This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.

# TCP/RAS/3304 Development of regional initiative to Revitalize Irrigation and Agricultural Water Governance in Asia Pacific

Final Workshop, ADB Manila, 11/03/2013

Thierry Facon

FAO Regional Office for Asia and the Pacific



# Presentation plan

- Why this project
- ▶ 3 FAO regional +1 WB-FAO-ADB projects
- ► Inception workshop
- Meanwhile ...
- Regional workshop on revitalizing irrigation
- Regional workshop on capacity development
- Status and prospects for follow up

# Why this project

- Launch of the initiative by FAO and IWMI and 1<sup>st</sup> Asia Pacific Water Summit (2007/12):
  - Sector neglected
  - Lack of change in the sector to address present and new challenges
- This project to design and develop the initiative and mobilize partners— became active April 2010

#### Initiative Rationale

- Irrigated agriculture is essential to the achievement of human development and environmental targets in the Asia Pacific.
- These targets will not be met unless the sector departs from a 'business-as-usual' approach and adapts innovative, forward-looking and effective strategies.
- Prod and enable actors in the region at all levels to take effective action.
- build on the existing capacity of the various actors of the agriculture and water sectors in the Asia Pacific region so that it can move towards greater food security, poverty alleviation, environmental sustainability and climate change readiness.

#### Initiative Rationale

- action oriented:
  - identify, highlight and provide support to a number of country or river basin initiatives that would:
    - illustrate what could be done and how,
    - provide inspiration
  - provide helpful regional support components including by mobilizing selected centers of excellence.

# Target Audience

- Policy makers
- Politicians
- Investors
- Financiers
- Managers (river basin, irrigation system, landscape)
- Operators and service providers
- Local governments
- Farmers
- Learning institutions and
- Private sector.



# Proposed Initiative Structure

- National/Basin Components
  - People's Republic of China, Malaysia, Thailand, Vietnam, Indonesia, India, Pakistan and Central Asia.

#### Regional Components

- providing support to develop and disseminate knowledge and tools in several key topic areas that are of broad regional importance:
  - monitoring of investment and results, irrigation modernization, capacity building, water accounting, others to be decided
- Regional components will be discussed in detail during Session 2, and participants will be asked to formulate and discuss additional regional components.

# Proposed Initiative Structure

► FAO, IWMI and other national and international organizations would provide technical and fundraising assistance to help both country/basin-level and regional components become self-sustaining into the future.



# Intended Activities of the initiative

- Develop communities of practice of like-minded, forward-thinking people
- Generating the knowledge and tools required to build capacity and support feasible pathways towards goals
- Creating a knowledge hub for a knowledge network (sic)
- Supporting action in basins
- Mobilizing the professional community
- Establishing/recognizing Centres of Excellence

#### Since the initiative was launched

- The food, energy and economic crises have focused minds, energies and resources again on food and water security.
- Emerging regional and national initiatives and significant national developments.
- ► The 2009 IWMI-FAO-ADB study on Revitalizing Asia's Irrigation with five key strategies:

Could we expand on and activate these key messages?

- Regional work done under a regional project supported by MAFF of Japan and in 4 of the participating countries
- Work done with ESCAP on economic, food and water security

# 3 FAO regional + 1 WB-FAO-ADB projects

- ► TCP/RAS/3304 —Initiative
- ► GCP/RAS/241/JPN Focus on policy and water allocation issues (2009-2012)
- ► TCP/RAS/3303 Capacity building in irrigation modernization (started in 2010, suspended, now re-activated)

► WB-FAO-ADB regional study on IMM in East Asia Pacific

# GCP/RAS/241/JPN

Highlighted the need to factor in the transformation of the Asian economies and implications for irrigation and agricultural water governance



# Key Challenges

- All the well-known challenges (climate change, increasing competition for water and land leading to scarcity, declining ecosystem health, widespread poverty and hunger)
- Greater interconnectedness between the water cycle, ecosystems and users.
- Decision-making is extremely complex
- There is often a widening gap between official irrigation discourse and on-the-ground reality
- Many old 'solutions' are not working as expected
- Conflicting policy objectives and incoherent policies
- Irrigation agencies and the 'development mission'

