

Community Development Council Participation In Rural Water Supply Projects

Study of Three Community **Development Councils** in **Kabul Province** of **Afghanistan**

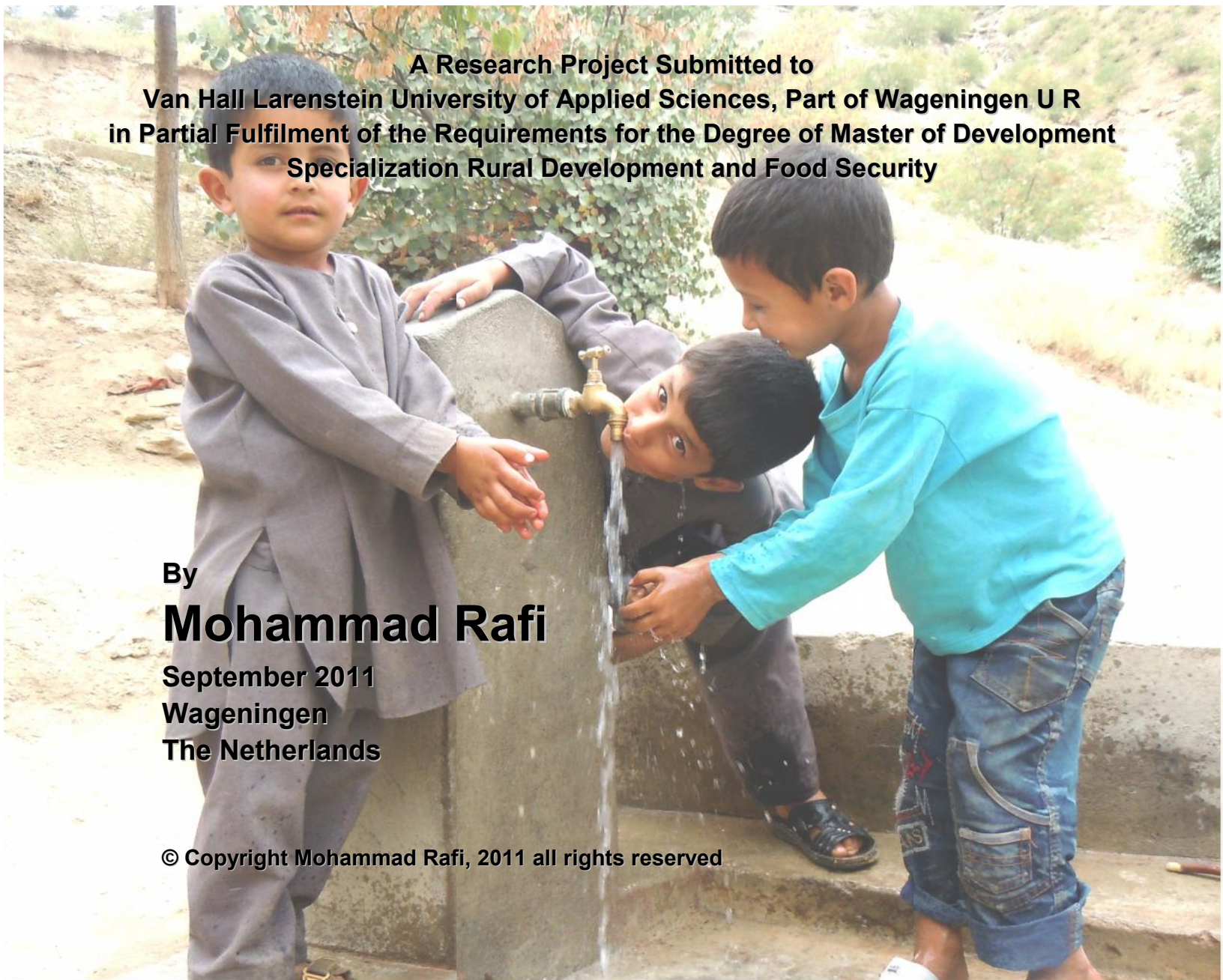
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Specialization Rural Development and Food Security**

By

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Dedication

To my parents, for their love and care of me
Thank you for all love and everlasting prayers

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First, all praises, appreciation, gratefulness and thank due to Almighty Allah, the most beneficent and the most merciful, the only one help and direct us to the straightway, the way of those that he has bestowed his graces. Without his will, I am not able to do anything.

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Abstract

Increasingly demand for safe drinking water in Afghanistan rural communities as well as achieving the goal of 100% access of rural community to potable water and sanitation facilities by 2020 which has set in Afghanistan National Development Strategy (ANDS) and Afghanistan Water Sanitation and Hygiene (WASH) Policy 2010 has bring the need for better engage of rural communities at decision-making in planning, design, construction, operation and maintenance and services delivery of water project for ensuring ownership and sustainability of water supply systems at community level.

On that base, this research aims to contribute to the improvement of Community Development Councils (CDCs) participation in rural water supply projects for enhancement of the rural communities' access to safe drinking water.

This qualitative study has performed in three selected villages in Farza district of Kabul province, Afghanistan. In this paper CDC participation in rural water supply project has defined and conceptualized as the process in which CDC as elected villages base institution has participation in decision-making for priority setting and initiation of project, design of project, physical and economical contribution in construction or implementation of project and being fully responsible for operation and maintenance of water supply project for proper functioning of project after it handed out to community. According to research conceptual framework and literature review, the study has assessed the concept of CDC participation under three dimension-wise stages including pre-construction stage, construction stage and post-construction stage of rural water supply project.

The analysis of the findings of this research indicated that CDCs are self mobilized and they are directly involved at all stages of water supply project, but there are number of factors affecting CDC participation in rural water supply projects such as illiteracy of CDC chairpersons, poor participation of women in CDC, manipulation of CDC decisions by local commanders and/or chairperson of CDC, and lack of trainings for CDCs for improvement of their capacities - specifically about operation and maintenance of water supply projects.

According to analysis of situation recommendations for improvement of CDC participation in rural water supply projects and suggestion for further study has provided at end of this study.

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Acronyms

ANDS	Afghanistan National Development strategy
AREU	Afghanistan Research and Evaluation Unit
BoQ	Bill of Quantity
CDC	Community Development Council
CIA	Central Intelligence Agency
DDA	District Development Assembly
DG	District Governor
GO	Government Organization
HDI	Human Development Index
LPCD	Litter Per Capita Per Day
MRRD	Ministry of Rural Rehabilitation and Development
NGO	Non-Governmental Organization
NRVA	National Risk and Vulnerability Assessment
NSP	National Solidarity Program
O&M	Operation and Maintenance
PG	Provincial Governor
PRRD	Provincial Rural Rehabilitation Department
PRT	Provisional Reconstruction Team
Ru-WATSIP	Rural Water Supply and Irrigation program
UNDP	United Nation Development Program
UNFPA	United Nations Population Fund
WHO	World Health Organization

Local terms

Ashar	voluntary participation in works on communal projects or help an individual of the community in construction of his house or in collection of harvest
Kareez	(also spelt karez / kariz and later called qanat in Arabic) is a combination below and above ground channel system used to bring water to a settlement or fields from a natural source, say an aquifer, mountain spring or lake.
Malik,Arbab,Khan	Head of village
Qariadar	village representative
Shura	Council
Ulama	Clergies

1. Introduction

This research is aimed to study the Community Development Councils (CDCs) participation in rural water supply projects. The study has focused on three rural water supply pipe scheme projects in three villages (Qala Zargaran, Qala Mosli and Qala Karim) at Farza district of Kabul province of Afghanistan which has implemented through Rural Water Supply and Irrigation Program (hereafter referred to as Ru-WATSIP) of Ministry of Rural Rehabilitation and Development. This research has been fulfilled in partial completion of the requirements for degree of Master in Management of Development from Van Hall Larenstein University of Applied Sciences, part of Wageningen University and Research Centre in the Netherlands. This research consists of five chapters. The introductory chapter presents the background to the study. The second chapter talks about literature review. The third chapter presents the research design and methodology. The fourth chapter is result of the research, and the final chapter is discussion and academic debate. At the end the research has concluded briefly and presents the recommendations for improvement of CDC participation in rural water supply projects.

