CODIFICATION OF WATER RIGHTS AND RULES IN NIMOROZ PROVINCE OF AFGHANISTN

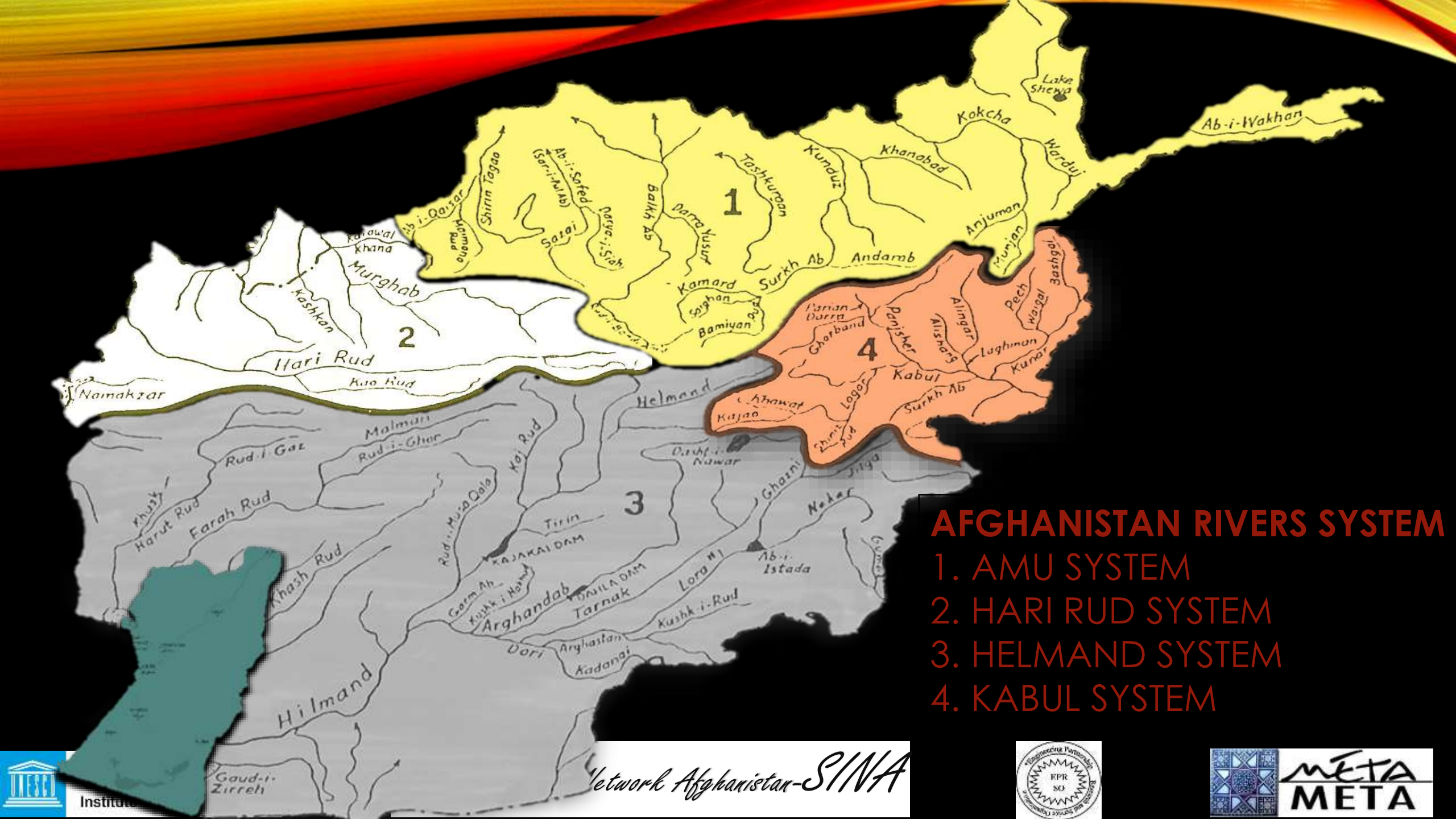
DR. ABDUL QAYEUM KARIM
FBLN AFGHANISTAN COUNTRY CHAPTER

UNESCO-IHE
Institute for Water Education

Spate Irrigation Network Afghanistan-SINA

META

PART I:
HELMAND RIVER BASIN AND SPATE IRRIGATION



AFGHANISTAN RIVERS SYSTEM

1. AMU SYSTEM
2. HARI RUD SYSTEM
3. HELMAND SYSTEM
4. KABUL SYSTEM

Network Afghanistan-SINA


Turkmenistan
Turkmenabat
Qarshi
Dushanbe
Душанбе
Tajikistan
Badakhshan
National Park
Национальный
парк Бадахшан
Ashgabat
Yashlyk
Golestan
National Park
پارک ملی
گلستان
Mary
Termez
Kunduz
کندز
Gorgan
گرگان
Mashhad
مشهد
Sabzevar
سبزوار
Shahroud
شاهرود
Neyshabur
نیشابور
Mazari Sharif
مزار شریف
Torbat
Heydariyeh
تربت حیدریه
Herat
هرات
Kabul
کابل
Peshawar
پشاور
Khash
Chakhansur
چخانسور
Zaranj
شهرنو
Afghanistan
Iran
Birjand
بیرجند
Anar Dara
انار دره
Farah
فراه
Kandahar
کندهار
Mirabad
میراباد
Sistan
Rudbar
Zabol
زابل
Kerman
کرمان
Quetta
کوئٹہ
Bam
بم
Zahedan
زاهدان
New Delhi
Bikaner
Khairpur

