

Revitalizing Asia's irrigation: an Action Agenda

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A Regional Initiative for Revitalizing Irrigation and Agricultural Water Governance in the Asia Pacific

- ▶ Launched by FAO and IWMI at the 1st Asia Pacific Water Summit (Beppu, 2007):
 - Sector and food security neglected
 - Lack of change in the sector to address present and new challenges
- ▶ A project to design and develop the initiative and mobilize partners

Initiative Rationale

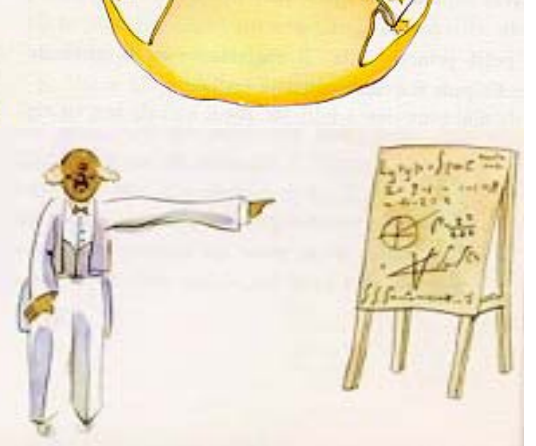
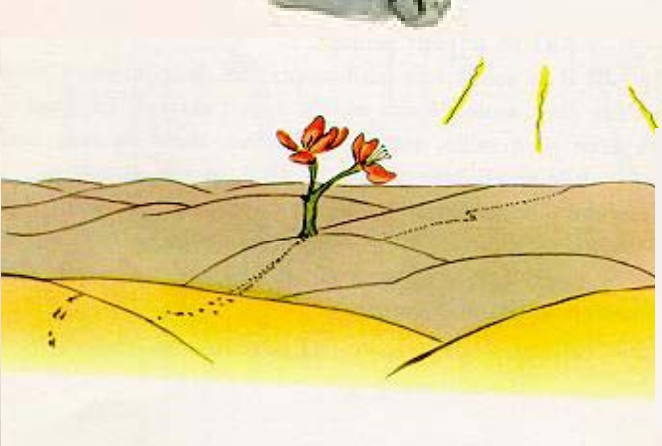
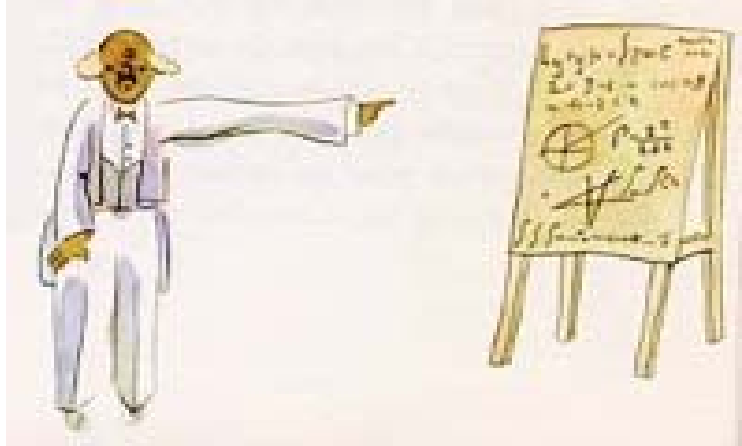
- ▶ Irrigated agriculture is essential to the achievement of human development and environmental targets in the Asia Pacific.
- ▶ These targets will not be met unless the sector departs from a 'business-as-usual' approach and adapts innovative, forward-looking and effective strategies.
- ▶ Prod and enable 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.

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?

- ▶ A lot of work done in the region



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

- ▶ Integrating into economic development dynamics is a must
- ▶ 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.

