

The webinar “Water Rights and Water Conflicts” will start today at 11:00 GMT

More information can be found at  
[www.thewaterchannel.tv/webinar](http://www.thewaterchannel.tv/webinar)



- Introduction (5 min)
- Water Rights and Water Conflicts (35 min)
- Answering chatbox questions (30 min)

# Water Rights and Water Conflicts

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# Water rights and water conflicts

- Why more attention to (spate) water rights and water distribution rules
- Case Afghanistan: understanding water conflicts
- Example: Codifying water rights
- General observations

# Why pay attention to water rights and water distribution

- To optimize the use of water
- To mitigate risk of conflicts and ‘voids’
- To define access to resources and protect weaker parties
- To discuss further management responsibilities that come with water rights

- Examples from flood based farming systems

Use of short duration floods in dry river beds

For agriculture, stockwater, recharge, rangeland

Requires skills and cooperation

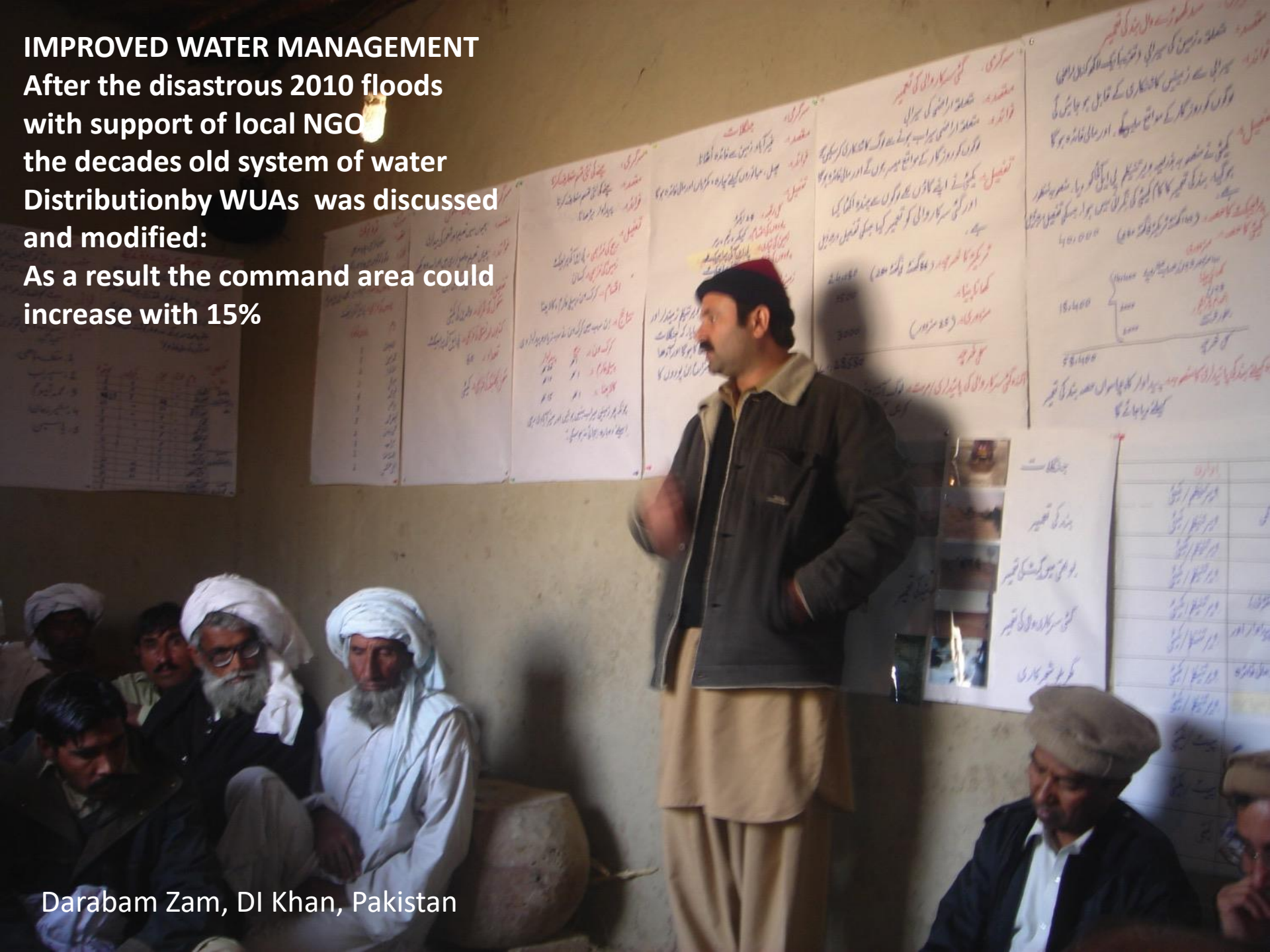


# IMPROVED WATER MANAGEMENT

After the disastrous 2010 floods with support of local NGO

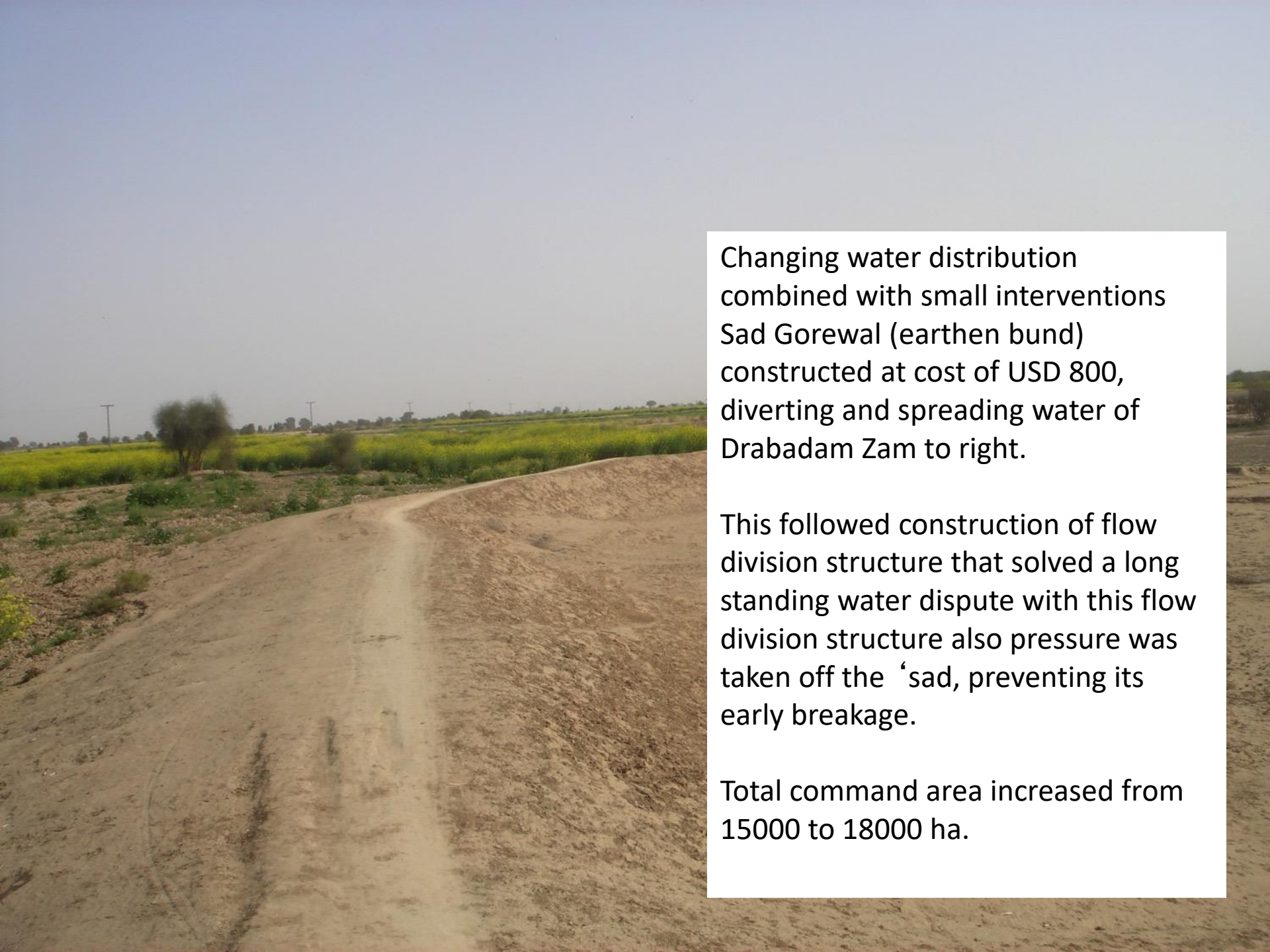
the decades old system of water Distribution by WUAs was discussed and modified:

As a result the command area could increase with 15%



Darabam Zam, DI Khan, Pakistan





Changing water distribution combined with small interventions Sad Gorewal (earthen bund) constructed at cost of USD 800, diverting and spreading water of Drabadam Zam to right.

