



Enhancing Utility Performance through Asset Management: Insights from South Western Umbrella of Water & Sanitation - Uganda

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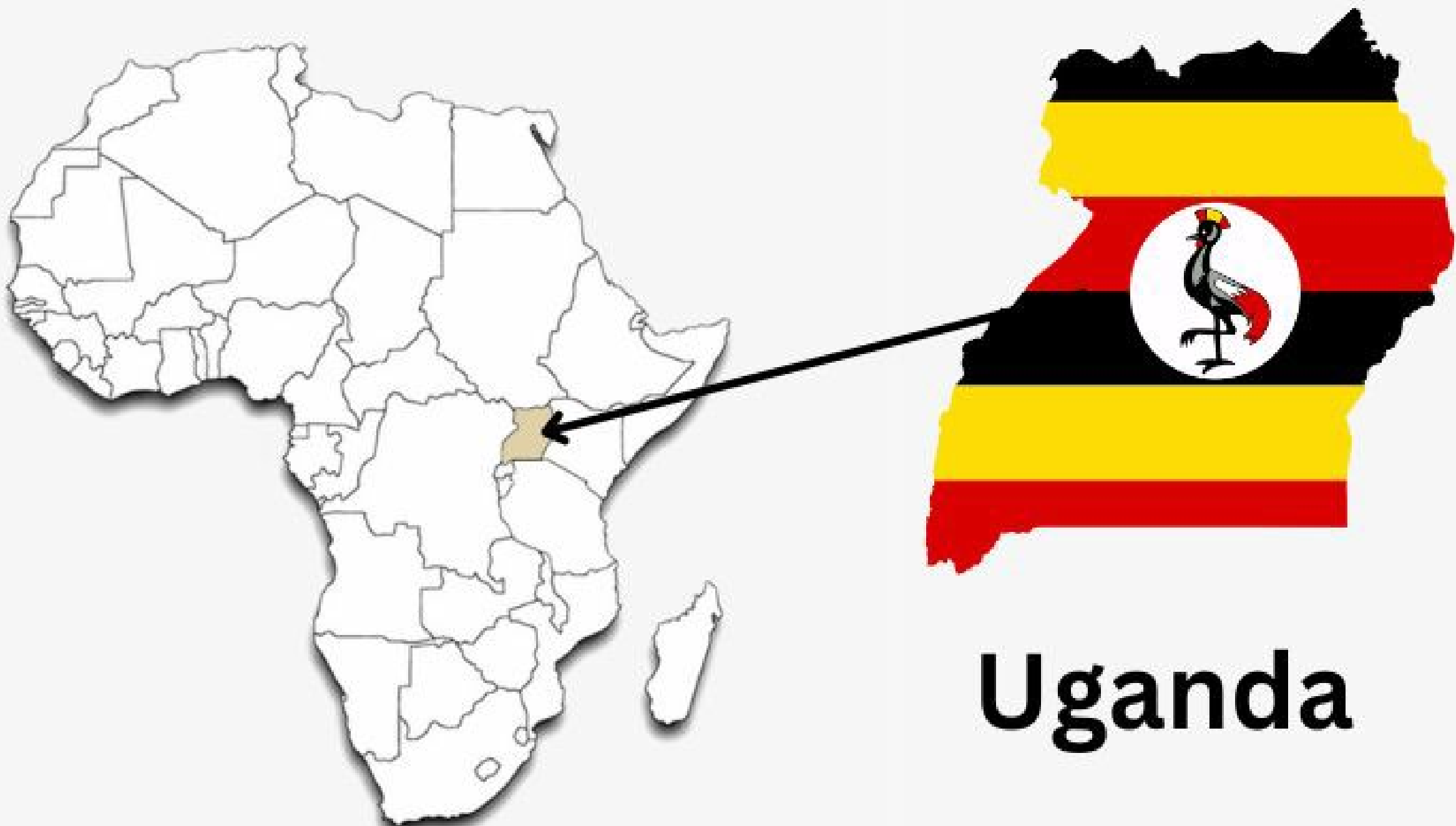
Engineer – SWUWS

PMP, MSc Env & NR, MPIM, BSc Civ & Env Eng

Presentation Scope



- Background of SWUWS
- Challenges faced by SWUWS
- SWUWS Initial Maturity Level
- EU WOP
- Progress
- Lessons
- Perspectives and Strategic Direction
- Conclusion



Uganda

Background of SWUWS



Before 2018, rural piped water schemes were managed by the communities, but this proved over time to be ineffective in ensuring sustainability leading to the breakdown and failure of the schemes.

