IOT Missions in Tanzania

The 54th UNISEC-Global Virtual Meeting

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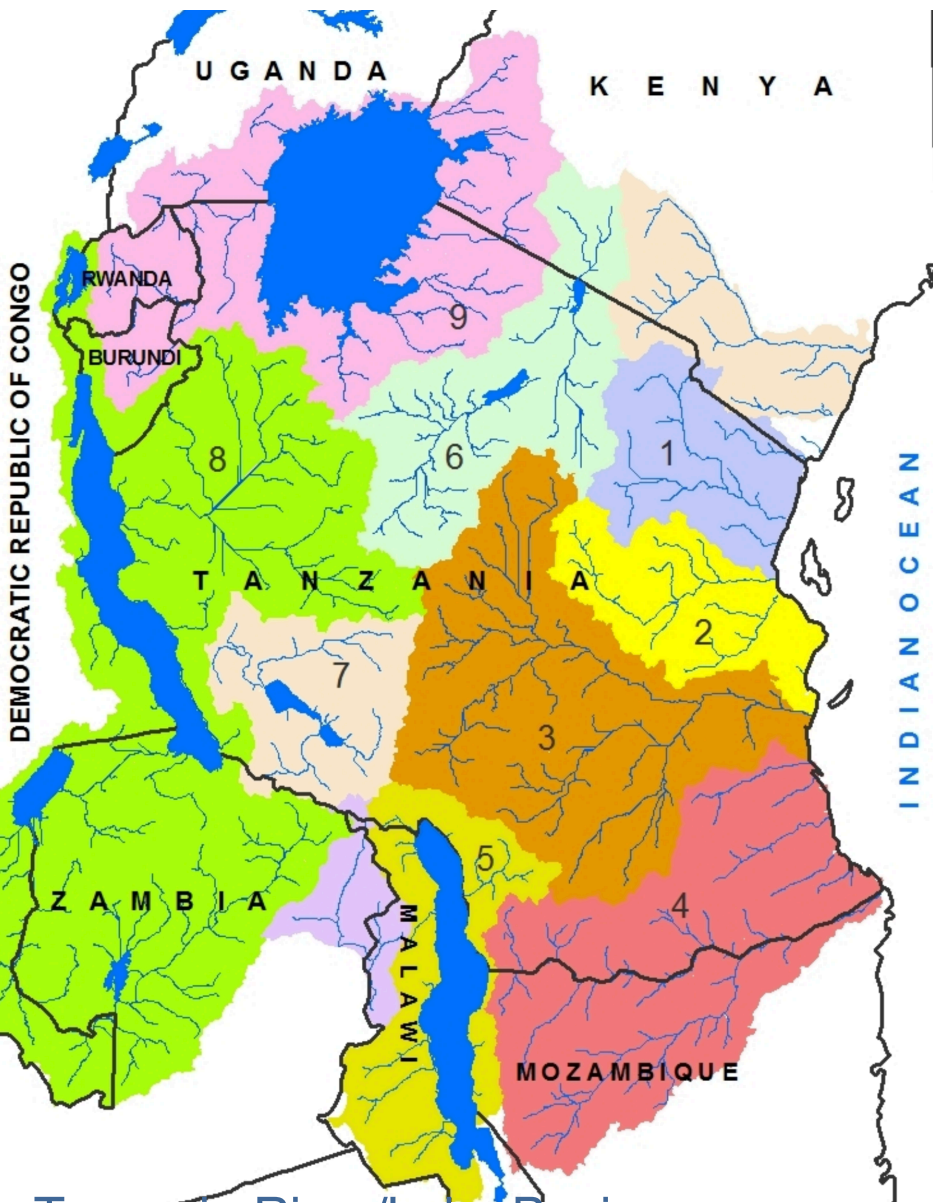
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(https:www.unisec.tz)