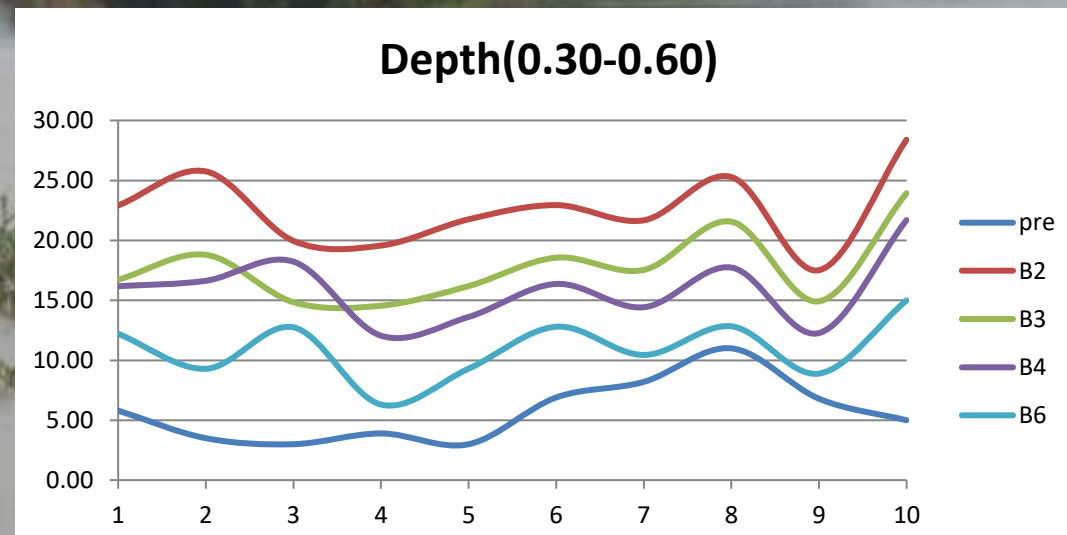
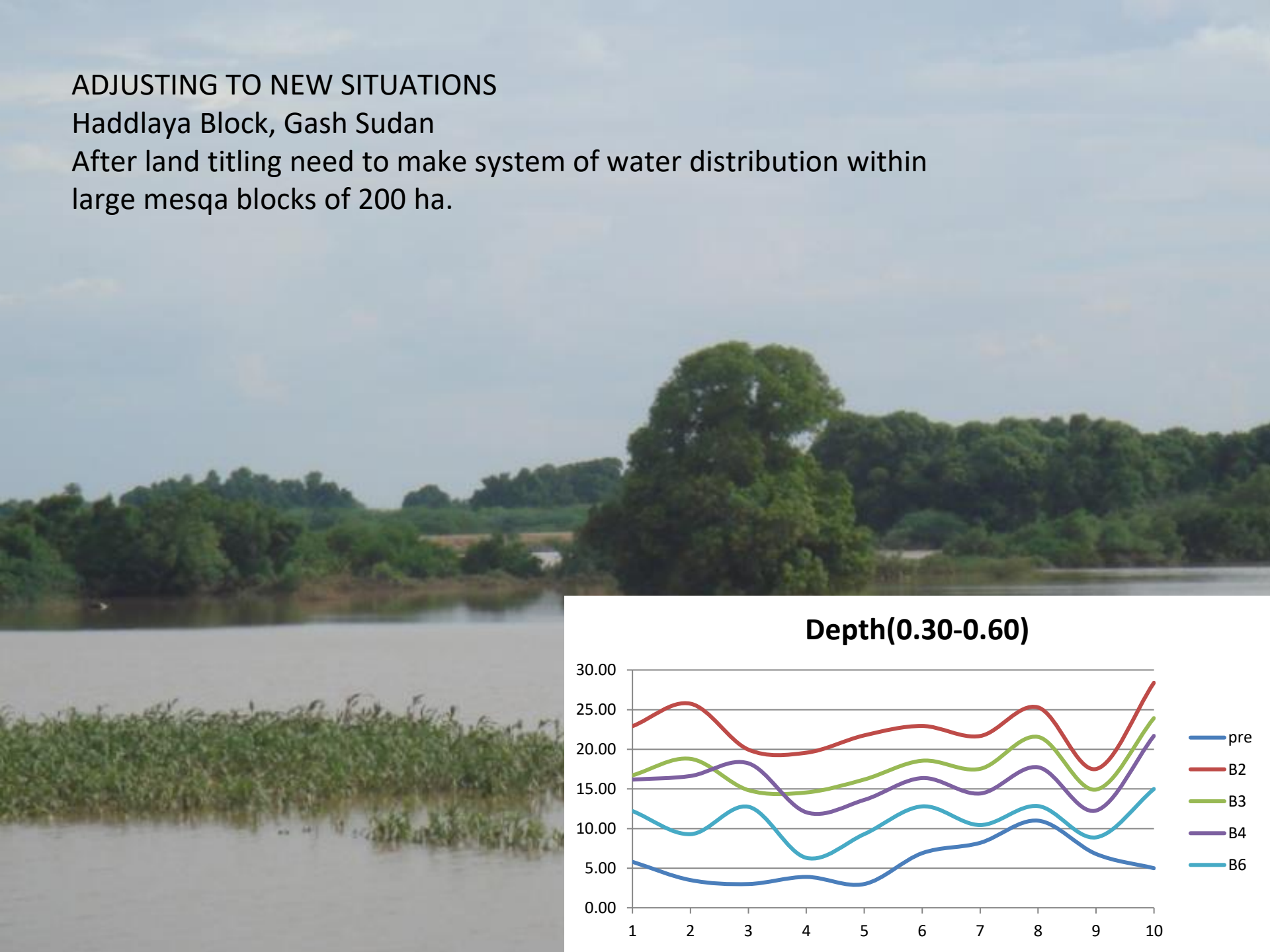
This followed construction of flow division structure that solved a long standing water dispute with this flow division structure also pressure was taken off the 'sad, preventing its early breakage.

