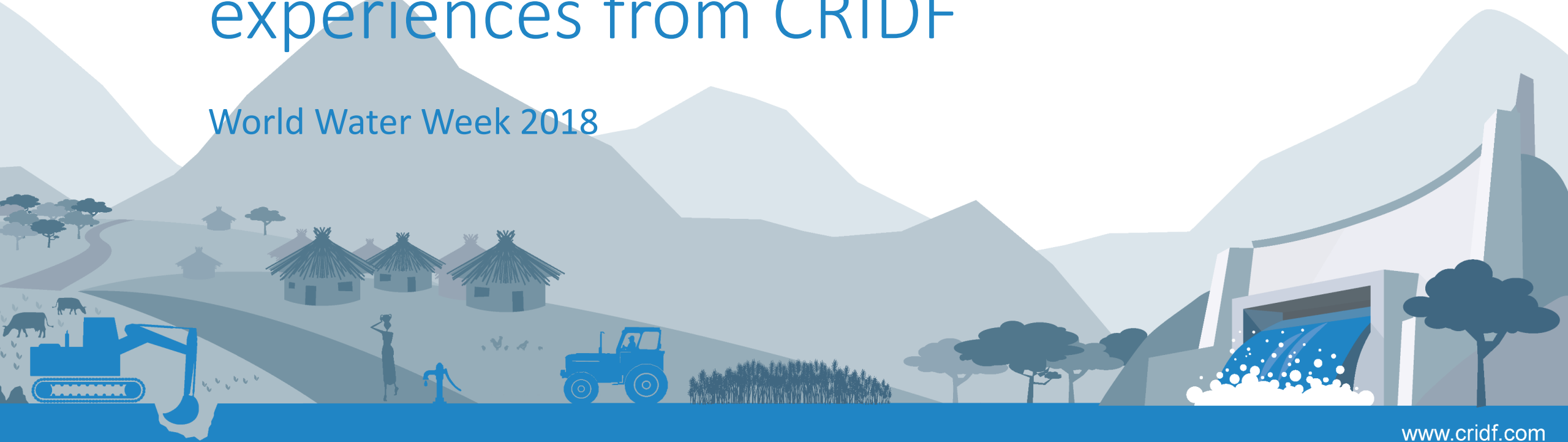


# Preparing transboundary, climate resilient water infrastructure finance applications in southern Africa: experiences from CRIDF

World Water Week 2018

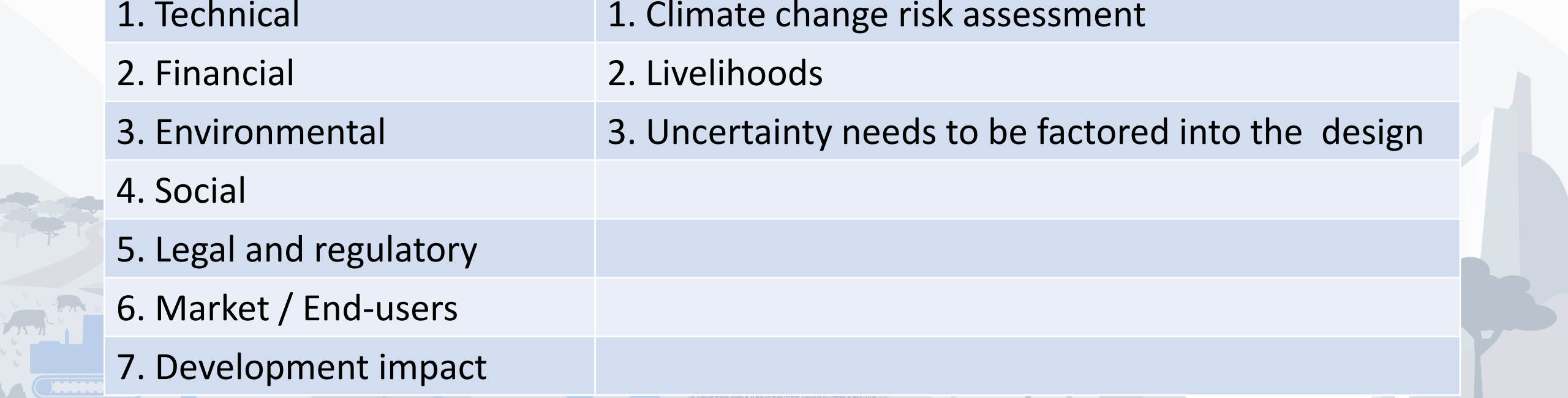




# Financing for adaptation

*Impacts, returns, risks, opportunities and mitigating factors related to the following issues need to be addressed:*

