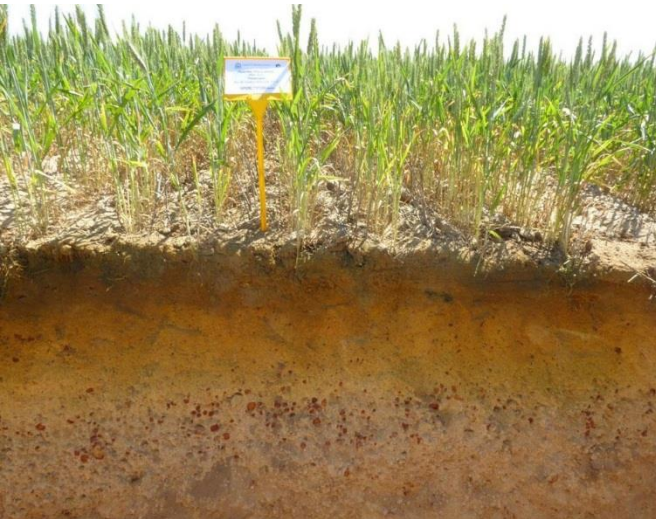# Providing ecosystem services: challenges, lessons and best practice

David Pannell

Centre for Environmental Economics and Policy

Rural Australia

- A wealth of environmental assets & resources

A wealth of problems

Policy experiments

- From about 1990, various national policies and initiatives
  - Some state ones too
- Many different approaches (beyond traditional regulation and planning)

- What have we tried?
- What worked?
- What have we learnt?

The 1990s – social capital

- Landcare
- Joint initiative of conservation and farmer peak bodies – convinced national government to fund it
- Formation of hundreds of small local groups of farmers
- Hundreds of $millions for facilitators and small grants
- Voluntary and largely unfunded

Landcare Australia

Landcare

- Aimed to
  - o Build awareness
  - o Influence values – foster stewardship ethic
  - o Build social capital – local networks and trust
  - o Greatly change land management

Landcare successes

- Raised awareness of environment and natural resources

- Helped promote substantial uptake of some sustainable farming practices
  - Zero tillage
  - Liming acid soils

- They were practices that generated private benefits for farmers (as well as some public environmental benefits)

Landcare failures

- Naivety about the nature of the problems
  - It wasn't just lack of awareness or social capital
  - Limited capacity & willingness of farmers to absorb costs to generate public environmental benefits
  - Lack of suitable technologies

The 2000s

- Regional governance (56 regions)
- Several $billion

Regional governance

- **Motivations**
  - More strategic, more targeted, better planned approach
  - Respond to public pressure for more action
- **Devolution**
  - Funds allocated to regional bodies
  - Consult and develop regional plans
  - Allocate funds to local priority projects
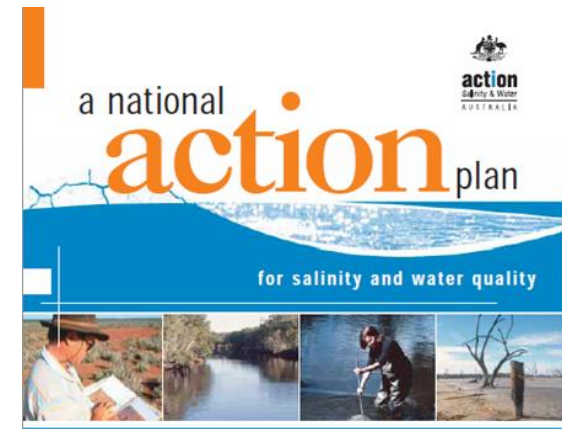
Regional gov'nce successes

- Consultation led to buy-in for regional plans
- Maintained relationships with a motivated subset of local farmers
- Continued similar successes as for Landcare
  - Private benefits
  - Or public benefits and not too costly

Regional gov'nce failures

- Targets unachievable
- Minimal use of science
  - Completely ignored the hard questions:
    - *Would it take to achieve the targets?*
    - *What would it cost?*
- Very weak prioritisation – preference for spreading $ thinly
- Pressure to spend money quickly, not well

Regional gov'nce failures

- Failure of system to prioritise learning and improvement

- Assumed that all problems could be addressed regionally
  - o Some needed investment in technology development – none supported

ANAO Review (2008)

- No evidence of significant progress towards preventing, stabilising and reversing trends.

- Where there was evidence, progress was frequently less than one per cent of the longer-term resource condition target.

Australian National Audit Office

- Centralisation – Caring for our Country

- Motivations

  - Reduce reliance on regional bodies – viewed as the cause of the earlier failings

  - A more business-like approach

  - Set clearer targets

Centralisation successes

- A pretty good set of criteria for selecting projects to fund

Centralisation failures

- Ignored their own criteria for selecting projects – very weak prioritisation
- Political interference in funding decisions
- Disempowered the regional bodies – lost regional support and networks
- High transaction costs

Centralisation failures

- **Targets worse than the earlier ones**
  - o Included a bit more science, but very coarse-scale
  - o Absence of local knowledge, local behaviours and attitudes, social conditions, economics
  - o Ridiculously short time frames for targets
  - o Encouraged actions with short-term "gains" even if no long-term gains e.g. environmental weed removal
  - o Ruled out investments that could actually make a worthwhile difference in medium to long term

Water markets – why

- Water over-allocated by state governments

- Lower appetite for costly water infrastructure – costs exceeded benefits

- A water market seen to allow flexibility and to reduced costs of adjustment

Water markets – what

- A cap on extractions
- Tradeable water entitlements
- Trading rules that reflect hydrological realities
- Trading platform and accounting system
- Systems for managing third-party impacts