Total command area increased from 15000 to 18000 ha.

## ADJUSTING TO NEW SITUATIONS

Haddlaya Block, Gash Sudan

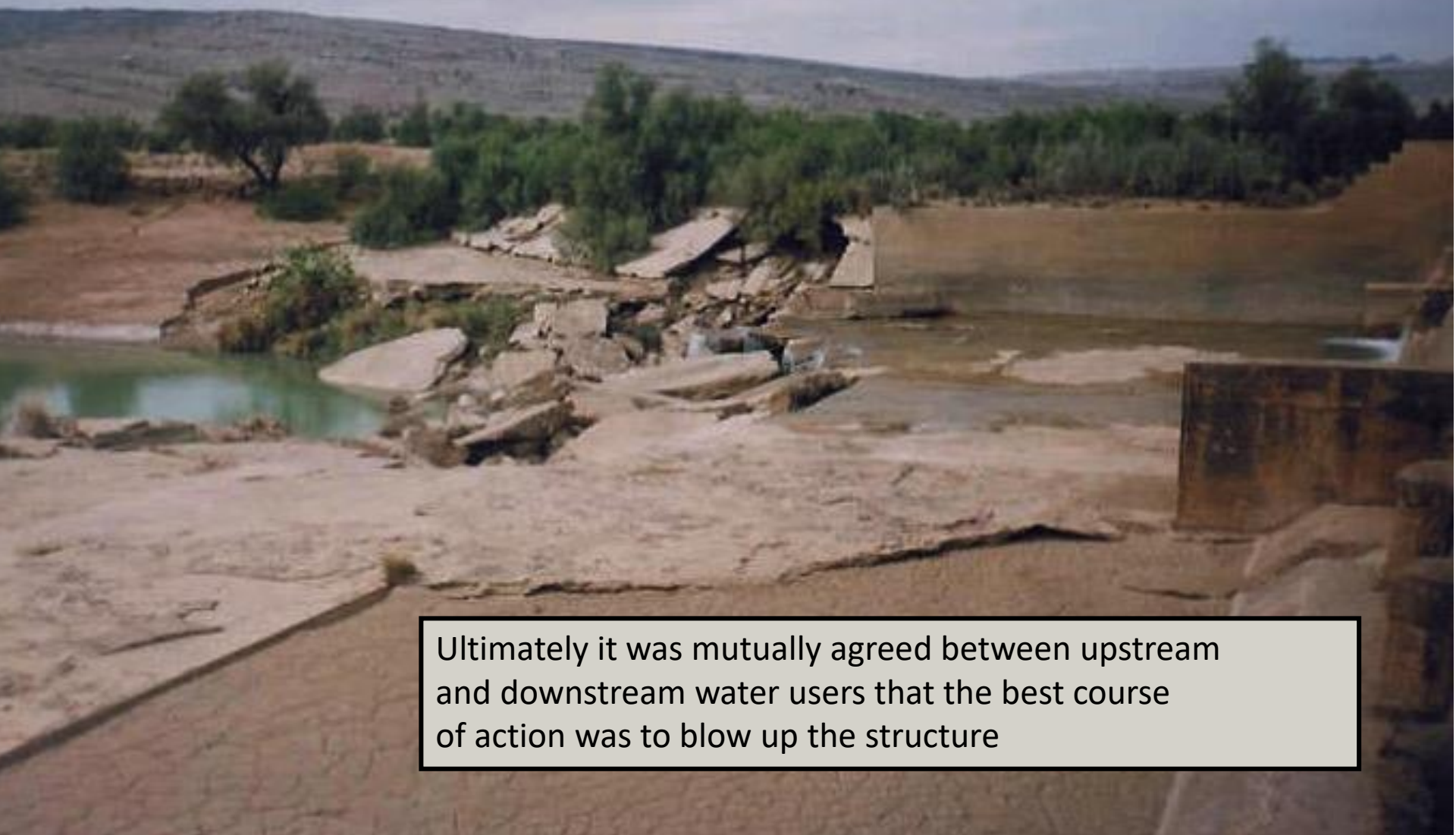
After land titling need to make system of water distribution within large mesqa blocks of 200 ha.



## PROTECTING DOWNSTREAM USERS

Pakistan, Anambar Plain

This newly constructed weir interfered with the water rights of the downstream landowners



Ultimately it was mutually agreed between upstream and downstream water users that the best course of action was to blow up the structure



## ADDRESSING VOIDS AND CONFLICTS - Al Majelis, Tihama, Yemen

In areas in coastal Tihama 60% of population left after sand dune formed because of loss of recharge from spate irrigation after upstream structures were built



## Addressing voids and conflicts - Al Majelis, Tihama, Yemen


Void: Resource degraded without conflicts, without debate or issue – ‘silent destroyers’

They occur:

- When resource use spread over large area
- New resources, new issue – no’







Sons of large landlords  
in Wadi Zabid, Yemen

Outdated water distribution and additional water capture upstream



Infrastructure development often:

- Undermine existing (informal) water rights and water distribution
- Overlook different elements of water control (fi subsurface flows) – create voids
- Typically do not include work on modifying water rights and water distribution



# Beyond spate irrigation – no systematic water distribution and water rights in:

- Groundwater use
  - Mega irrigation
  - Pollution – right to good water quality
- > There is often no basis for water justice..



