

# Watershed Management Proposal

Afghanistan  
Wardak watershed

**July 2013**

# **The Policy**

# **Wolves**



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# Outline of Presentation

Watershed characteristics

Other projects in the area

Current status of watershed & its services

Challenges for the watershed

Vulnerability towards watershed management

Outline of our integrated WMP

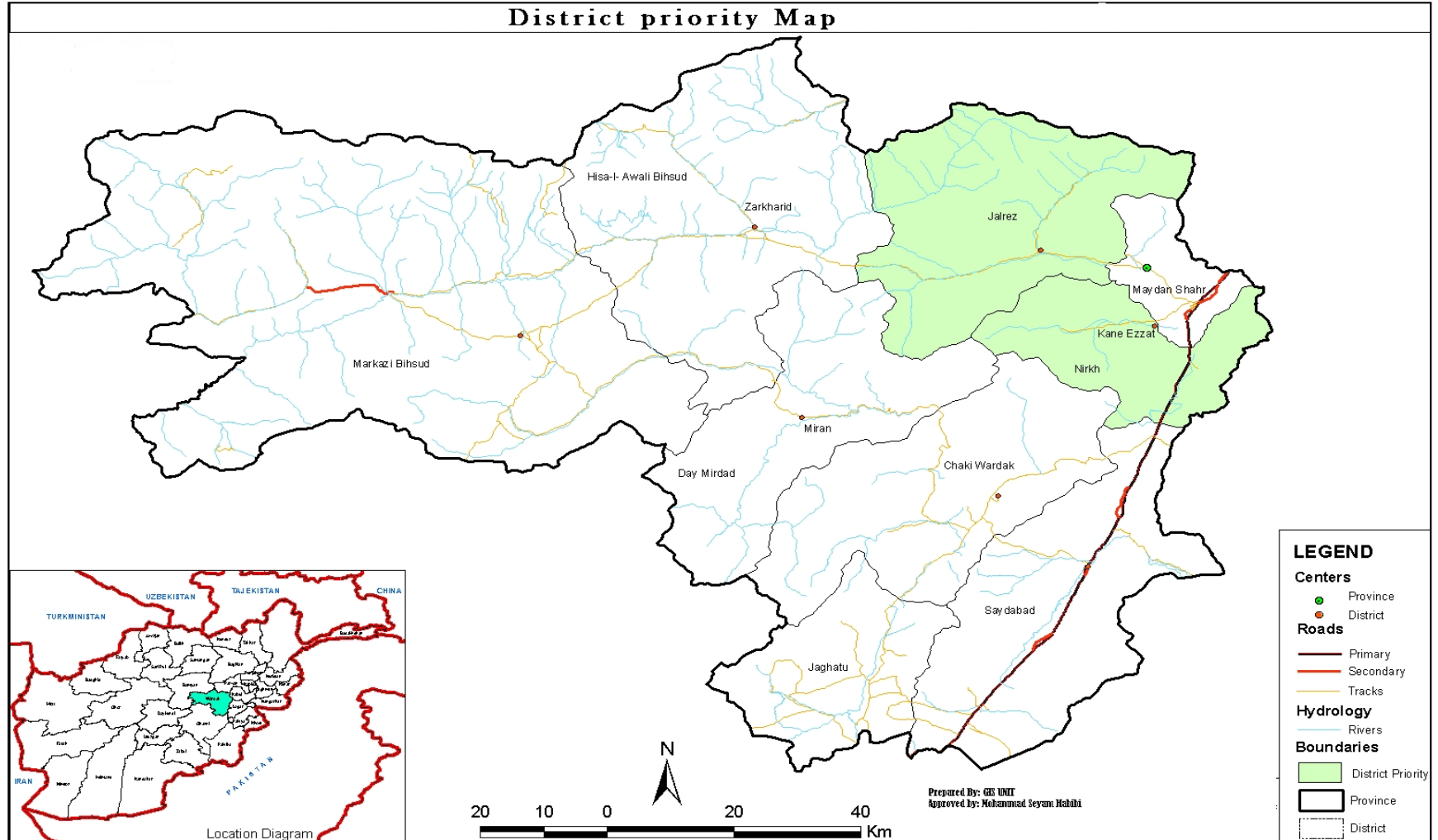
Implementation

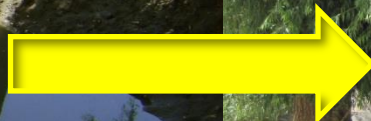
Sustainability

Costs & other resource requirements

