



NAVIGATING REFORM PATHWAYS: THE CASE OF WATER POLICIES IN AGRICULTURE

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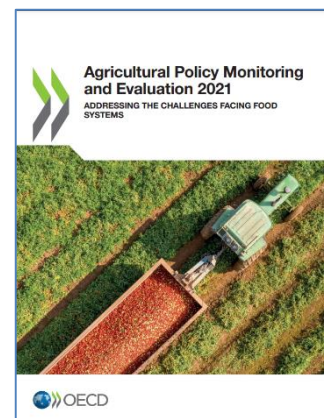
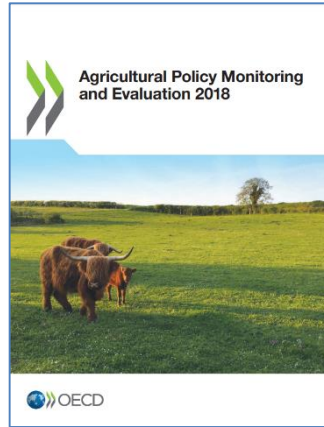
Agriculture and Resource Policies Division

OECD Trade & Agriculture Directorate



“Repurposing agricultural subsidies”: a long term OECD recommendation!

Redirecting subsidies recommendations since 2017



- **Redirecting agricultural subsidies** has long been a narrative of OECD’s work on monitoring and evaluation of agriculture policies.
- **How to do conduct such reform is pertinent.** In our latest report, USD 817 billion of agriculture support in 54 countries, including USD 391 billion trade distorting and potentially environmentally harmful (2019-21)
- The case of reforming water policies in agriculture shows the complexity of the task ahead!



2017-18 OECD project on “Reforming water policies in agriculture”









- **Objective**
 - > Develop recommendations on how to achieve effective policy reforms to address agriculture’s water quantity and quality challenges.
- **Two parts, two papers**
 - A. Drawing lessons from **past** reforms
 - B. Identifying effective policy pathways for **future** agriculture water improvement



REVIEWING PAST REFORMS



A “deep dive” into selected reforms in OECD countries

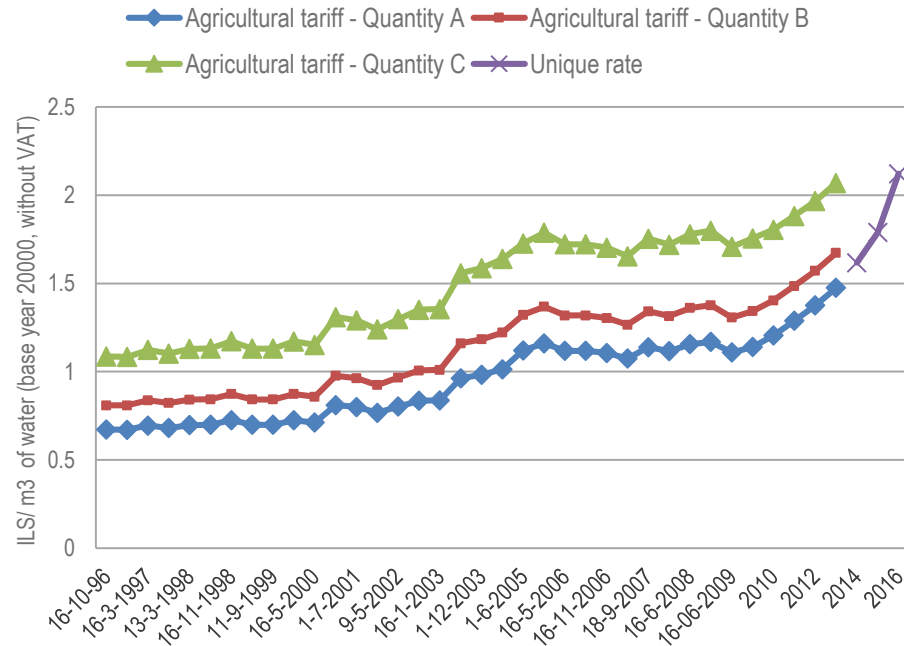
Country	Reform	Primary area of action	
		Water quantity	Water quality
	Murray-Darling Basin reforms	X	
	Water Framework Directive	X	X
	Nitrates Directive		X
	Water pricing in agriculture	X	
	Manure management program		X
	Catchment schemes		X
	Conservation Reserve Program		X
	Regional Conservation Partnership Program	X	

Additional reforms discussed : water right reforms (Chile), water quality trading (New Zealand), water pollution policies (Denmark), groundwater regulation (California), storage and irrigation investments (Turkey and Chile)



