The South Africa water innovation story

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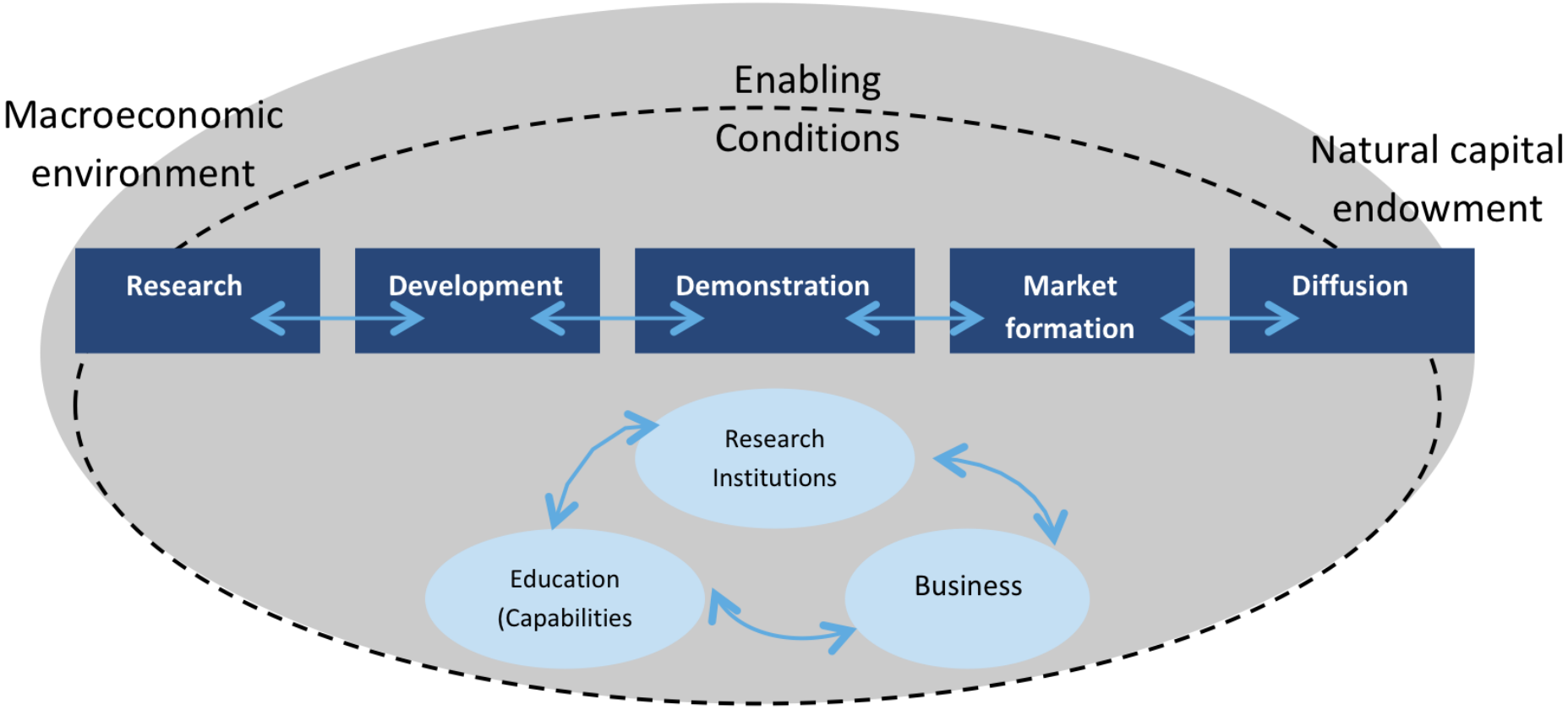
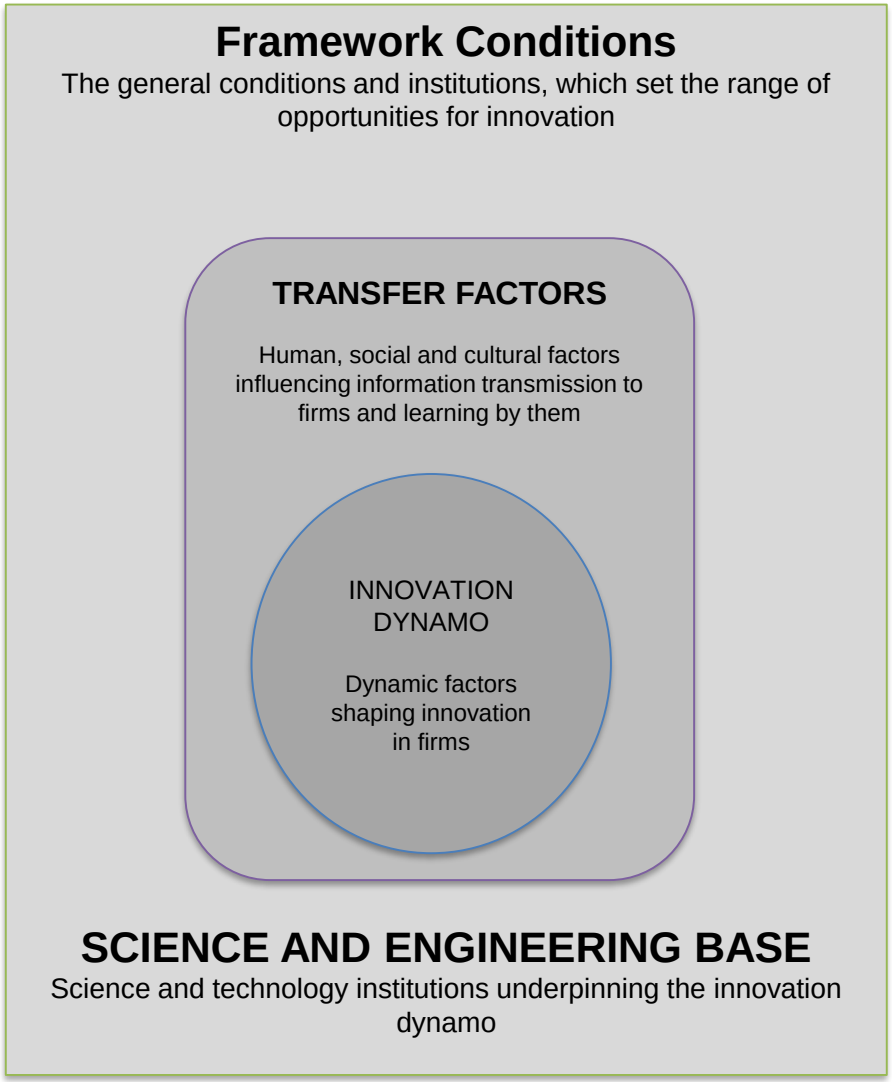
Water Innovation Ecosystem