# Watershed Characteristics

## *Location*





# Watershed Characteristics

## *Biophysical & Landuse*

**Location:** Afghanistan

**Geography:** Mountain Area (1900m elevation)

**Population:** 66,800 (47% Female)

**Agriculture Type:** Orchard 70%, wheat, corn (and other vegetable)

**Geological Data:** To be obtained

**Economy:** Agriculture and Livestock (~80%), remittances from Kabul

**Water Source:** Karez 70%, River 30% (+snow and rain)

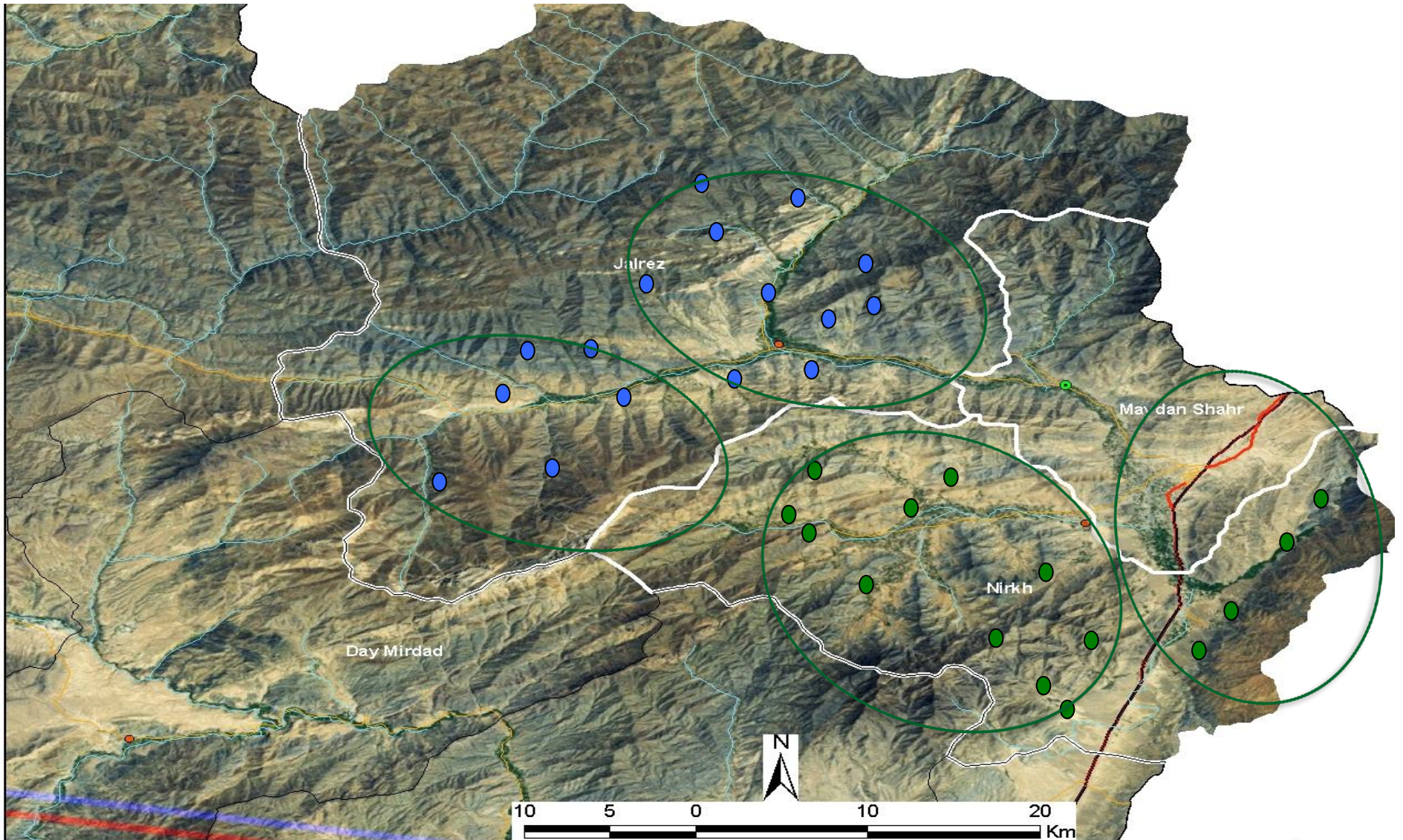
**Total Number of Karezes:** 25 (to be repaired)