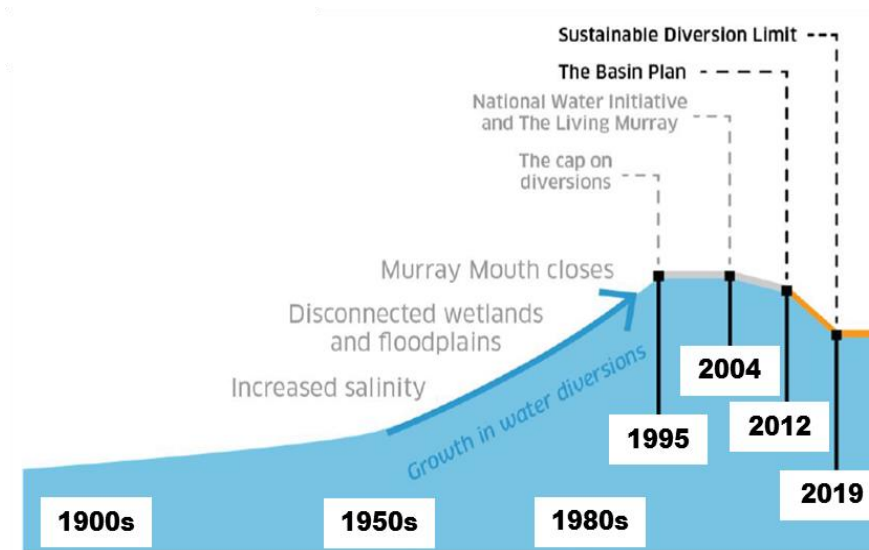
Method (A) historical perspective

Real prices of freshwater in agriculture in Israel from 1996-2016



Source: Derived from data provided by the Water Resources Authorities.

River diversions and recent reforms in the Murray-Darling Basin



Source: Adapted from a presentation by J. Dore, Australian Ministry of Foreign Affairs and Trade, August 18, 2017, based on materials developed by the Murray Darling Basin Authority.

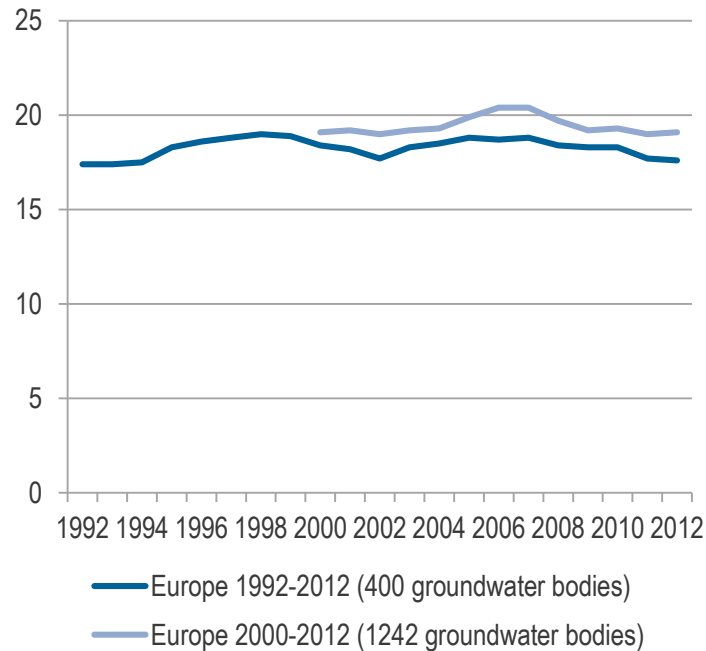
Evaluation questions

- Overview of the reform(s),
- Facilitating factors leading to the adoption of the reform
- Facilitating and inhibiting factors in implementing the reforms in the agriculture sector
- Premise for future adjustment



Method (B) Cross-cutting comparison of political economy factors

Annual mean concentration of nitrates in groundwater in Europe after the 1992 Nitrates Directive (mg/L)



Investigated factors :

- Reform outcome and characteristics (6 Yes/No questions)
- Political factors (5 mixed questions)
- Macro-and sectoral economic conditions (7 quantitative questions)
- Interactions with other policy reforms (2 mixed questions)
- Process and decision making (10 mixed questions)



Key finding: several factors positively influence the adoption of water and agricultural reforms

	Political factors	Economic Factors	Environmental factors	Path dependency factors	Design of reform
Contextual (exogenous) factors	<ul style="list-style-type: none"> -Mounting public pressure -Opportunistic political window on environmental policies -Environmental oriented government majorities 	<ul style="list-style-type: none"> -Stable macro-economic situation 	<ul style="list-style-type: none"> -Environmental pressures: major droughts, Aquifer and lake depletion, eutrophication, erosion, odour -Impact and costs of pollution 	<ul style="list-style-type: none"> - Past programmes to build on* -Framing regulations* -Funding from existing policy programmes* -Flexibility of governance systems* 	
Controlled (endogenous) factors	<ul style="list-style-type: none"> -Reforms included in the electoral platform of incoming government - Coalition of the willing 			<ul style="list-style-type: none"> - Past programmes to build on* -Framing regulations* -Funding from existing policy programmes* -Flexibility of governance systems* -Regular adjustment of policies -Evaluations of past policies 	<ul style="list-style-type: none"> -Awareness of stakeholders, , participation of stakeholders in discussion. -Review mechanisms or adaptive management -Engaging with trusted 3rd party -Long time for reform development -Promised increased water security; -Transition payments -Paying farmers - Voluntary programmes

Notes: Bold font highlights some of the factors that are prevalent among most review reforms,* Denotes factors that may be controllable or exogenous depending on the context



Reform processes and design influence reforms' outcomes

Characteristics of the reform processes	Efficiency (cost and time)	Ambition (degree of change)	Effectiveness (implementation)	Flexibility (adjustability)
Higher geographical scale	(~)	(+)	(~)	(-)
Lower geographical scales	(~)	(~)	(+)	(+)
Broad water policy objectives	(~)	(+)	(-)	(~)
Targeted policy objectives	(~)	(-)	(+)	(~)
Rapid policy change	(+)	(~)	(-)	(-)
Gradual policy change	(-)	(~)	(+)	(+)
Stakeholder engagement	(-)	(~)	(+)	(+)
Transition payments	(-)	(+)	(+)	(-)
Payments for farmers	(-)	(-)	(+)	(+)
Investment in infrastructure	(-)	(+)	(~)	(-)

(+) likely to positively influence the factor,

(-) likely to negatively influence the factor,

(~) ambiguous (could be going one way or the other).

