cooperation

Practical challenges in implementing Spate Projects



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- Swiss NGO, mainly working in KP and FATA
- Working in Pakistan since 1982
- Core emphasis on providing opportunities for improved livelihoods
- Thematic areas: <u>Water</u>, <u>Climate Change /</u> <u>Environment</u>, and, <u>Market System Development</u>

Main focus of Country Programme





IC in Rudh Kohi Areas

- cooperation
- 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:

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- 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 <u>conflicts</u> 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



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- 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





Climate change! Spate areas are experiencing strong shifts in hydro-met tends

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