

FLOOD BASED LIVELIHOODS COURSE

Wageningen, 16-24 May 2017

EXPERIENCE FROM PAKSITAN



**Flood-Based Livelihoods
Network** Pakistan

Experiences

- Formally, the research work on spate irrigation was started by Frank and Karim from the last 10 years already. Following the vast experience in Balochistan Province
- The Country has largest irrigation canal system in the world that irrigates 170.24m Hac (Agri Census 2010) Through managed surface irrigation water supply. Not included the ground water and spate waters.
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Experiences

- No data is available on the annual crops produced by the spate systems in the country.
- After the elimination of agricultural tax in 1972 has further added up to the negligence of spate irrigation systems
- No formal annual data base is available on the spate irrigated lands in all 4 provinces

Experiences

- Revenue collection department become ineffective on spate irrigation system.
- Entire focus is enhanced to the conventional irrigation systems.
- Seeds, Plants and soil research is diverted on perennially irrigated crops.
- Induction of machinery through so called (Green Revolution) has gradually changed the drought powers. Bullocks disappeared from the spate irrigation systems.

Experiences

- The areas have least public facilities, school hospitals, road, electricity.
- Most of the area have saline subsurface water
- Spate ecologies are same in terms of flora and fauna
- Earth moving machines that are essential of spate irrigation are not available to the farmers in timely manners.

Experiences

- Spate irrigation Regions in Pakistan are economically poor with comparison to farmers live on canal fed irrigation systems.
- Spate irrigation areas lay in temperate zone.
- Crops in spate systems are same in all 4 regions
- Drinking water is problem in many spate areas
- Been neglected from the mainstream development
- Under researched in the fields of crops, water management, Agroforestry.

Experiences

- Irrigation department of Balochsitan has adopted Integrated River Basin Management approach 1 completed (Pishin River Basin).
- Narri River Basin is approved by ADB
- 3 of Major spate systems in Dg Khan are Improved by the Govt
- Gradually the sector is getting attention else where.
- Awareness is increasing through planners and practitioners.

Experiences

- Water Management practices are different In different spate systems DG Khan, DI Khan, Balochistan an Sindh.
- Major irrigation water source is water, temporary seasonal flows in ephemeral rivers
- Secondary irrigation water source is shallow aquifers that often gets dried if rains are disappeared for a year.

Contributions

- 4 Networks Comprising farmers, engineers, students, teachers are established.
- Knowledge Exchange visits were arranged to each other regions.
- Seed Swapping from Region to Region
- Introduction of new Seeds
- Conducted training for the farmers

Contributions

- Prepared numbers of practical notes on various topics, Oil seeds, pulses, potential and scope, grain storage, truffle mushroom, Acacia, Guar Beans, Sorghum and milk Churners
- A Book on “ Dry Side of the Indus” Exploring spate irrigation in Pakistan.
- Guide Books on Pakistan’s spate irrigation identifying the scope in various areas.

Contributions

- More than a dozen presentation on spate irrigation and its scope in Pakistan, Donors, Education Institutional, Irrigation Departments, and farmers.
- Concepts papers on issue and project development.
- Short documentaries on various topics
- Involved and supported the implementing agencies

Contributions

- Digitizing water rights records from all 4 regions (though not all).
- Collection and digitizing of research reports, different projects feasibilities reports, policy papers.
- Dissemination of practical notes to Government departments, NGOs, Donors and Farmer Networks.

Contributions

- Research through Universities on different technical topic, e.g. soil, moisture, fertility management, conflicts on water distribution issues.
- Alternate water storage concepts
- Value Chain development (study and way out).
- Training and induction of Interns.
- Inspired students and Academia 1 PhD is completed.

Contributions

- 1 PhD scholar is defending space Irrigation
- Our mandate is currently limited to advocacy and, raising awareness.
- Farmer Training and Capacity Building
- Provision of seeds of missing Crops at small scale