Efficiency: minimising cost and time to achieve a result.

Effectiveness: degree of implementation of the reform (complete or incomplete).



Take-out lessons



Credits: T. Y. Kim

Water policy reforms in agriculture are diverse, often long, and complex

Past water and agriculture reforms show the importance of taking advantage of political windows of opportunities, and that preparation is key.

There are trade-offs across reform characteristics on the achievement of a reform's outcome



NAVIGATING PATHWAYS TO REFORM WATER POLICIES IN AGRICULTURE



How to change agriculture and water policies?

- Develop a theory of change, and apply to selected water and agriculture policy instruments
- Analysis based on wide review of literature, and consultation with policy and economic experts-→ **Two international workshops**

OECD-European Commission (DG AGRI) workshop
Pathways to policy change on water in agriculture



Brussels, February 20-21 2018

OECD & World Bank (Global Water Practice) workshop
Facilitating policy change towards sustainable water use in agriculture



Washington DC, May 29-30 2018



Theory of change

Seizing an opportunity with a viable plan

Don't wait for the last standing cow!

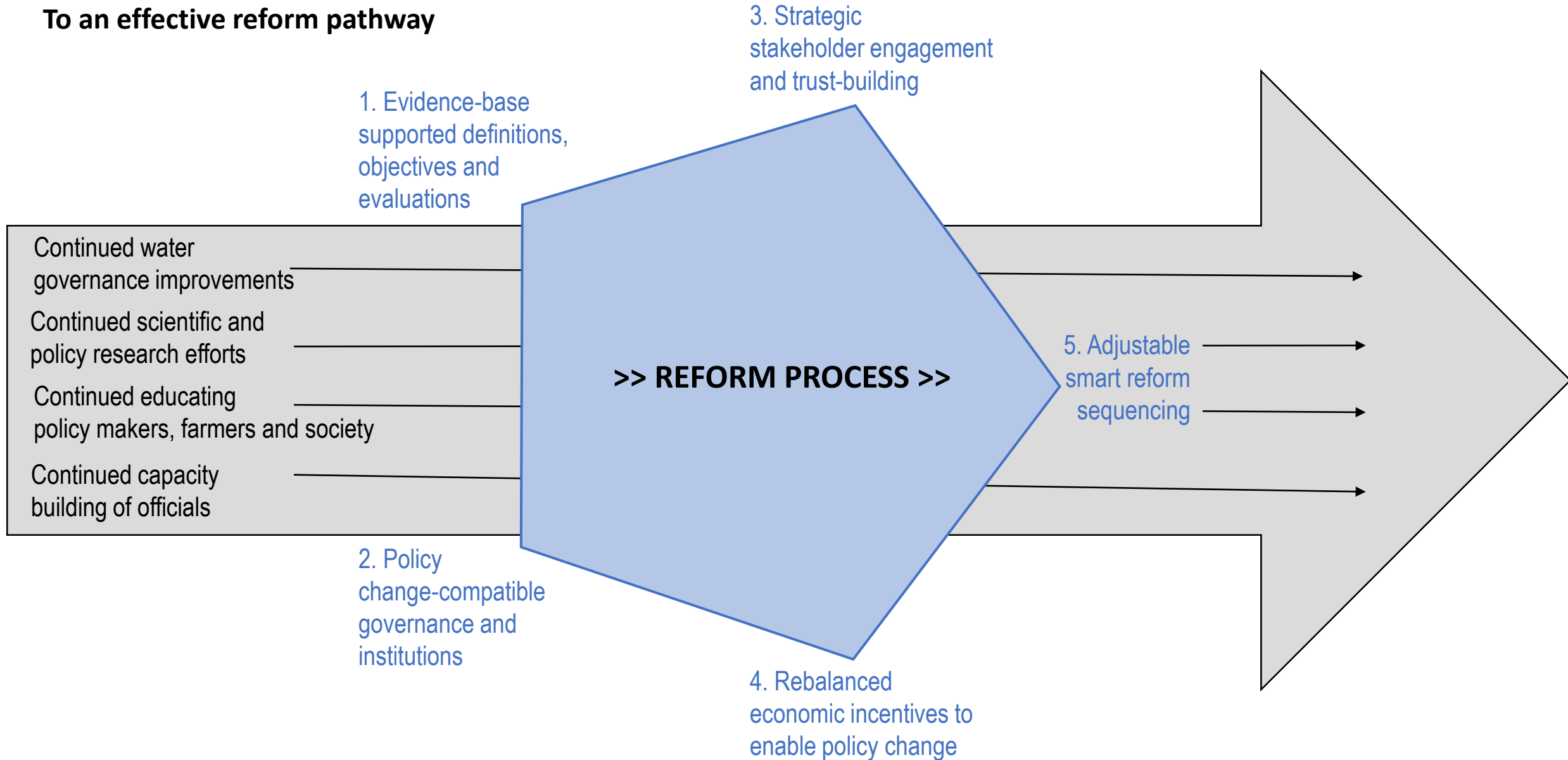


<https://doi.org/10.1787/22245081>

1. Governments need to **prepare in advance** so as to be ready when the time for reform comes and to take advantage of **windows of opportunity**
2. Governments should set **evidence-based** goals and ensure that the reform process builds-in the means to **make adjustments** as needed.
3. Governments need to **facilitate changes in management** for farmers and government officials

This translates into two different time horizons: (A) preparation and (B) when the time is right

Necessary conditions To an effective reform pathway



(A) While waiting for a change, governments need to continue:

- **Improve their water governance system** so as to clarify the roles and responsibilities of the relevant authorities, and to ensure coherence and coordination among government bodies;
- **Support relevant scientific and policy research** that encourages sustainable water use in agriculture;
- **Educate the public** about agriculture and water challenges and risks;
- **Build capacity of government agencies** to improve reform implementation.