Issues common to all infrastructure projects	Issues specific to adaptation
1. Technical	1. Climate change risk assessment
2. Financial	2. Livelihoods
3. Environmental	3. Uncertainty needs to be factored into the design
4. Social	
5. Legal and regulatory	
6. Market / End-users	
7. Development impact	



# Water infrastructure: large dam, rural and urban water supply, hydropower, irrigation

Project	Songwe River Basin Development Programme (Malawi and Tanzania)
Sponsor	Songwe River Basin Commission
Other projects	<ul style="list-style-type: none"><li>• Rural electrification, integrated natural resource management, economic and social infrastructure</li></ul>
Key issues	<ul style="list-style-type: none"><li>• Long preparation time, especially with multi-country stakeholders</li><li>• Transboundary notification</li><li>• Commercial vs social projects were identified through financial modelling after detailed design stage: financial and economic IRR are key parameters</li><li>• High capex, commercial return of dam and HPP allowed a Public-Private Partnership (PPP)</li></ul>



**Songwe River meander at Mpunguti Village, Katumba Songwe Ward**

# Water Infrastructure: flood embankment with sluice gates, water resource management

Project	Incomati flood risk management project (Mozambique)
Sponsors	ARA-Sul (water board), INIR (irrigation institute), Illovo Sugar Africa, Tongaat Hulett (sugar companies)
Key issues	<ul style="list-style-type: none"><li>• Public-private cooperation needed</li><li>• Private sector wants to manage the supply risk that comes from out-grower exposure to floods</li><li>• Private sector provided 85% of initial £1.8m funding</li><li>• Government (ARA-Sul) objective is to reduce the vulnerability of the surrounding communities to floods</li><li>• Need to address vulnerability to drought as well</li></ul>



**Incomati river**

# Water Infrastructure: small-scale rural irrigation, water supply and sanitation

Project	Bindagombe and Kufundada irrigation schemes (Zimbabwe)
Sponsor	Gov of Zimbabwe
Other projects	Supplier support, reduction of river bank erosion
Key issues	<ul style="list-style-type: none"> <li>• Resilient livelihoods enhanced by inclusion in private sector value chain</li> <li>• Food security</li> <li>• Riverbank subsistence farming</li> <li>• Ex-post challenges:             <ul style="list-style-type: none"> <li>• leaking pipes</li> <li>• electricity shortages</li> <li>• cashflow for maintenance, inputs and fuel</li> </ul> </li> </ul>



Before



After




# Water Infrastructure: small projects aggregated to achieve scale and transformative impacts

Project	Building climate resilience of vulnerable agricultural livelihoods (Zimbabwe)
Sponsor	Gov of Zimbabwe
Other projects	<ul style="list-style-type: none"><li>• Sustainable agriculture</li><li>• Access to markets</li><li>• climate, agricultural and market information</li></ul>
Key issues	<ul style="list-style-type: none"><li>• small projects aggregated to achieve scale and transformative impacts</li><li>• Multi-source financing: government of Zimbabwe, UNDP, CRIDF</li><li>• Operations and maintenance funding from the Government</li></ul>



Irrigated crops



# Key lessons in preparing adaptation focused projects for finance

- Adaptation impact can be achieved
  - Livelihoods matter: “resilient poverty is an oxymoron” (Robert Muir-Wood)
  - The longer-term resilience issues are not always obvious
  - Water infrastructure is often the anchor of a multi-faceted approach
- Robust project preparation is critical:
  - Economic IRR is as important to funders as Financial IRR
- Coordinating different funders’ needs and expectations is essential
- The private sector can play a crucial role in mobilising adaptation focused investments



# World Café table discussion topics

- How do you integrate climate change adaptation and resilience into projects? When in the project cycle do you start considering this?
  - Where do you access project preparation funds from and has the assistance provided been useful?
  - Have you experienced trade-offs in projects between resilience and other development needs?
  - What are your biggest challenges in accessing finance to implement climate resilient water infrastructure projects? When do you start thinking about finance and what are the considerations for accessing climate finance? Are there differences when trying to access finance from private organisations versus public organisations?
  - If you are an organisation that funds water and/or infrastructure projects, is resilience a concern and what project preparation support do you provide?
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