1.1. Background of study

Afghanistan is a landlocked country with total area of 652,230 Km² and the total number of population is 29,835,392 with 2.375% population growth rate (CIA, 2010). 71.2% of the population lives in rural areas. (UNDP, 2004) Over a quarter of conflicts and political unrests compounded with natural disasters such as repeatedly droughts left Afghanistan as one of the poorest country in the world that 36% of the country population cannot meet their daily basic needs. (NRVA, 2007) The United Nation Human Development Reports 2010 has listed Afghanistan in low human development category and one of the poorest countries in the world. The Afghanistan human development indicators have rank at 155th out of 169¹ countries in the world and it has ranked in top one lowest HDI from 10 lowest HDI countries in Asia and Oceania region. (UNDP, 2010)

The decades of conflict and instability in Afghanistan passed a large scale of destruction to the infrastructures, services and institutions which provided facilities to people. Afghanistan has ranked in 12th grade from bottom of the list of countries with a high mortality rate of 161 under five year's child per 1000, people access to safe drinking water in Afghanistan is 27% (urban

¹ In 2010 due to lack of data some of countries has missed from Human Development Report (UNDP, 2010)

58%, rural 20%, nomads 16%) and only 5% of the population have access to improved sanitation (21% urban, 1% rural, 0% Nomads). (NRVA, 2007) Lack of access to safe drinking water and sanitation intensifies poverty through water-borne diseases such as (Diahorea, Cholera, Dysentery, Ameobia...etc.), increase medical expenses, and loss the productivity and income, which causes widespread under nourishment and malnourishment among children. (WHO, 2010)

The Ministry of Rural Rehabilitation and Development (MRRD) is one of the key ministries in the Islamic Republic of Afghanistan. MRRD aims to reduce poverty and facilitate rural communities to become empowered and prosperous by rural infrastructure and economic development, local governance, institutional strengthening, and human capital development. (MRRD, 2010) As per the Afghanistan National Development Strategy (ANDS) for 2008-2013, MRRD is in-charge of providing safe drinking water and sanitation facilities for rural people of Afghanistan through its Rural Water Supply and Irrigation Program (Ru-WATSIP).

Ru-WATSIP aims to enhance the quality of life, well-being and productivity of rural people through improving health by reducing preventable waterborne diseases by increasing access to safe and reliable water points and hygienic sanitation facilities. (Ru-WATSIP, 2010a)

Ru-WATSIP presents package of services for improving the quality of life of people in rural areas. This package consists, (1) Provision of safe-drinking water through construction and rehabilitation of the water points such as shallow and deep wells, pipe schemes and water reservoirs. (2) Providing of improved sanitary facilities to rural community - specifically construction of sanitary latrines, and (3) Promoting the hygienic practices at the personal, family and community levels through providing of trainings to community. (Ru-WATSIP, 2010b)

In 2010, Ru-WATSIP developed the water sanitation and hygiene education (WASH) policy which presents a roadmap to the program for 2010 to 2014. The objective of WASH policy regarding improvement of access for safe-drinking water is to improve access of the rural people with minimum requirement of 25 litter water per capita per day (LPCD), from 27% current national wide coverage to 50% by 2014, 50% to 70% by 2016, and 70% to 100% in 2020 – this issue has also indicated in ANDS. (MRRD, 2010a) The operation manual of Ru-WATSIP indicates on provision of water supply with a minimum of one water point for 20 families. (MRRD, 2010b) In-order to achieve this objective, since 2005 Ru-WATSIP has constructed over 12000 water wells fitted with hand pumps, 68 pipe schemes including gravity and power extraction. (Ru-WATSIP, 2011)

Ru-WATSIP intends to construct 32000 new water points, and rehabilitated 16000 dysfunctional water points to achieve the objective of 50% access of population to potable water in 2014, and construction of 100000 water points up to 2020 for achieving of 100% coverage. The policy further indicates that 30% - 50% of the constructed water points are dysfunctional due to poor quality of construction material, lack of standardization and oversight, poor operation and maintenance, and lack of community ownership. (Ru-WATSIP, 2010a)

The main recipient of Ru-WATSIP services are communities. (Ru-WATSIP, 2010a) According to Chambers (1983) community should be involved in a system inception and more than that community should accept the ultimate responsibility for the ownership of entire life cycle of the system. By realizing of the importance of community participation, the WASH policy (2010) has also indicated for ensuring community participation in decision making for men and women in planning, designing and service delivery, and ensuring ownership and sustainability of the projects at the community level, as a principle for achieving of the goals set in the WASH policy. Moreover, the policy has pointed out regarding the community participation in project implementation – partial cost sharing for construction and 100% operation and maintenance (O&M) responsibility by community for all types of water supply facilities. (Ru-WATSIP, 2010a)

In 2003, the National Solidarity Program (NSP)² has set-up institutions for local and community-based governance at the villages' level under name of Community Development Council (CDC). Establishing of these institutions has taken place through secret ballots of village members to elect their representatives. (Christia & Enikolopov, 2008)

The aims for establishment of CDCs at the village-level are to contribute to the reduction of poverty at village level through enhancing access of the local people to infrastructure and training, creating of cooperation and unity feelings among people, social justice and transparency/accountability in the village-level activities through the right of people to monitor the performance of GOs/NGOs or any type of institutions, ensuring active community participation in establishment of sound community-based institution, assets formation at village level through community-based institution like, plan/design and implementation of the different projects through community, and finally ensuring of community well-being through expansion of the necessity socio-economic services according to the demand of community - under

² National Solidarity Program is a flag-ship national priority program under Ministry of Rural Rehabilitation and Development (MRRD) established in 2003. The aim of this program is to empower Afghans to reduce poverty through establishing and strengthening a national network of self governing community institutions. (MRRD, n.d)

leadership of community representatives. (NSP, 2006) NSP has established over 25000 CDCs in nearly 70% of rural communities. (NSP, 2011)

CDCs are community-based decision-making body, which according to the WASH policy and Ru-WATSIP operation manual they are responsible for planning, implementing, and operation and maintenance of the water supply and sanitation facilities, which will contribute to development of the ownership sense in community, which leads to sustainability of projects. Ru-WATSIP is to increase the community access to safe potable water and sanitation facilities to reduce the incidence of waterborne illnesses and deaths for enhancement of rural communities' productivity, which contributes to food security and well-being of population. On that base, CDCs participation as representative of community are crucial in rural water supply projects for achieving of the goals set in Ru-WATSIP WASH policy for 2020 (100% access of rural population to water) and success of Ru-WATSIP.

1.2. Research problem

Access to safe drinking water and sanitation is a basic human right. (UN, 2010) Provision of safe drinking water is important and indispensable for reduction of poverty and improvement of health. A study by World Water Forum in 2003 has indicated that water problem in a village will not end until the villagers have not changed their behavior through active contributions in the water supply process. (World Water Voice, 2003) Ru-WATSIP policy insists on community participation and gender equality in the decision-making, planning, design, service delivery, partial capital cost sharing and 100% operation and maintenance responsibility of the water supply projects by community for ownership and sustainability of the projects at the community (Ru-WATSIP, 2010a). Thus, Ru-WATSIP is implementing the water supply projects through CDCs. The community-based implementation approach concentrated on the implementation of water supply and sanitation projects, which costs up to US\$ 60,000. (Ru-WATSIP, 2008) Ru-WATSIP considers this modality of implementation as a step for further improvement of participation of the community in water supply services.

On that base, Ru-WATSIP wants to understand on extent of participation of CDC in rural water supply projects at the community level – with specific focus to water supply pipe scheme projects for propose of incorporating of information to the program decisions and planning.

1.3. Research objective

To contribute to the improvement of CDCs participation in rural water supply projects for enhancement of the rural community access to safe drinking water.

1.4. Research question

To what extent CDCs are participating in rural water supply projects?

- a) To what extent CDCs participate in pre-construction, construction and post-construction stages of rural water supply projects?
- b) What are the factors affecting (positive & negative) the CDCs participation in rural water supply projects?

1.5. Organization of research problem

This research has conducted to analyze CDC participation in rural water supply projects, and provide recommendations to be considered for improvement to: (1) Rural Water Supply and Irrigation Program (Ru-WATSIP) (2) Ministry of Rural Rehabilitation & Development (3) CDCs - specifically CDC Qala Zargaran, CDC Qala Mosli and CDC Qala Karim of Farza district of Kabul province.

1.6. Community Development Council (CDC) in Afghanistan

1.6.1. CDC in local governance context

In Afghanistan, the community level governance exist below official/formal structures, it has ranges and sometime expand up to sub-district level, in local language calls (*Alaqadari* or *Hauza*). In 20th century in many areas of country the central government had a responsible person in the community, acting as interlocutor of government in community, called (*Malik / qaryadar / khan* and/or *Arbab*), they were sometime appointing by government but mostly as heredity leadership role they has been identified in their respective area. The variations and prevalence of these local actors depend to their regions, ethnic and situation of each individual community. In Afghanistan, the existence or non-existence of official institutions at the community level does not mean that governance is not taking place in Afghan community, because the community level governance in Afghanistan history has been handled by the community leaders, local actors and non-governmental institution in the community as well. (Nixon, 2008)

According to UNDP local governance is “a set of institutions, mechanisms and process by which citizens and their groups can articulate their benefit and wants, mediate their differences and exercise their rights and obligations at the local level.” (UNDP, n.d) Based on the successful results of community-driven development programs in the post war countries, in 2003 the National Solidarity Program (NSP) has launched to set-up institutions for local governance at the community level to contribute to reduction of poverty through enhancing access of the local people to infrastructures and training. For this propose Community Development Councils at the villages level have established through secret ballot of the respective community members. (Christia and Enikolopov, 2008)

According to Nixon (2008) “community-driven development (CDD) refers to programmatic interventions that emphasis community participation, empowerment, local contributions, and the development of community capacity or social capital in providing resources for development projects at community level”, that the idea of CDD has institutionalized through establishment of CDCs in villages of Afghanistan.