GENERAL INFORMAITON

- Hydrology of river,
- Proposed projects
- Flood patterns and rivers

- Sociology of the area
- Tribal structure
- Recent history

- Agriculture, cultivated area
- Different crops
- Sources of irrigation

- Main crops, pastures
- Main changes in period

NIMROZ PROVINCE

- South west of Afghanistan with area of 41356 km2.
- Its capital is Zaranj.
- languages spoken, Pashtu, Balochi, and Dari.
- The population is approximately 156,600 settled people.
- Kuchi nomads who inhabit the province seasonally and keep ***Livestock***.
- Vast majority of people engage in ***agricultural profession.***
- wheat, melon, water melon are major productions.

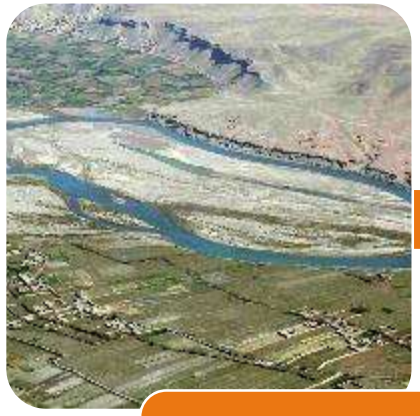
HELMAND RIVER

- Helmand river is main source of drinking and irrigation water.
- From Average flow of **26m3/s**, Iran should receive **4m3/s** as per water treaty 1973.

Yet:

"Most of Nimruz's water, approximately 80-85% of it, streams to Iran. ... Government also does not prevent flow of water to Iran." (Nadir, 2016)