**Land Cover:** Dry mountain, grazing and agriculture

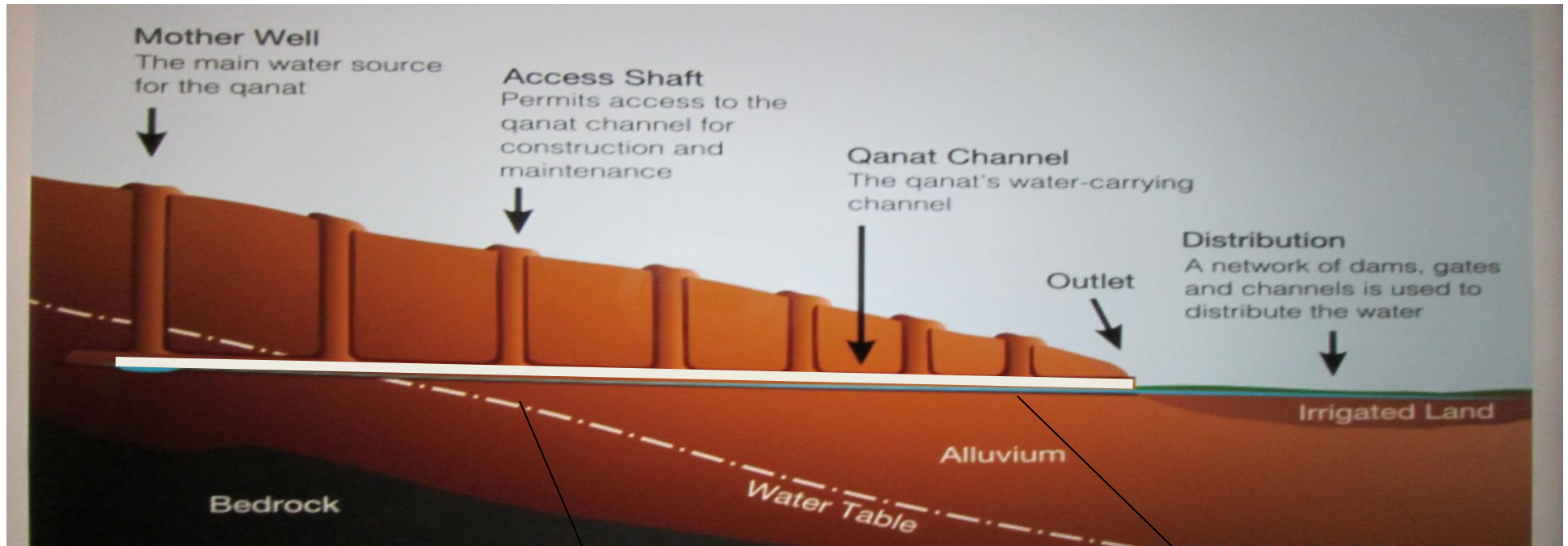
**Temperature:** Winter -20C    Summer 30C

