INSTITUTIONAL SETUP OF IRRIGATION AND DRAINAGE IN AFGHANISTAN

Economy of Afghanistan heavily rely on Agriculture
While 80% of agriculture depend on Irrigation, the aridity of climate causes water resources scarce like other Central-Asian and Middle-East Countries
Contribution of Agriculture is strong in Afghanistan: Contribution to National GDP is up to 31% (MAIL, 2015) and creation of employment is 60-70% of population.
9.61 Million ha of arable Land (FAO, 2014)

Introduction

Types of Irrigation in Afghanistan

According to Anderson, 2006; FAO and AIMS, 2004
Modern Surface System (10% of Irrigated Area)
Traditional Surface System with Intakes (More than 80% of Irrigated Area)
Springs (5% of Irrigated Area)
Karezes and Wells (5% of Irrigated Area)

On-Farm Water Management Project (OFWMP)
Implementing under four main components:
a. Irrigation Rehabilitation and Management
b. Institutional Strengthening and Capacity Building
c. Project Management and M&E
d. Support for Enhancement Agriculture Productivity
Focus on Farm level Irrigation Rehabilitation + IA Establishment and Account Opening
Contribute to High Irrigation Efficiency System (HIES)
Provide Capacity Building Trainings to MAIL and Other Project under Irrigation department
Contribute in development of Irrigation Procedures, Policies, Manuals and Guidelines

Traditional Irrigation Institutions

• Traditional Irrigation Systems in Afghanistan are well managed, maintained and organized by local communities
• O&M carried by Local Water Users, headed by Water Master, Locally Known “Mirab”
• Mirab: Combination of Arabic Mir (amir-emir) designated as Leader and “ab” in Dari is used for Water (Leader of Water)
• The Mirab system has been observed to have a long history and possess its own characteristics that have been well integrated into the country’s natural and social background (Roe, 2008).
Characteristics of Traditional Irrigation Institutions

- Responsibility
- Apprenticeship Process
- Flexibility of Organizational Structure
- Basis and Process of Water Allocation and Distribution
- Resource Mobilization for Operation and Maintenance and process for Conflict Resolution

- Individual appointed from among the landowners by the landowners for a given period of time (one to several years) entrusted with responsibility of Irrigation Water Allocation and Distribution belonging to Same Community

Roles and Responsibility of Irrigation Institutions

Operation and Maintenance (O&M)

- Based on the IAs’ By-Law/procedure and Afghan Water Law, IAs are responsible for managing the O&M of irrigation canals under the preservation of the traditional Mirab system (Afghan Water law/ 26 April 2009).
- The Statute/guideline of IA’s is more focusing on overall management of IAs but specifically on the IA’s (ToR) of each members (Mirab/Chakbashi, Secretary, Treasurer and General body members). It is clearly mentioned in ToR to take very serious care of O&M and repaired canals in Defect Liability Period (DLP) and even after the final handover to the community.

Roles and Responsibility of Irrigation Institutions

Irrigation Associations (IAs) Bank Account Establishment

- Accounts are Established for each IA as they collect money (Usually 250 AFN or USD 3-5 per Hectare) for O&M under IA responsibility
- MAIL has around 950 IAs in the Country and all have Bank Account
- Deposited the Money not only for O&M but also for New Irrigation Schemes Rehabilitation Work
- More than 12.6 Million AFN/ USD, 157510 Collected

Roles and Responsibility of Irrigation Institutions

Special efforts by OFWMP

- Established Guidelines and Procedures for O&M following below steps:
  - Social Mobilization
  - IAs establishment
  - IAs registration with MAIL
  - Opening of Bank account
  - Collection of land & water right fee (250 AFN/ha)
  - Implementation of irrigation sub-project
  - Handover of irrigation sub-project to the community
  - Capacity building of IAs
  - Operation & Maintenance
- Capacity Building Trainings Provided for Betterment of Procedure

Roles and Responsibility of Irrigation Institutions

Resolving Water Management Problems/Issues

- Various types of conflicts, issues and problems exist in irrigation system in community or with contractors
- OFWMP developed Grievance Redress Mechanism (GRM) for timely resolving the issues, problems, grievance and conflicts raised by community members
- OFWMP follow several steps for resolution of problem and solve the problems
- Various types of Grievances Related to (Irrigation Association Formation and Management, Inter-community disputes and Process delays)

Roles and Responsibility of Irrigation Institutions

<table>
<thead>
<tr>
<th>No</th>
<th>Region</th>
<th>O&amp;M of completed irrigation schemes</th>
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</thead>
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<tr>
<td>1</td>
<td>Kabul</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Herat</td>
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<tr>
<td>3</td>
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<td>4</td>
<td>Balkh</td>
<td>6</td>
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Conclusion and Recommendations

Conclusion

• Strengthening and Establishment of IA strongly affect the Performance of Mirab System in context of strengthening, O&M of canals, resolving water management related issues and capacity building of water users in modern agriculture and irrigation practices in Afghanistan
• IAs have been registered with MAIL as their legal entity
• The role of IA is crucial in term of institutional development and awareness campaign for the dissemination of modern irrigation and agricultural practices.

Recommendations for Further Improvement

• Necessary care must be exercised not to disturb the organizational set up of Mirabs/Chakbashi of centuries old irrigation water management, while establishing IAs, the Mirab should be its key person
• IAs should not be restricted only to Irrigation activities but it can be used for other agricultural and extension related activities to make it more active and multi-functional
• Comprehensive trainings on Irrigation Water Management have to be provided to IA as most of the Mirabs are not educated