Continued water
governance improvements

Continued scientific and
policy research efforts

Continued educating
policy makers, farmers and society

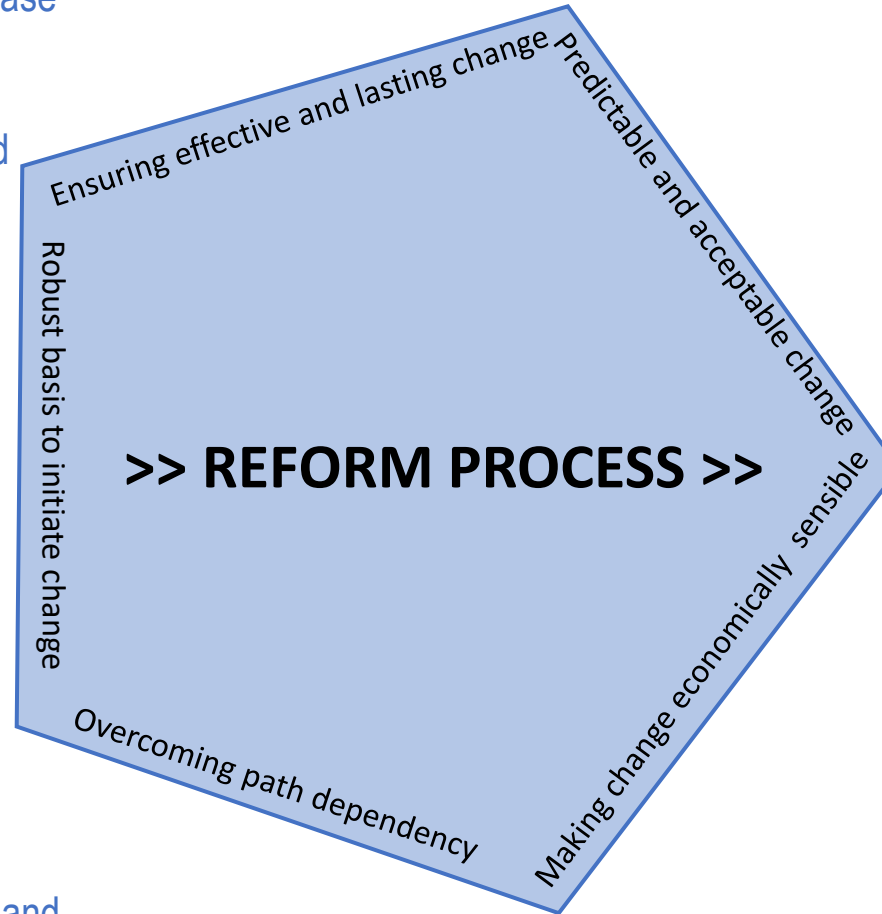
Continued capacity
building of officials

B) Managing reform processes

When engaging in the reform, five conditions are needed to ensure the reform process will be effective