Six regional Umbrella Utilities were introduced to ensure the sustainability of the schemes.

There are **six (6) Umbrellas:**

1. South Western
2. Mid-Western
3. Central
4. East
5. North
6. Karamoja

South Western Umbrella Overview

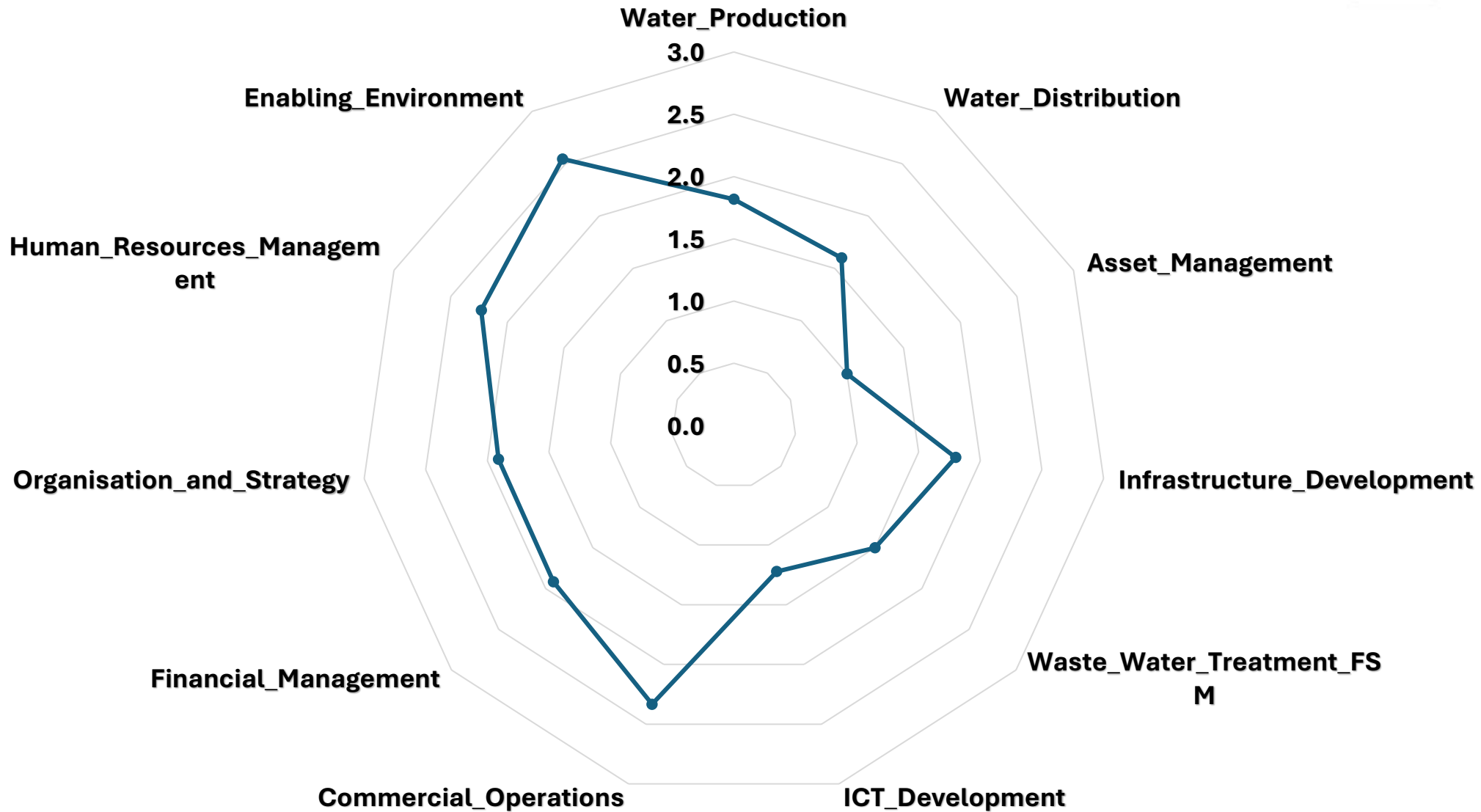
Description	Total number
No. of Districts covered	18
No. of Schemes managed	48
No. of Connections	16,000
Total population served	510,000
Total Number of Villages served	480