- Some challenges
  - Sleeper licenses

Water market – what happened

- Persisted with it – took it seriously
- Now have a successful market system
- Generates benefits worth 100s of $millions each year
- Especially during drought
- People can't imagine not having it
- Also used by the CEWH

Market-like instruments

- Conservation tenders (reverse auctions)
- Used to allocate funds to projects that protect or restore native vegetation/habitat/wetlands
- "Bushtender", "Ecotender" "National Stewardship Scheme"

Conservation tenders

- Farmers submit bids
  - I will do X if you pay me Y
- The program evaluates and quantifies ecosystem services provided
- Rank bids according to value for money B/C
- Contract the best ones
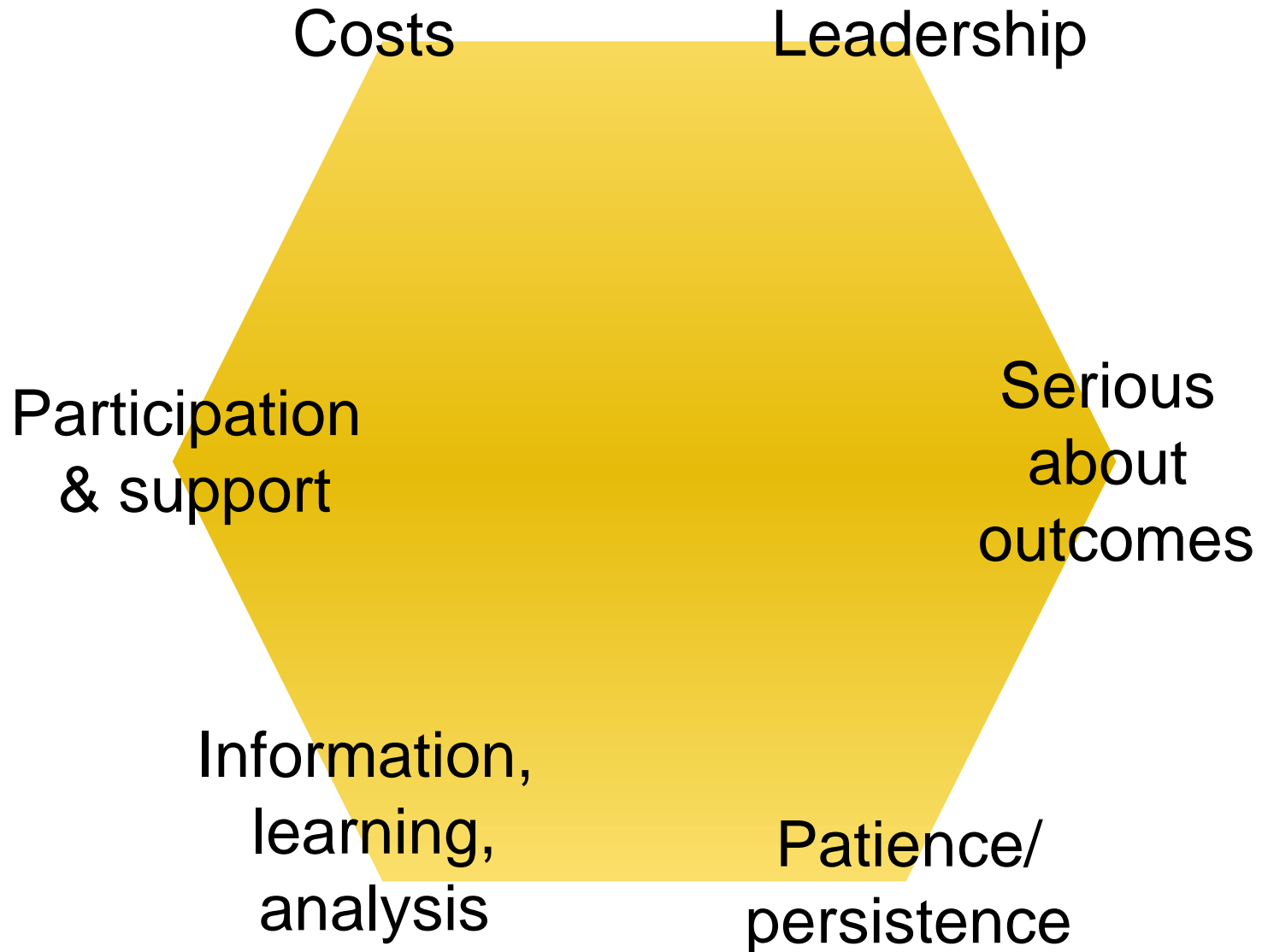
Conservation tenders, benefits

- Excellent prioritisation of investments
- Good contracting
- Development of tools to efficiently provide essential ecological info – if I do X, what will be the environmental outcomes?
- In case of the National Stewardship Scheme, long-term contracts
- Efficiency
- Transparency

Conservat'n tenders, problems

- All the things that make it good were resisted
- People used to looser, uninformed, opaque decision making and preferred it!
- Info viewed as a cost
- Long-term contracts clashed with gov't culture
- Implementers need knowledge
- Crowding out voluntary action
- Needed strong leadership – not forthcoming

The key elements

Costs

Leadership

Participation
& support

Serious
about
outcomes

Information,
learning,
analysis

Patience/
persistence

Conclusion

- It seems to be hard to do this well
- It is possible
- We've made mistakes – learn from them

www.DavidPannell.net