CDCs election has taken place in two methods. (a) Cluster method, in which the community is grouping into same number clusters and each cluster votes for two representatives, one male and one female. The members (one male and one female) from each cluster with the maximum vote will build the member of CDC. It is worth mentioning that the number of the clusters must be regulated in such a way that the total number of the CDC members do not go beyond 30 people. It would be better each CDC ideally has 16 members.

(b) Community wide method, in this method the community is not grouping in clusters but the eligible voters in the community is voting for a fix number of the male and female who want to be member and serve at CDC. In this case the number of candidate male and female is equal, and everybody has the right for only one vote. After election and selection of the members, the members will serve as chairperson, vice-chairperson, treasurer and secretary of CDC, and the

Box 1: Definition of CDC

NSP has defined CDC as: “A group of community members elected by the community to serve as its decision-making body. The CDC is the social and development foundation at community level, responsible for implementation and supervision of development projects and liaison between the communities and government and non-government organizations. The CDC is to be governed by the CDC by-laws.” (NSP, 2009: p.3)

CDC fill a form and submit it for registration with the NSP and respective departments of government. Each CDC has bank account under the name of CDC. (NSP, 2009)

The map below presents a general picture of governance at the three levels of province, district and village and shows the position of the CDC. The four vertical in the below map are not mutually exclusive, but the stakeholders may overlap and across at least two or more of them. Map also shows the level of decision at the different level of governance. These vertical levels are in interacting with each other. (Saltmarshe, and Medhi, 2011)

Figure 1: Institutional map

	I	II	III	IV
PROVINCE	PG office	Provincial line departments	Provincial councils	PRT, NGOs, CSOs, political parties
DISTRICT	DG office	District line departments	DDA, district shuras	Commanders, ulema
VILLAGE			CDCs	Maliks, arbabs

Source: (Saltmarshe, and Medhi, 2011: p.11)

1.6.2. Role of CDCs

A- Community Driven Development: CDCs are responsible for making their community development plan based on the priorities of their community. The plan should be based on the detail contribution of the community for selection of the project. Selection of project is usually a long process which the member of the community describe the needs and make list of projects, and as per the urgency they shortening the list into few project. The process of consensus-building among the community should be stand base on the contribution of the community in the process; sometime the community is making a large meeting for this issue for narrow-down of the demands to a priority project. A study shows that the process of prioritization of the projects sometime has taken to a project which has the possibility for the equal distribution among the community, such as solar electrification. (Nixon, 2008)

B- Community governance: Besides managing of the development project in the community, CDC is a local governance initiative in the country for establishing and strengthening of

community level governance. CDCs affect the process of participation of community in the management of development works and it also contributes to the accountability in the development projects through involvement of local communities in controlling and monitoring of projects. Researches have also indicated that CDC contribution in the conflict resolution among the community and their involvement in the social protection (*Ashar*), for instance clearing of the irrigation channels has realized positive. (Nixon, 2008)

2. Literature Review

Following introduction of the research context in the previous chapter it is important to shape the mentioned context into academic theories and concepts for drawing of a scientific foundation for research. The scientific framework set out in this chapter is on basis of valuable academic reading materials for portraying relevance and consistency in research for better understanding of the reader. In this chapter, the concept of participation and community participation has discussed. The stages (level) of participation, and the theories of community management that seems as major theories, this thesis has built on. The chapter has concluded with understanding of the effect of community participation on sustainability of rural water supply projects at community level, and Ru-WATSIP WASH policy principles has also described.

2.1. Participation

The word participation has originated from French word of *participatio(n-)* and Latin word of *participat*. (Oxford, 2011a) According to Oxford Advances Learner's Dictionary (2011) participation is the act of taking part into some activity or event.

Definitions for the concept of participation vary, it defines differently based on its application and the context of the issue. In 1970s United Nation Research Institute for Social Development defined participation as “...*the organized efforts to increase control over resources and regulative institutions on the part of groups and movements hitherto excluded from such control*”. (Chamber, 2005 p. 103 refer to Pearse and Stiefel, 1979)

Department for International Development (DFID) in an human right manifesto defined participation that: “*enabling people to realize their right to participate in, and access information relating to, the decision-making processes which affect their lives*” (Chamber, 2005, p.103 refer to DFID, 2000)

Leeuwis, (2004; p.249) has defined participation as “*a process through which stakeholders influence and share control over development initiatives, decisions and resources which affect them*”.

Participation is a direct involvement of public in the process of decision making through which people share their decision to determine their direction and life quality. (Sanoff, 2000) According to Mc-Cracken and Narayan (1998) control of stakeholder in development initiative, decision-making process and resources hold different forms which ranging participation from the sharing and consultation to appliance of collaboration and empowerment of stakeholders.

Participation has also been defined in narrow and broad terms. (a) Participation in narrow term is called to citizens' active engagement in public institutions such as voting to a person s/he want, campaigning for the election and drop a line of contact either individually or in group consisting of non-violent protest. (b) In broad term participation is achieve of common goal through sustaining of the collective activities like distribution of benefits. (Khan, 2008)

2.1.1. Community participation

The concept of community participation has different meanings according to situation. In most cases it has different meanings to the people of the same group as well as people of different groups, and the participation is in differ according to level, type, extend and frequency. (Sanoff, 2000)

According to Burns, et. al (2004) *"community participation concerns the engagement of the individuals and communities in decisions about the things that affects their lives. Community participation means that communities are playing an active part and have a significant degree of power and influence"*.

Participation happen by empowering of people to have control over the activities and it will be effective when the objective be clear to all that what the result will be, and the questions such as who, what, where, how and when be understandable to participants.

- **Who:** it define the parties that are involved in a process of participation activities planned, in general term it indicated those which will be affected by design and planning of a decision making.
- **What:** define the wish we have to perform it by participation and it is making clear the objective. For instance, to resolve an identified conflict, or disseminate some information.
- **Where:** it indicate that where the participation is leading or where the participants want to be through achieve of the objective.
- **How:** it indicates the methods for the appropriate participation for achieving of the desire objective. The method should be set up based on the objective.
- **When:** it is a planning process of the activities in a time frame for achievement of the objective, and it is also important to know that when the participation of who is important. (Sanoff, 2000)

According to Burns et. al. (2004) active participation of local people is essential for improvement of services and accountability and it enhance the social cohesion. It also connects the local policy with relation to needs of community. Furthermore, it creates social networking and social

inclusion that finally it lead toward community ownership and make the community responsible, to contribute to the sustainability of services.

The propose of community participation is to involve community in decision making, planning and design of project for enhancing their trust and confidence and assess the need of community for developing a better solution to the problem. It further contributes to improving of awareness of community on their problem for coming up with solution by their own which improve the decision-making power of the community. The individual learning by enhancing awareness of the community is an advantage of the participatory process, and affect further whenever the process is more clear and open to participants. From social prospective participation consequences on a better meeting of social needs that increasing affect on utilization of resource of community. Through participation professionals are also provided with the up-to-date information from the communities. (Sanoff, 2000)

Participation plan needs for identification of objective and it requires considerable time for analysis of the issue of participation, objective and resources. After that method should be selected which leads to success. Active and direct participation can get the sense of achievements to those who get involved in the participatory process. Sanoff (2000) has summarized the principle of participation as following statements:

- **There is no best solution for design of problem.** But each problem has number of solutions, which the selection of the favorite one can be done as per two criteria. (a) Facts: the data which is collecting at the empirical stage should be stand as the facts concerning the material strengths and economics. (b) Attitude: the interpretation of the facts, the approaches for the judgment on the data collected and the state of the art in the specific area affect it. Thus, the design and planning of the project is biased according to the value and way of thinking of the designer.
- **“Experts” decisions are not necessarily better than “lay” decisions.** As per the given fact for the decision, the user can examine alternatives in the decision for selection of plan/design. According to this approach the designer should be involved in the decision making to understand what type of the design community wants, and what alternatives can be drawn as per the information provided by the users.
- **Design or planning task needs to be transparent.** The components of the design decisions should be understandable and the alternatives should be explored, and the

designs made by professionals should be brought for discussion with users for being more responsive to the demand of users.

- **Individuals and interest groups should come together.** This is for propose that individual and groups openly express their view for necessary adjustment.
- **Continuing over changes in process.** The process of product needs for continues changing at the different levels and it must be managed and re-evaluate and adjusted with the changes for best result.

