390 795 083	33%	67%
TOTAL	945 014 221	37%	63%

- Note

1. 21% of fees is share for other nationalities (complexity of the works)
2. Auditing of the above figures is being finalized

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PHASE II MASTER PROGRAMME

WT- COMPONENT

- | | |
|---------------------------|-------------------|
| - Feasibility | - 2006 to 2009 |
| - Design Main Works | - 2017 to 2021 |
| - Tender - Award | - May 21 - Mar 22 |
| - Construction Main Works | - 2022 to 2027 |
| - Impoundment | - Jun 2025 |
| - Commissioning | - 2027/28 |

HP – COMPONENT

- | | |
|-------------------------------|----------------|
| - Further Feasibility studies | - 2016 to 2019 |
| <u>PSS OPTION (Deferred)</u> | |
| <u>CONVENTIONAL OPTION</u> | |
| - Design Main Works | - 2021 to 2024 |
| - Construction Main Works | - 2024 to 2027 |
| - Impoundment | - 2026 |
| - Commissioning | - 2027/28 |

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PROCUREMENT

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PROCUREMENT OBJECTIVES



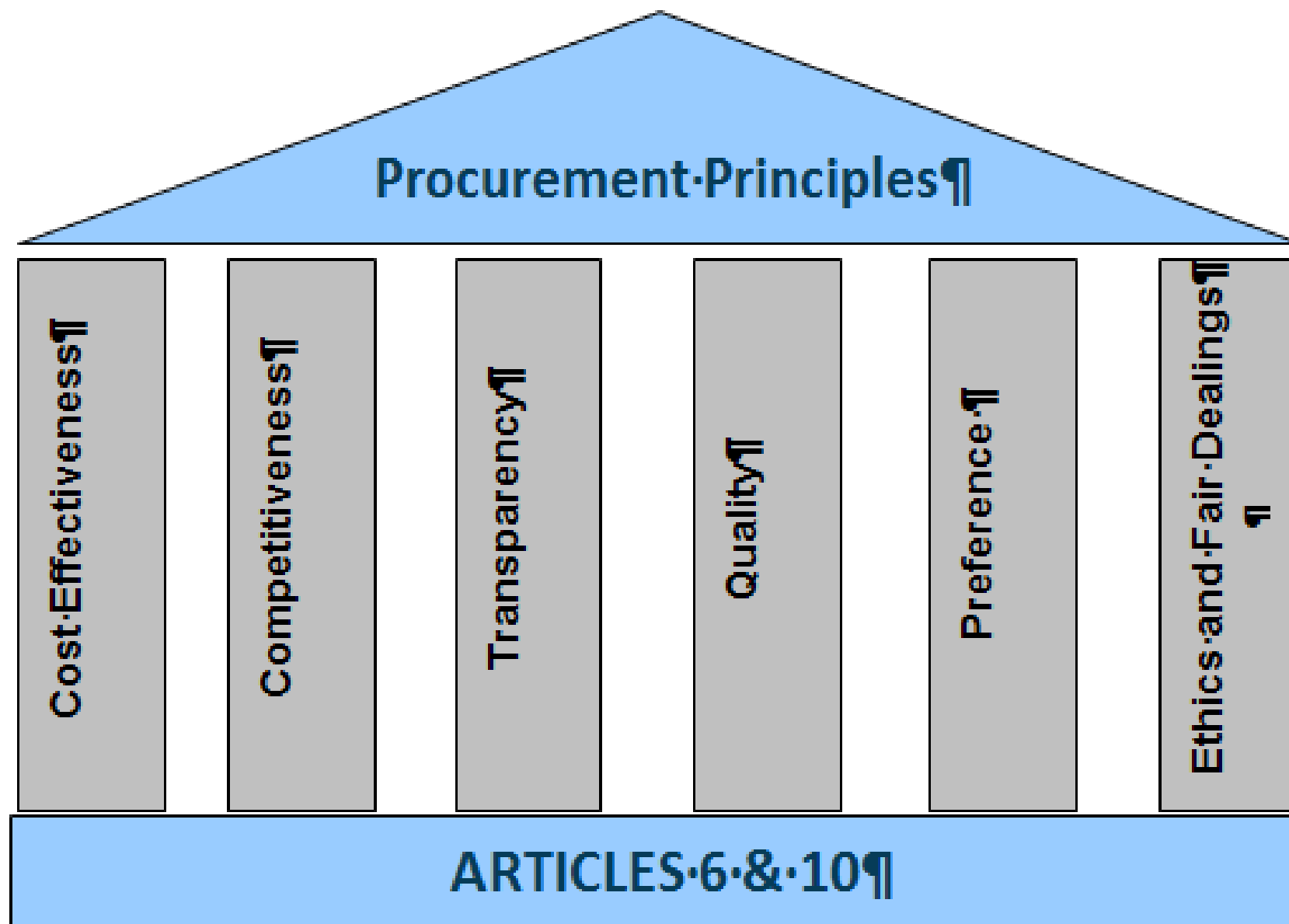
To maximize procurement opportunities.