HIERARCHY OF WATER DISTRIBUTION



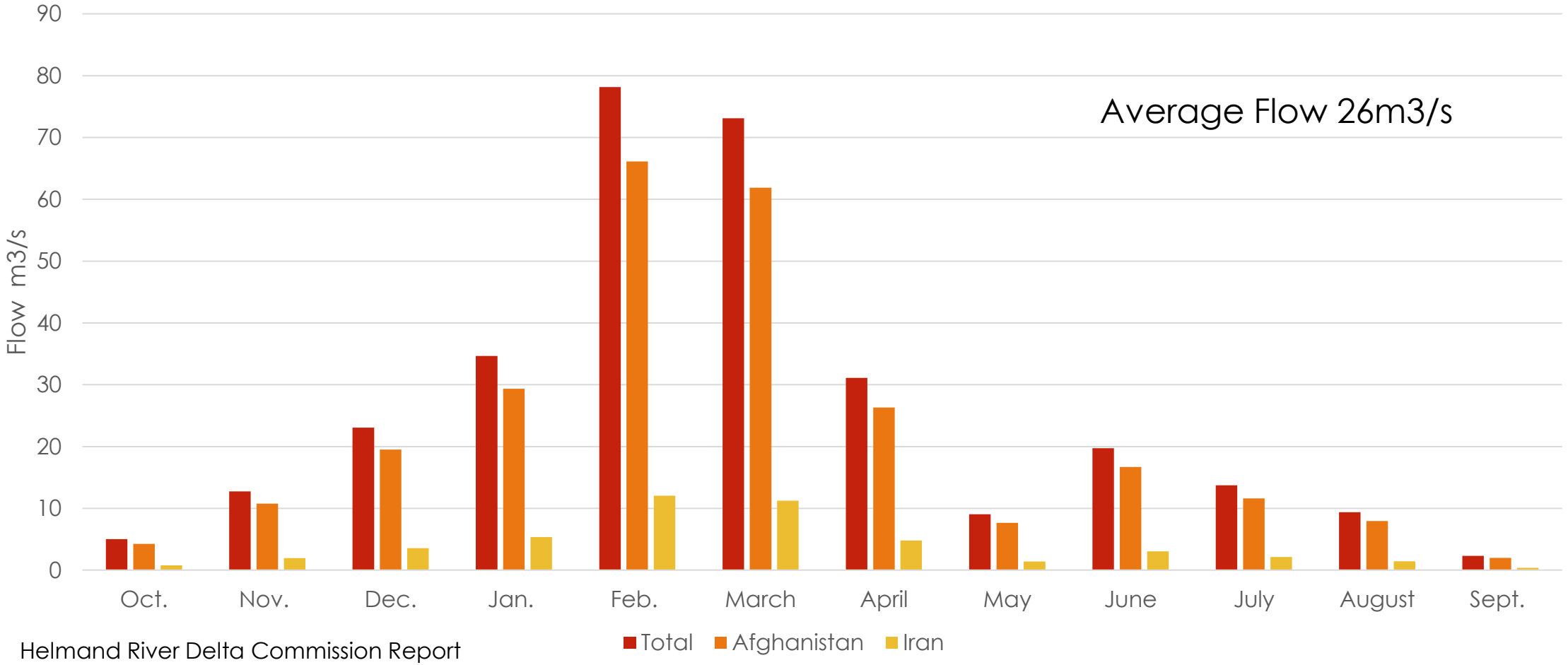
River

Main Canal

Sub-Canal

Jui (Stream)

MONTHLY FLOW OF HELMAND RIVER



Helmand River Delta Commission Report

EFFECTS OF BROADLY FLUCTUATION

- In peak flows, Helmand river engenders flood.
- Yet, on other seasons, it does not provide sufficient water to stream to the main canal.

" Helmand River destroys our crops and control gates when its flow is high and we cannot control it. Water goes to Iran. However, in drought seasons, we buy water for drinking transferred by pipe from Iran where they store this water from Helmand River", said a resident.

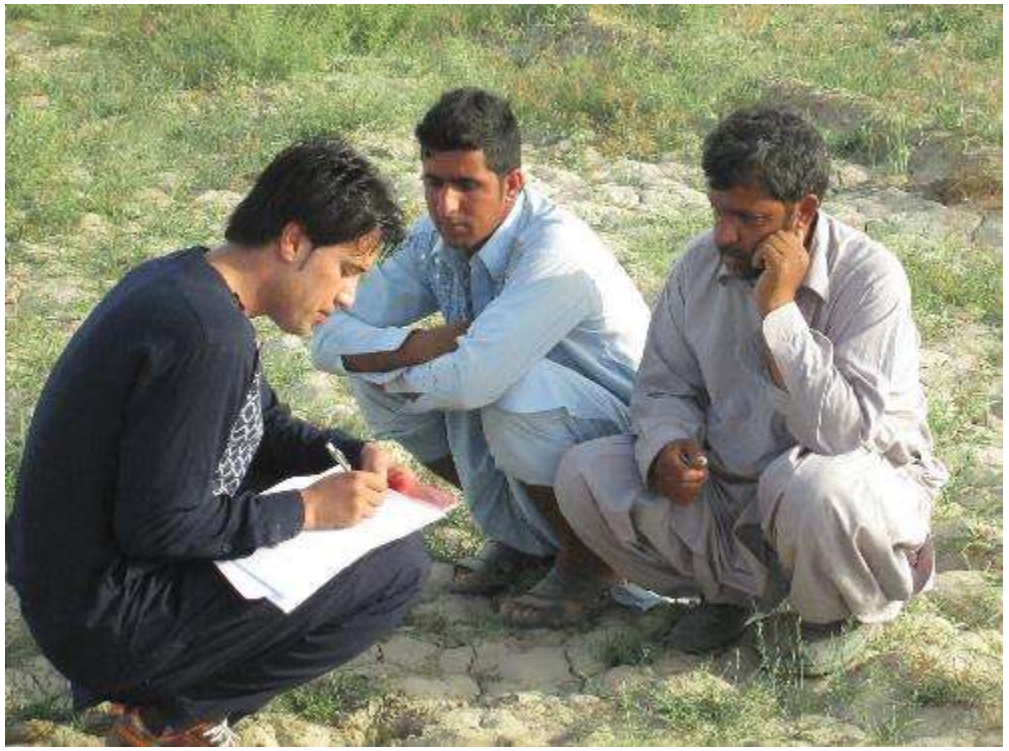
MAIN CANAL

- Lashkari Canal has 48 km length, which provides water for Zaranj and Kang districts.
- It irrigates about 19,000 hectare area in Zaranj District.