- 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**

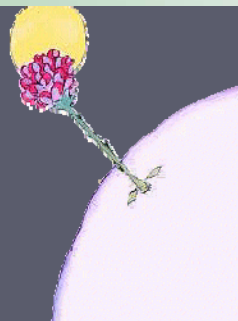
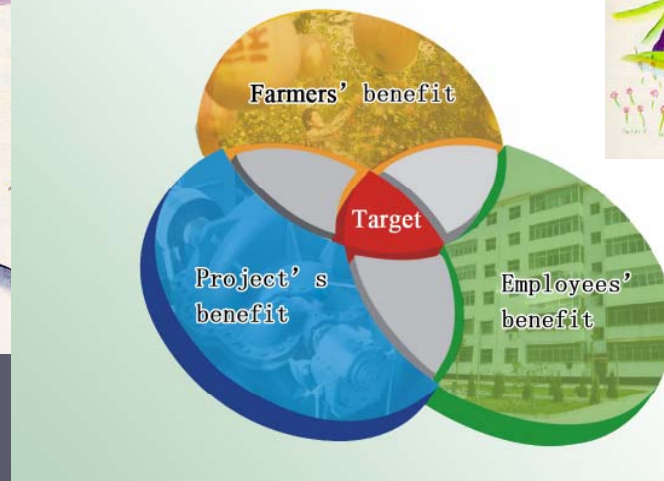
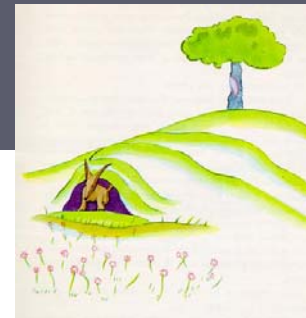
Dilemmas and difficulties

1. **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.