# Groundwater: Uncontrolled use of fossil groundwater for export horticulture

Wadi Natrun,  
Egypt



# Mega-irrigation: Water rights outdated, water distribution unclear and suboptimal

Sudan, Gezira System





Right to good water quality

Pollution by Chevron/ Texaco:  
Ecuador, Amazon



# Water rights and water distribution system

- Largely forgotten – requires craft and effort to draft these
- Systematically overlooked in the ‘economic goods’ debate (emphasize individual ownership not collective/ public systems)
- Too much emphasis on ‘process’ governance rather than ‘impact’ governance



# Understanding water rights:

## > unlike land rights

- Water rights usually not systematically registered
- Water rights are not 'property' rights
  - They operate at different levels
  - They deal often with unknown resource quantities
  - Many ecosystem services not just 'blue' surface water
    - Flood control, subsurface water, storage, microclimate
  - Esp. at higher level they are part of social systems
  - They are bundles of responsibilities at lower level (water entitlement typically connected to contribution in O&M)
- Water rights have the nature of 'collective user rules'

# Call for action

- Demand for more water resource development – needs to go hand in hand with settling of water rights and water distribution
- But instead rights and rules have been watered down
- This undermines cooperation
- Right are required to foster cooperation probably more than preventing conflicts
- Right sensitive can set basis for conflicts – examples where they are being used in changing power constellation

# Water rights and rules in spate irrigation systems ...

- Create predictability and equity, as such
  - Encourages land preparation and
  - Facilitates cooperation in maintenance
- Are reactive – in other words they deal with situations that are every time different
  - Floods and spates are different every year – the rights and distribution rules need to anticipate this
  - In the long run there are changes to river bed and level of land that need to be dealt with
  - Deal with high sediment loads
- Yet often not recorded and incomplete, i.e. not addressing all aspects (main example recharge and subsurface flows)

# Case study: Afghanistan (Nimroz)

- 50-70% of conflicts on land rights
  - Large landgrabbing related to forged documents
  - Many small conflicts
- Water rights second major cause of conflicts
- Both closely related
- Number of conflicts on the rise:
  - Increased pressure on land and water resources
  - High value of land and water esp. in poppy areas
  - No clear record – opportunistic behaviour
  - 30 years of conflicts – water rights were changed and reverted back
  - Increased investment in rehabilitation and new development asks the question





# Land rights

- Four still overlapping and incomplete stages
  - Traditional law
  - Sharia law
  - Civil law
  - State law
- During the Abdur Rahman reign, the government registered landholdings by granting rights in proportion to their area
- In addition, courts maintain their own registry of properties, > to obtain absolute ownership of property one must use the court-based system. Officials will record the property's value in the tax book and registration book
- 'The basic unit for registering land is the deed. A **deed** is a formal legal document that certifies a person's ownership of a piece of land. A deed can take several forms
- Communal land ownership not much recognized



# Current status

- Most documentation on land rights (maps, principle books, surveys and title deeds) held with the local courts or the property owners, has been lost or destroyed in last three decades
- Maps and municipal records sometimes even altered to enable misappropriation and land grabbing or were deliberately destroyed..
- Now less than 20 percent of the land in Afghanistan is accurately titled and most land ownership and use is based on historically constructed informal or customary arrangements

# Water law - situation

- Formal Water Law 2009
- Want to introduce permit and license system
- Exceptions
  - Drinking water
  - Navigation
  - Traditional right until permits are given
- *Existing water rights will be gradually converted to permits in accordance with the policies of the relevant River Basin Agency.*

# Water permits (Article 21, Water Law)

- *Water User Associations obtain water use permits after proper registration*
- *Art. 21 - Activity Permit and Usage License*
  - Mandatory for new projects
  - Mandatory for water storages > 10,000 m<sup>3</sup>
  - The procedure to issue Activity Permits and Usage Licenses will be prepared
  - Sales and transfer prohibited

# Thirty years of conflicts – what did it do

## Practical

- Infrastructure became dysfunctional
- Documents and records destroyed
- Water rights in some cases changed in Taliban Area

## Change in society

- Changed population dynamics
- New type of representative politics and upsurge of opportunistic business - replacing earlier leadership
- Faith in community solutions weaned away
- More expectations from State (paradoxically)

# Case Nimroz



Aerial view of Nahri Lashkari (Google Earth)

