

# Monitoring in PES

# Questions

- Why monitor
- What is monitored
- How to monitor
- When time-scale
- Where spatial scale
- Who monitors
- Cost of monitoring

# What & Why

- Monitor land use and mgt practices
  - to assess if promised changes are being made and sustained
  - Basis of payments
- Monitor ES outcomes
  - to identify/confirm the impact of different landuse practices on ES e.g. grazing v/s no grazing -> infiltration and erosion
  - Basis for payment
- Livelihood of providers and receivers
  - Assess incremental impacts
- Other explanatory factors

# How

- Adoption of the land mgt practices and landuses u/s
- Basic measuring of biophysical variables
- Modeling biophysical relations (e.g. dose-response approach) for basic ecological rationale
- Cost-benefit analysis for opportunity costs at u/s (supply) and d/s (demand)
- Income/livelihood monitoring

# When & where: scale

- Earlier monitoring elsewhere for lessons
- Time – scale
  - periodicity
    - sediment/rainfall – daily
    - Income – yearly
  - Duration
    - Multi-year, multi-decade
  - Spatial scale – areas impacting ES provision directly, indirectly.

# Who monitors

- Intermediary, stakeholders
- Public monitoring
- Who collects, assesses, shares data

# Who pays

- Demand side
- Supply side
- Intermediaries
- Facilitators
- public investment in monitoring systems and data