2.1.2. Types of participation

It indicates the differentiation in the kind of participation and it is classifying the form and level of participation. According to Leeuwis (2004), the idea for the level of participation is a notion which is connected to idea of maximum participation that the type of participation is identifying the form and level of participation. Typology of participation is ranging participation and it mostly carryout a normative assumptions with placing the form of participation in an axis of good to bad. (Cornwall, 2008) The authors (e.g. Leeuwis, 2004; refer to in Paul, 1986; Biggs, 1989 referred to in Okali et.al., 1994) also use the level of involvement in decision-making as a basis for classifying different type and degree of participation. The typology of participation which has developed by Pretty's (1995) is equally normative which is going from bad form of participation – manipulative and passive participation to better form of participation like consultation, material incentive, functional participation in which people contribution to meet the objective of project and reducing the cost and increasing the efficiency of the project and its frequently content with the arguments. The two last categories has proposed goal for community development. (Bass; Dalal-Clayton and Pretty's, 1995) Functional participation is the most frequent type which finding in the development projects. (Cornwall, 2008; referred to in Rudqvist and Woodford-Berger, 1996)

Box 2: Pretty's typology of participation

1. **Manipulative participation:** Participation is simply a pretence, with 'people's' representatives on official boards, but who are un-elected and have no power.
2. **Passive participation:** People participate by being told what has been decided or has already happened. It involves unilateral announcements by an administration or project management without any listening to people's responses. The information being shared belongs only to external professionals.
3. **Participation by consultation:** People participate by being consulted or by answering questions. External agents define problems and information-gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.
4. **Participation for material incentive:** People participate by contributing resources, for example, labor, in return for food, cash or other material incentives. Farmers may provide the fields and labor, but are involved in neither experimentation nor the process of learning. It is very common to see this 'called' participation, yet people have no stake in prolonging technologies or practices when the incentives end.
5. **Functional participation:** Participation seen by external agencies as a means to achieve project goals, especially reduced costs. People may participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision-making, but tends to arise only after major decisions have already been made by external agents. At worst, local people may still only be co-opted to serve external goals.
6. **Interactive participation:** People participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is seen as a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structured learning processes. As groups take control over local decisions and determine how available resources are used, so they have a stake in maintaining structures or practices.
7. **Self mobilization:** People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used. Self-mobilization can spread if government and NGOs provide an enabling framework of support. Such self-initiated mobilization may or may not challenge existing distributions of wealth and power.

Source: (Bass; Dalal-Clayton and Pretty's, 1995)

2.2. Community management model in rural water supply

Community management has become a leading concept in implementation of rural water supply project in the past two decades in the development countries. This concept is a demand-drive approaches, which the basic principle for community management of rural water supply project is participation, control over decisions making process, ownership and cost sharing. This model has is focused to long term O&M. Implication of this model is generally time-consuming and complex, but it is connected with the community participation. Through this model it is tended to get better results in water supply system through including majority of population of community. Although this model has many positive examples, but it still has limitation in long term sustainability of water project, the limitation is that communities cannot maintain the water supply system alone in long term, but they need for external assistance. These supports can be provided to community by range of institutions (national and local government, private sector, NGO or self help institutions), which these institutional support requires for policies, regulations and clearly defined role and responsibilities and regular financing. In addition, the actor institutions such as NGO/GO or any other agency is to investment in capacity building along with the sector reform policy. (IRC, 2004)

2.2.1. Definition of community management model

Community management practically means different things to different people. From one level it means valorize of labor input or local materials through project budget without any corresponding transfer of authority or decision making power to community itself, while from another extreme or level this model enable people for overall operation and administration of their water supply project. (IRC, 2004) Or *“community management is....about communities making strategic decisions: what level of service they want, how they want to pay for it, where they want it. The community may also be involved in day-to-day operation and maintenance, in collecting money from users and in buying spare parts, but they do not have to be. They may choose to hire a professional to do this for them. Community management is about power and control”*. (IRC, 2004, p7 refer to Schouten and Moriarty, 2003).

The methods for delivering of this model is included of usage of participation approach in planning, decision-making and construction; involvement of both men and women in community; strengthening of management structure, and continued process of training and skill transfer in project cycle.

The aims of community management model are: (1) community empowerment and self-improvement through building capacity in general, (2) efficiency in service delivery by leveraging the resources through use of human capacity, volunteer time and material inputs, financial resource... etc and (3) sustainability of rural water supply services.

2.2.2. Principles of community management

Participation: for effective community management, community must continually participate in development process and for implementation of this model the community support is required.

Control: community should have the direct and indirect control over the O&M of their water supply project. Control means making decision about process of project from start (design) up to O&M.

Ownership: the community should have the feeling of ownership of their community based project, although being legal owner is most desirable which is not possible for some of the projects.

Cost sharing: the recurrent and maintenance cost of the system should be contributed by community, it does not mean that it always be financial contribution. (IRC, 2004)

2.3. Sustainability in rural water supply project

Talks on sustainability of rural water supply projects has a long passed discussion, which the views has concentrated on the capacity of rural water supply projects to deliver services for the long period of time after project has handed out to community or after withdraw of supports by any external agency to community and project continue providing water to household, which the definition of sustainability of rural water project has derived from this vision. In 2001 the International Water and Sanitation Center has defined the sustainability of water project as capacity of community to be able to manage and maintain the services. (IRC, 2003) But it has argued that few communities will be able to manage their water supply project without external support, while the need for external support such as training, capacity building and etc is increasing, so by classify of communities with ability to manage the project should not exclude them from external back-up.

According to Bakelien and Wakeman (2009) the factors influencing sustainability of rural water projects has categorized into (1) pre-project issues; such as community participation, demand-driven approach, community empowerment, technical design, quality of construction, gender and poverty focus trainings, and (2) post project issues; like finance and tariff collection,

satisfaction of beneficiaries, capacity of water committee, roles and responsibility of community for management of project and on-going trainings.

Five factors are affecting the sustainability of a community-based water projects which are including of technical factor (design, performance and maintenance), financial factors (ability for covering recurrent costs), community/social factor (willing to support project), institutional factor (policy and external follow-up support) and environmental factor (dependability of water sources). These factors has divided into internal and external factors, which internal factors are including of preventive maintenance, tariff collection or cost recovery for O&M, management capacity of community (technical, financial, administrative etc.), social cohesion or social capital and motivate for willingness to contribute both time and money. The external factors has summarized as access or availability to tools and equipments, external follow-up support to empower community to maintain the infrastructure and provide training for community, strength of private sector to provide services for complex technical issue and repair, availability of supportive policy environment and legal framework for making clear the roles and responsibilities for O&M, and system source to produce water in sufficient quantity and satisfied quality. It is worth mentioning both external and internal factors are in link with each others like capacity of community is related to the trainings provided to community. (Bakelien and Wakeman, 2009)

2.4. Afghanistan Ru-WATSIP WASH policy principles

- Ensuring community participation in decision-making for women and men in planning, design and service delivery, ensuring ownership and sustainability at the community level.
- Partial capital cost sharing and 100% operation and maintenance responsibility by the community for all water facilities.
- Gender mainstreaming through women's active involvement, particularly in *Shuras*, and in CDC decision-makings to ensure social equity and justice.
- Protecting the human rights (safety, security, privacy and dignity) of people, particularly of women, children, returnees, internal displaced people (IDP), and physically and mentally challenged.
- Protecting the environment by conserving water sources, adapting to climatic changes through the preservation and improvement of catchment areas, with a focus on recharging ground water. (MRRD, 2010a)

3. Research Methodology

Following the previous chapters of introduction and literature review, this chapter provides the manual that how research has been structured in the field for collection, management and interpretation of data to meet the objective.

3.1. Desk study

According to Oliver (2009), literature review is to link the research area with the academic bases, and it contributes to the understanding of the research field. For proceeding of research and gathering of the relevant information on the research topic, desk study has been carried out to get insight on the concepts related to the research field. It supports to design a proper research framework and link the research to an academic base. Through literature review, the concepts of participation, community participation, community management, and their relation with the rural development projects-specifically with water supply projects has been defined. Furthermore, background information on the concept of CDC in Afghanistan and data on the socio-economic situation of the study area has been collected, and the literature has been studies to justify the methodology used for this research. For collection of information about the concepts and terms mentioned above, the writer used library, valuable internet searching machines such as Google scholar, WUR internet library, and Ru-WATSIP reports and document.

3.2. Research strategy

Through literature review the case study has chosen as strategy for the research to explore in-depth on CDC participation in rural water supply projects and to look on the factors supporting and hindering their participation. According to Trochim (2006) “All quantitative data is based upon qualitative judgments”. The data collected through case study is mostly qualitative data which quantitative interpretation of the data has also been provided.

3.3. Unit of analysis

According to Trochim (2006), unit of analysis is one of the significant thoughts in a research project, which identify the thing or body that a researcher aims to analyze in his study; it can be an individual, group, artifacts, geographical units and social interactions.