15/03/2025

PRESENTATION OUTLINE

- Mission idea 1
- Mission idea 2
- Mission idea 3
- Mission idea 4
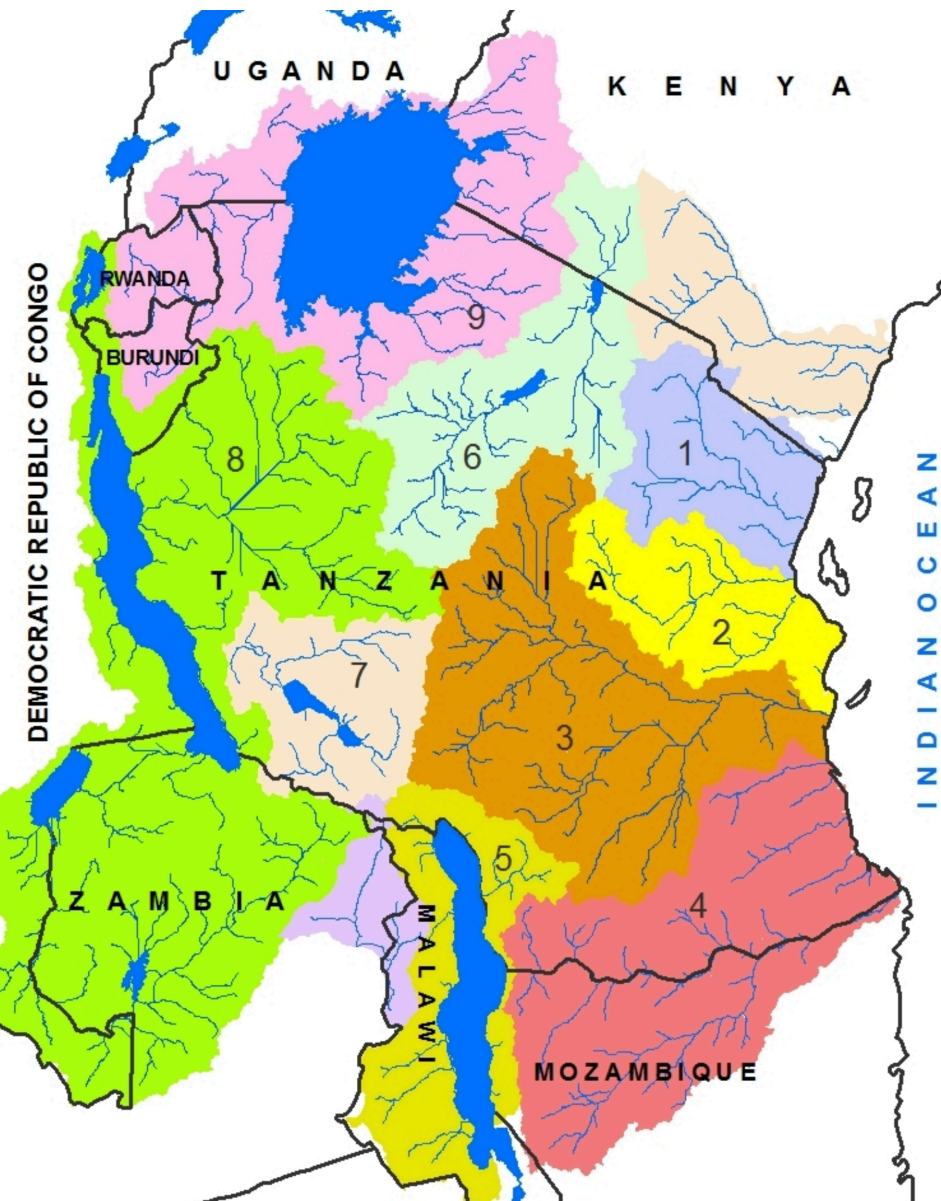- Conclusions

Tanzania River/Lake Basins

- *The United Republic of Tanzania is endowed with numerous and diverse water resources in the form of rivers, lakes, groundwater aquifers, ponds, reservoirs, and wetlands*
- *Tanzania has nine River/Lake Basins, namely*
  1. *Pangani,*
  2. *Wami Ruvu,*
  3. *Rufiji,*
  4. *Ruvuma,*
  5. *Southern Coast,*
  6. *Lake Nyasa,*
  7. *Internal Drainage Basin,*
  8. *Lake Tanganyika and Lake*
  9. *Victoria Basin*
- *These basins are used to supply clean water to towns/cities in Tanzania. They are also used for social economic activities, including agriculture.*
- *Due to climate change and torrential rains, these basins sometimes cause flooding in some areas.*
- *Therefore, monitoring water levels is very important for getting reliable hydrological data and early warning information for informed decision making in areas related to agriculture and food security, disaster risk reduction, water resources management and environmental protection.*

- *Mission: Monitor water levels in some basins*

- *Objective: Prediction of water levels in water basins and rivers for modelling, decision making and providing early warning in case of flooding.*

- *Data user: Ministries, Tanzania Water Boards, Prime Minister's Disaster Management Department, Researchers.*