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



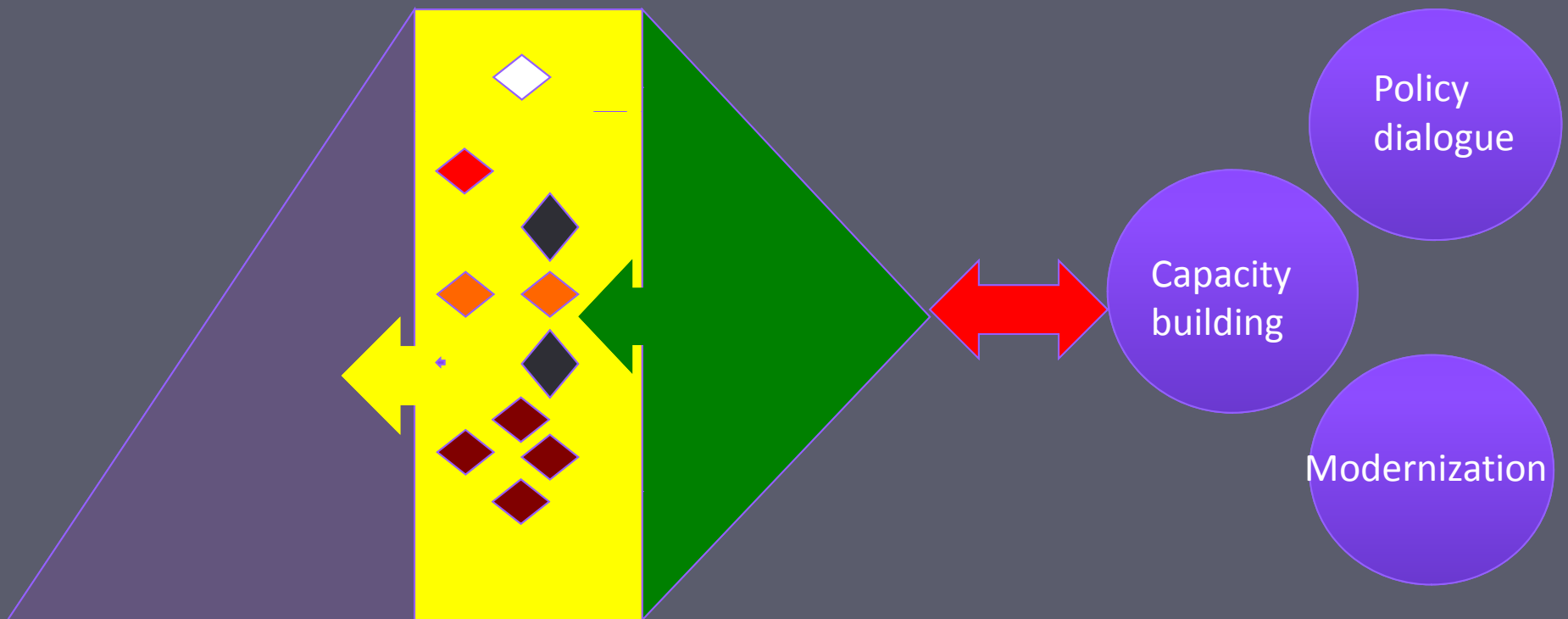
The design

Country/basin
initiative

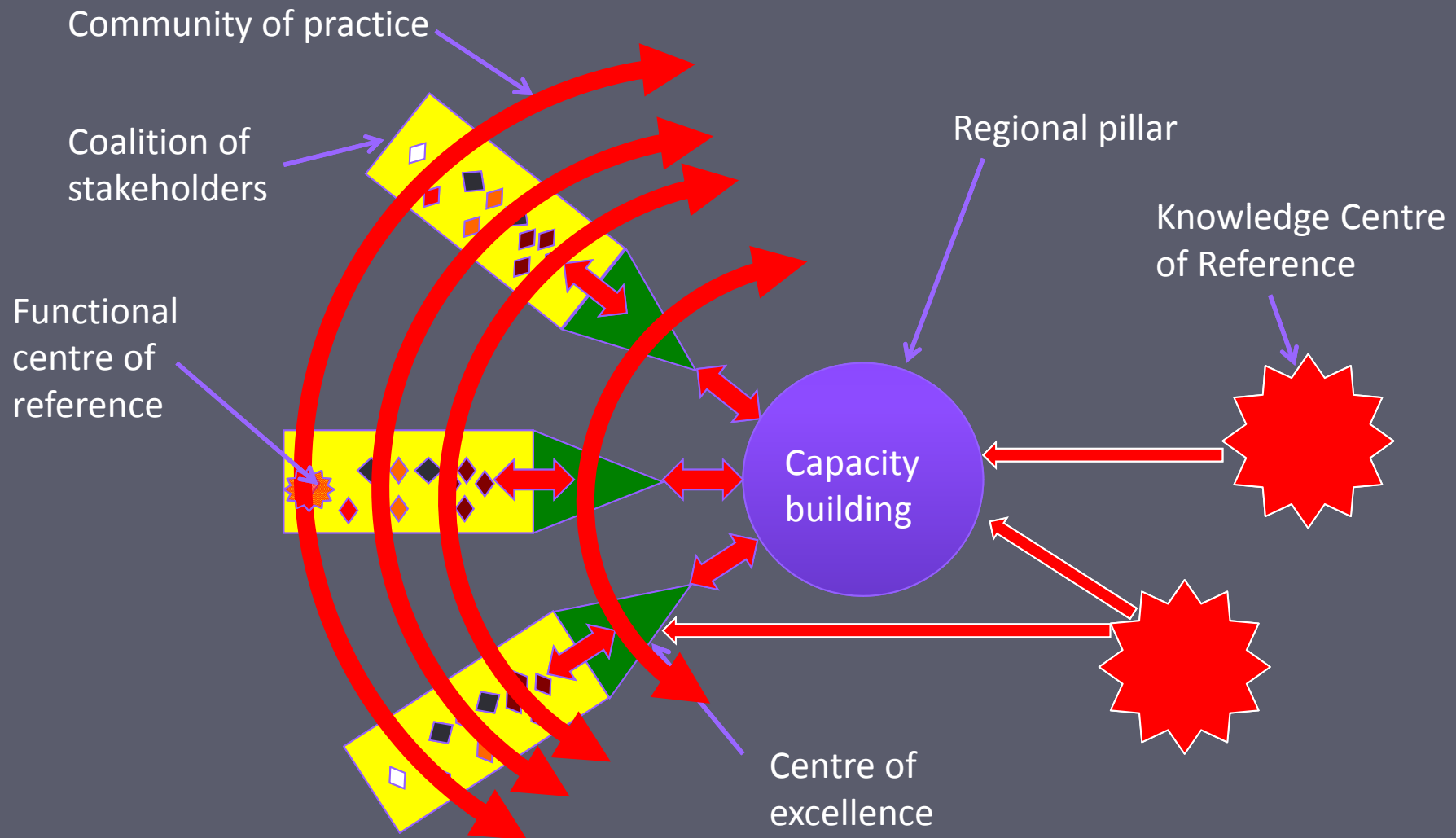
Coalition of
stakeholders

Centre of
excellence

Regional pillars



Capacity building in the Initiative



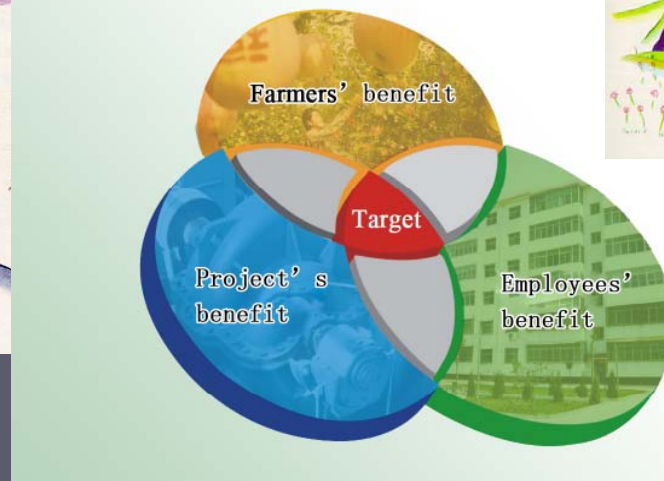
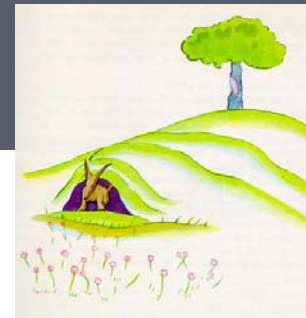
Change of strategy

- ▶ Countries own and share a modernization agenda and want to work together: there is a strong demand
- ▶ They share common issues and questions
- ▶ A number of interested partners
- ▶ The initiative shifts from push to pull and demand-driven
- ▶ We can focus on the tools, methodologies, centers of excellence, capacity development, regional pillars and linking this to action