Water poses a business risk

Innovation systems frame



Innovation frontiers

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- Smart Water technologies
- Efficiency and conservation
- Purification
- Alternative sources
- Storage (surface and ground water)
- Ground water- infiltration, GW banking & recovery

Case studies

AquaTrip

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Permanently installed leak-detection system

- Deployed in South Africa and is being introduced into Namibia and Botswana as well as to some parts of east Africa
- Over 6000 units

Eutectic Freeze Crystallization

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- Waste management in desalination tech
- Commercialised

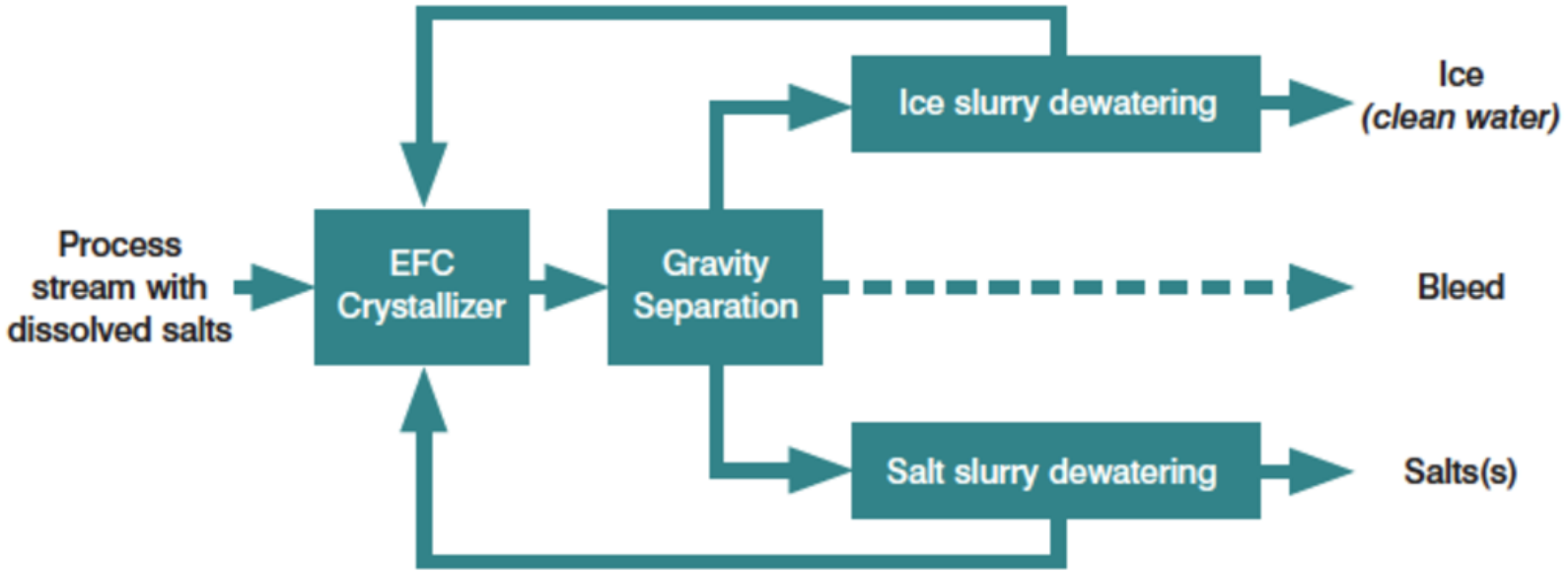

Figure 1: Simplified scheme of the EFC process

The Geasy

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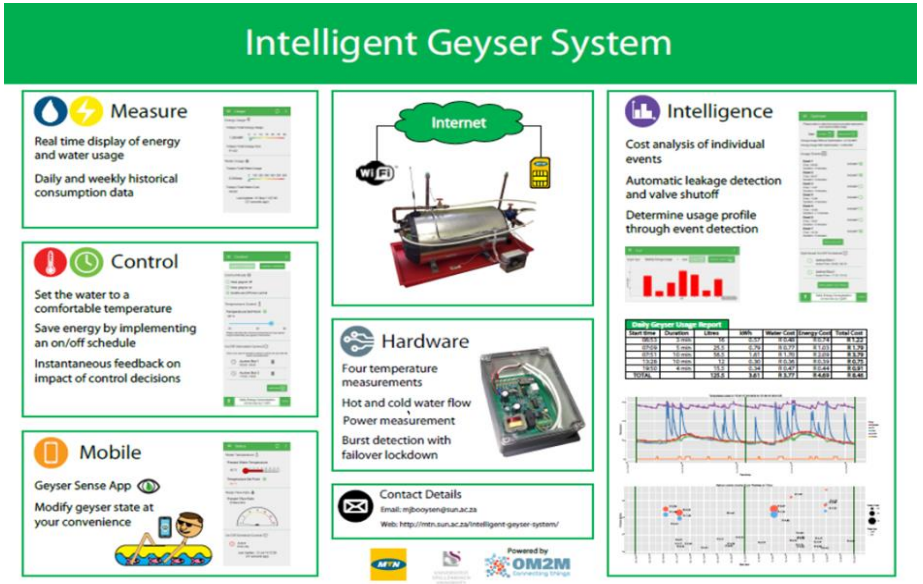

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Hippo Roller

MiniSASS

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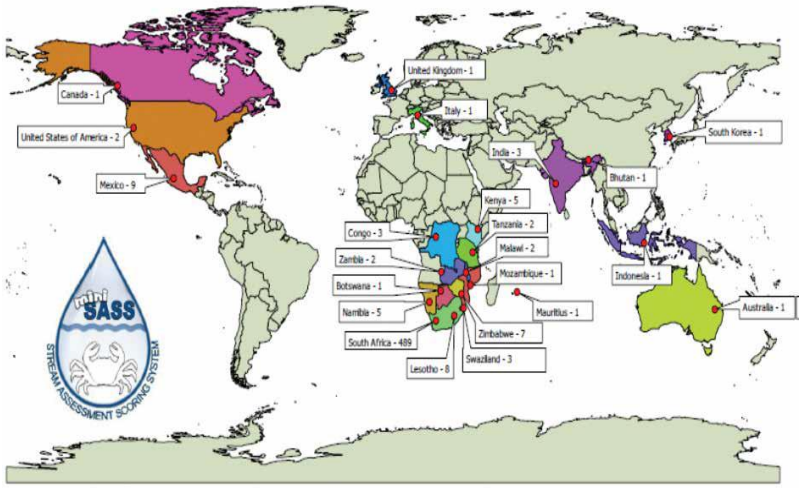
- South African Scoring System (SASS)- 1998
- Citizen science

Ecological category (Condition)	River category	
	Sandy Type	Rocky Type
Unmodified (NATURAL condition)	> 6.9	> 7.9
Largely natural/few modifications (GOOD condition)	5.8 to 6.9	6.8 to 7.9
Moderately modified (FAIR condition)	4.9 to 5.8	6.1 to 6.8
Largely modified (POOR condition)	4.3 to 4.9	5.1 to 6.1
Seriously/critically modified (VERY POOR condition)	< 4.3	< 5.1



WEROP

- Eanated from an MSc project by Simon Wijnberg in 2002 at the UCT

- It has the potential to provide safe drinking water and electricity from from seawater

Emerging trends in the water innovation ecosystem

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- Limited links between various actors and institutions
- Intellectual property related challenges
- Funding challenges for water innovations
- Lack of access to markets for emerging innovations
- Engaging with key local communities and stakeholders

Conclusion

- Effective coordination to support the innovation ecosystem
- Foster partnerships with strong linkages to market
- Need to keep track of innovations
- Invest in early stage start-ups
- Learn from failure