Yet;

- It is not sufficient for current needs.
- Sediments decreased its capacity significantly.
- Downstream water users cannot get enough water.

SEDIMENT CONCERN



"The existing problem with deficiency of water can be solved by removing sediments from Lashkari Canal. In the past, water was enough to irrigate all of farming lands, and the problem which nowadays the people are faced is dramatic increase in population and agricultural areas that this canal cannot irrigate." (Mohammad Hussain, Local Farmer, 2016)

BRACKISH UNDERGROUND WATER

" Despite of being on proximity of Helmand River, we are facing water scarcity. Moreover, underground water is brackish and cannot be used.", (Mazlum, Deputy Director, Supreme Court, 2016)

SUB-CANAL

Some sub-canals in downstream of Lashkari Canal (Kang District) cannot receive water even in peak flow of river.

And some in dry seasons;

" In dry seasons, we do not have water even for drinking. Women and children have to walk kilometres of distance to get water.", said a resident.

IF THERE IS WATER…

- Nimruz province land is vast for agriculture and highly productive.
- The weather is temperate and these lands with sufficient water can be cultivated in more than two seasons consequently.

" If there were sufficient water available , Nimruz could provide wheat for entire Afghanistan.", (Nadir, 2016)

AND IF THERE IS NOT…

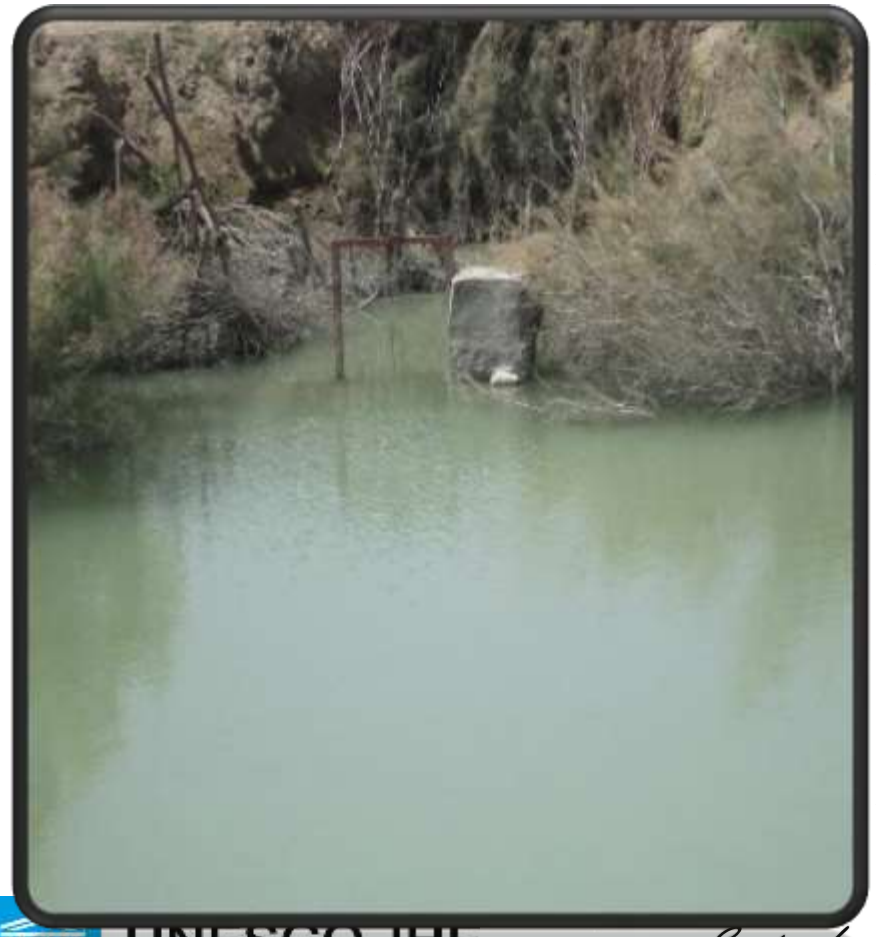
Catastrophe occurs.

