The views expressed in this presentation are the views of the author/s 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 of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

# Innovative Project Story Or responsibility for any consequence of their use. The countries listed in this presentation do not imply a independent status or necessarily conform to ADB's terminology. Central, West and Southeast Asia Countries:

Innovation, Issue, Development Agenda, Story behind the Story in Project Design and

**Implementation** 

Day 2 group session

## Water Resources/Irrigation Projects

Ryutaro Takaku

Principal Water Resources Specialist, SERD



## What are key factors for successful innovations?

#### 1. Innovation

- Satellite based remote sensing technologies to assess water productivity of agriculture (TAJ and PAK).
- Piped irrigation system for growing high-value crops (VIE)
- Transboundary water resources management (TAJ and AFG)
- Holistic and IWRM approach addressing multiple issues in one project (TAJ).
- Politically sensitive outputs in the project design (PAK).
- Policy related outputs in the project design (UZB).

#### 2. Issues

Are Innovations Successful?



# Why are we still on the way to address key agenda?

## 3. Key Development Agenda

- Sustainable Management of Irrigation Systems
- Strengthening Institutional Capacity
- Good Project Design

### 4. Story behind the story

Lessons learnt: Assessment and performance review at the early stage. Realistic assumptions. Flexible change of the original project concept and preparation and implementation arrangements, Balancing implementability, complexity, innovation, etc.



# Requirements make project designs complex

#### 1960s: Engineering

## **Low Complexity**

- 1970s: Engineering + Agriculture + Economics
- 1980s: Engineering + Agriculture + Economics + Management + User-Organizations
- 1990s: Engineering + Agriculture + Economics + Management + User-Organizations + Institutions + Gender
- 2000: Engineering + Agriculture + Economics + Management + Service Orientation + User-Organizations + Institutions/Governance + Gender + Policies/Politics + Environmental and Inter-sectoral aspects (IWRM) + "Green Water"
- 2000: Engineering + Agriculture + Economics + Management + User-Organizations + Institutions/Governance + Gender+ Policies/Politics + Environmental and Inter-sectoral aspects (IWRM) + "Green Water" + Climate Change
- 2010: Engineering + Agriculture + Economics + Management + User-Organizations + Institutions/Governance + Gender+ Policies/Politics + Environmental and Inter-sectoral aspects (IWRM) + "Green Water" + Climate Change + Cultural Aspects
- 2017+: Engineering + Agriculture + Economics + Management + User-Organizations + Institutions/Governance + Policies/Politics + Environmental and Inter-sectoral aspects (IWRM) + "Green Water" + Climate Change + Cultural Aspects + Water allocation + High Level Technologies and Innovation

Ian W Makin, Regional Director (Asia), IWMI, Symposium on "Modernization of Irrigation Systems" (2018)

**High Complexity**