# Watershed Characteristics

## *Community distribution*



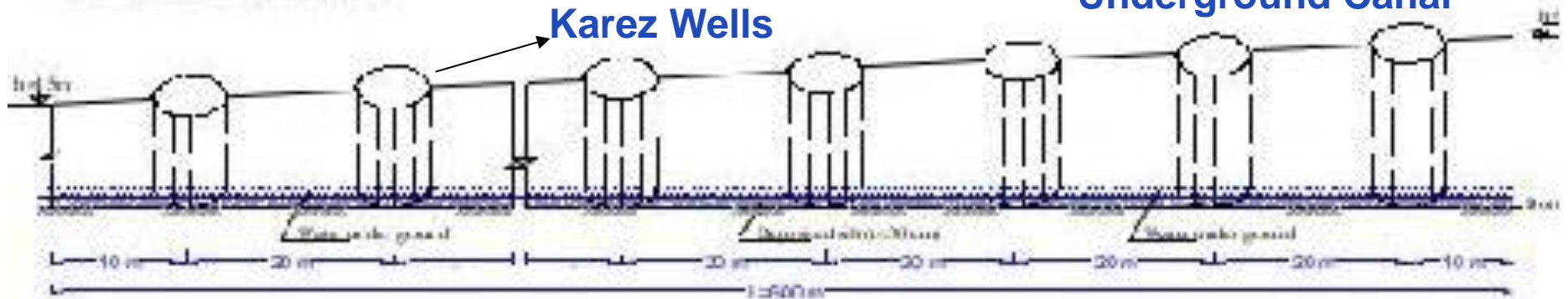
# Watershed Characteristics



Karize Well Springs Plan

Karez Wells

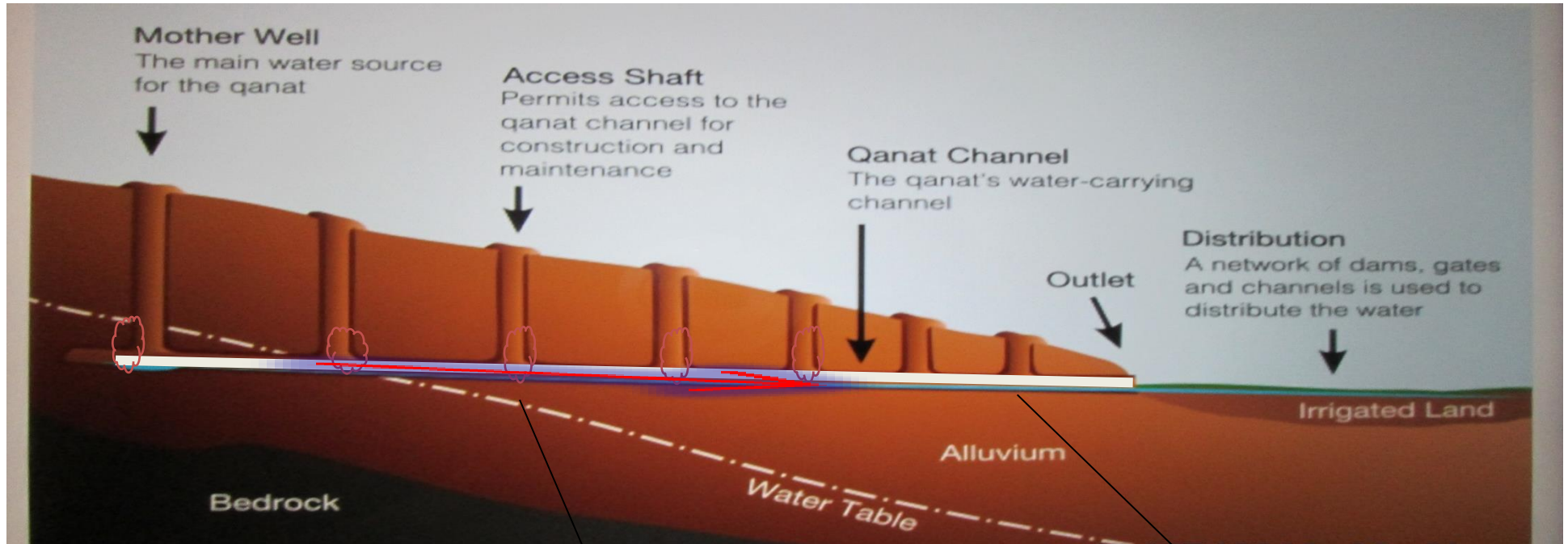
Underground Canal



Sec C-C



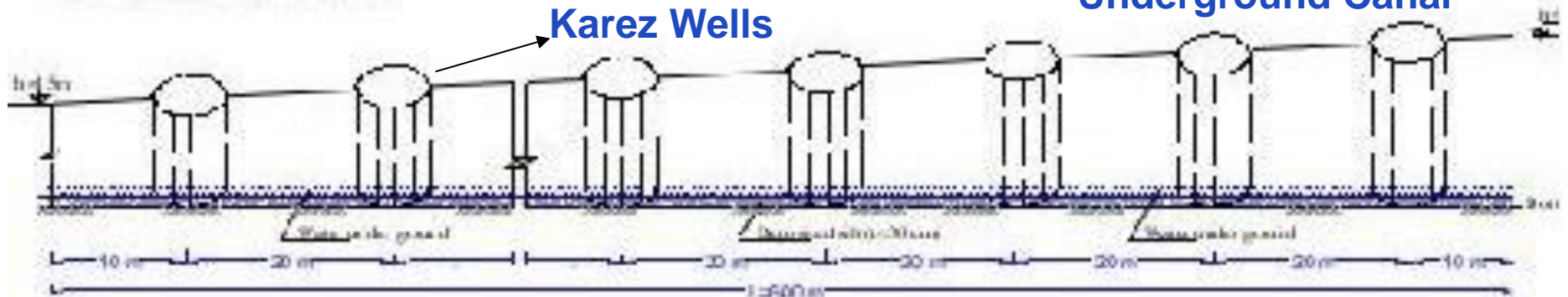
# Watershed Characteristics



Karize Well Springs Plan

Karez Wells

Underground Canal



Sec C-C

## Other projects in the area

- Social outreach programme (community empowerment)
- Afghanistan stabilization initiative (improving linkages between afghan army and communities)

## Current Status of watershed

- Reduced access to water (Karez blocked)
- High potential for increasing water availability
- Traditional community based water rights not adapted to a fair and equal water distribution
- Over dependency on agricultural production, lack of alternative livelihoods
- 95 percent of agricultural production sold in the market (raw product)
- High rate of poverty

# Challenges for watershed



## Vulnerability towards watershed management

- Population growth (carrying capacity)
- Unbalanced use of water
- Inter-households conflicts related to water rights
- Economic dependency on one source of income (horticulture)
- Increased pasture degradation and related erosion

# WMP – Proposed Interventions

**GOAL:** To enhance livelihoods through integrated and sustainable watershed management

## Cross Cutting Objective

- Addressing cultural barriers and tensions
- Promoting the development a friendly society

### Objective One:

To improve water Resources and Irrigation networks.

### Objective Two:

To develop sustainable alternative livelihood programs.

### Objective Three:

Formalize the institutional context at community level (Community Development Councils) and empower women

# Objective One: To improve water Resources and Irrigation networks.

- 1 • Karez Cleaning (Well and Tunnel Canal)
- 2 • Reservoir Construction
- 3 • Irrigation System Improvement
- 4 • Karez Protection from floods (gabions, terraces, super passages)
- 5 • Water Right/Policy Improvement
- 6 • Watershed Maintenance Plan
- 7 • Water Wells
- 8 • Agriculture diversification
- 9 • Improve productivity through the introduction innovative agricultural technologies
- 10 • Storage facilities
- 11 • Improving value chain management

## Objective Two

To develop sustainable alternative livelihood programs.