In 2013 during a prolonged drought in Kang District, ***nearly 20,000 animals dead,*** and many people displaced to other districts.

" 80-90% of animals were lost, including sheeps and cows", said a resident.

PART II:
WATER CODIFICATION (NIMROZ PROVINCE)

ROLE OF CURRENT CODIFICATION OF ACCESS AND USE RIGHTS



- New legislations have been enacted in (26 April 2009).
- Registered in Ministry of Judicial.
- This law has two parts

Ministry of Energy and water

Ministry of Agriculture and livestock

- the laws are not implemented .

WHY LAWS ARE NOT IMPLEMENT

- ✓ Laws have been focused on general.
- ✓ Area of cultivation lands are.
- ✓ Illiteracy of farmers.
- ✓ people violate from this traditional custom.

WHETHER REGISTERING WATER RIGHTS FORMALLY IN A WATER RIGHT REGISTER WOULD MAKE A BENEFICIAL CONTRIBUTION?

- Make positive effects.
- Everyone's proportion of water will be specified.
- The laws are beneficial.
- Modernization of cultivation.

TENSIONS AND CONFLICTS:

- ✓ No rule regarding water distribution of water .
- ✓Different sizes of canals.
- ✓Illegal canals to get more water.
- ✓No conflict on water sharing exist during seasons which have enough water.
- ✓conflicts arise during dry seasons.
- ✓Majority of conflicts are between upstream and downstream water.
- ✓Opening the gates illegally.
- ✓Different elevation in sites of canal.

CONFLICT BETWEEN PASTORALISTS AND FARMERS.

- No rule to allocate water between farmers and pastoralists.
- majority of animals died due to scarcity of pasture.
- Their animal death because of water scarcity.
- pastoralists are on downstream and do not receive enough water.
- conflicts are solved by common sense.

BACKGROUND AND HISTORY OF CONFLICTS

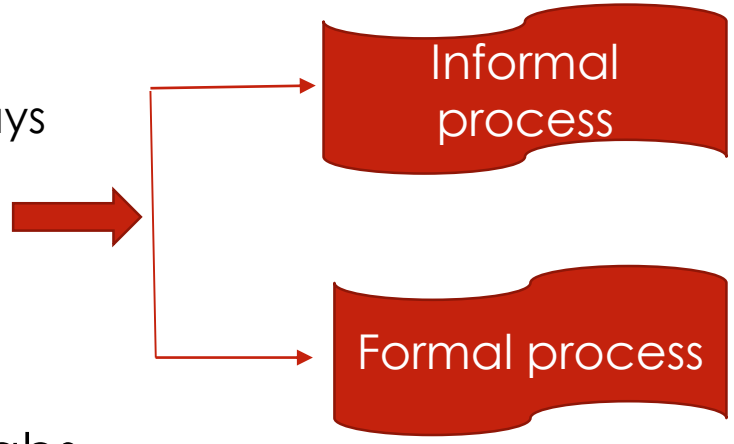
- ✓Circular canals made from concrete.
- ✓In the past, there was not any significant conflict.
- ✓Due to increase in cultivated area, there is some shortage of water.
- ✓shortage of water is source of conflict .

SANCTION RULES.

- There is no document regarding problem solving.
- They take order from head of local administration.
- There was not any specific rule to be applied; however, it is believed applying rules strictly would have positive effects on conflict resolution.

THE MECHANISM FOR RESOLVING THE CONFLICT

For conflict resolution people can use two ways



Informal Method:

- ✓Local mediators like seniors and mirabs.
- ✓Mirabs, who are selected by vote of people.
- ✓ are responsible for resolving conflicts raised on water sharing on site.
- ✓These mediators are very effective in this case.
- ✓meeting place for solving the conflicts are on the site of conflict.

FORMAL PROCESS

- ✓There is a conflict resolving office in local department of MOEW in Nimruz for mitigating and resolving conflicts and tensions.
- ✓complainer submit a petition to ministry of energy and water.
- ✓According to provisions both ministries have to establish associations.

OTHER WAYS FOR SOLVING OF CONFLICTS

- ✓Water user associations also were created for conflict mitigation by ministry of energy and water. it was unsuccessful because of farmers lack of interest.
- ✓A provincial shura which cannot resolve the conflicts.

