'Pathways to policy change on water in agriculture'

Session 4: Implementing and future-proofing policies and investments

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Four types of policy instruments

Standards Awareness Self-Tariffs and raising charges management **Permits** Knowledge 'Golden triangle' **Subsidies** Rules transfer Support and Water Command facilitation Best practice markets and control Certificates Level of state involvement Low High 3. Legal 2. Economic 4. Miscellaneous 1. Information instruments instruments instruments





Case 1: Central Mexico (Guanajuato)



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- Regulatory measures, indirect measures, selfmanagement, water markets have had limited effects
- Drip irrigation → rebound effect (intensified production)
- 'Water vampires' (equity issue)
 - Industrial agriculture vs smaller producers
 - Political power
- What is needed: cooperation between higher levels of authority (the regulator) and the water users the (regulated)
 - Trust and reciprocity!
- https://www.youtube.com/watch?v=0ubFpIZ1VKU





Case 2: China (Minqin County)





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- Direct groundwater regulation often difficult (South Asia):
 - Large number of individual users (administrative costs)
 - Lack of strong intervention from local water authorities
- Here, however, successfully implemented
 - Part of a water-policy reform (top-down)
 - Local government promoted self-management
 - Integrated in existing institutional structures
- Side-effects:
 - Closure of wells: reduction in crop production
 - Migration of farmers
 - Long term sustainability impacts?





Case 3: Netherlands (flower bulb growers)

- High level of pesticides in surface water in region with bulb farmers
- Problem achieving goals Water Framework Directive
- Program including water authorities, manufactures of pesticides, flower bulb growers, research institutes & branch organization
- Knowledge gained about emission routes and solutions for reduction: further implementation by branch organisation
- Successful policy instruments: knowledge transfer, "golden triangle", awareness, best practise







Some key messages / observations

- Few successful cases of policy implementation have been reported
 - Little can be said about long term effects
 - Reduction of *increases* in levels of groundwater use
- Adverse side effects (equity aspects / mutual gains)
 - Trust and reciprocity, autonomy
- Global local authorities
 - Labelling / certificates context-specific / tailor made
- Who is in the driver's seat: consumers or producers?
- Role for government especially when problems occur on mid-term: "Farmers are specialised in producing food, not in managing water."





Thanks

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