# Lashkary Canal (Zarani District)

- No clear water distribution on main canals – nitra system (water proportional to land) is no longer followed and was difficult in first place
- Capture by powerful individuals
- Now permanent gates being made
  - To be done properly
- Lower down – water distributed in jui – relatively less conflicts and resolved by mirabs (water masters)









# Current water distribution and conflict resolution mechanisms

- Mirabs (water masters) with Conflict Resolution Manager from the branch of Ministry of Energy and Water are main actors
- Some mirabs employed officially, others not working officially.
- Mirabs are selected by shura of land owners and local branch of Ministry of Energy and Water.
- Mirabs in conflict resolution. They play the role of mediator between conflicting parties. Mirabs receive the issues and solve them according to their judgement.
- In some cases, landowners accept mirabs judgement, but they act according to their own choice; if not referred to higher level
- in some situations the conflicts are presented to shura (people's gathering) and the final decision is made by unanimous vote of people
- Mirabs limited role in larger conflicts (along river) or in settling water rights





# Conflicts over water

- During dry season
- Conflicts since last seven years – with increase in cultivated land
- Main type of conflicts are on sharing the amount of water between land owners, and differences in elevation of cultivation areas which forbids the watering of lands with high elevation to get sufficient water in comparison with low height land.
- Level of conflict is also between districts and center of province.
- Some people, who are not satisfied with shared amount of water, open the gates illegally or even they destroy them sometimes
- Could be reduced if more storage and more sediment removal



A control installed over Lashkari Canal for controlling flow of water to sub-canal; however the proprietor of jui welded the gate open to avoid its closing by mirabs to get more water than supposed to



# Codification?

- There is a rising demand for land dispute resolution in Afghanistan; the percentage of stakeholders that search for outside support increased from 28 percent (2007) to over 50 percent in 7 years (Warren, 2014). Same in Nimroz – wide support, if done well
- Dispute resolution in Afghanistan is historically community-based and land disputes were mediated successfully in this way.
- However, after the 1979 coup, two decades of instability and conflict followed which weakened the social structures of the communities. Since 2002, the traditional community-based mechanisms have further weakened because of displacement, insurgency and socio-economic changes
- These community-based mechanisms are often not permitted and/or unable to provide documentation that is accepted by the government.
- Automatic mechanisms no longer

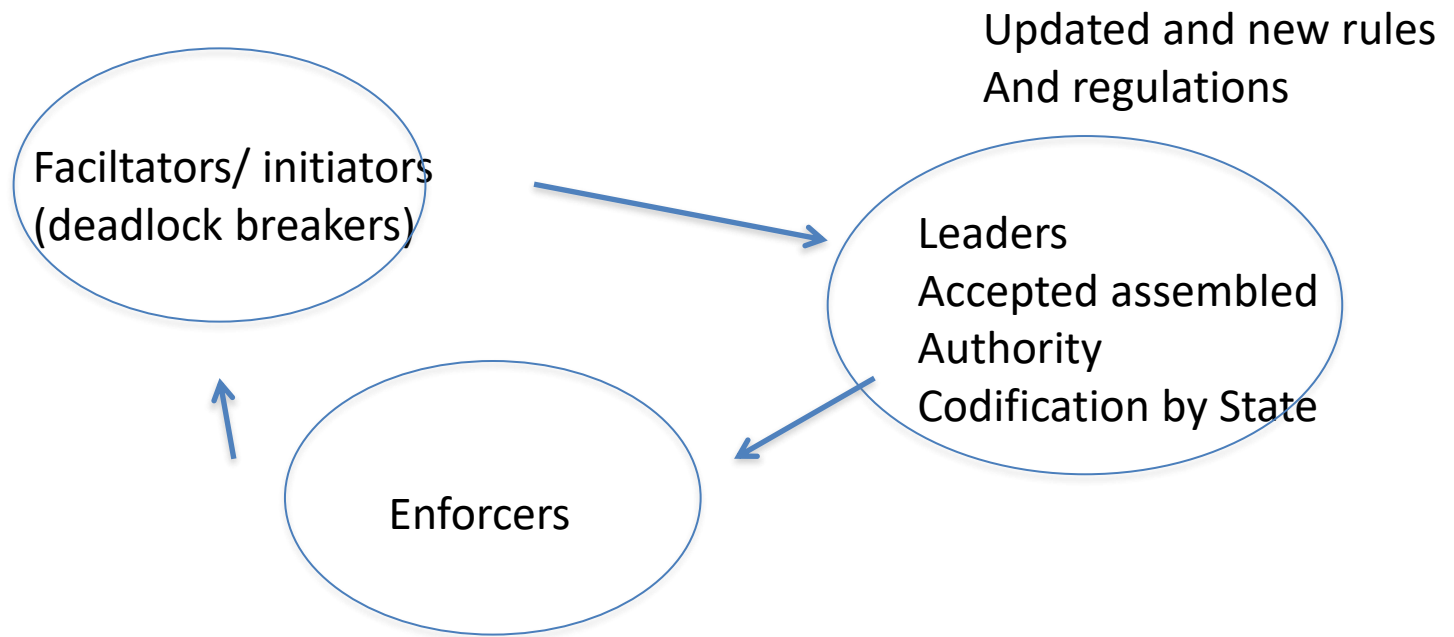


# Codification?

- The State itself has proven to be only partly successful in sustainably settling disputes which can be mainly explained by their poor enforcement capability, limited presence, lack of widespread authentic title deeds and bad reputation due to land grabbing and corruption practices
- Needs new mixed mechanisms
- New infrastructure (incl distribution structures) provides window of opportunity