CONCLUSION

- Cultivation area should be known.
- A specific law should exist for distribution of water.
- Increase in number of canals.
- Work to improve and advance water associations.

SUGGESTIONS


Water Retention Mechanism


Water Conveyance Mechanism


Maintenance Mechanism


Codification of Water Rights

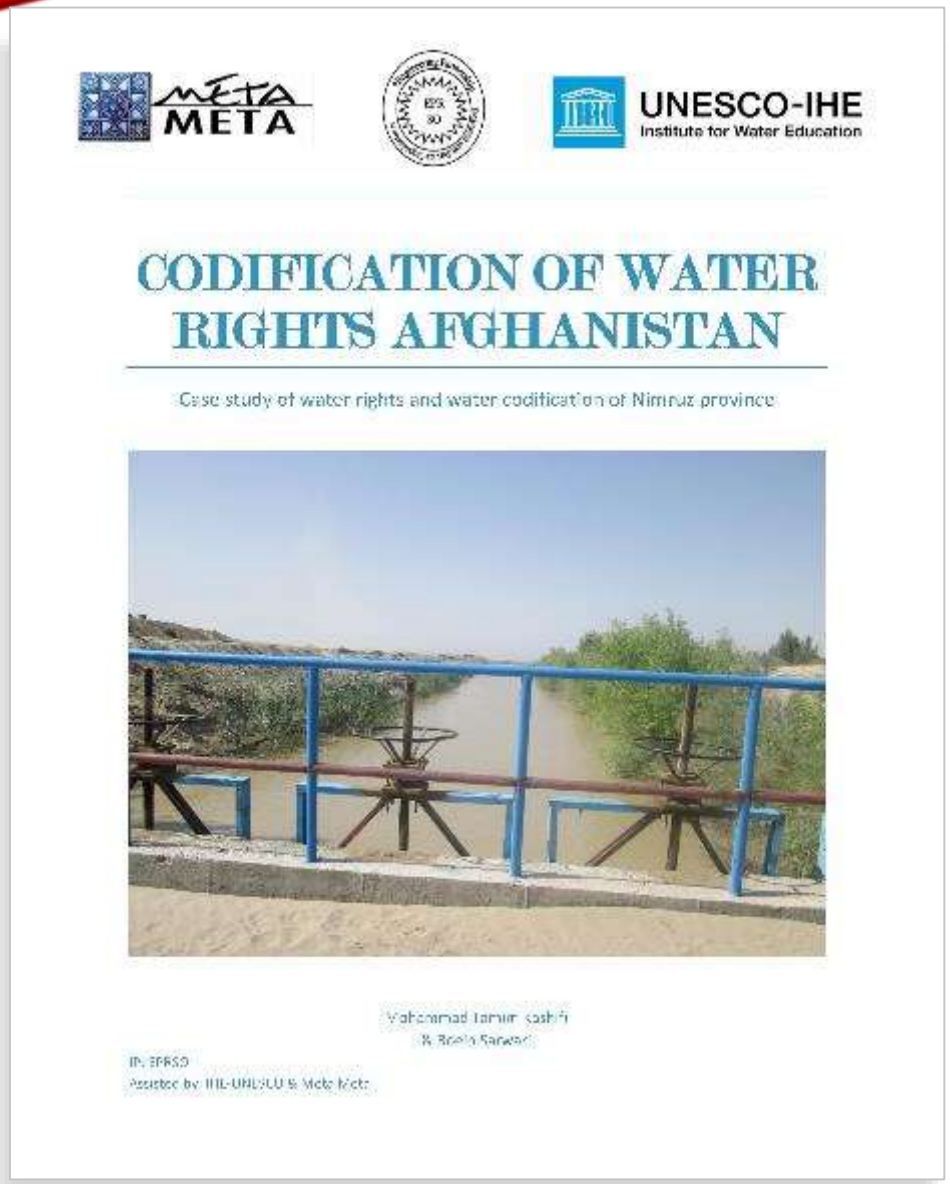
Codifying Spate Water Rights in Contested Basins in Afghanistan

NIMRUZ SURVERY INFORMATION FY 2016

Nimruz province has been called the stock of Asia due to significantly high production of wheat. Yet in the recent years, on account of increase in cultivation areas and lack of sufficient reservoirs, it is only one seasonal producer of crops.

IP: EPRSO

Assisted by: IHE-UNESCO & Meta Meta



UNESCO-IHE
Institute for Water Education

Spate Irrigation Network Afghanistan-SINA

Thank you.

Any Question?