



IMMEDIATE AND EARLY RECOVERY FROM FLOOD DAMAGE IN KACCHI SPATE IRRIGATION SYSTEMS

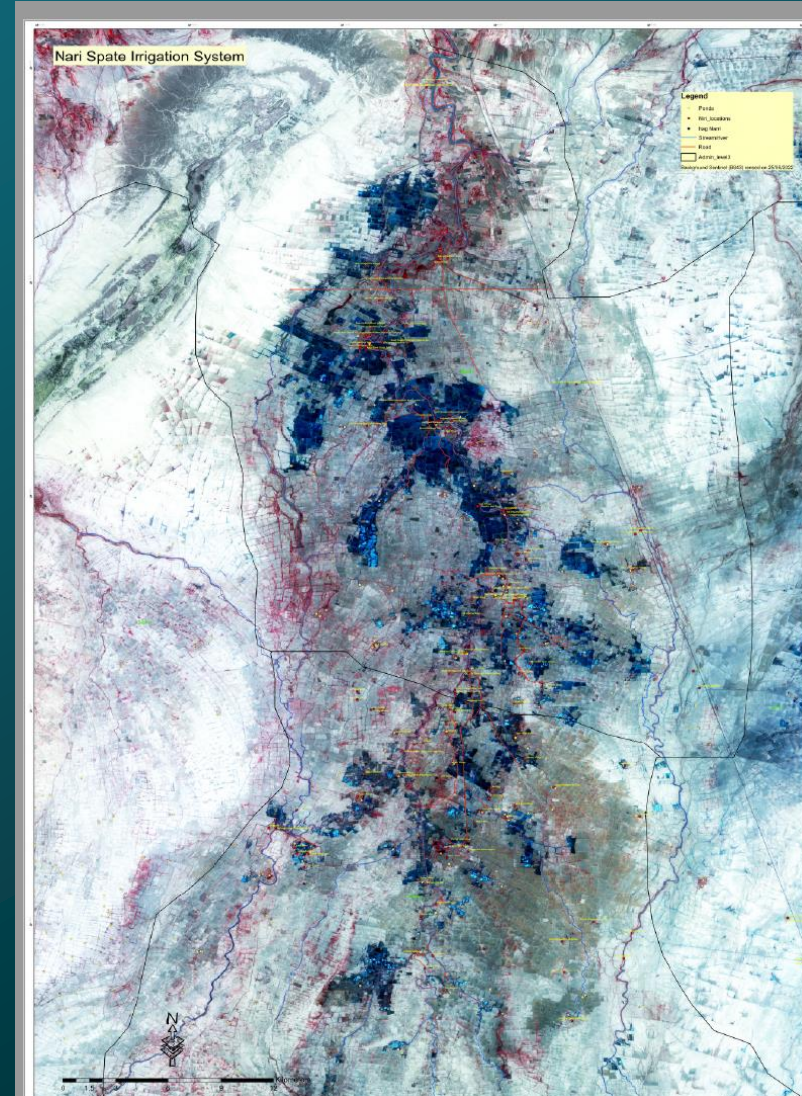
Reinier Veldman – MetaMeta Research
Allah Bakhsh – SPO Pakistan



SITUATION

World largest spate irrigation system

- >100,000 ha
- Improved and earthen systems
- Food basket (sorghum, oilseeds, wheat, pulses)
- Crucial for fodder production
- Fragile area – temporarily abandoned sections
- Strenuous drinking water situation
- Project area of FDW17093PK