# Codification - how

Conflict to be resolved  
Voids to be addressed  
More resilient water rights to create



Miraab  
Codified water rights and rules

*Table 31: Key contributions of the main actors involved in resolving water-related conflicts*

Actor/Organisation	Key contribution
Mirabs	<ul style="list-style-type: none"> <li>• Mainly conflict prevention</li> <li>• Saatchis settle minor disputes at jui level</li> <li>• Provide information and advice during conflict resolution meetings</li> <li>• No role as deadlock-breaker</li> </ul>
Shura/CDCs	<ul style="list-style-type: none"> <li>• Usually settle disputes through consensual agreements at village level or between groups of villages</li> </ul>
Provincial governor	<ul style="list-style-type: none"> <li>• Facilitator</li> <li>• Channels complaints and sets up conflict resolution platforms if required</li> <li>• Legitimises conflict resolution processes and involves other powerholders such as PC members</li> </ul>
Provincial Council members/local powerholders	<ul style="list-style-type: none"> <li>• Deadlock-breakers</li> <li>• Involvement usually facilitated by the provincial governor</li> <li>• Bridge between government and communities</li> </ul>
Water Management Department	<ul style="list-style-type: none"> <li>• Formally supported by the provincial governor</li> <li>• Bridge between government and communities</li> <li>• Channels complaints, organises logistics, etc.</li> <li>• Provides technical information and support</li> <li>• May attempt to resolve cases, but no authority to take final decisions</li> </ul>
National political figures	<ul style="list-style-type: none"> <li>• Deadlock breakers</li> <li>• Ad hoc involvement not necessarily regulated by other actors or procedures</li> </ul>

Thomas, Azizi and Ghafoori (2012)

*Setting up platforms and mobilising conflict resolution actors: understanding drivers and choices*

# Leadership in Nimroz

## Formal leadership

- WUA not always trusted – seen as politically manipulated
- WMD not seen in all cases seen as effective and neutral, even though it has officer for conflict

## Actual leadership for water rights settlement

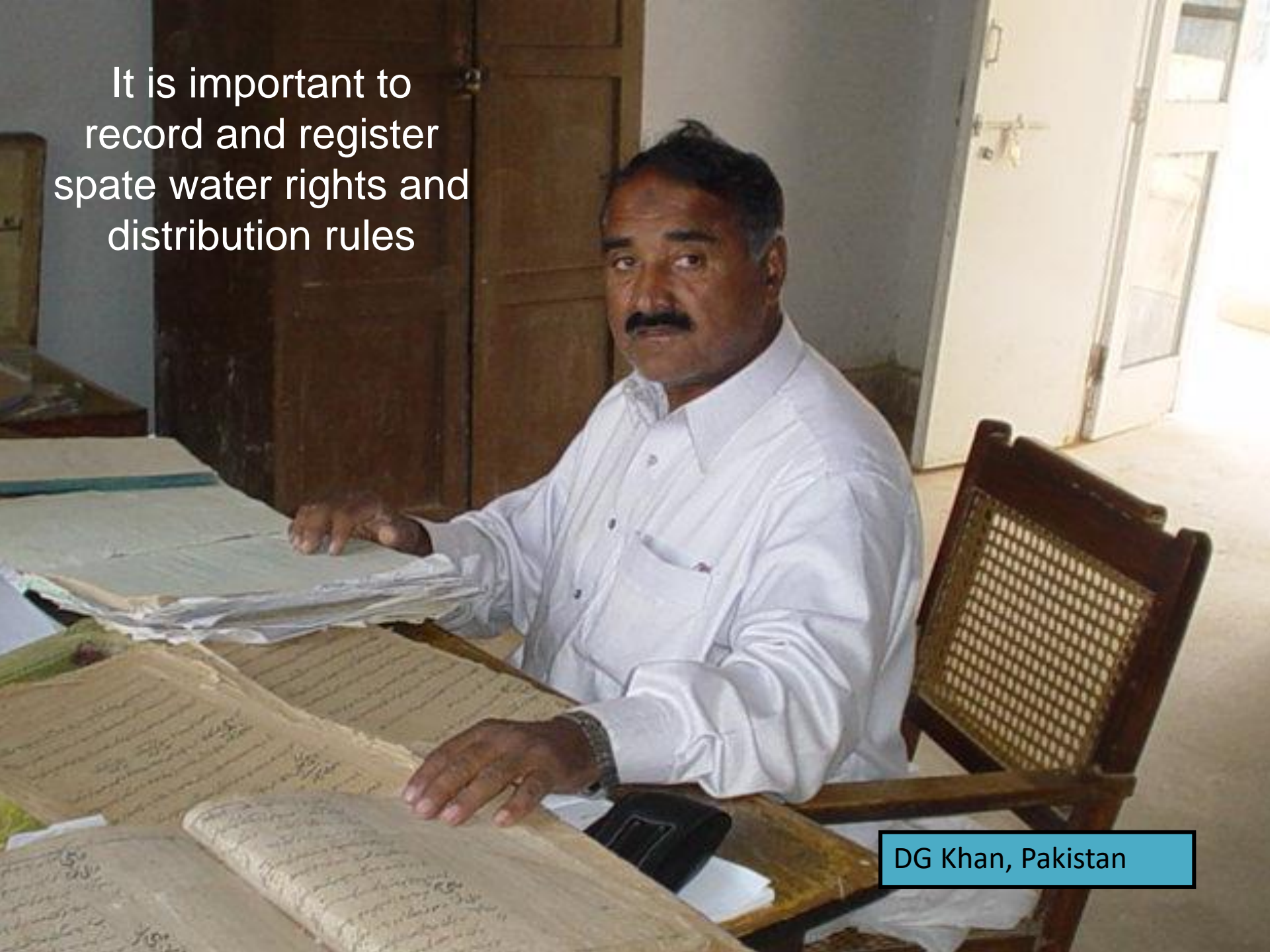
- Authority is informal but also subject to change
- Assembled authority (can include MWR)
- Almost area-specific arrangement based on reputation, relations and presence



