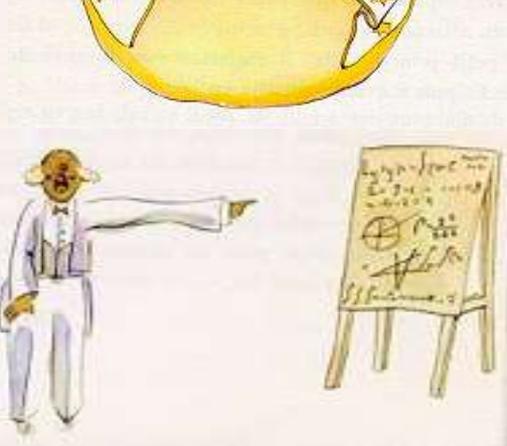
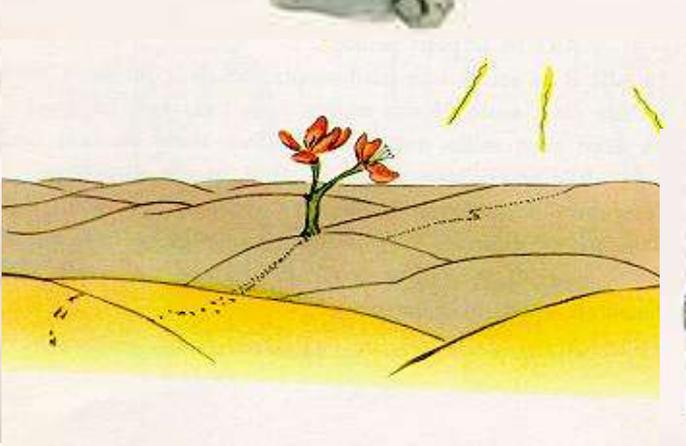
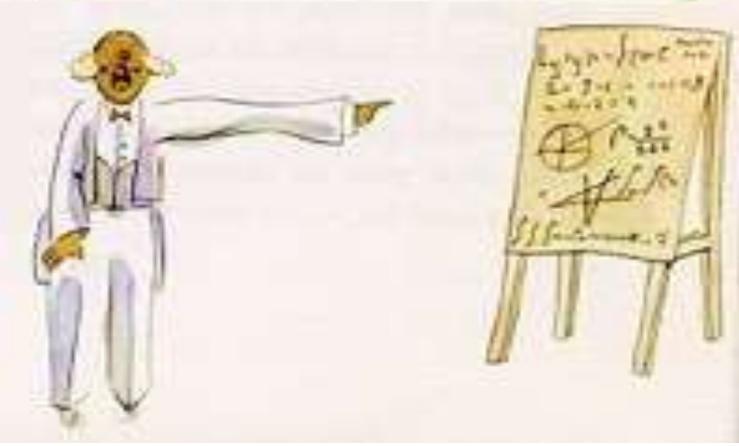
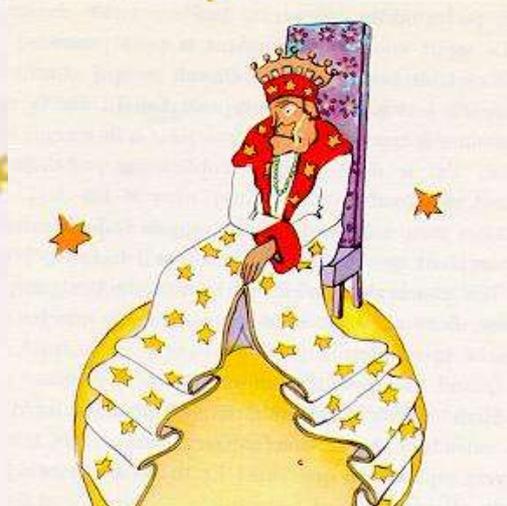
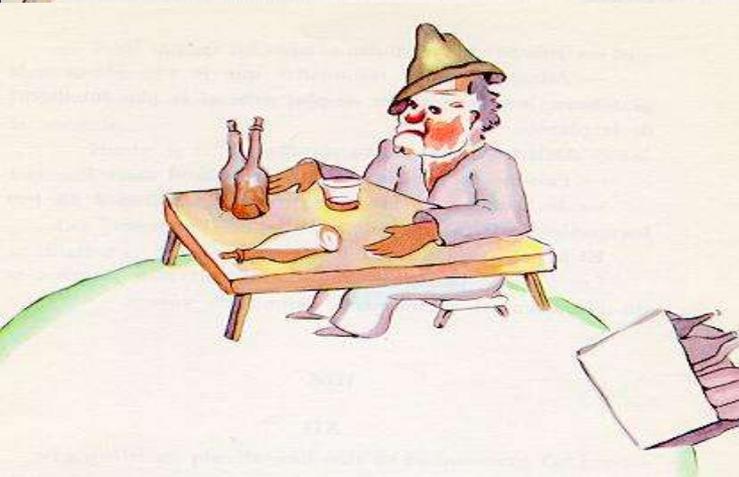
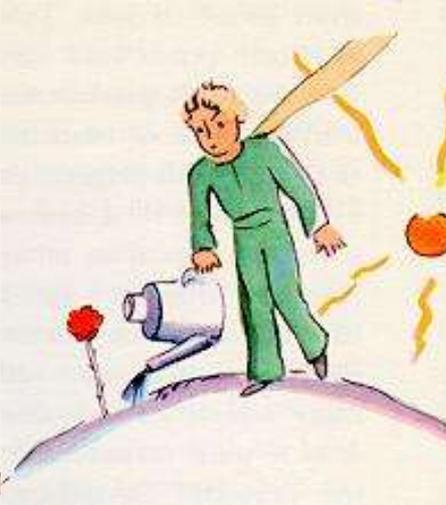