To minimize the utilization of imported goods, skills and labour.

To maximize skills & technology transfer.

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OPPORTUNITIES

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OPPORTUNITIES – CONSTRUCTION PHASE



Construction Contractors

Joint Venture & Sub-Contractors

Enterprise Development

Employment – Skilled and Un-skilled

Supply Goods & Services – E.g.

Catering and Transport Services

Building material, plant and fuel

Hospitality and Banking Services

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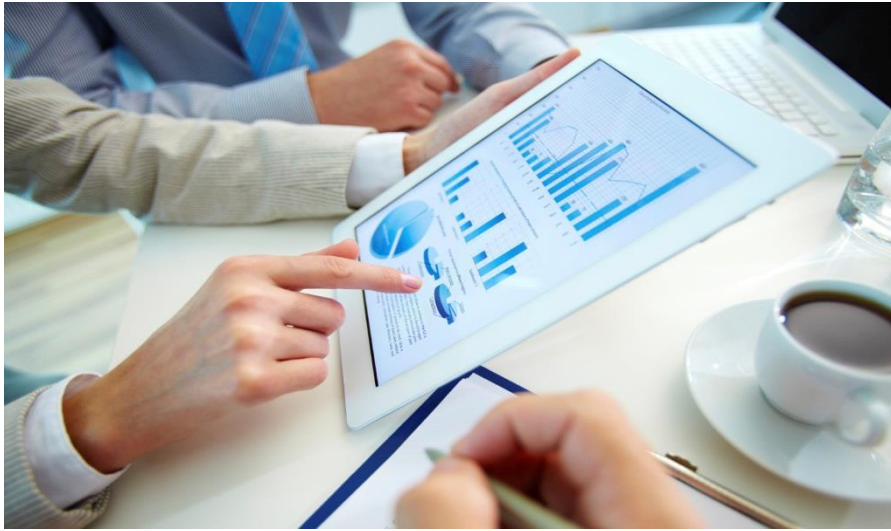


CATERING



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Support - Guarantees/Securities

Tender Security

Performance Guarantee

Advance Payment Guarantee

Retention Guarantee.

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CLEANING SERVICES



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GARDENING SERVICES



GARDENING



LANDSCAPING



SECTION CLEANUPS

MAINTENANCE



LEGAL SERVICES



Permit Application
Employment Contracts
Tax Matters
Legal Opinions

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TRANSPORTATION SERVICES



collaboration



RETAIL & SPORTS FACILITIES



OPPORTUNITIES – POST CONSTRUCTION



Aquaculture

Tourism

Maintenance

LHDA O&M

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AQUACULTURE



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TOURISM



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TOURISM



MAINTENANCE



CONCLUDING REMARKS

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CONCLUDING REMARKS

Quality, Competitiveness & Cost Effectiveness

Knowledge of Trade

Nature & magnitude require joint efforts

Consistency, Dedication & Honesty

Challenges exist

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THANK YOU



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