The research unit selected in this study is three CDC, which Ru-WATSIP has implemented water supply projects through them in their relevant villages. In two CDCs the researcher has

interviewed 11 respondents per each and at third CDC the researcher interviewed with 9 respondents. Furthermore, 5 interviews had been done with informants from related organization.

3.4. Research procedure and orientation

Field orientation has been done by the researcher after completion of the thesis proposal in VHL and traveling to Afghanistan. Before going to the field, discussion has been done with staff of Ru-WATSIP regarding the research project to draw their assistance for provision of required documents and reports, and having their field experience. After that, official document of the selected projects including other informative official document has been collected from Ru-WATSIP.

As researcher was not physically familiar with the selected area of research in Farza district of Kabul province; thus, having a general view on district and selected villages felt necessary for understanding of social structures, ethical groups and influential bodies of the area to make the ground for successful performance of the research. On that base, the researcher met and discussed with local authority for approaching the selected communities. Visiting official local authorities for research in the area was necessary due to several reasons such, security issue that local authorities should be informed about who has entered in their area of responsibility, communities are not going to interview until the local authorizes has not informed them about, which is also due to security issue. The researcher has also tried to make social relation with the community through his friends in community to enter in-depth in community and met tribal leader to draw participation of community in the process of data collection. Researcher developed the research plan for being organized in the research process in field to understand on the issues such as: which of selected community to approach first, and when to approach. It is to say, due to mountainous and scattered existing of the selected area houses and field, local authorities has facilitated this research through assigning of a staff for introducing the addresses of villages and villages people's such influential bodies, community elder, CDC member or non-CDC member, and their houses /garden/ land to make easy for researcher to approach them for interview.

3.5. Data collection

The data has been collected from the bodies involved with the project in community such as CDC members, non-CDC member³ and staff relevance to the project area. The interview with CDC member performed to explore on their participation in water supply project. The interviews with villagers or beneficiaries who were not member of CDC performed to know from their point of view on extent of CDC participation in rural water supply project and how CDC attract the community support and to what extent community has cooperation with CDC. It seeks to triangulate the answers provided by CDC members as well. Interview with staff who had experience in researched area or region regarding rural water supply projects were focused on receiving their experience and understanding on the participation of community during planning, implementation and O&M of projects. Staff interview was also focused to get insight on the strengths and weakness of CDC modality of implementation, which it contributes on triangulation of the answers provided by community. The samples has been selected in a such a way (as mentioned above) to ensure viability and reliable of research findings.

Before field research, the number of research cases has been planned two CDC, but since Ru-WATSIP has been implemented three water supply project in the selected district though three CDCs in three villages at the same time; thus it seem fruitful and interesting to the researcher to cover all three CDCs which Ru-WATSIP has been implemented project through them. Another reason was to explore in detail about the CDCs participation in rural water supply projects in ground. For this propose the researcher has extended the field work time plan from 14 days to 20 days. The number of interview in each case has written in table of interviewees' demographic profile in below:

Table 1: Demographic profile of interviewees

Category	Institution	No. of interviewee / selection criteria			Sample selection criteria	
		CDC member	Non-CDC member	Official staff	Random	Selective
Respondents	Qala Karim	5	6		11	
	Qala Zargaran	4	5		9	
	Qala Mosli	5	6		11	
Informant	Ru-WATSIP/MRRD			5		5
Total		14	17	5	31	5
Percentage		39%	47%	14%	86%	14%

³ Non-CDC Member: In this paper non-CDC member has defined those who are not member of the CDC, but they are beneficiary of project and inhabitant of selected case study village.

3.5.1. Interview tools and pilot testing

Data collection at field level has been done through self-made topic list for interview with the selected community members (CDC members and non-CDC member). In addition, a topic list has been made for interview with official staff to get detail and in-depth insight about participation of CDCs in rural water supply schemes in the selected villages.

The topic lists made for interview for both community and staff has been test. The topic list for community has test on 2 CDC members and 2 non-CDC members at one of the selected CDCs of research, and the topic list for staff has tested on one staff. After testing some topics from topic list has replaced. The interview with community was focused to lighten in-depth on the aspect of matter and to un-reveal the questions of (What) to shows the aspects and stages of a project that CDC has participated, (How) to show the method that CDC and community has participated in services, and (Who) to find the power relation with regard to CDC and the role of CDC. The interview topic list for interview with community has been translated into local language, and the interviews performed by researcher himself.

3.5.2. Selection of sample

The villages for study in Farza district of Kabul province have been selected based on Ru-WATSIP activities coverage in the selected district. Ru-WATSIP has been implemented three water supply pipe scheme projects in three villages of Farza district, these villages have been selected as the research cases. The respondents from both CDC members and non-CDC members of the selected villages have been chosen randomly from different part of the villages such as being far/near to road, being near/far from water tap and with consideration to geographical location of the village. The simple-random base method was selected to well manage the research within the given timeframe.

The official staff has been selected based on the specific characteristics of informants required for this research such as having experience of practical field work in the same district and province, good knowledge level, involvement with community/CDC, engaged with policy of Ru-WATSIP and training/mobilizing of community.

3.5.3. Interviewing

Interview with the community has been done individually in their houses/gardens/fields and data were noted down in a dairy notebook. Every respondent has been approached once, except about 2 respondents which some parts of interview have missed in the first which approached for second time. The length of each interview in average was around 1 hour and 10 minutes

with each respondent plus over 2 hours extra chatting in their houses in community and about 1 hour and 30 minute each interview took time with each informant.

3.5.4. Personal observation

Observation was used to gather additional information on the operation and maintenance of water project infrastructure, utilization of water and accessibility to water among the family that how they have been managed in practice. Observation has been done through attending meetings in the village, walking around the village and the projects, informal discussion with the community people on water issue and sharing experience with people; these all play a role in mapping of the communities situation in mind. The observation was done during the extra time of the day left or during the breaks and coming or going from villages.

3.6. Data management and analysis

The interviews have been captured in the notebook and after, the qualitative data were analyzed manually according to the interview. The quantitative data of the interview have been processed and analyzed through MS. Excel program and their results have developed into tables, charts and figures.

3.7. Constrains and ethical issues

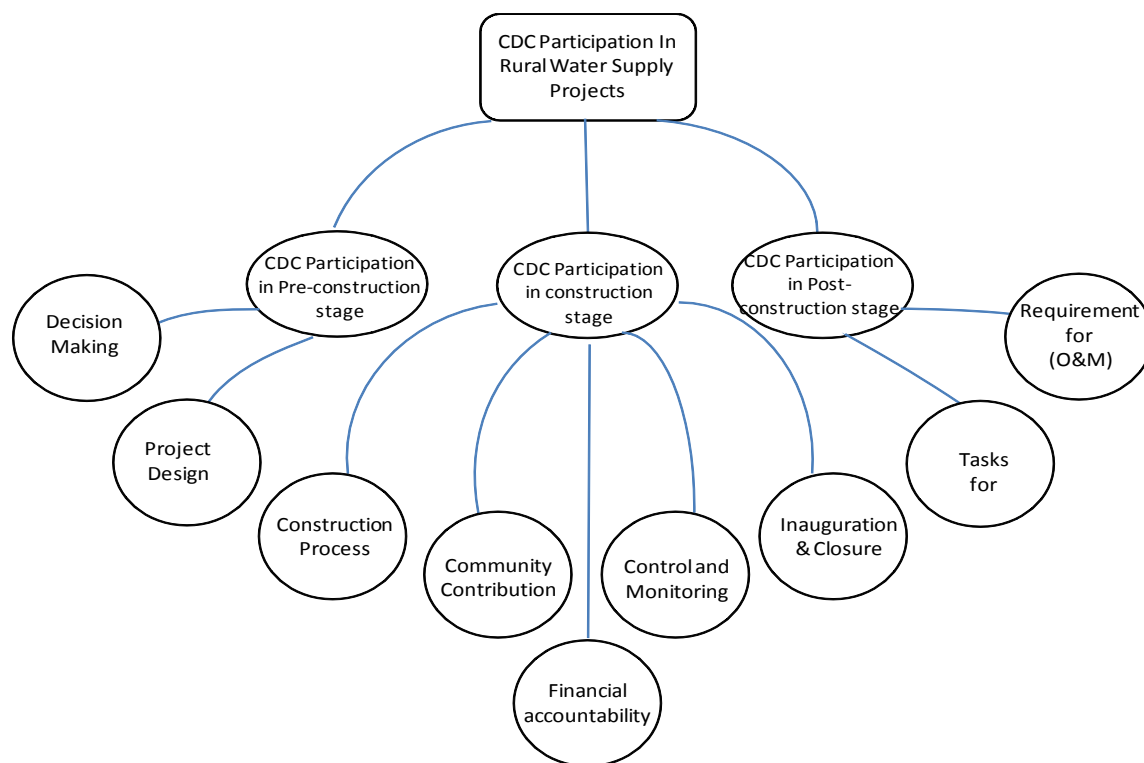
In every community the norms and traditions of community should be respected, that due to various reasons, such as security problem and community tradition and sensitivity the researcher could not included women in the samples of research, but the topics related to gender has been listed in the interview list for raising them with respondents and informants that their replies will reflect on situation of women participation in water supply projects.