# **Emerging Solutions**

- Water accounting-based approaches
  - ET management for aquifers in Northern China
- Plan B approaches
  - If you cannot ration water or price electricity, ration energy: Gujarat restructuring of electricity grid
  - Participatory groundwater management: Andhra Pradesh
- Innovative legal instruments
  - Regulating ET by banning transplanting in hottest season (Punjab, India)
- Addressing policy dilemmas
  - Hiking pumping prices and redistributing revenue on area basis (policy experiment, China)

# Emerging Solutions (cont.)

- Monitoring of investment and results
- Structured policy dialogue facilitated by visioning exercises:
  - Long-term water security and
  - Long-term food security
- Supported by forward-looking experimentation (eg: Revitalizing Asia's Irrigation):
  - Emergence of new farming models
  - Water productivity
  - Irrigation modernization
  - Institutions and operators
  - Policy experiments
- ▶ 'Smart' investment

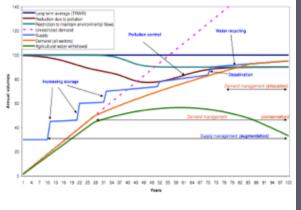


Figure 3: Coping with water scarcity: a dynamic model

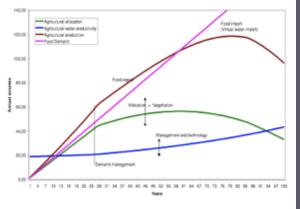
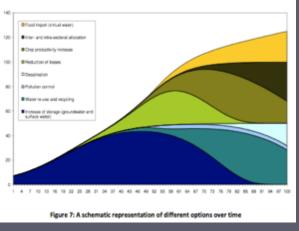


Figure 6: Dynamics of agricultural response



- The transition problem
  - Many things are happening in the basins
  - Many things are happening in the economy
  - Resilience? Sustainability?
  - Facilitate exit strategies?
  - Magnitude of CC uncertainties vs other changes?
- A more deliberately multi-sectoral multiobjective approach is needed
- A water accounting/auditing foundation

Economic trajectories
River basin trajectories
Autonomous trajectories
Local trajectories =>
Irrigation system trajectories

- More food with less water= how much food?
- Policy coherence
- Risk management strategies
- Coherence of actions across levels
- Quality of investment

# Unanswered questions

- Allocation of water rights widely regarded as necessary but how?
- Why has the implementation of practices that enshrine water productivity been slow and how can we speed up the process?
- How do we make better use of autonomous responses in informal economies?
- How do we balance short-term livelihood with long-term resource management?
- Is institutional reform needed? Where? When? How?
- How do we create better groundwater solutions?
- What do we need to do to plan more effectively and practically?
- How do we address environmental decline and high poverty at the same time?
- Etc!!

# Towards A Renewed Framework for Action on water and green growth for economic, food and water security to achieve coherent, feasible and effective policies and interventions

- It is necessary to adopt a multi-sectoral approach when considering food and water security — with agriculture taking a very high priority.
- Review existing objectives through a water lens taking a multi-sectoral approach.
- Consider solid water accounting as a prerequisite to decisions
- Develop risk management strategies for national food security
- Recognize political difficulties
- Improve negotiation processes
- Monitor investment and results

 Explicitly address policy dilemmas and trade-offs

#### Dilemmas and difficulties

- Managing Transitions: supporting continuity or a combination of improvements and exit strategies?
- 2. Informal water economies: to manage or not to manage?
- 3. Is the pursuance of agricultural productivity (economic efficiency) always compatible with other strategic goals such as food security, rural stability and equity?
- 4. Efficiency or resilience and redundancy?
- 5. Implementation of ideal or second-best/Plan B options?
- 6. Prioritizing: national objectives, local objectives or basin objectives? How do we better align goals?
- 7. Realistic financial arrangements and incentives for performance?

Addressing dilemmas and difficulties is necessary to achieve a coherent set of feasible and effective policies and better water management outcomes.