- *Tanzania is among the blessed countries in Africa with fertile and arable land.*

- *Agriculture plays a pivotal role in Tanzania's economy, contributing more than 20 % of GDP.*

- *However, agricultural sector faces challenges such as climate change impacts, limited access to modern farming technologies, which affect productivity and economic growth.*

- *Therefore, having soil vital information will help farmers and extension offers to make informed decisions and improve agricultural productivity.*
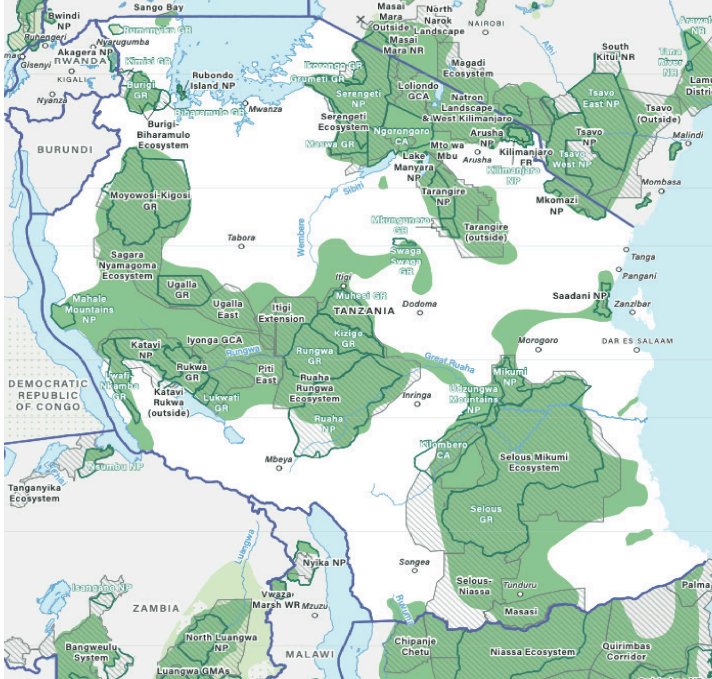
- **Mission:** *Monitor soil vital information such Soil moisture, soil temperature, soil PH level, soil organic composition.*

- **Objective:** *Monitor vital information about the soil and make informed decision and help in large scale farming and improving the agricultural sector.*

- **Data user:** *Ministry of Agriculture, Extension Officers, famers, Researchers.*

TANZANIA ELEPHANT
MANAGEMENT AND ACTION PLAN
2023-2033

- *Tanzania is among a few countries in the world with large national parks and natural wild animals.*

- *Tanzania has large population of elephants.*

- *However, less work has been done to monitor elephant populations, movement, behaviour and habitat conditions.*

TANZANIA ELEPHANT MANAGEMENT AND ACTION PLAN 2023-2033

- **Mission:** *Monitoring of elephant movements.*

- **Objective:** *Monitoring of elephant populations, behaviour and habitat conditions to provide essential data and information that informs decision-making processes and facilitates adaptive adjustments in elephant management.*

- **Data user:** *Ministry of Natural Resources and Tourism, Tanzania Wildlife Research Institute (TAWIRI), Tanzania National Parks (TANAPA), Tanzania Tourism Board (TTB) and Researchers.*

DTP PROJECT UPDATES

Minara 402 kati ya
758 tayari imewaka
53.03%

Hadi kufikia tarehe 17 Februari, 2025 jumla
ya minara 402 kati ya 758 tayari imewaka na
inatoa huduma. Hii ni sawa na asilimia 53.03

- *Tanzania has a strategy of ensuring the entire population has access to communication services.*

- *To enable this, the government through UCSAF is subsidising the cost of communication towers to encourage service providers to provide communication services in areas with less commercial interests.*

- *However, monitoring of these towers poses some challenges considering some towers are installed in remote location without access to the national electric main grid.*

- **Mission:** *Real-Time operational status of communication towers.*
- **Objective:** *Continuously monitoring the status of each tower to make informed decision for improving telecommunications reliability, emergency response, infrastructure resilience and improve eCommerce and other mobile services in Tanzania.*
- **Data user:** *Ministry of ICT, Universal Communication Access Fund (UCSAF), and Researchers.*

Conclusion

We plan to engage more with real data users.

We also think it is important to harmonise the missions because our missions have some similarities.

We invite all UNISEC members to collaborate with UNISEC Tanzania to realise these missions and address international common challenges.

Q&A

ASANTE/THANKS