Towards MASSCOTE 2.0

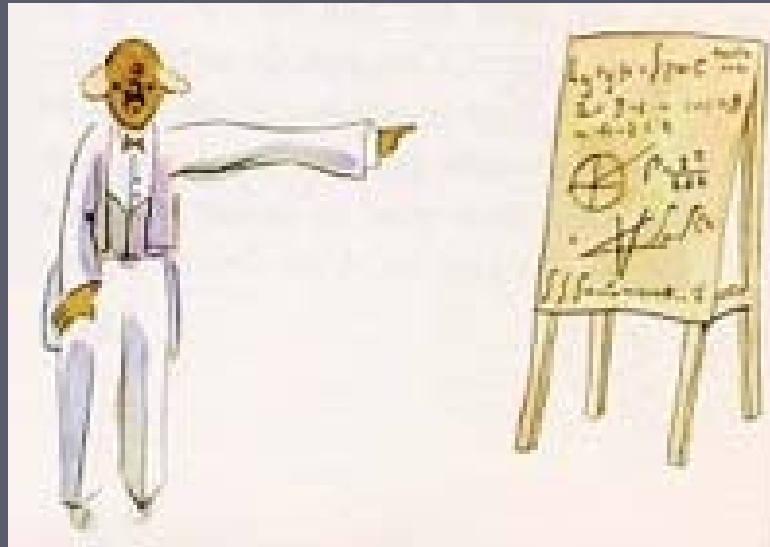
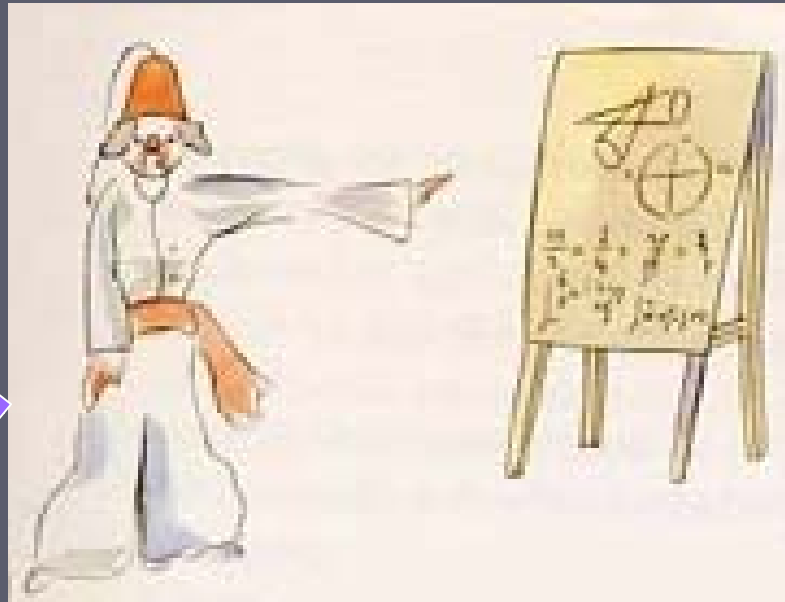
Multiple use, integrating existing modules

Drainage and salinity
Technical options: pumping stations, pumps, pipes, farm technology, automation, SCADA, etc.
Farm level (including fishponds etc.) level considerations
Policy, institutions, stakeholder processes and legal issues
Economic aspects and issues
Water accounting, evapo-transpiration, link to basins, multiple uses, environment et.
Climate change and energy



Towards a collaborative web—based open source model

- ▶ An improved master MASSCOTE 2.0
 - Steps
 - Aspects
 - Process
 - Builds on what exists
 - ▶ MASSCOTE modules
 - ▶ Practice
 - ▶ Available tools (COSTAB, many others)
 - Add to/change
 - ▶ FAO and technical partners
 - Develop/tests and validate
 - ▶ Developers
 - ▶ Users
- ▶ Continuous development
- ▶ Different versions for different users
- ▶ Warehouse of tools and solutions/steps



National Guidelines to support Policy for Transformation of Irrigation modernization

► National guidelines are needed

- R&D: investment in irrigation research, development and extension
- Dialogue- genuine consultation with stakeholders, especially irrigators to develop and implement a strategy and plan
- Knowledge: using best available science, establish key problems and quantity of water available
- reform and streamline regulatory and administrative processes at all levels of authority
- Capacity Development- provide relevant education and training for managers, system operators, irrigators, etc.
- provide incentives to irrigation water suppliers and to irrigators to encourage transformation
- Enable Water reuse in sector & cross sectors
- Enable forms of Water trading - entitlement of water use in term of quality & quantity
- Add flexibility -Total allowable usable water determined by a regulator at the beginning of year - can be adjusted during year.
- Include - Environmental water use to be considered a water holder

► A community of practice

► A reference document

Pillar on Capacity Development to support improved Agriculture Water Management: a Revitalization Agenda

- ▶ Assessed capacity building needs, demands, offer and gaps to support the future revitalizing agenda on irrigation. -Global Survey and Regional Workshop
- ▶ Developed a strategy for capacity development - set a Network of centers of excellence & communities of practice
- ▶ Defined a process for accreditation of reference centers and criteria's for certification of individuals and training modules.
- ▶ Worked on roadmaps at global, regional and national levels to answer to capacity development requirements for implementing effectively the irrigation revitalization strategy.