1. Evidence-based supported definitions, objectives and evaluations

3. Strategic stakeholder engagement and trust-building



2. Policy change-compatible governance and institutions

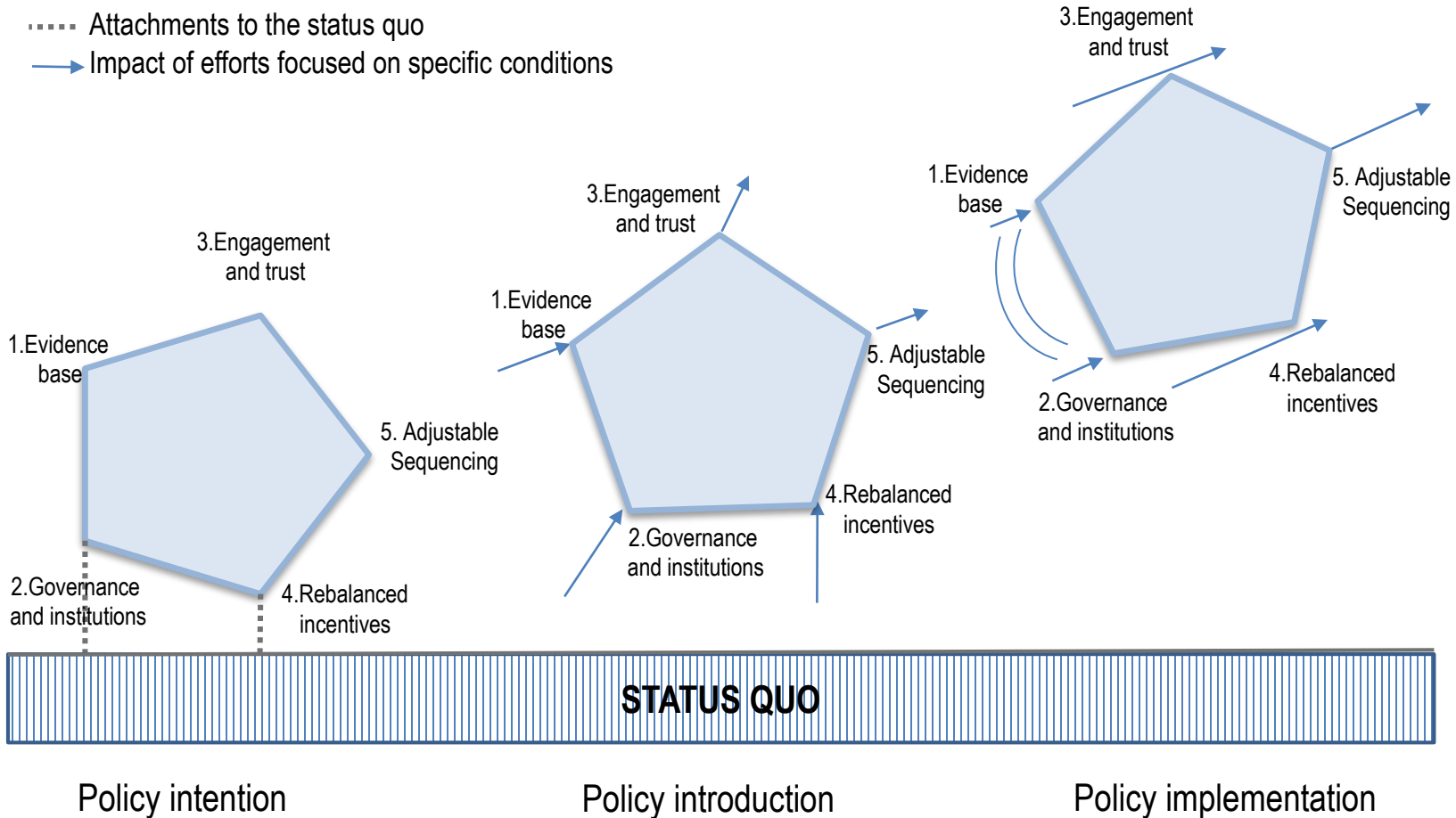
4. Rebalanced economic incentives to enable policy change