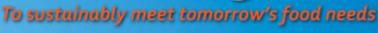
#### Need for a re-think

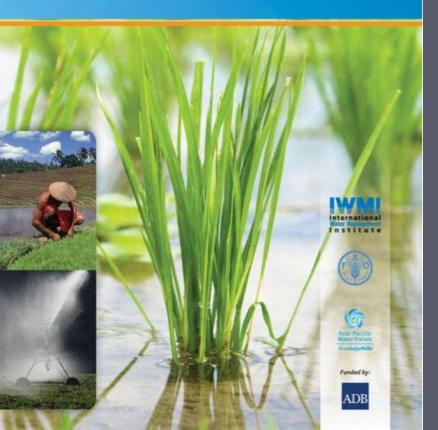
- Rapid growth and changing demands for agricultural products are prompting a rethink on how economies in the region are positioning the irrigated sub-sector.
- Lessons to learn with a view to the future?
- Prospects for country and regional trajectories?
- Probable evolution of irrigation in the region?



### Outlining key strategies

# Revitalizing Asia's Irrigation:





#### **Productivity // Service**

- Modernise yesteryears' schemes for tomorrow's needs
- Go with the flow by supporting farmers' initiatives
- Look beyond conventional PIM/IMT recipes
- 4. Build for the future: Expand capacity and knowledge
- 5. Look beyond irrigation: Invest outside the water sector

### Managing Transitions

As countries transition do we want to:

- ▶ Bridge the income gap for farmers?
- Achieve a much better income status for rice and other grain/staple producers?
- The two meanings of 'managing':
- Managing/attempting to control; or
- Coping with/adapting to

## Managing Transitions

#### Modernization

► What are the service needs of the farmers of the future?

# Transitions and options for additional development of irrigation

- Improve performance of existing schemes a priority;
- ▶In some contexts new schemes may be needed

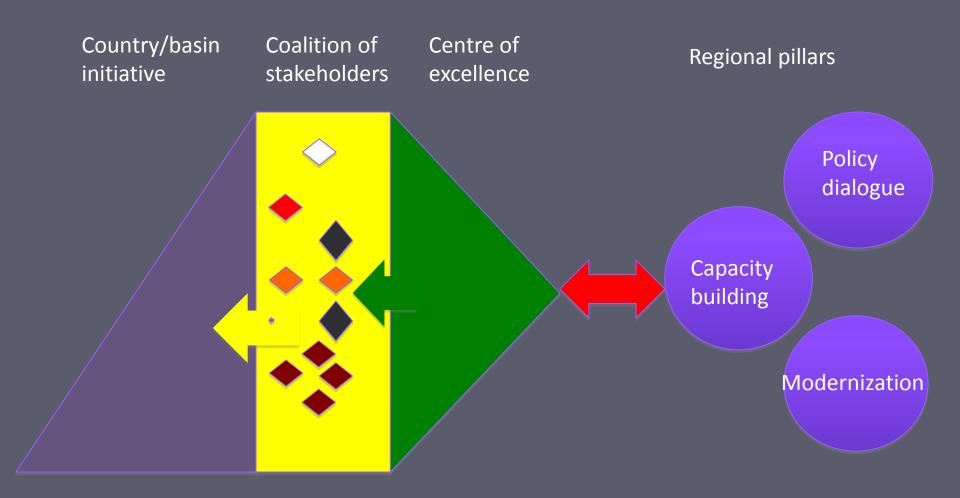
#### Investment

- Anticipate future needs and regulations; or
- ► Incremental change?