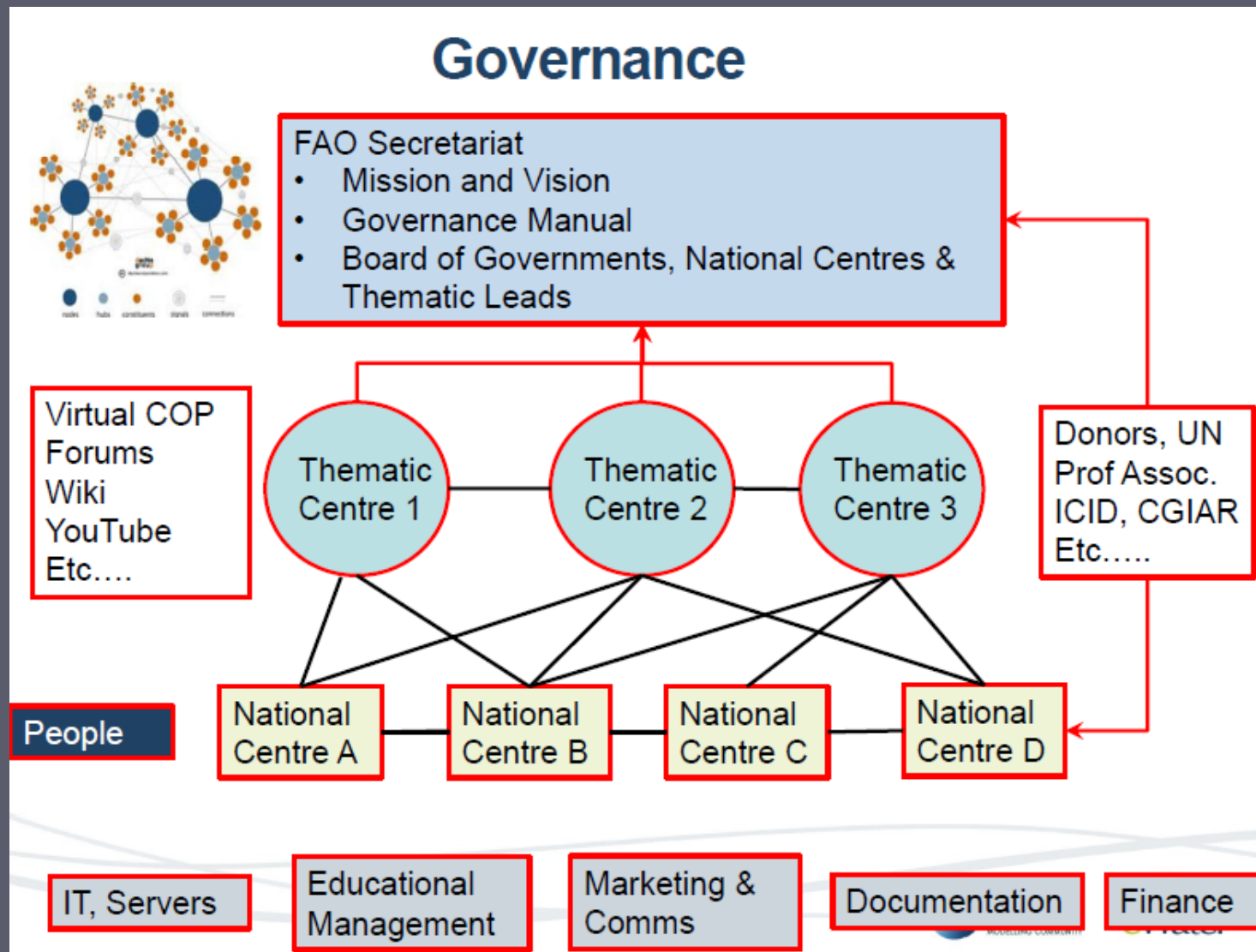
A key question

- ▶ The profession is in a sorry state
- ▶ Questions:
 - Professionalization
 - Attracting and retaining AWM specialists
 - Attracting and retaining non-AWM specialists
 - Knowledge generation and dissemination from the field
 - Public sector, other service providers, outsourcing
 - Shape of AWM specialists
- ▶ How to attract the youth
- ▶ We need a new attractive dynamic project: modernization
- ▶ Will this be sufficient?

The goal

- ▶ Smart management for smart investment
- ▶ Smart investment for smart management

Network of Reference Centers and Centers of excellence on irrigation modernization



- Agreement between National Centres and FAO regarding status, roles, participation in Thematic Centres and Accreditation (proposed 5 year period). Thematic Centres could be around both knowledge but also accreditation etc.
- “Internal” Financing of capacity building, training and knowledge products to WUA, Farmers, Irrigators covered by direct agreements/contracts at National Level
- Certification Services for a fee to Commercial Operators and Practitioners
- Educational and Training support to external clients as fee basis
- Capability delivered through National Centres but coordinated by Thematic Centres

FAO Reference Centers for irrigation modernization

- ▶ MASSCOTE and other FAO tools
- ▶ Development of tools for modernization AND capacity development – link to action
- ▶ Knowledge generation: a public good
- ▶ Services and certification on a fee/commercial basis.
- ▶ RFCs will help countries to:
 - Improve, adapt and simplify existing tools
 - attract resources to the region
 - allow expansion to other regions
 - be focused on irrigation modernization
 - disseminate tools and methods more effectively
 - increase credibility of national centers

Initial set of Reference Centers and their specific themes

Reference Center	<u>Thematic Focus</u>
AC IWRM	Systems, Basins