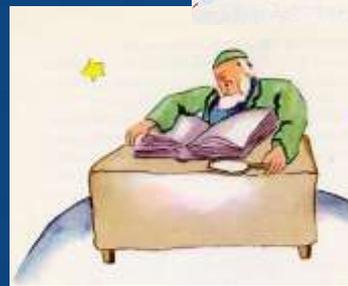
# Irrigation futures: New questions

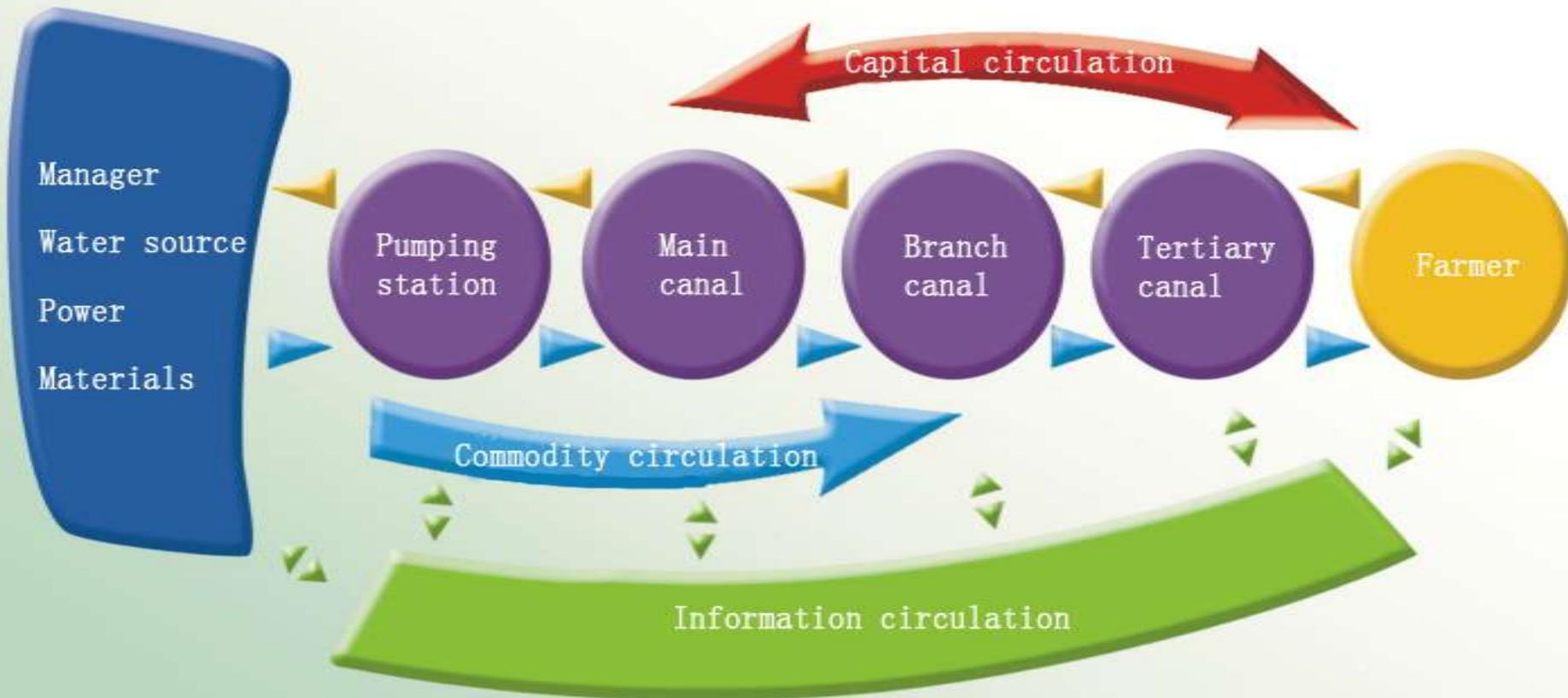
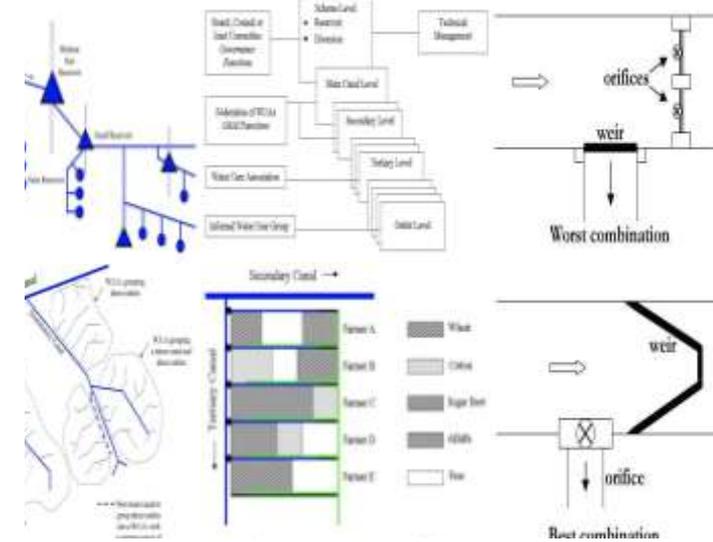
*Thierry Facon*

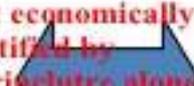
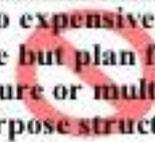
*Senior Water Management Officer  
FAO, Bangkok*

**IMM in EAP Regional kick-off meeting**  
*Bangkok, 15 November, 2012*







National and Sub-national stage	Type 1: Reservoir gravity	Type 2: Off-river gravity	Type 3: Off-river pump 	Type 4: Conjunctive 	Type 5: Integrated management deltas 
Post-agriculture	0 	- 	+ 	+ 	- 
	Optimizing multiple use economically justified; limited number of sites available for new systems	Reduce. Merge or neglect due to low reliability Convert to type 3 or 4 Convert to different crops/land use	Increasing energy costs Crop diversification Rice phases out economically justified; limited number of sites available for new systems	Highly flexible Farmers decide Market rules (export possibilities) (many users use pumps)	urbanization Optimizing multiple use (environment, drainage issues, peri-urban agriculture, urbanization); more crop diversification
Agricultural Export	not economically justified by agriculture alone but may expand; 	0 	0/- 	+ 	Expand short term then decline due to urbanization, sea level rise, salinity? 
	Anticipate on multiple uses 	Improve, modernize (endless) Inherent limitations of supply	Likely reduction due to energy costs (for paddy)	Highly flexible Farmers decide Market rules (export possibilities) (several farmers use pumps)	Optimize multiple use Expensive drainage (environment, drainage issues, peri-urban agriculture, urbanization)
Agriculture focus	0 	+ 	+ 	+ 	Expand short term then decline due to urbanization, sea level rise, salinity? 
Too expensive for rice but plan for future or multi-purpose structure 	low costs Comparative advantage (compared with other options)	Affordable investment Subsidized O&M	Highly flexible Farmers decide Market rules (export possibilities) (some rich farmers use pumps)	Developing paddy systems Not yet irrigated 	