SITUATION





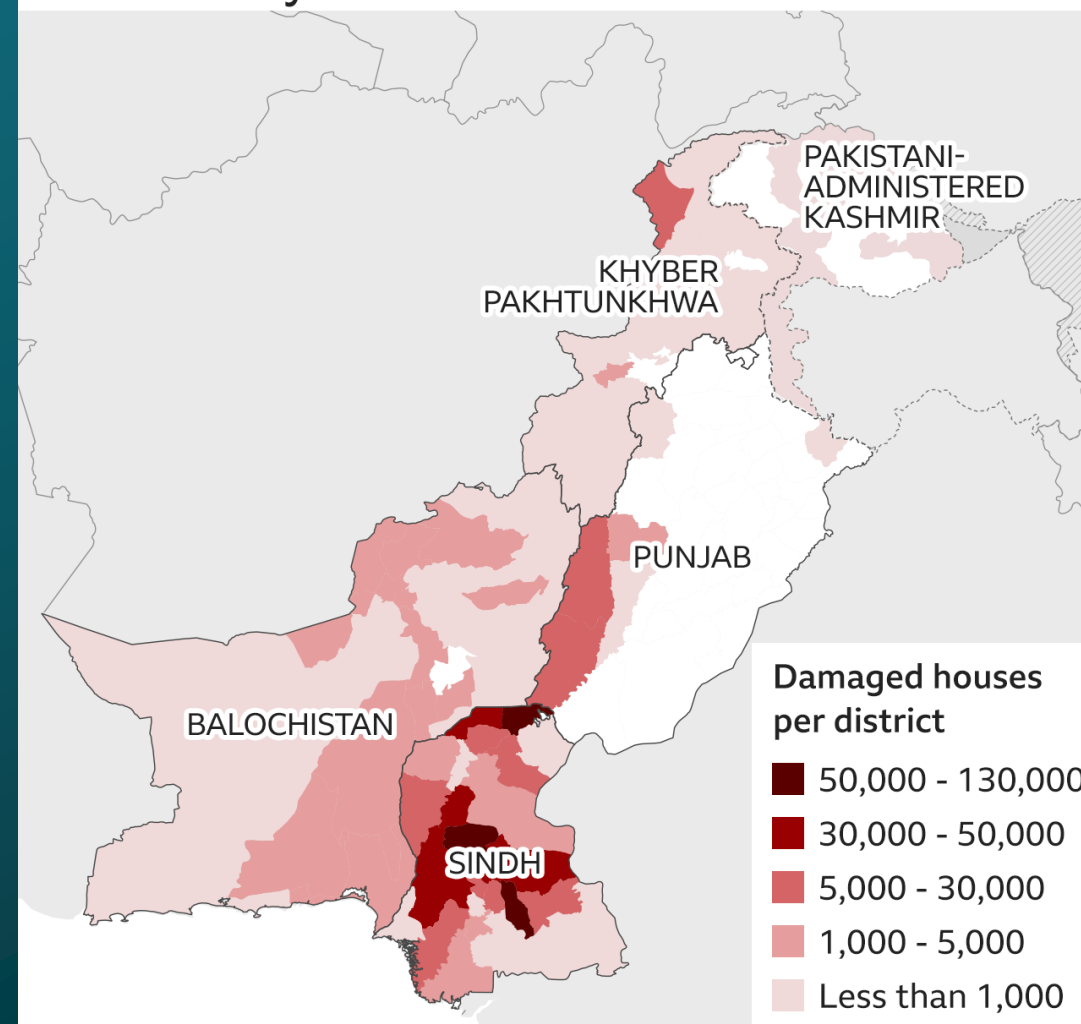
SITUATION





SITUATION

Areas hit by monsoon rains



Source: UN OCHA

BBC



DAMAGE AND LOSSES IN SPATE IRRIGATION AREA

- 100,000 plus people affected
- 80,000 ha Kharif crop lost (sorghum) in lower section
- 3000+ houses damaged
- Damage to spate irrigation system and drinking water ponds
- Village protection bunds stood up (80%)



IMMEDIATE RECOVERY (2 - 4 WEEKS)

- Safeguarding rabi crops (mustard/ arugula, chickpeas, wheat)
 - Restore lives
 - Food security for country
 - Wheat 56000 ton
 - Oilseeds 84000 ton
 - Chick peas 41000 ton
 - Logistically relatively easy (no fertilizer)
 - Need seeds and tractor hours
- Drinking water



EARLY RECOVERY (6 - 32 WEEKS) BUILDING BACK BETTER

- Rebuild spate irrigation system
 - Reinforced earthen structures
 - Improved structures
- Improved drinking water (ponds and wells)
- Roads with water control
- Village protection bunds
- Agricultural innovation and value chains



PROJECT'S ROLE

- Launch of the 'save the Rabi-crop' initiative
- Contact with multilateral donors led to commitments such as:
 - EU, freed 2,5m of existing budget
 - ADB, made grant funds available, focus on nomads/women
 - Japan (JICA) → seeds (wheat)
 - US-AID → seeds
 - WFP → food distributions
 - WorldBank → Assessment of system and rehabilitation of entire system



LESSONS

- Utilize network of the project
 - On the ground
 - With partners
 - Access to (political) leaders
- Project's activities as 'proof of concept'
- Increased interest for normally neglected areas
- Use the momentum
- Look beyond the emergency, focus on restoration & 'building back better' from the start



MORE INFO

- <https://thewaterchannel.tv/thewaterblog/urgent-salvaging-the-rabi-crop-in-the-spate-irrigated-areas-of-pakistan/>
- <https://thewaterchannel.tv/thewaterblog/flooded-once-again/>
- <https://thewaterchannel.tv/videos/flood-damage-in-kacchi-plains-balochistan-pakistan-2022/>
- <https://floodbased.org/urgent-salvaging-the-rabi-crop-in-the-spate-irrigated-areasof-pakistan/>
- <https://floodbased.org/projects/newarbi/>