5. Adjustable smart reform sequencing

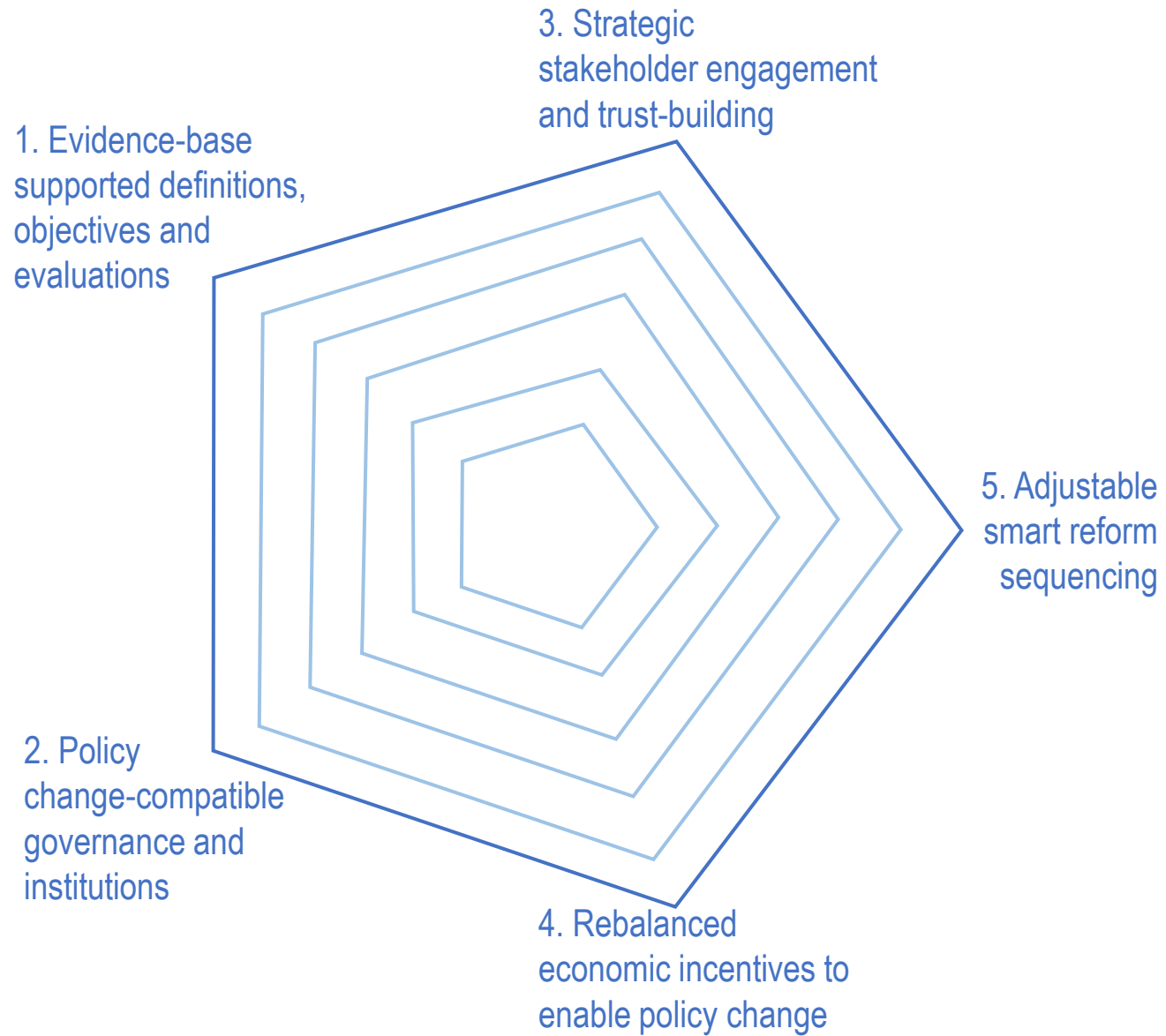


Steering the reform

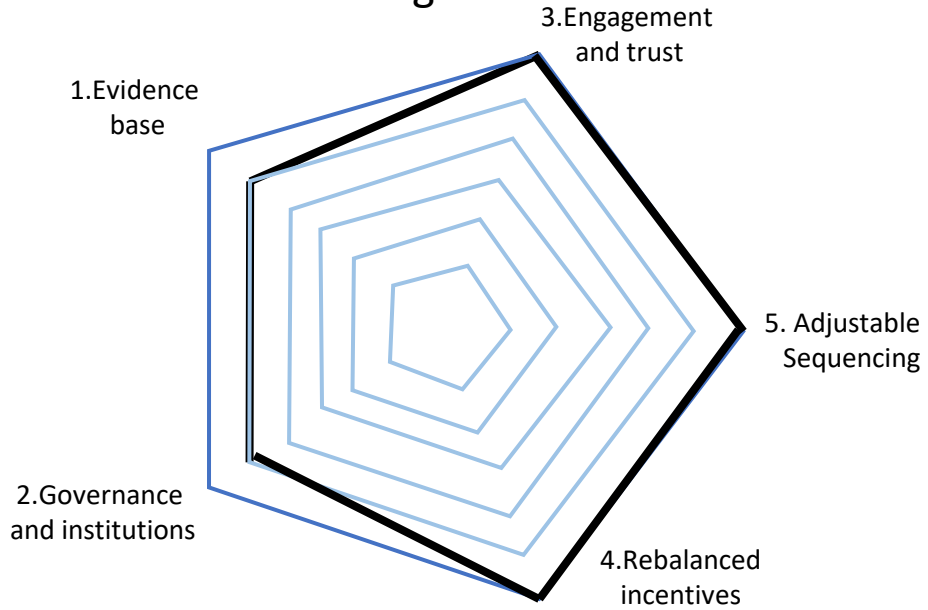
Why all five conditions are necessary



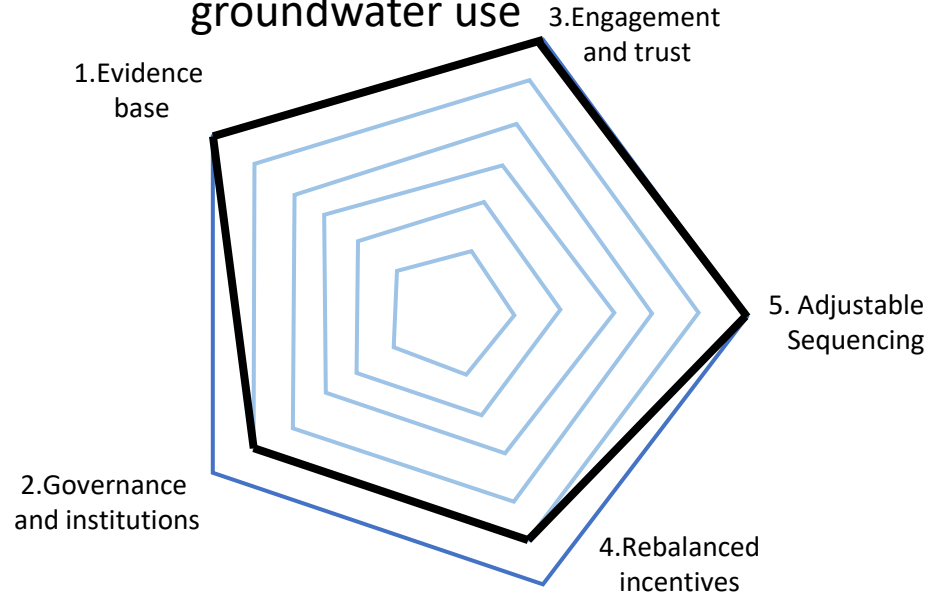
**A scale can be used
to measure needed
efforts and progress**