Challenges Faced By SWUWS

- Dilapidated systems
- Non Revenue Water
- Illegal water usage
- Unmetered connections
- Poor quality meters
- High Energy cost
- Poor Water Quality
- Unserved communities
- Inadequate Asset Management



—● Maturity level 2021 (ALL working processes)





30 YEARS
1994 - 2024



EU WOP



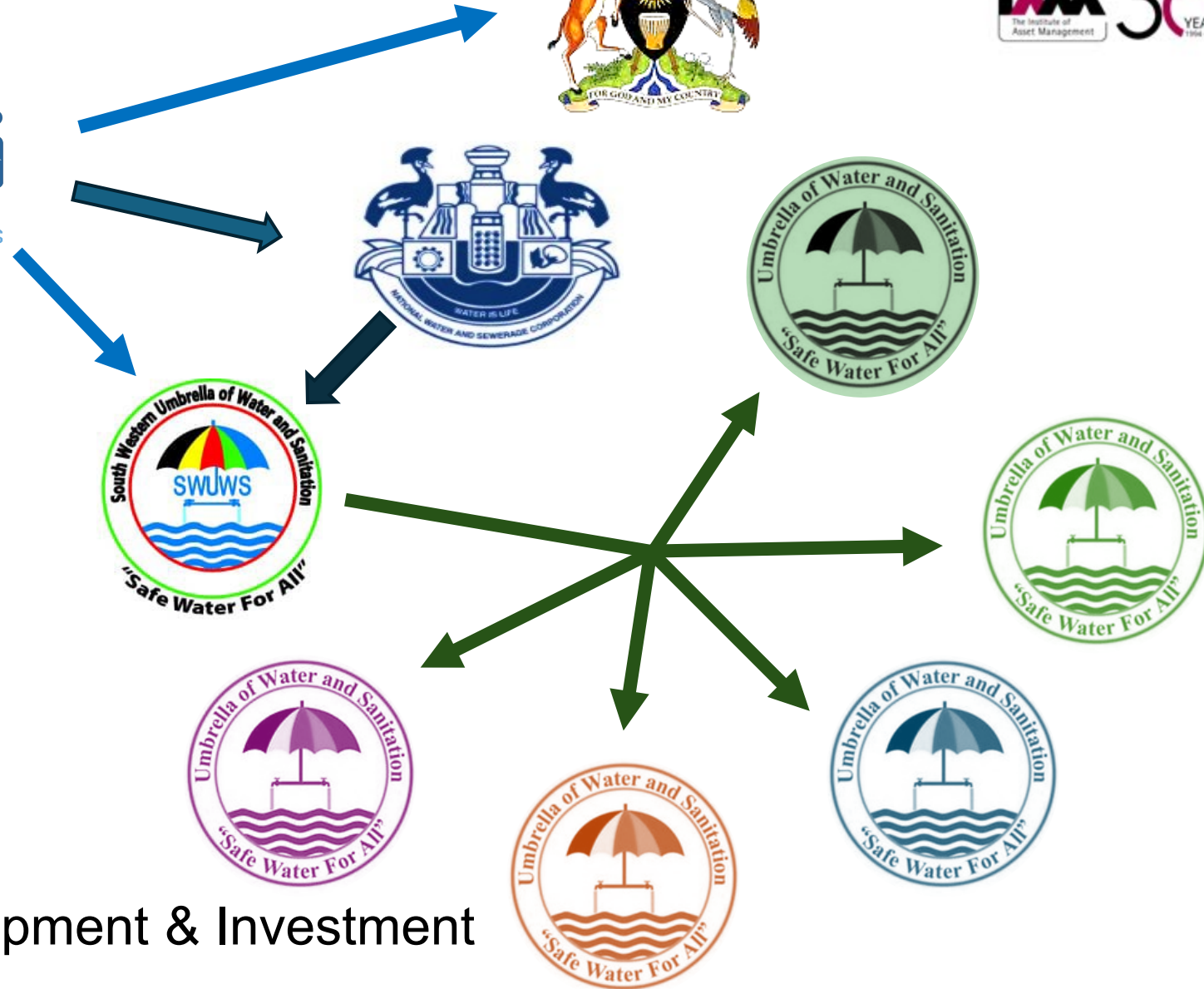
SWUWS needed to address Asset related aspects by adopting the Asset Management (AM) framework and AM principles, as provided by international knowledge centers (IAM: Institute of Asset Management) and standards (ISO55001)

