



LiWa

Making Water Affordable to All – A Typology and Evaluation of Options for Urban Water Pricing

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OUTLINE

- Introduction
- Framework
- Water Pricing Options
- Conclusion

THE CHALLENGE

1992 Dublin Principle No. 4

“Water has an economic value in all its competing uses and should be recognized as an economic good.”

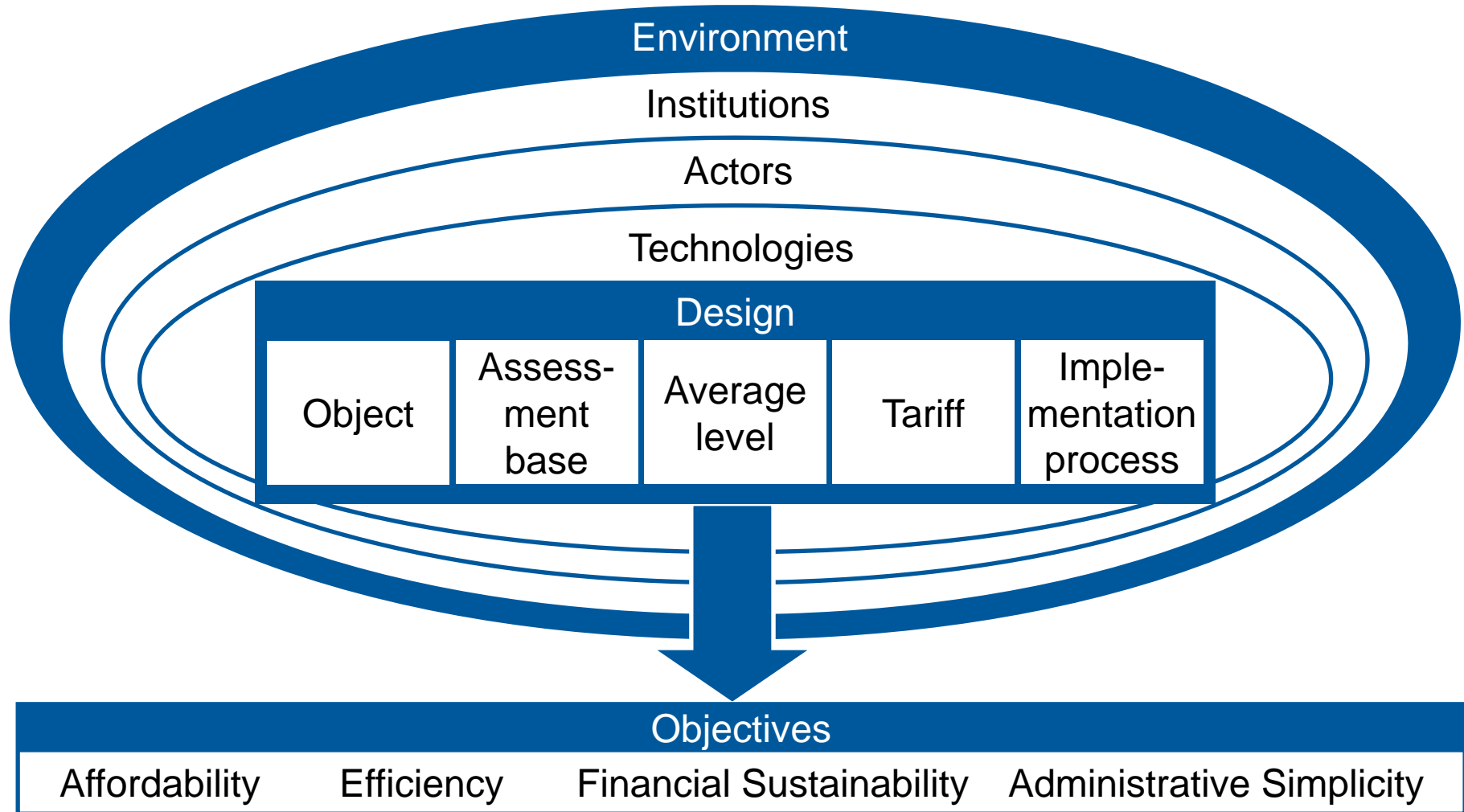
“Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price.”

➔ How to design water prices to address affordability?

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WATER PRICING SYSTEM



OBJECTIVES

Affordability

$$\frac{\text{Expenditures for basic consumption (20-100 l/c/d)} \times 100\%}{\text{Income}} < \text{Affordability threshold (3-5\%)}$$



