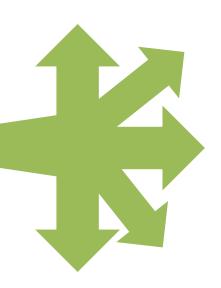
### Session: Evolution of Irrigation Services and Organizational Reform

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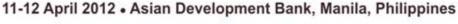
# IRRIGATION REFORM AND INSTITUTIONAL DEVELOPMENT Diversifying Irrigation Institutions



#### **Bryan Bruns**

bryanbruns@bryanbruns.com









## **Diversifying Irrigation Institutions**Overview:

#### **CHALLENGES**

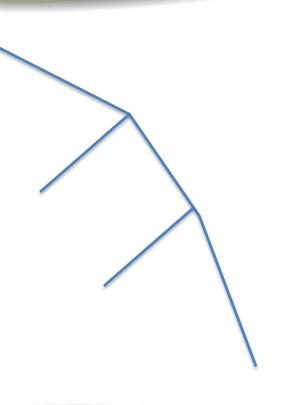
- Participation for performance
- Customizing irrigation management
- Escaping the rehabilitation trap
- Achieving real water savings and benefits
- Finding workable options for groundwater management

#### **OPPORTUNITIES**

- Smarter subsidies to help people help themselves
- Participatory diagnostics for comanagement
- Incremental improvement: Repackaging investment
- Sharing benefits from water productivity
- Outside the box: Information, swaps, and conjunctive management

### **CHALLENGES**

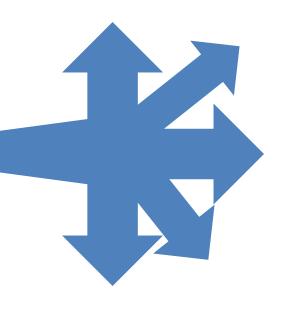
#### **Participation for performance**



- Experience with PIM & IMT shows possibilities and limitations
- Participation can improve design and construction
- Overemphasis on "establishing" formal organizations, rather than O&M performance
- Post-project sustainability of WUAs is questionable
- Constraints: authority, finance, agency incentives

How can we create better alternatives for institutional reform in irrigation?

#### **Customizing irrigation management**

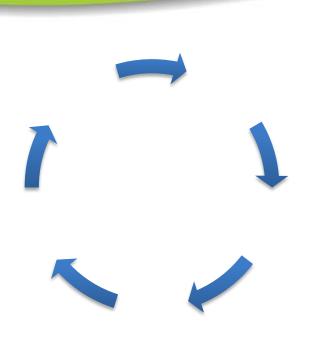


- Beyond panaceas:
  - Beyond replication, models, onesize-fits-all: tailoring institutions to circumstances
- Diversity of customary irrigation institutions
- Evolving context for irrigation systems

How can irrigation management adapt to an evolving context?



#### **Escaping the rehabilitation trap**



- Vicious cycle
- Moral hazards in maintenance
- Perverse incentives in rehabilitation
- Project financing and design disconnect benefits and costs, construction works and institutional reform

Are there better ways to align interests and incentives?



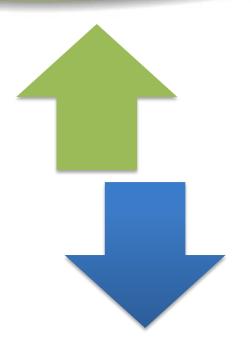
#### Achieving real water savings and benefits



- Need to aim for the right targets to improve water productivity
  - Beneficial vs. non-beneficial evapotranspiration
  - Recoverable vs. nonrecoverable losses
- Disruptive technologies: from information scarcity to information abundance

How can technologies help inform decisions by farmers and irrigation operators?

#### Finding workable options for groundwater management



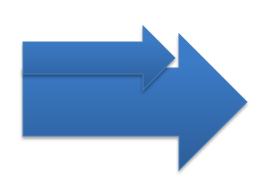
- Depletion of groundwater stocks
- Licensing strategy is hard to make effective
- Simple local rules sometimes work

What are outside-the-box solutions for groundwater management?



### **OPPORTUNITIES**

# Smart subsidies to help people help themselves



- Institutional framework for self-finance, e.g. irrigation district bonds, usually not available
- Government funding likely to continue, so how to make smarter subsidies
- How can government participate in farmers' efforts
- What mechanisms? Examples:
  - Local initiative
  - cost-sharing
  - Pre-construction agreement

How can aid be designed encourage self-help?

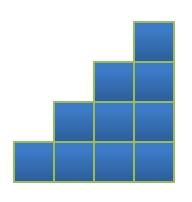


#### **Diagnostics for co-management**

- Not maximizing or minimizing, but how to work together: public, private & community
- Joint diagnostic processes for improving water service delivery:
  - Walk-through
  - Modernization: RAP, MASSCOTE, ...
- Additional methods:
  - PRA, PGIS, community visioning, appreciative inquiry, consensus-building ...
- Considering institutional options, including private investment and services

How to build better partnerships between farmers and irrigation agencies?

#### Incremental improvement: Repackaging investment



- Options for unbundling funding
- Managing complex adaptive systems requires adaptive learning
- Repeated interaction builds trust and credible commitments
- Dispersed and demand-driven funding in smaller chunks, for incremental improvement

How can projects and programs be redesigned to support incremental improvement?



#### Sharing benefits from water productivity



- Agricultural water use is not the constraint, cities get water: The question is how to be fair and efficient?
- Spontaneous transactions
  - Swapping irrigation turns, pumping services, tanker markets, buying land to get water
- Sequencing reforms:
  - Participatory governance,
  - secure tenure, and then
  - negotiated transfers, with accounting and safeguards
- Facilitating win-win transactions
  - Efficiency investments, drought contracts, reservoir accounting, conjunctive management

How can we develop win-win options for improving water productivity?

#### Creating alternatives for groundwater management

- Understanding aquifer characteristics
  - Storage
  - Flow rates
  - Recharge
- Informing community decisionmaking
- Simple rules
- Swapping surface water for groundwater
- Separating electricity supply networks

What else works for improving groundwater management?





#### **Conclusions**

- Smarter subsidies that encourage people to help themselves;
- **Joint diagnostics** to design integrated improvements in operations and infrastructure and develop co-management;
- Investment repackaged to support adaptive, incremental improvement;
- Facilitating win-win water transfers to share gains in water productivity, with regulatory oversight for proper water accounting and safeguards;
- **Practical groundwater management** including information-based consensus-building, surface-groundwater swaps, and actively managing aquifer storage

How can we diversify irrigation institutions to cope with evolving challenges?