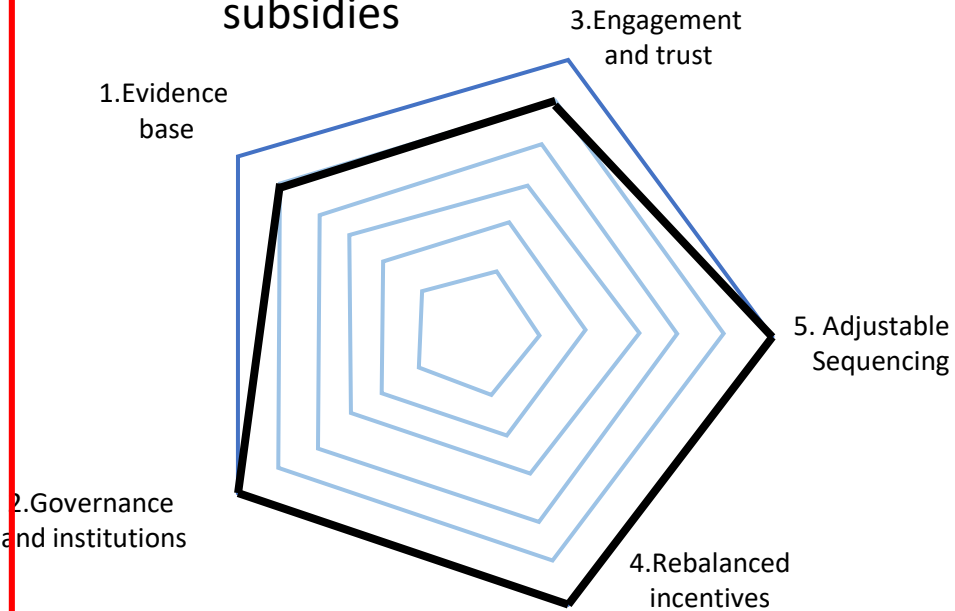
Water charges



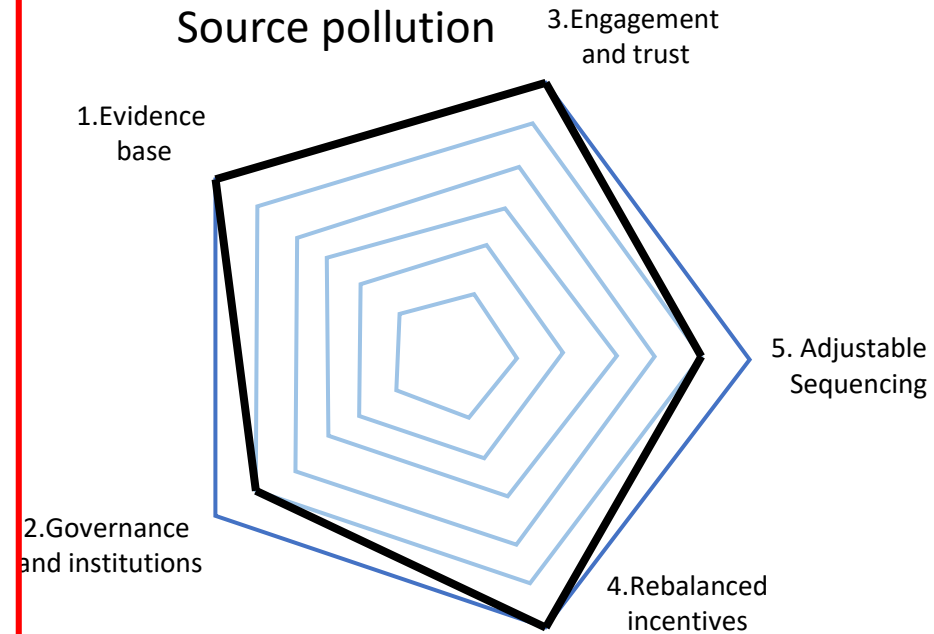
Regulating groundwater use



Removing subsidies

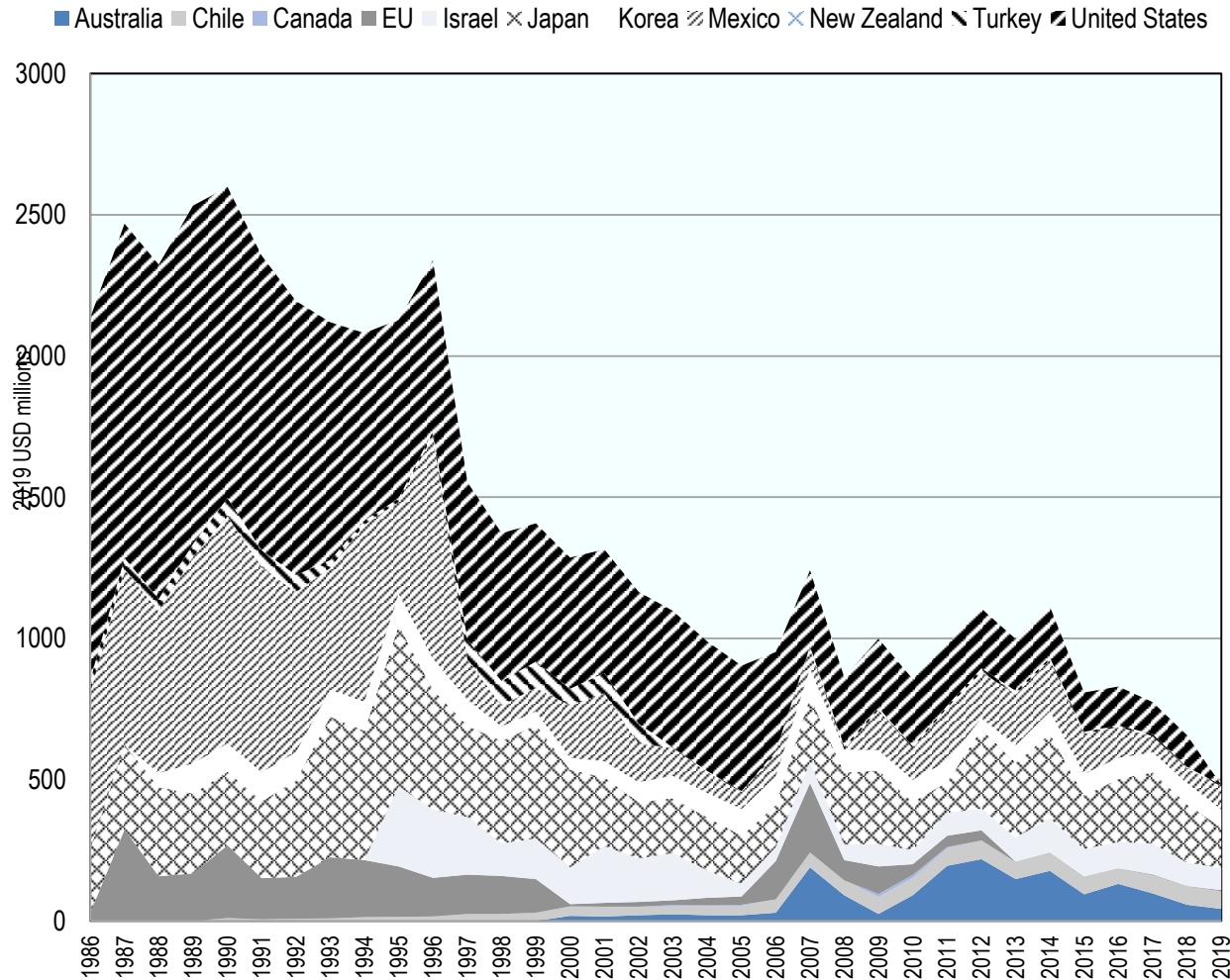


Reducing nonpoint Source pollution





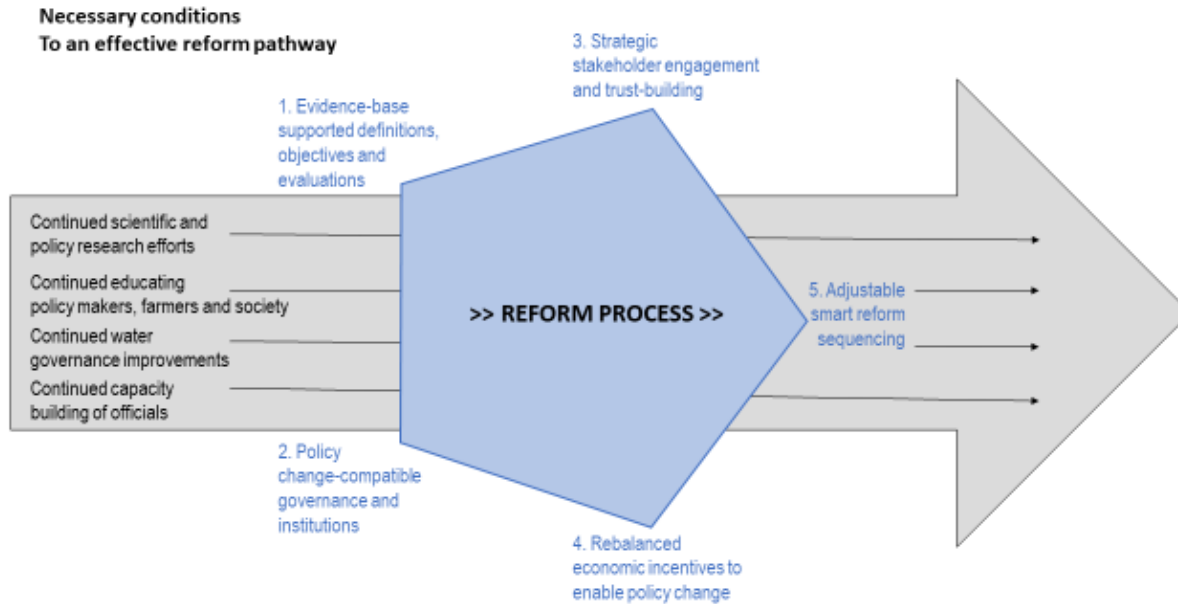
The case of subsidy reforms



- Three main policy reform options:
 - the elimination;
 - the gradual reduction; or
 - decoupling the subsidies from production
- In practice, phasing out subsidies that negatively impact water resources are rarely considered and implemented, due to:
 - Strong opposition from entrenched pressure groups,
 - Political cost
 - The public has little interest, while the benefits are concentrated in the hand of small groups



What to do then?



Source: Ovière, G. and H. Le Soldeu (2019), 'Navigating pathways to reform water policies in agriculture', OECD Food, Agriculture and Fisheries Papers, No. 128, OECD Publishing, Paris, <https://doi.org/10.1787/600c9a20-en>.

Applying the 5 reform conditions to the removal of subsidies that negatively impact water resources

Evidence-base supported definitions, objectives and evaluations	Running a diagnostic, experimenting scenarios
Policy change-compatible governance and institutions	Revisiting the legal framework, addressing governance failures
Strategic stakeholder engagement and trust-building	Dialogue on options, building trust to overcome resistance
Rebalanced economic incentives to enable policy change	Considering transitory compensation under the decoupling option
Adjustable smart reform sequencing	Running pilots and experiments Adapting pace of compensations



Conclusions



- Progress continuously- prepare change is necessary
- Timing and adaptability are key : the “political will” is not sufficient
- Work with stakeholders transparently with gradual targets and credible enforcement
- Reforming policies often require changes within governments



Thank you for your attention!



<https://www.shutterstock.com/video/clip-150877-walking-on-rice-field-rain>



<https://ec.europa.eu/jrc/en/news/minimum-quality-requirements-water-reuse-agriculture>



<https://www.videoblocks.com/video/cattle-in-the-meadow-drinking-water-from-the-trough-hqbzsezgijav7dyi>

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