Practical challenges in implementing Spate Projects

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Sindh Agriculture University
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About Intercooperation

• Swiss NGO, mainly working in KP and FATA
• Working in Pakistan since 1982
• Core emphasis on providing opportunities for improved livelihoods
• Thematic areas: Water, Climate Change / Environment, and, Market System Development
Main focus of Country Programme
IC in Rudh Kohi Areas

- Rudh Kohi is a system of flood based irrigation: hill torrents travel down-streams and water is incepted by farmers for ponding and irrigation.
- IC working since 2002 (Tank & DIKhan districts)
- Began with detailed studies:
  - Farming system / Rudh Kohi study 2002
  - Stakeholders consultation 2003 >>>
  - Poverty assessment study 2003
- Areas of focus: Equitable access to water / rights, DRR, improved practices in agriculture, value chains, farmers’ institutions
Following notes are based on:

• Our experiences in Spate systems:
  ▪ E.g. Rodh Kohi in DI Khan; Infiltration galleries in Karak, Rainwater harvesting in various places and Rainfed Agriculture
  ▪ Climate change adaptation activities
  ▪ Infrastructure development
  ▪ And social organization
• A specific feature of spate areas is resource scarcity – which invites conflicts among users
• Poverty breeds poverty in spate areas – individual farmers cannot afford structures, tube-wells etc.

Conflict mediation – emphasis on well organized farmers’ institutions who can mediate issues – are essential

• Pumping of groundwater to make up for water scarcity is a killer environmental factor, especially in Karak!
• Infiltration galleries can be a sustainable resource for water in Karak – however less known and tapped.

Special policies for regulating and discouraging unauthorized ground water pumping + groundwater monitoring are needed
Most of spate areas are also disaster prone:

- Intermittent Drought incidents, starvation and migration
- Flash floods due to sudden rain with high intensity
- At times farmers cannot handle quantities (*Rodh Kohi*)

DRR / prevention measures to be mainstreamed in spate development. E.g. gated structures both help in regulating water but also reducing risks.

Good forecasts and early warning systems needed
• Social organization is self-embedded in most of Spate systems. Therefore high potential for several measures

  Capitalize this and build capacity of these institutions in conflict mediation, funds collection, organizing early warning, and training in O&M of spate structures

• Infrastructures in spate areas have a high proportion of failure risk

• Engineers need special training for spate areas. Failure must be documented and shared!
Spate Areas are often perceived as subsistent economies! Whereas a large range of economic goods emerge from these areas.

Change this perception – for this invest in value chain promotion and economic value addition. Improved off / on farm income will release pressure from water.
Notes

- Climate change! Spate areas are experiencing strong shifts in hydro-meteorological trends.

Study trends and prepare scenarios for longer term adaptation planning!!

Develop capacity of University Researchers in conducting climate compatible crop research and involve farmers in identifying research agenda / issues.
Thank You