This built the case for a Water Operators Partnership with Vitens Evides International (VEI) in 2022

Partners:

- Vitens Evides International (VEI) [_NL](#)
- South Western Umbrella of Water and Sanitation [_UG](#)
- Ministry of Water and Environment [_UG](#)
- National Water and Sewerage Corporation [_UG](#)

WOP Overview



Main Tracks

1. Asset Management
2. Infrastructure Development & Investment
3. Customer Relations & Billing

Progress

Achieved

- Asset Management Trainings; Dutch Expert; SWUWS, MWE
- SAMP & AMP Development
- Equipment (Motorbikes, Server, Laptops, Desktops, GPS)
- Visit to VEI, Netherlands
- Mentor/Mentee Missions; NWSC to SWUWS

Track 1: MapKit & GIS

Track 2: Baseline Conceptualisation, UW management

Track 3: CRM, SMS platform, Customer charter & handling

- Bi-Monthly training for all Umbrellas

Planned

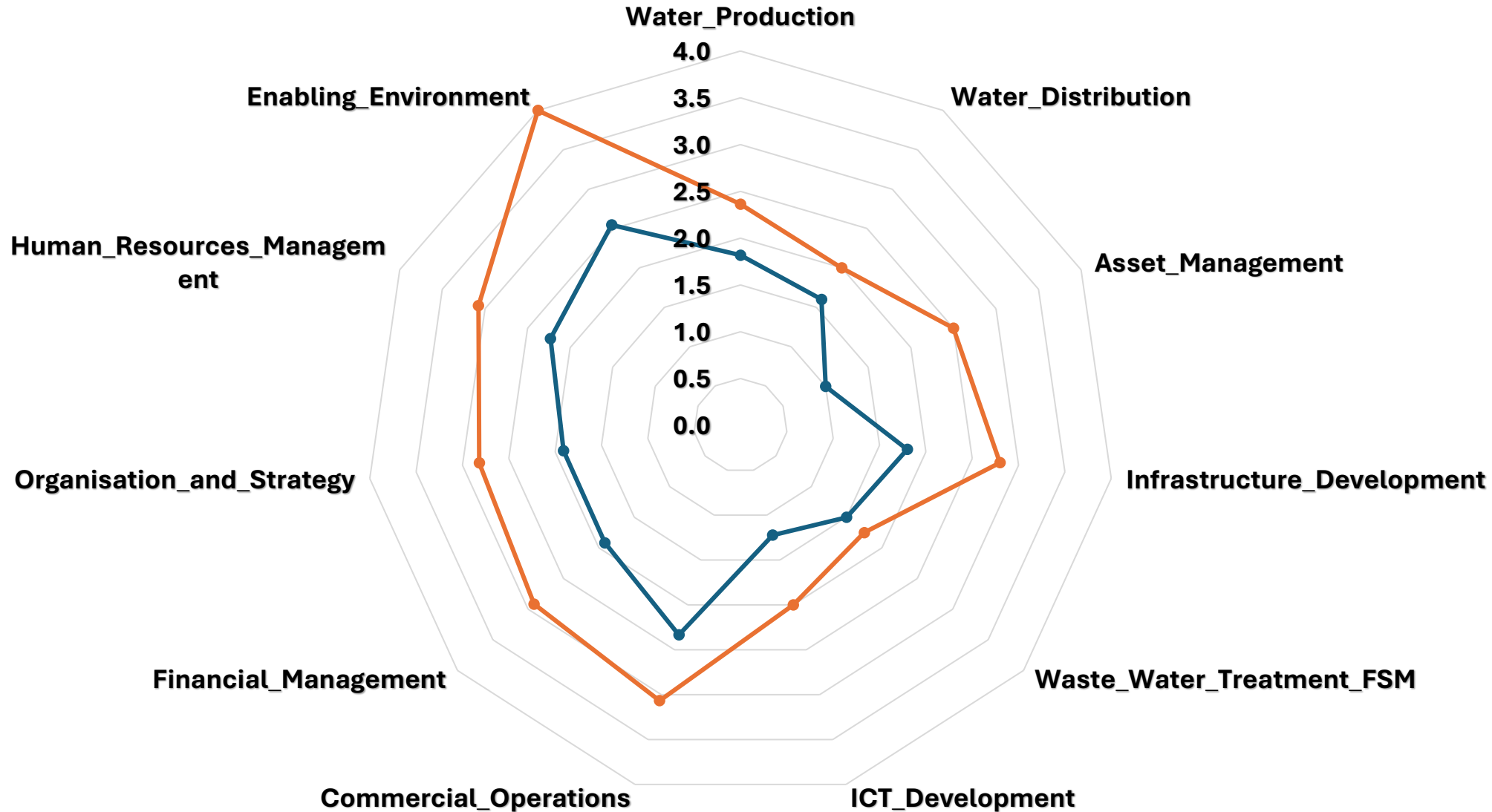
- Call center
- Practical benchmarking methods and KPI
- Computerised Maintenance Management System (CMMS)
- Bulk meters & loggers
- Borehole Siting & Drilling



Maturity Assessment for the South Western Umbrella



—●— Maturity level 2021 (ALL working processes) —●— Maturity level 2023 (ALL working processes)



Lessons



Collaboration and Knowledge Sharing

Collaboration and knowledge sharing among water utilities promotes quick growth and advancement.

Continuous Improvement

Utilities should strive for continuous improvement and innovation in water management practices.

Institutional Capacity Building

Building internal capacity is as important as implementing technical solutions. Investing in staff training and development programs to enhance skills in asset management, maintenance, and operational efficiency.

Lessons...ctnd



Adaptability to Local Context

Solutions should be tailored to suit the specific needs and context of the local area.

Data Management

Accurate and up-to-date data is essential for informed decision-making.

Digitisation for Efficiency

Utilisation of digital platforms promotes efficiency at all operational levels.

Perspectives and Strategic Direction



Opportunities for Further Improvement

- Fine-tuning existing processes and strategies based on lessons learned.
- Exploring new technologies or methodologies that can optimize asset management and operational efficiency.
- Strengthening partnerships with local stakeholders, government agencies, and other relevant organizations to leverage resources and expertise.

Potential Expansion of Partnership Activities

- Expanding the scope or scale of partnership activities, to other Umbrellas.
- Diversifying project focus areas to address emerging challenges or opportunities in the water sector, such as climate change resilience or water quality management.

Perspectives and Strategic Direction...ctnd



Long-Term Sustainability Considerations

- Develop robust monitoring and evaluation frameworks and metrics to track effectiveness and progress.
- Regularly review monitoring data to identify trends and challenges, informing decision-making.
- Engage stakeholders in the process to foster collaboration, transparency and accountability.
- Incorporate lessons learned to optimize project impact and sustainability over time.
- Advocacy for more International collaboration.