Regarding the research ethics, the research has been carried out under approval of both relevant program (Ru-WATSIP) and official authorities of the research areas. The houses were approached by assistance of local government staff and participation in the research was voluntary and informed consent was obtained orally from the respondents and informants before interview. The names have not mentioned in the research and the privacy of respondents and informants have protected. The photos have been taken under respondents permission for putting in report.

3.8. Research conceptual framework and scope

Ru-WATSIP implement types of water supply project for community such as shallow wells with hand pump deep wells and pipe schemes. As in pipe scheme projects several families are involved and participation of CDC and community seems more crucial for sustainability of such projects; thus the research has only focused on the CDC participation in rural water supply pipe scheme projects. For understanding of the aspect of CDC participation in rural water supply schemes the below figure of research conceptual framework will provided a detail picture of the research dimensions.

Figure 2: Research conceptual framework



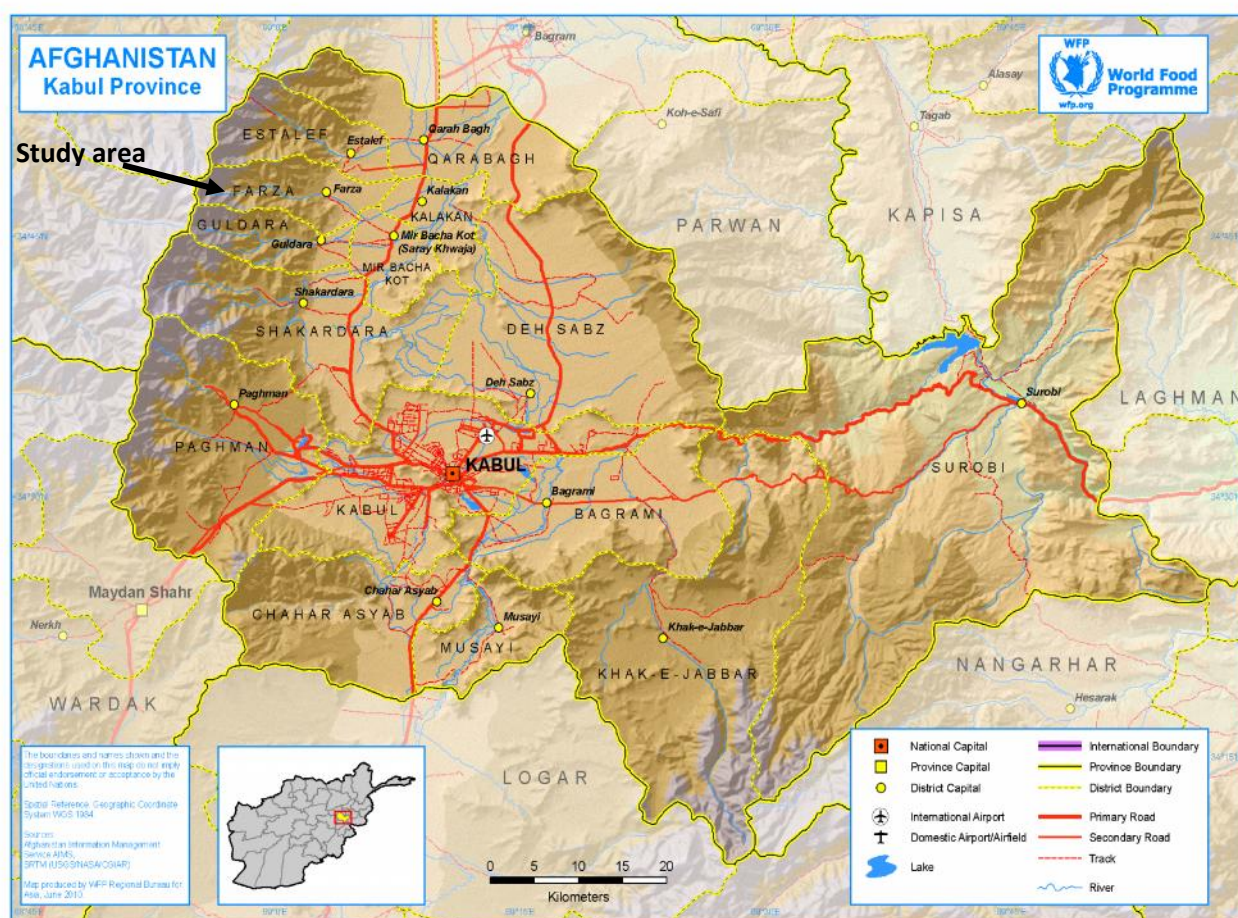
In the framework developed above, the researcher has studies the CDC participation in rural water supply projects in three stages of (1) pre-construction (2) construction and (3) post construction (operation and maintenance), that the indicators for each stage have develop as it is visible in the figure.

3.9. Description of study area

Kabul province is the capital of Afghanistan and it has located in central region of the country. The total population of this province is 2425067 (10.5% of total country population) and the total area of this province is 4524 Km² (0.69% of total Afghanistan territory). (CSO & UNFPA, 2004) Kabul has 15 districts, 81% of population lives in urban area and 19% live in rural area, and 49% of population is female and 51% male.

Kabul province has 508 CDCs which are active at the village level. As Kabul is the capital of Afghanistan, on that base 65% of household have access to safe drinking water (71% in urban and 41% in rural areas) around 60% of population speak Pashtu and 40% speak Dari. 58% population is literate. (NABDP, n.d)

Figure 3: Map of study area



Source: WFP, 2010

Farza district is the focus district of this research. It belongs to Kabul province, total population is 15239 people (male 7793, female 7346), total area of this district is 82 Km², it has 22 villages and 22 CDCs, Pashtun and Tajik ethnicity group are living in Farza district. This district is around 45 Km far from the centre of Kabul province. This district has 1 high school and 4 primary schools. (NABDP, 2007) In Farza district three villages or CDCs are the focus village/CDC of this research which are Qala Karim, Qala Mosli and Qala Zargaran.

4. Results

Following the chapter of methodology, this chapter presents the findings of field research. It is an attempt to provide a clear overview on the participation of CDCs in rural water supply projects with specific focus to water supply pipe schemes in three villages at Farza district of Kabul province of Afghanistan. In order to understand the factors affect positively or negatively the participation of CDCs in water supply project - the cases has written in somehow comparative base under each dimension wise sub-sections.

4.1. Essential clarifications for results

According to this paper CDC participation in rural water supply project has defined and conceptualized as the process in which CDC has participation in decision-making for priority setting and initiation of project, design of project, physical and economical contribution in construction or implementation of project and being fully responsible for operation and maintenance of water supply project for proper functioning of project after it handed out to community. The definition is in line with concept of participation and community participation, and it is also in line with Afghanistan water, sanitation and hygiene policy (WASH-Policy) 2010.

4.1.1. Definition of CDC participation in pre-construction stage

Based on the conceptual framework made for this research, the pre-construction stage of water supply project has defined as the entail consultations of CDC before a water project is implementing. The stage, in this research has followed under indicators of CDC participation in decision making and prioritizing of water project and CDC participation in design of water supply project.

4.1.2. Definition of CDC participation in construction stage

According to this research, CDC participation in construction stage of water supply project has identified as contribution of CDC in process of physical implementation of construction activities, cost-sharing of project, control and monitoring of project activities, and inauguration and closure of water supply project.

4.1.3. Definition of CDC participation in post-construction stage

In this research the CDC participation in post-construction stage of water supply project has defined as the contribution of CDC in all tasks (regular supervision, cleaning/treatment) and

provision of requirements (material, personal) for maintenance and operation of a water supply project in community.

4.2. General information on cases and interviewee's profile

This part of interview was concentrated to provide required information on the characteristics of respondents and informants, and case study CDCs' with regards to their water supply projects. The issues here asked were intended to assure that right sample has selected for interview, justify the background information of case study project and brain-preparing of respondents for discussion on the selected topic. Hereunder, the general information of each CDC has provided separately and subsequent to that they have summarized in a comparative way.

(a) **CDC Qala Karim:** water scheme project construction has completed in 2009 and it provides water for 150 out of 306 families living in Qala Karim village. The project is gravity pressure (non-motorized) scheme sourced water from spring to reservoir and distributing through 9 taps. Each tap provides water for 15-20 families in average. The project has constructed by village CDC with technical and financial support of Ru-WATSIP. CDC of Qala Karim has established in 2006, passed 2 terms of CDC election (after every 3 years), and it has 15 members which remained in their position in both terms of election. 11 interviews (5 with CDC member, 6 with non-CDC member) have performed in this village. Characteristics of the respondents have specified in table below.

