Wetlands and agriculture in Zimbabwe: Trade-offs dilemma

Thomas Marambanyika
Midlands State University, Zimbabwe
Introduction/Context

- Wetlands cover 3% of Zimbabwe total area
- Natural wetlands - damsos, floodplains, pans & swamps
- 21% are classified as stable, 18% severely degraded & 61% moderately degraded
- 42% of wetlands in communal areas & 28% resettlement areas
- Major use – agriculture
Livelihoods, drivers & regulation

• Benefits – food security, income generation etc.

• Wetland agriculture drivers:
  • Moist conditions
  • Fertile soils
  • Population growth
  • Macro-economic challenges
  • Climate change (frequent droughts) etc.

• Laws and policies for sustainable wetland agriculture – EMA Act, Policy and Management Guidelines

• Lack of comprehensive and updated wetlands inventory
Wetland agriculture – practices and threats

- Wetland threats ranking – 1\textsuperscript{st} cultivation & 2\textsuperscript{nd} livestock grazing
- Cultivation methods - ox-drawn ploughs???, ridges & furrows
- Degradation – draining, increased levels of nutrients and pollutant loads, increased water abstraction, gullies, etc.
- Shift towards sustainable wetland agriculture
  - conservation farming practices - infiltration pits, sand traps, crop rotation, vegetation strips, animal and green manure and composting, botanical pesticides, removal of invasive species, etc.
Future of wetlands and agriculture

• Understand and balance trade-offs
  • Assess suitability of farming practices to wetlands with different hydrogeomorphic characteristics
• Strengthening local and indigenous knowledge systems
• Comprehensive wetlands inventory information
• Integration of near real time EO based wetland monitoring and assessment platforms, e.g. WeMAST for timely interventions
• Strengthening enforcement of laws and policies
Thank you!