# Outlining key strategies



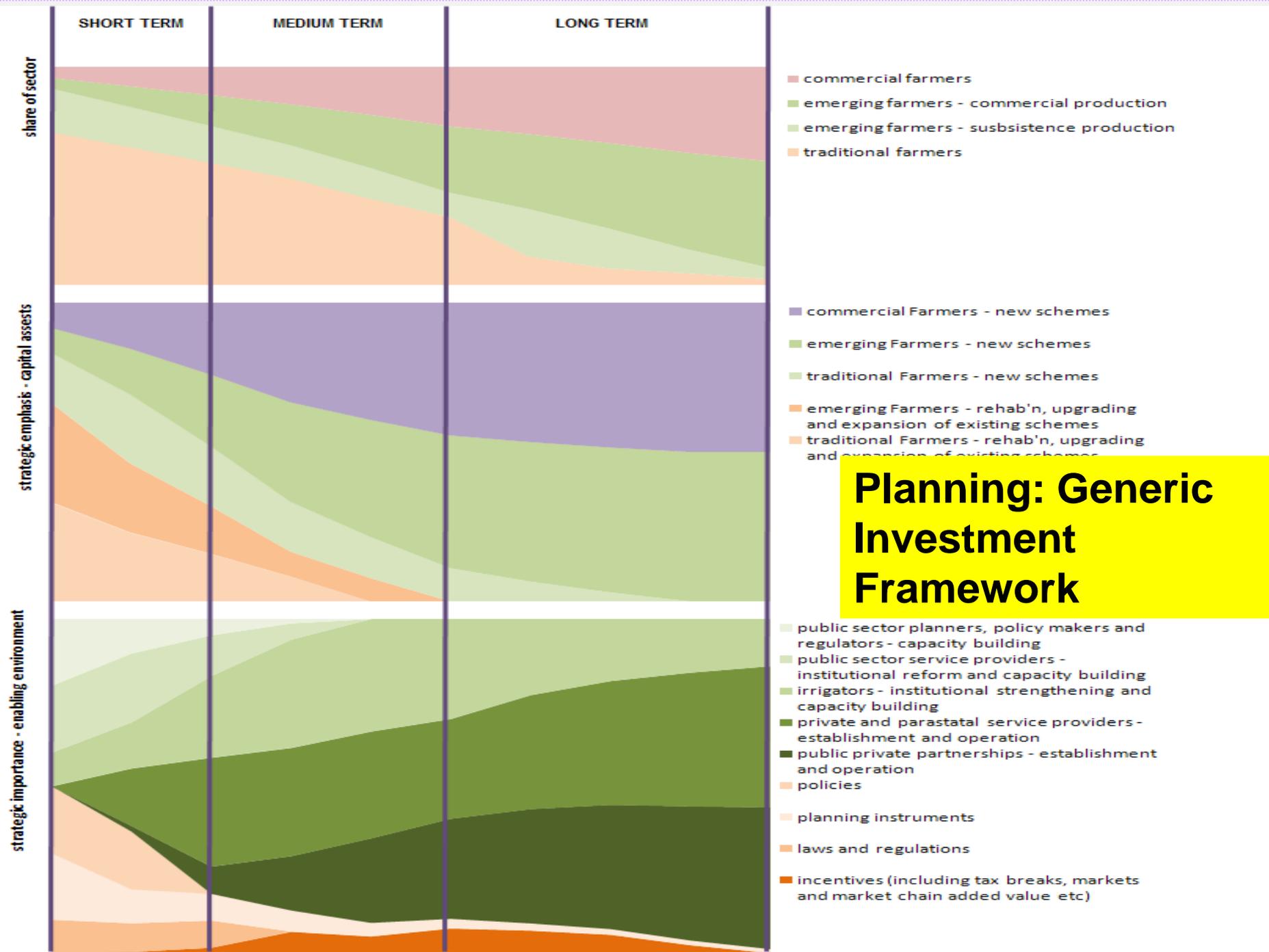
## Revitalizing Asia's Irrigation:

*To sustainably meet tomorrow's food needs*



## Productivity // Service

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



# **Economic, Food and Water Security in Asia: Towards a New Framework for Action**

Presented at the  
World Water Week, Stockholm

## A Policy Brief

Outline:

1. Key challenges and trends
2. Fundamentals
3. Policy dilemmas
4. Towards a renewed framework for action
5. Moving forward

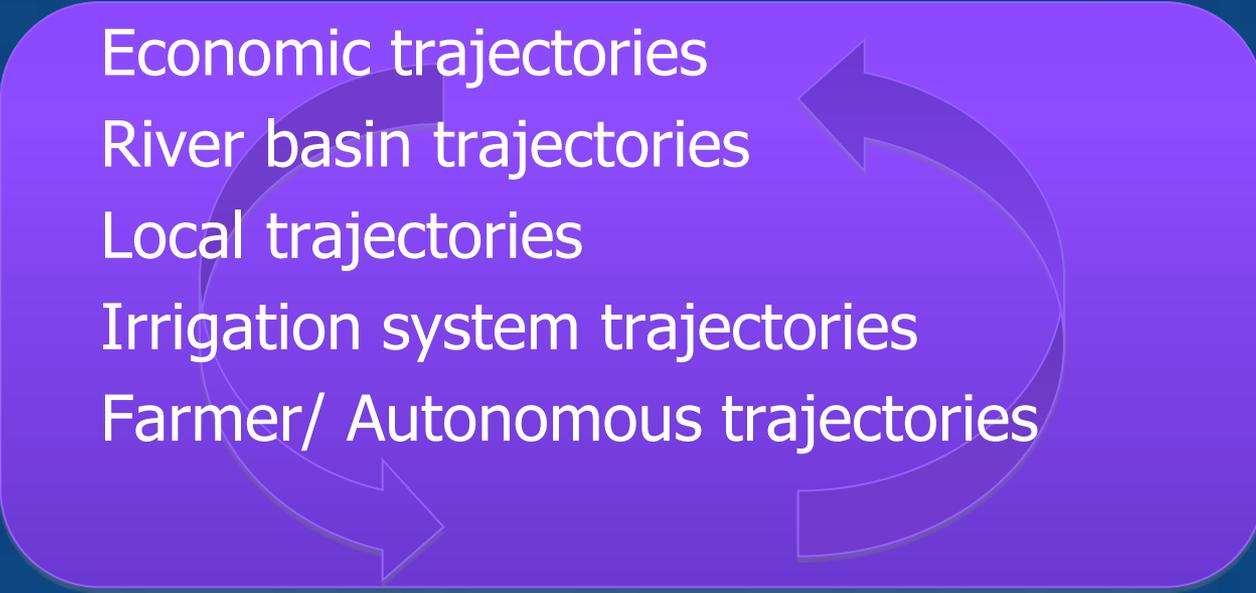
### Key Messages

- It is necessary to adopt a multi-sectoral approach when considering food and water security - with agriculture taking a very high priority.
- Explicit consideration of policy dilemmas and difficulties is required.



## Dilemmas, difficulties and trade-offs

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 vs resilience?
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?



Economic trajectories  
River basin trajectories  
Local trajectories  
Irrigation system trajectories  
Farmer/ Autonomous trajectories

The text is centered within a purple rounded rectangle. To the right of the text, there is a circular arrow diagram consisting of two curved arrows forming a circle, one pointing clockwise and one pointing counter-clockwise.

As countries transition we want to:

- Bridge the income gap for farmers
- Achieve a socio-economic status for rice and other grain/staple producers similar to other sectors

The two meanings of 'managing':

- Managing/attempting to control; or
- Coping with/adapting to
- Up to governments to decide the acceptable cost in achieving broader socio-economic goals



## Farm size

- Consolidation equals increased incomes and productivity; but
- Better understanding of trade-offs at the local level is needed
- Are there barriers to consolidation?

## Modernization

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

## Investment

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