# Codification experience from Pakistan



It is important to record and register spate water rights and distribution rules



DG Khan, Pakistan



**To avoid conflicts  
and powerplay**

**Local tax  
official  
administers  
water  
distribution**

**Water rights recorded  
in 1872 still used daily**

**In enforcing water rules  
it is often useful if this  
done with the local  
government**



# Water rights records Pakistan

- Annex to the Land Record
- Each spate river/stream (usually known as ephemeral river, dry river, hill torrent) has its distribution rules upon occurrence of spate flows
- Distribution rules include division among villages, tribes, upstream and downstream and to groups of land plots and individual fields



# Contents of records

- Spate river's name, its origin with location, tributaries, boundaries of watershed, routes from start, command area, drainage to the end.
- Includes sketch and map of water source(s), tributaries, location, passages, name of valleys/villages situated along the passage, any mile stone or significant reference
- Description of water resource - depth of river/stream at various sites, possible erosion danger and or overflow from banks at various locations, slopes towards down streams and left and right direction is also mentioned.
- Sites to construct earthen structures for diversion of spate flow are well defined and demarcated physically as well as on cadastral record maps
- Area/fields to be irrigated through each diversion structure is defined with sequence

# Describes water rules - elaborate

- Area/fields to be irrigated through each diversion structure is defined with sequence
- Timings of irrigation rule may mentioned particularly, if and when applicable
- An annex is prepared for construction, operation, repair and maintenance of spate irrigation structures. This is in the form of certain questions and probability of issues occurrence on special occasions or circumstances and answers are recorded
- Different positions and roles are also defined in cadastral record along with land ownership rights and water rights such as water master, water guards

# Process

- While preparation of the records in the past, the decisions made by actively involving stakeholders were devised keeping in view the entire local rules, loudly narrated in meetings of land and water shareholders, village elders, tribal and religious leaders.
- The document was then prepared and again recited in general assembly of all local stakeholders (in this case land/water owners and sharing parties/groups) and their signatures/thumb impression were taken along with government/s official signatures and with its official stamping.

# Record keeping

- Copies of these documented rules are part of land record and kept at three sites – at local level with government functionary called Patwari, sub district level and district level with government administration besides a copy is also maintained at provincial level with archive department
- Copies of these documents (land and water share record) can be obtained by all
- Civil courts cases related to land and water issues are dealt by courts and the above documented is the key source for decision making



# Conclusions

- Water distribution in rivers (and other water systems)
  - not just conflict resolution – optimized water use
  - not just optimal use of water – secured operations
- System strengthening, making them more resilient, dealing with rules and responsibilities and avoiding voids and resource capture

# Improving water rights

- Codify and record of what is there
- Use proper local process
  - Neither necessary formal legal process (only)
  - Nor rely on informal systems only
- Move further
  - Clarify responsibilities in enforcing
  - Clarify responsibilities in related tasks such as maintaining system

# For long time water management discussion 'spoiled' by

- Volumetric water pricing discussion
- Did not work in most circumstances because
  - Not individual economic decision
  - Difficult to implement and measure
  - No flexibility at user site in surface water systems
  - High price politically unacceptable





# Messages

- From conflict resolution to creating resilient water governance
- Making stronger codified water rights and rules
  - Set the basis for water justice
  - Optimize water use and system management
- So:
  - Can we not invest in governance (with socio-economic cost/benefit calculations) as we invest in physical infrastructure?