VAWR	WRM, Disaster Risk Management, Climate Change, Land Use
IWHR	Basin Management, IWRM, Water Saving Irrigation Technologies
WHU	Water Saving in Irrigation in paddy, Irrigation System Management, Pump and Pumping Station, multiple uses (MUS)
JMK	Pump and Pumping Station Operations, Water User Assoc., Service Oriented Management
MADA	Planning, Design, Operation and Maintenance of Irrigation Scheme for Paddy, Managing Economic Transition (policy formulation, strategies and action plans)
SIC	Water Saving in arid climates

Next steps

- ▶ Modalities for accreditation and certification: high standards are needed
- ▶ Towards accreditation
 - Finalize the governance setup
 - Standards set and agreed upon
 - Benchmarking centers against standards
 - Assess resources needed in which area - development of plans to achieve standard
- ▶ New candidates: Thailand, AIT?
- ▶ Milestone: Secretariat established and Reference Centers accredited by June 2014

Conclusion

- ▶ A change agenda is gathering increasing ownership, support and momentum. Countries and institutions are engaged in action and willing to work together. There is a strong demand.
- ▶ The Regional Initiative on Revitalizing Irrigation and Agricultural Water Governance supports an action agenda by focusing on tools, methodologies and guidelines for irrigation modernization, capacity building, and policy dialogue, which countries and partners agreed meets a demand.
- ▶ FAO will direct its resources and technical programs in the region to support and further develop this and farm out its capacity development activities to the Reference Centers and Centers of Excellence.
- ▶ We are starting now with the centers, resources and partners.
- ▶ Indications the common project is sufficiently attractive to mobilize and accrue resources and partners and new countries for the initiative to further develop, be sustained, and expand in the region – and beyond.
- ▶ The Asia Pacific to demonstrate leadership.