



L-Università ta' Malta
Faculty for the Built Environment

Can Water Users' Associations Improve Water Governance?

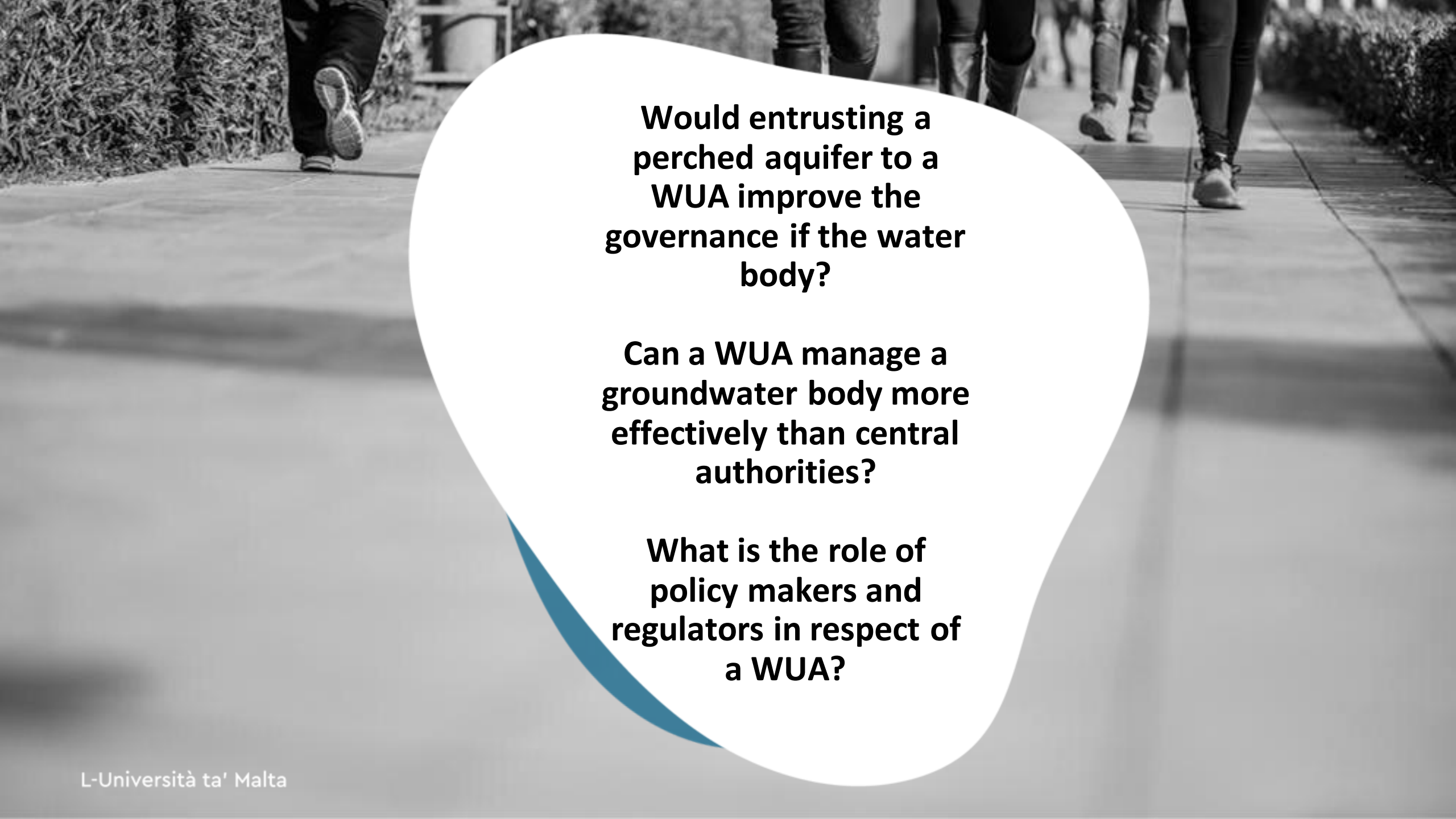
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Should Perched Aquifers be devolved?

- Malta's 2nd Water Catchment Management Plan shows:
 - Rabat-Dingli – 22.6km²; I-5.41Mm³ – O-3.48Mm³
 - Mgarr-Wardija – 13.7km²; I-3.28Mm³ – O-2.11Mm³
- Both aquifers experience high level of nitrates
- Land use above these aquifers is mainly agricultural land
- Malta's 3rd WCMP to focus on
 - Water management in the urban environment (better management of stormwater, green infrastructure)
 - Groundwater management (quantification of groundwater use)
 - Effective use of fertilizers (limiting this diffuse source of pollution)





Would entrusting a perched aquifer to a WUA improve the governance if the water body?

Can a WUA manage a groundwater body more effectively than central authorities?

What is the role of policy makers and regulators in respect of a WUA?