Conclusion

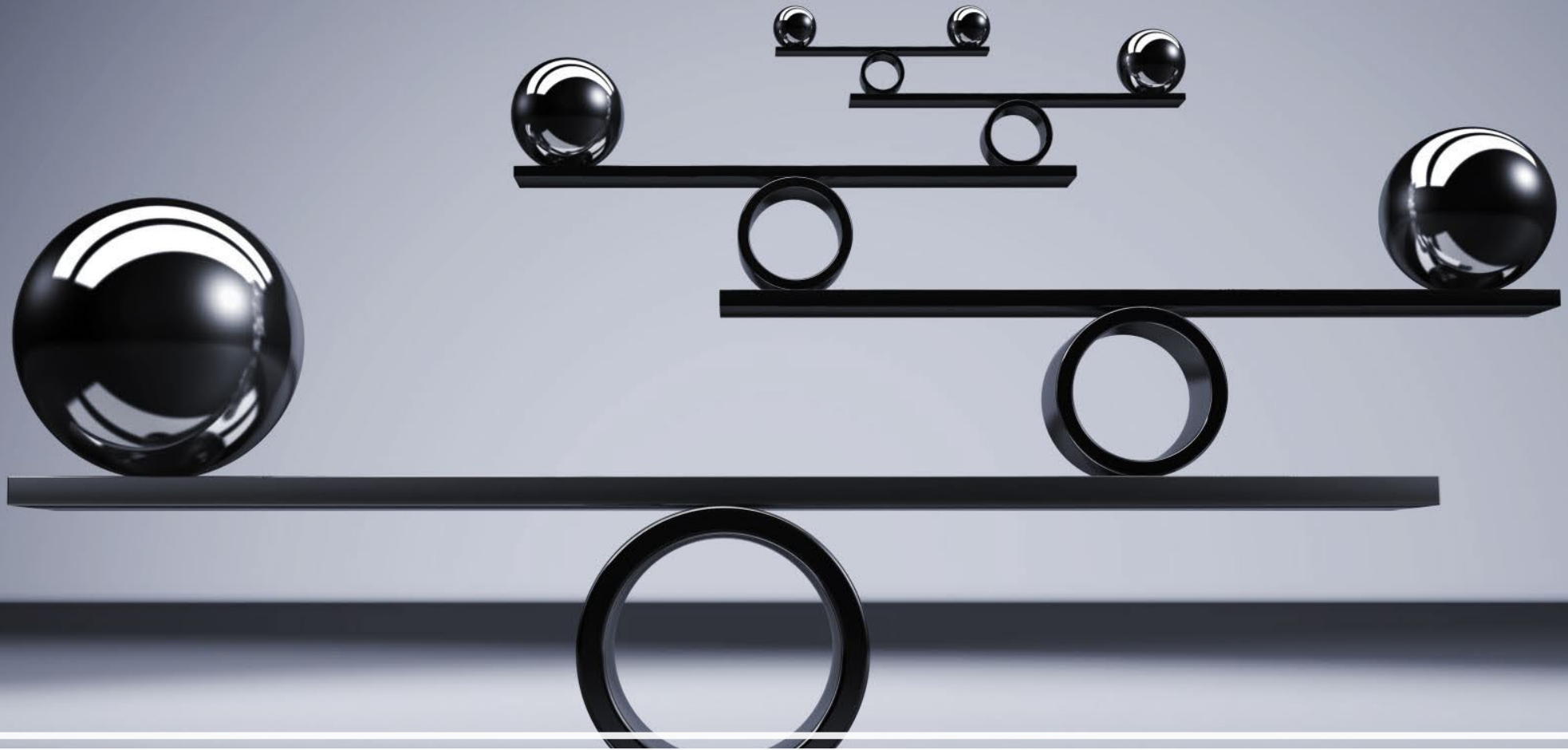


The EU WOP Partners have achieved significant progress in enhancing water utility services in South Western Uganda.

As we move forward, we remain committed to building upon our achievements, addressing challenges, and ensuring long-term sustainability through transformative Asset Management practices.

With gratitude to all stakeholders, we are transforming water infrastructure and empowering communities for better livelihood.





THANK YOU FOR YOUR ATTENTION!