Efficiency



Financial sustainability

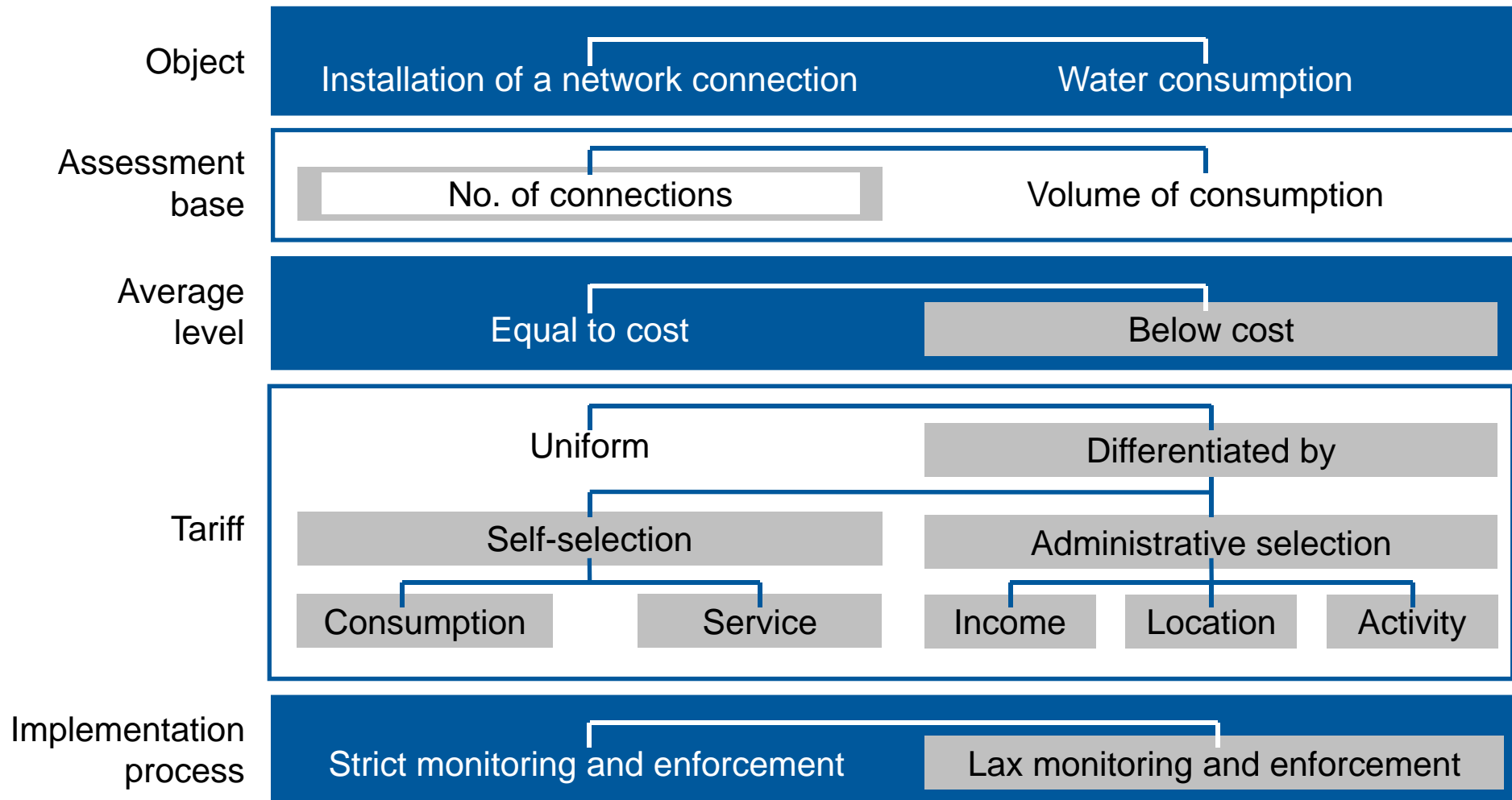


Administrative simplicity

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TYOLOGY OF WATER PRICING OPTIONS



OBJECT OF PRICING

Connection vs. Consumption Charge

Affordability implications of subsidized consumption charge

- available to connected households only
- strong effect with high connection rate

Affordability implications of subsidized connection charge

- available to unconnected households only
- strong effect with low connection rate
- but non-price barriers may prevail

→ Both approaches may exclude a significant share of the poor

AVERAGE LEVEL OF PRICING

Pricing below Full Costs

Affordability	Efficiency	Financial Sustainability	Administrative simplicity
<ul style="list-style-type: none"> high in the short-term adverse effects in the long term 	<ul style="list-style-type: none"> suboptimal incentives to save water 	<ul style="list-style-type: none"> not possible 	<ul style="list-style-type: none"> no selection process required
	-	-	+

TARIFF

Differentiation by Consumption

Main characteristics:

- increasing block tariff: different unit prices for different levels of consumption

Affordability	Efficiency	Financial sustainability	Administrative simplicity
<ul style="list-style-type: none"> ▪ good due to positive income elasticity ▪ adverse effects for large family, joint connection 	<ul style="list-style-type: none"> ▪ inefficient price differentiation ▪ low inefficiency with two blocks, second block equal to marginal cost 	<ul style="list-style-type: none"> ▪ theoretically possible ▪ first block often too large 	<ul style="list-style-type: none"> ▪ high ▪ reduced when household size is considered

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CONCLUSIONS

- The affordability of water pricing options depends crucially on the technological, socio-economic and institutional environment.
- There are important limits to addressing affordability by water pricing, which call for additional measures.
- There are important trade-offs between affordability and other criteria.



Thank you for your attention!