- **Capacity Building**



- **Community Contribution**



- **Alternative Livelihood Programs**



- **Community Small Grants**



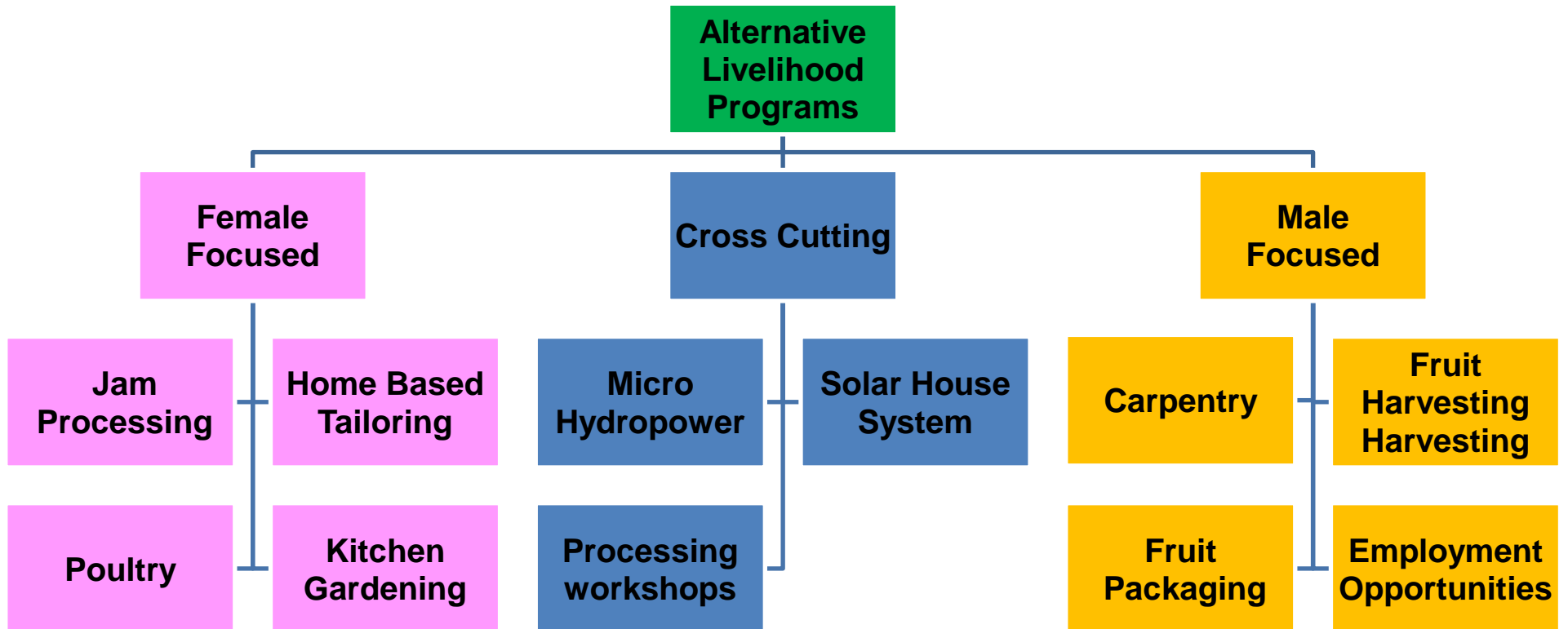
- **Community Development Councils (CDCs)**



- **Community Mobilization**



# Alternative livelihoods



## Objective Three

Formalize the institutional context at community level (Community Development Councils) and empower women

### Community institutions

- Community mobilization
- Community awareness raising
- Community development councils
- PRA
- Participatory approach toward policy improvement (CDCs and elderly involved)
- Water fee establishment based on a per liter price → trust fund
- Development of a maintenance plan

### Women empowerment

- Establishment of women associations (CDCs)
- Providing women with alternative sources of income

# Cross Cutting Objective

## Addressing cultural barriers and tensions

- Creating Women Association
- Involving women in household Economy
- Literacy and Capacity Building Trainings
- Sensitize communities on issues of current water rights
- Promote a transition towards more equitable and inclusive water rights

## Promoting and developing a friendly society

- Creation of recreation places for children and families
- Organizing inter community social and cultural events