Table 2: Characteristics of respondents in Qala Karim

SN	Respondents group		Ability to read & write		Age group				
	CDC member	Non-CDC member	Yes	No	(20-29)	(30-39)	(40-49)	(50-59)	(+60)
Total	5	6	3	8	0	4	3	3	1
Average	45%	55%	27%	73%	0%	36%	27%	27%	9%

Source: Data collected by interview, 08/2011

Of the 11 respondents 45% has selected from CDC members and 55% from non-CDC members⁴. 27% (3 out of 11) respondents were able to read and write. Based on interview, 2

⁴ Non-CDC Member: In this paper non-CDC member has defined those who are not member of the CDC, but they are beneficiary of project and inhabitant of selected case study village.

out of 5 from CDC members (18% of total respondents) and 1 out of 6 from non-CDC members (9% of total respondents) was able to read and write, and the chairperson of CDC was graduated from 12th grade.

(b) CDC Qala Zargaran: has established in 2006, total CDC members are 6, passed two terms of election and the same members remained in second election. Construction of Qala Zargaran village pipe scheme has completed in 2009. The project has constructed by CDC through technical and financial support of Ru-WATSIP. This project provides potable water for 80 out of 120 families living in Qala Zargaran village. Water source of this pipe scheme is Kareez, and through 8 taps water is distributing to village on basis of 8 - 10 families in average per each tap. According to interview from 4 CDC members and 5 non-CDC members (total 9 respondents) shows that 33% (3) respondents were able to read and write and they were CDC members. The fact that the number of sample in this case has decreased from 11 to 9 is due to less number of families and CDC members⁵ in this village rather other 2 cases.

Table 3: Characteristics of informants of Qala Zargaran

SN	Respondents group		Ability to read & write		Age group				
	CDC member	Non-CDC member	Yes	No	(20-29)	(30-39)	(40-49)	(50-59)	(+60)
Total	4	5	3	6	1	3	4	1	0
Average	44%	56%	33%	67%	11%	33%	44%	11%	0%

Source: Data collected by interview, 08/2011

(c) CDC Qala Mosli: the water supply pipe scheme of Qala Mosli has constructed by CDC with technical and financial support of Ru-WATSIP to provide water for 180-200 out of 317 families living in Qala Mosli. The project construction has accomplished in 2009 - after 2 months utilization, the project became dysfunctional. This water project content 15 water taps. CDC of Qala Mosli has established in 2006, it has 15 members, also passed 2 terms of election, which in both the same people has remained. Water source of the pipe scheme was Kareez, which the water pumped through gravity pressure.

⁵ Number of CDC member in each village depends on number of families in the village. Each member of CDC in average represent from 20 families in a village, for detail refer to chapter No. 1

Table 4: Qala Mosli Respondent's characteristics

SN	Respondents group		Ability to read & write		Age group				
	CDC member	Non-CDC member	Yes	No	(20-29)	(30-39)	(40-49)	(50-59)	(+60)
Total	5	6	3	8	1	2	3	4	1
Average	45%	55%	27%	73%	9%	18%	27%	36%	9%

Source: Data collected by interview, 08/2011

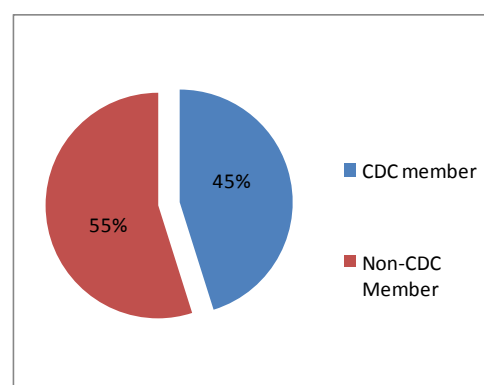
Interview conducted with 11 respondents (5 CDC members, 6 non-CDC members). 27 % of respondents were able to read and write which 2/3 of them were member of CDC, head of CDC was not able to read or write.

(d) Staff (Informants): 5 informants have been selected from Ru-WATSIP program. All informants have graduated from university (four bachelors, one master degree); in average they had 10-20 years of experience with rural water supply and sanitation programs, and about 5 years of working experience with Ru-WATSIP. The sample was contents of community mobilizer, field engineer, monitoring officer, project officer for the selected region and site, and policy advisor for the program.

(e) Summary of cases general information: all three studied projects have constructed in 2009 through CDCs with technical and financial facilitation of Ru-WATSIP, two of them are currently functional and one of them are dysfunctional. In average the schemes has been constructed to provide water for about 430 families in the selected three villages. Based on the interview all selected CDCs have established in 2006 and passed two terms of election that in all CDCs in second term the previous members remained in their positions in CDC.

According to interview, 2 out of 3 water schemes are sourced water from Kareez and one of them from spring. As the figure shows, of 31 respondents' 45% of interviews have done with CDC members and 55% with non-CDC members.

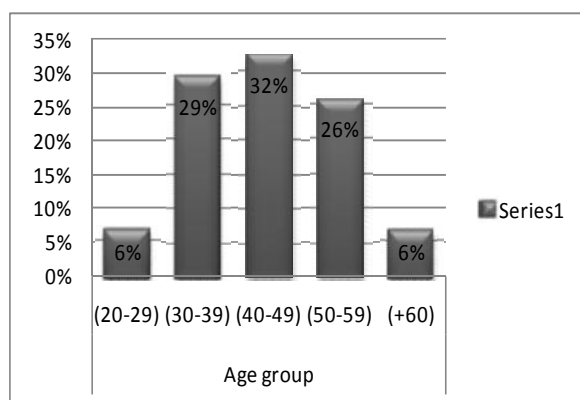
Figure 4: Respondents category



Source: Data collected by interview, 08/2011

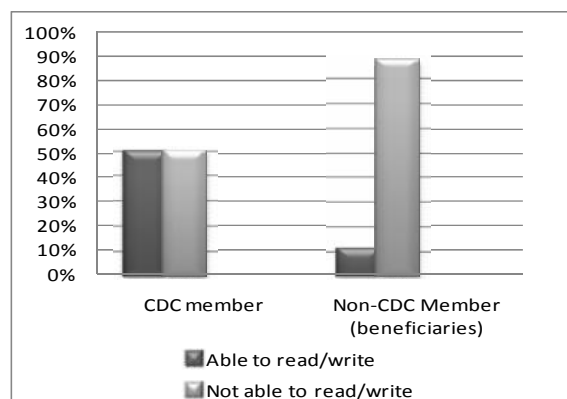
As per the interview, 32% out of 31 respondents were (40-49) years old. 50% (7 out of 14 CDC members) and 12% (2 out of 17 non-CDC members) were able to read and write.

Figure 6: Respondents population by age



Source: Data collected by interview, 08/2011

Figure 5: Category in term of ability to read and write



Source: Data collected by interview, 08/2011

As per the interview half of the CDC members were able to read and write which has a huge contrast with the non-CDC members. The chairpersons of 2 CDCs were graduated from 12th grade while chairperson of Qala Mosli village was not able to read and write. In contracts with other two CDC's pipe scheme that has constructed at the same time the pipes scheme of Qala Mosli was dysfunctional.

4.3. CDC participation in pre-construction stage

This section presents the data provided through interviews on the subject of CDC participation in the initial stage of the project implementation.

4.3.1. Decision making

From interview it understood that due to decreasing of water level, damage and contamination of traditional water systems like Kareez, streamlets and handmade dig wells, and through incidents of repeatedly droughts, access to safe drinking water become major problem for the case study villages. It caused CDCs of selected villages for arranging of committee meeting among their members to find solution for their villages' potable water problem.

From interview it realized that 2 out of 3 CDCs had invited the community elders beside the members in their CDC meetings for prioritizing their community need. The fact for call of the village elders in their meetings have proposed to core their decisions from community, have choices to hear different ideas for tackling the problem and to share the operational cost on

village. In meetings held all studied CDCs have been agreed for tackling of water problem in priority list of their villages.

Narrating from respondents, the studies villages did not have the financial capacity for tackling the problem by their own; thus, few of the CDC members including community elders join their CDC representatives and they have approached to organizations that work in their district – specifically district government office. In review, all respondents argued that initial decision making for provision of water in their villages have initiated by their CDCs. A community elder in Qala Karim said:

“...we have shared efforts with our CDC to have drinking water for our family and children. If the CDC does not exist as before - how could organize the village! so the project you see now may not exist ... “ (56 years man from Qala Karim village, 20.07.2011)

According to the interviews with members of CDCs, they elaborated that in decision-making process usually the CDC members are participating and as per requirement sometimes for finalizing of the decisions or initially for awareness of community they invite the elders of the village. Meetings of CDC in all three studied villages took place in masque or house of CDC chairperson.

Majority (64%) of the respondents from CDCs has responded that power of decision making is depend on all members –specifically it depend on the finest idea to benefit all community. But 29% (4 out of 14) respondents from CDC has answered that decision making is mostly manipulated by chairperson of CDCs.