Strengths

- Equitable water distribution
- Water managed at basin level – not fragmented
- More crop per drop. More dollar per crop
- Lower fertilizer use
- Crop management on a larger scale
- Enhanced water focus
- Increased scientific capacity

Weaknesses

- Resistance to change
- Skilled, administrative and scientific HR needs
- Requires financial investment
- Management of power by users not the norm
- Needs initial expert handholding
- Accountabilities on users increases



Opportunities

- Creation of producer organisations
- Crop diversity and higher returns
- Contributes to economic growth and employment by moving from agriculture to agri-business
- Improved food security
- Water becomes a finite and valued good

Threats

- Lack of economic incentives
- Lack of capacity
- Land ownership vs title holder
- Disagreements between users
- Parallel imports



Political

- Extent of political will
- Lack of public finance support
- Resistance to devolution and decentralisation

Economic

- Role of private sector in water management
- Crop diversification
- Moving towards agri-business
- Capitalising on premium products

Legal

- Harmonised crop plans
- Nitrate assessment
- Creation of WUA legal framework
- Implementation of WUA laws
- Setting of tariffs
- Legal/Illegal users
- Abstraction infrastructure



Social

- Modernisation of production
- Enhanced earnings
- Sector attractiveness for employment
- Cultural norms and expected rights
- Gap between farmer knowledge and trends
- Better integration of migrants
- Improved food security

Environmental

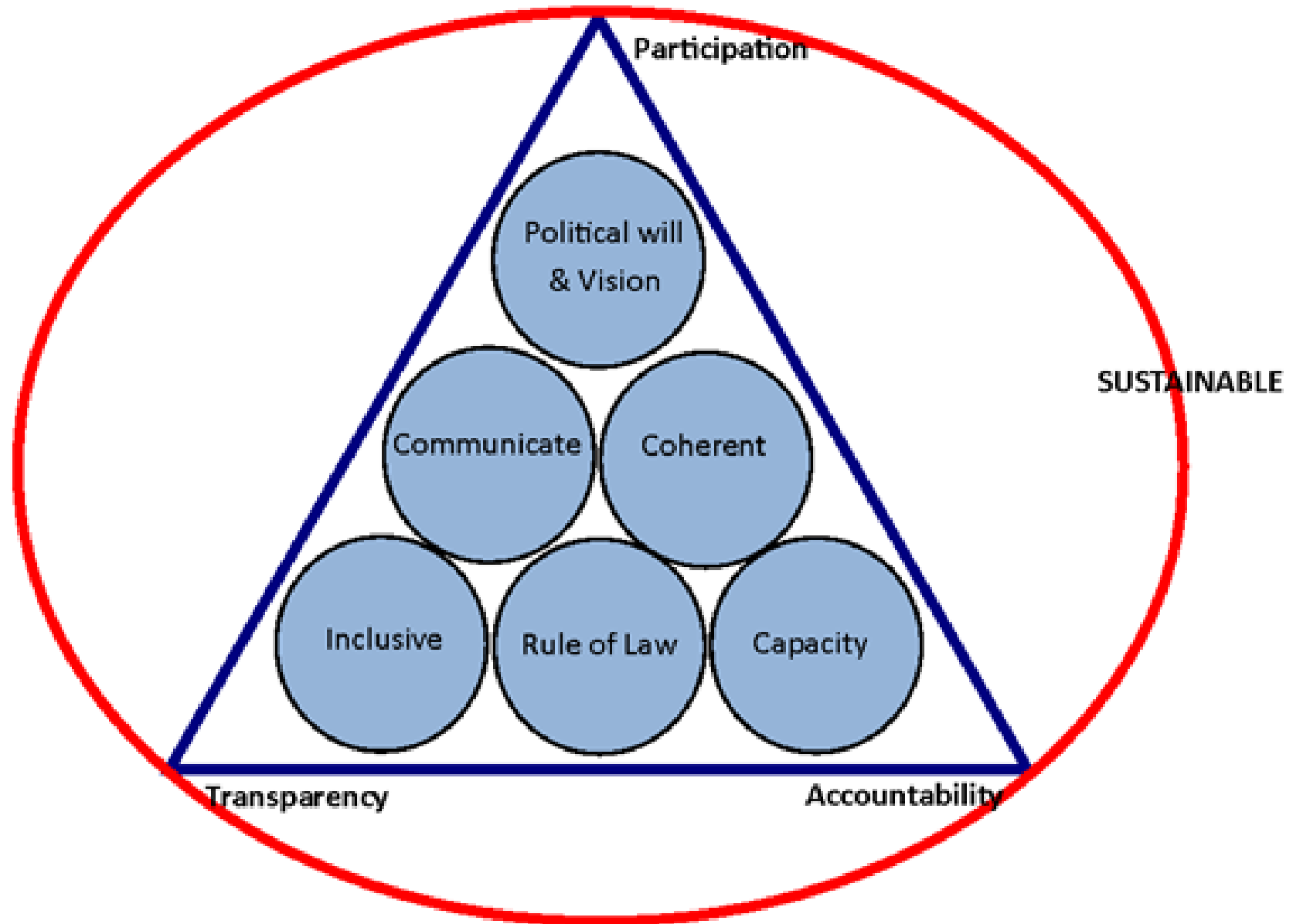
- Stronger biodiversity/ecosystems
- Improved water quality/quantity
- Lower use of fertilizers/pesticides
- Combats desertification
- Promotes local produce

Technological

- Better irrigation management
- Better fertilizer management
- R&I funding opportunities
- Managed aquifer recharge projects
- Metering systems for demand management
- Enforcement facilitating technologies



Water Governance Framework



Are the governance parameters satisfied?

- Participation – users directly involved
- Transparency – who gets how much, clearer
- Accountability – users need to manage finite supply
- Political will – decentralizing water management
- Communication – users directly informed by their own
- Coherency – in line with WFD and economic policy
- Inclusivity – gives those less heard more say
- Rule of law – implemented by users themselves
- Capacity – enhanced through capacity building
- Sustainability – more crop per drop; more dollar per crop; more dollar per drop; more employment; less pollutants




A high-speed photograph of a water droplet hitting a surface, creating a series of concentric ripples. The droplet is captured in mid-air, just above the surface, and is perfectly spherical. The background is a soft, light blue gradient. On the left side, there is a large, dark blue, abstract shape that resembles a splash or a drop, containing white text.

**Are we ready to take
this step?**

Thank you for your attention.

If you have any questions, now is the right time to ask!
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