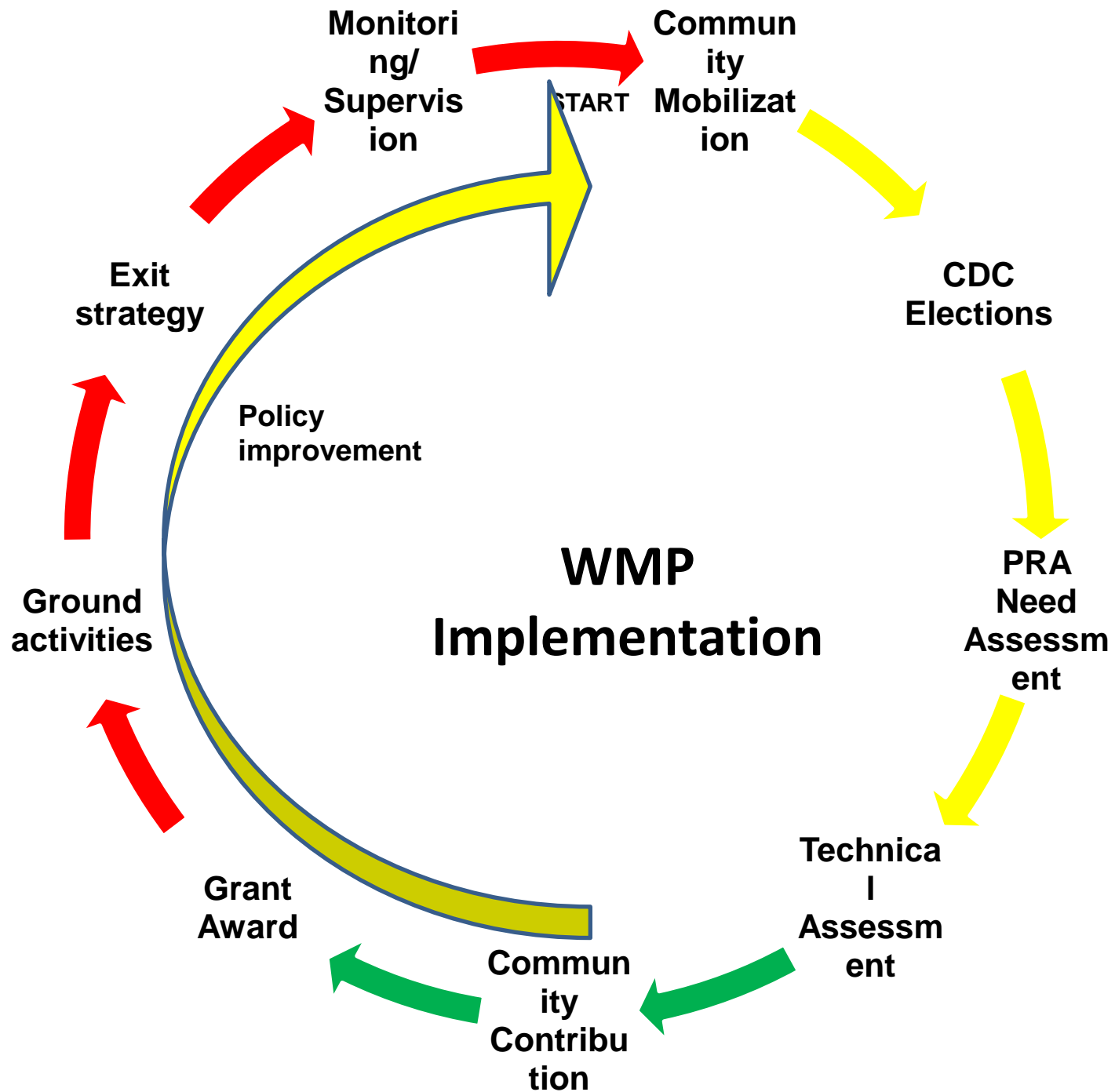
# WMP – Partnerships

## National Government

- Ministry of agriculture, irrigation and livestock
- Ministry of rural development
- Ministry of women affairs
- Department of risk management

## Local government

- Provincial government
- District government
- CDCs
- NGOs (aecom, etc.)
- Farmers cooperatives



## Sustainability/exit strategy of the WMP

- Pilot study for baseline assessment of ground water reservoir/geological survey
- Community ownership
- Trust fund
- Multi stakeholder involvement
- Establishment sustainability plan with nothing

## 7. Costs & other resource requirements

Sector	Cost in USD
Watershed Management	550,000
Alternative Livelihood Programming	700,000
Institutionalization	200,000
Youth and Recreation	300,000
Geological Assessment	200,000
Community Contribution	150,000
Operation costs	200,000
<b>Total Estimated Budget</b>	<b>2,300,000 USD</b>













Thank you