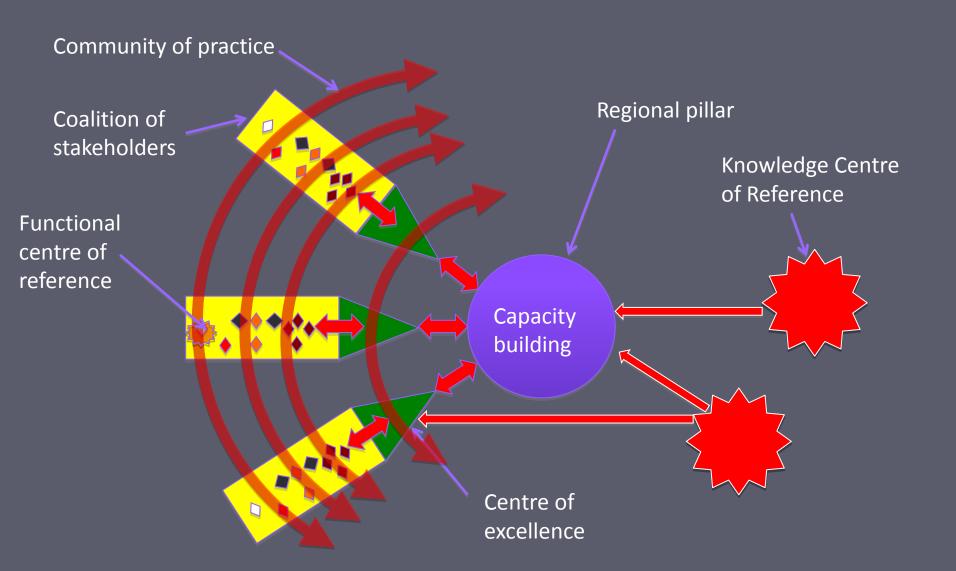
# The inception workshop

- ► April 2012
- ► A week before the ADB Asian Irrigation Forum
  - Countries presented their key initiatives in policy, strategies, investment
  - Something was happening in the region and in the countries
  - Countries and partners designed the initiative and a workplan

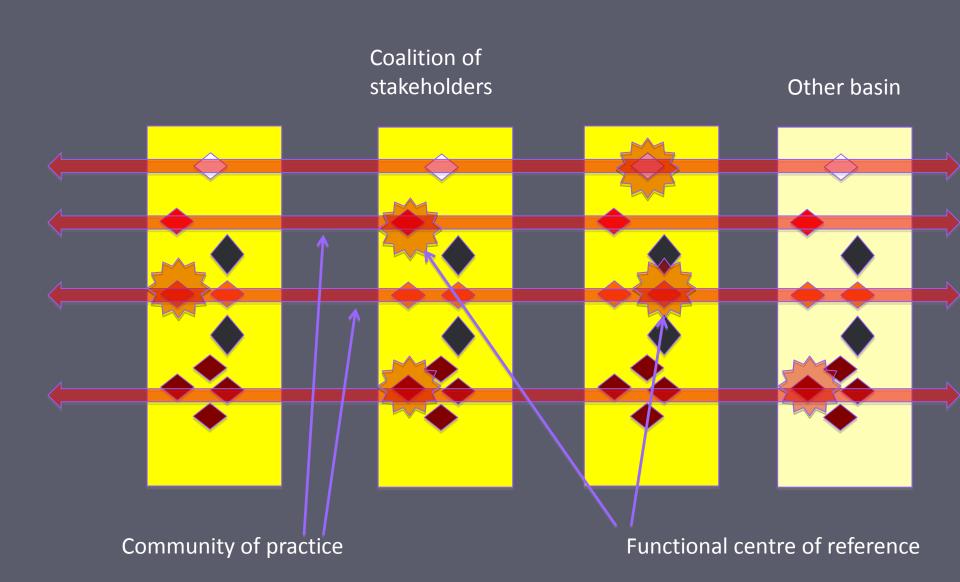
# The design



### Capacity building in the Initiative



# Communities of practice



# After the inception workshop

- Countries had innovative initiatives
- ► They shared common issues
- We could shift the initiative from push to pull and demand-driven
- We could focus on the tools, methodologies, centers of excellence, capacity development, regional pillars:
  - Regional workshop on revitalizing irrigation
  - Regional workshop on capacity development

#### Status

- ► TCP/RAS/3304 is closing
- Countries owning and sharing a modernization agenda
- Regional pillar on modernization and capacity building on modernization: we are ready to go:
  - 7 candidate centers of excellence in Asia Pacific
  - A vision of functioning, partnerships and continuous development of tools and initiatives
  - Agreement on modalities and governance
  - Resources now to get started now
  - Good prospects for resources mobilization in a number fo countries
  - Supporting all this will be FAO's technical programme in the region