“Mutually Acceptable Mechanisms for Integrated Use of Water Resources in Central Asia through Applying a Scenario Approach”

Supporting the Strategic Dialogue in the Aral Sea Basin

Geneva, April 2013
The Future is built on

Pre-determined Elements and Uncertainties

Source: Van der Heijden
What are Scenarios?

Scenarios are logical, plausible stories about the future that help us recognize and adapt to changing aspects of our environment.

Scenarios are about the external environment.

Scenarios should be used as a set; all are plausible and should therefore be considered together, they represent a good understanding of the range of events that may unfold.
The Tool

Four plausible story lines describing how the future of the Aral Sea Basin might evolve; there was general acceptance among the participants of the plausibility and relevance of the scenario set.

It provides a structure for a systematic and multi-stakeholder analysis of complex policy issues in the region related to food security, agricultural trade, energy situation and environmental degradation.
Steps

Interview mission to establish the scenario agenda

First regional workshop: to identify key driving forces and uncertainties

Research phase 1: better understand dynamics and inter-sectoral relations

Second regional workshop: develop scenario frame

Research phase 2: develop draft scenario logics and verify critical assumptions

Third regional workshop: review and complete first-generation scenario logics

Fourth regional workshop: verify scenario logics and discuss ‘next steps’
Scenario Frame

ECONOMIC DEVELOPMENT

WEAK

EFFECTIVE

STRONG

MANAGEMENT SYSTEM

NOT-EFFECTIVE

1 2

3 4
Scenario Frame

Wise Owl

Camel with 6 humps

Economic Development

Economically Effective Management System

Economically Uneffective Management System

Weak

Strong

Dead end

Swine, pike, lobster
Core Structure

- Agriculture is the dominant water user;

- Water use efficiency is generally low;

- Towards optimized beneficial uses in terms of agriculture, energy, environment, etc;

- Predetermined elements (demography, irrigation dev. in Afghanistan, etc.) included in all scenarios
Scenarios:

1. **Scenario 2: “Camel with Six Humps”**
   - Economic development: High
   - Effective management: High

   - IWMM, agricultural, market and land reform
   - Effective support to agricultural sector
   - Effective water users and farmers organizations
   - Private investments in agricultural sector
   - Funds for G&M (at tertiary and on-farm level), and for new technologies
   - Agro-productivity / value addition / profitability

   - High government revenue
   - Large public investments in agriculture and agro-industry
   - Modernization of irrigation & agri-production systems / introduction of new technologies

   - Large public investments in land reclamation & environmental protection
   - Improved land conditions & ecological situation

   - Reduced dependence on agricultural sector
   - Substantially reduced pressure on CA water resources

   - Regional agricultural trade practices / shift to higher value crops

   - Enhanced regional cooperation
   - Mutually acceptable mechanism on integrated use of water resources and environmental protection in Central Asia taking into account the interests of all states in the region

**Strong Economic Development**
- Favorable economic conditions
- High export revenue from commodities
- Economic diversification
- High economic integration
- Industrial Development

**END STATES 2040:***
- Water use efficiency improved significantly
- Substantially reduced pressure on water resources
- Strong gains in agro-productivity
- Effective regional cooperation
- Well established regional agro-trade practices
- Food & energy secure
- Improved ecological situation
- Regionally coordinated climate change response
- Increased immigration
- Diversified economy
- Improved general welfare
- Improved socio-economic stability
Relevance

The Aral Sea Basin: Risks being a protracted negotiation in which parties are becoming committed to locked positions

Why?

Thinking is still mainly focused on the rivers: zero sum game
Enlarging Common Ground

Water conflicts often center around the river: their solution is typically outside the water domain.

Enlarging common ground: jointly identifying areas where cooperation makes sense.

- irrigation
- hydro power
- etc.
- agro trade
- trade regime
- stable prices
- Joint management
Aligning Mental Models

The relevance lies in the **joint discovery** of these insights by a group of experts and decision makers, all from the riparian countries.

The strong **communality of views** that emerged in the scenario group is seen as an important outcome of the exercise.
Test of a good scenario:

Not ‘right’ or ‘not right’, but...........
does it help to make better decisions?
Process Gains

• Focus on process gains:

• it is not the scenario set that matters, but the insights gained by examining relevant questions against the backdrop of the scenario set

• engage decision makers into scenario based strategic conversation; thinking through implications and options for the future
Joint thinking exercises

Use of the scenario set as backdrop for a series of systematic & participatory thinking exercises

Facilitated national & regional workshop to examine relevant policy questions: aim is to make ‘better decisions’
Thank You!

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