Table 5: Influential bodies in CDC in term of decision making

SN	Total interviews	Chairperson	Voice chairperson	Treasurere	All members are equal	Community elders	Others
Qala Karim	5	1	0	0	3	1	
Qala Zargarani	4	0	0	0	4	0	
Qala Mosli	5	3	0	0	2	0	
Total	14	4	0	0	9	1	0
Percentage	100%	29%	0%	0%	64%	7%	0%

Source: Data collected by interview, 08/2011

From interview it understood that interest of CDC members and communities for participation in meetings held by CDCs are high, only 4 out of 31 respondents did not show interest for participating in meetings arrange by CDC.

According to the interviews, the propose of meetings organized by CDCs are to pull together the needs of community on development matters such as rehabilitation, repair and construction of project, reflect the needs of community to rural development offices for solution, present community-based solutions for problems and to solve the internal disputes in the community.

It understood that 2 studied CDCs have event-base meetings, but CDC Qala Karim has regular meetings in every two weeks. The reasons that CDC members argued for attending meeting was to serve community, feel responsible to community and social pressure among member to obey their own CDC-made regulations, while the situation in CDC Qala Mosli was somehow different, as realized from interviews in Qala Mosli the impression for joining the CDC meetings were low as it also indicated in above that 4 out of 31 respondents did not show interest for participating in CDC meetings, that all were from Qala Mosli village. The reason that 4 out of 11 respondents in Qala Mosli did not show interest for participation in meetings organized by CDC were due to lack of trust and disputes between CDC members that have putted un-fair reflection from CDC in community.

It understood in overall of two CDCs the respondents feel open air to have a voice in the CDC meetings and everybody respect to each other opinions. But in Qala Mosli both CDC members and non-CDC members were relatively disagree from the meeting atmosphere.

According to interview of 3 cases, only one village (Qala Zargaran) had functional women CDC, which their contribution was not sufficient. As understood the women CDC in Qala Zargaran had only one meeting at the decision-making stage for water project, which their meeting reasoned for increasing the number of water taps from 5 which has been putted in design to 8 taps. Qala Karim and Qala Mosli villages only had the structure of women CDC in paper for formality processes but in reality they did not. It has also realized that the women CDC in Qala Zargaran did not has any contribution in construction and post-construction stages of water project, but it is worth mentioning that participation of women in post-construction in all CDCs could be taking care for proper usage of water and water taps, since in the villages as observed women were

fetching water from taps. As gender is a sensitive issue in Afghanistan therefore the researcher could not collect data from women to explore further on their role.

4.3.2. Design of project

Through interview it was understood that studied CDCs are involved in designing of the project through assisting the surveyors for providing information on geographical scope of area, water sources for the pipe scheme, population in their village and density of households for proper distribution and ensuring equity in access of water.

It has found out 2 CDCs (Qala Karim and Qala Zargaran) has provided land for the water reservoir, which the land allocated for water reservoir was the private property that CDC has consult with the owner of land to support space for reservoir. Direction of water pipes has also crossed the private farms which through CDCs the space has provided for the pipes. In both cases of Qala Zargaran and Qala Karim the project has been design with 5 and 9 water taps, which after complain of families for more water tap the CDC has processed their complain to authorities for increasing the number of taps, which their scheme taps has increased to 8 and 14 water taps.

Based on the researcher observation, in all three cases the CDCs chairpersons has allocated one one water taps in front of their own house, while according to WASH policy 2010 one water is designing to provide water in average for 20-25 families.

With regard to the location of water taps, it understood, that at the beginning there was some disagreements for location of water taps in Qala Mosli village, which the CDC has convinced the community and solved the social disagreement in the village.

According to Ru-WATSIP WASH policy (2010), the contribution of community in water project is for 10% total cost of project, which the CDC needs to assure the program about payment of 10% community contribution before signing the contract. Thus, the CDC in all studied villages has informed the community through a meeting to be prepared for payment of 10% share of community in the project.

From interview it found out that in Qala Mosli village providing of incorrect information by CDC about the water source of project has reasoned for failing of their pipe scheme project after two month of project construction completion. Detail of the case has written below in box 3.

Box 3: Study of Qala Mosli pipe scheme failing

A respondent from Qala Mosli narrated the case as:

We have been informed by our CDC that a water project will be constructed in our village to solve the water problem in our village, we became happy and everybody shown preparation for working in the project. The engineers came they met CDC chairperson and visited the area, the CDC showed them two options for water source (1) Kareez of our neighbor village (2) drilling of a deep well to provide water for village.

The community elders consulted with the CDC and engineer for drilling of a deep well rather than neighbor village Kareez, but the CDC chairperson and members rejected the suggestions of community elder and they told to engineers that we talked with our neighbor village and they agreed for using their Kareez water for drinking propose, and the CDC people added that this project do not need any machine/motor and too much operational cost during life time of project. After engineers heard the CDC, engineers also talked with head of neighbor village CDC, which on that time the neighbor village CDC agreed. I have to say as the project construction cost was also cheap so the engineer preferred the source of Kareez and on that time Kareez had water, it used for irrigation by about 30-40 families in the neighbored village, it is notable to say the Kareez is the property of that 30-40 family. The propose of neighbor village was to rehabilitate their Kareez through our water project and from other hand our CDC chairperson also showed interest to Kareez to receive quickly the money in CDC account because he thought if they delay in selection of project water source the money will goes to other village plan. So, Engineers designed the project and contracted the project with our CDC, but still the community elders and some of CDC members were opposing the project. They argued that deep well should be drilled for village to solve potable water problem. Because they knew the reasons and understood that during drought the Kareez cannot provide water for 150 families in our village. But no one hear them, neither CDC nor the governmental staff. As the respondent said: "The CDC chairperson manipulates the decision makings as still he is the commander.... The government officers were coming and hearing him instead of seeing the reality" (a community member in Qala Mosli village of Farza district, 03.08.2011)

Chambers (1987) in his book Putting the Last First have argued as:

"The poor are often inconspicuous, inarticulate and unorganized. Their voices may not be heard at public meetings in communities where it is customary for only the big men to put their views. It is rare to find a body or institution that adequately represents the poor in a certain community or area. Outsiders and government officials invariably find it more profitable and congenial to converse with local influential that with the uncommunicative poor" (Chambers, 1983 p.18)

Finally, the project completed and we utilized from the project for about two month, after two month due to drought the water of Kareez decreased and neighbor village closed the valve of reservoir from their Kareez and now we do not have drinking water.

Source: Data collected by interview, 08/2011

4.4. CDC participation in construction stage

This part provides detail information on contribution of CDCs in order to build their village water supply projects. In this part the result of researched cases and the differences between them has narrated in indicator wise.

4.4.1. Construction process

According to Afghanistan WASH policy 2010, Ru-WATSIP is implementing the small (below 60000 US\$) rural water supply projects by CDCs for increasing the sense of ownership of projects in community. Based on this policy, Ru-WATSIP has contracted the water scheme projects with selected CDCs in Farza district as well. Through study it has found out for contracting of a project with CDC, initially the CDC fills the estimated activities/material costs in bill of quantity (BoQ) of project for estimating the total cost of project. In all studied villages CDCs have received the BoQ of project from Ru-WATSIP and they have entered the cost for each item in BoQ of project. CDCs has received price information from markets and putted in the BoQ of project.

The procedure of work suggests that: (1) If the cost of project presented by CDC fit with the anticipated cost of project which has been estimated by engineers then the project is contracting with CDC for construction, and in-case of presenting of high or low cost in contrast to the costs estimated by Ru-WATSIP the program staff discuss the issue with the CDC to change the BoQ into a proper rate. Ru-WATSIP is flexible in contracting with CDCs because, the money transferring to CDC account is related to community, so community spend the money for propose of development to benefit them, and CDC members who are responsible for bank account such as chairperson, voice chairperson and treasurer cannot get the money from their account without certification of Provincial Rural Rehabilitation Department (PRRD)⁶. (2) If the budget of project exceed from 60000 US\$, then the project is contracting with construction company as per the procurement law of Afghanistan, in this case the CDC is not involved in construction, but only they monitor the construction process from community side (3) If the CDC do not have capacity for implementation of project and the cost of project do not exceed from

⁶ PRRD: Ru-WATSIP is a program functioning under Ministry of Rural Rehabilitation and Development, and the MRRD has a Directorate in each Province of Afghanistan to control and supervise the activities of programs in their related provinces.

60000 US\$ then the project is contracting with District Development Assembly (DDA)⁷ of selected area.

As understood the water projects in selected area of research have been contracted to CDCs for implementation. Based on procedure three members (chairperson, voice chairperson and treasurer) of CDCs have signed the contract with Ru-WATSIP. Narrating the way how the CDCs in all three cases performed the activities of project construction, it found out that before starting of project few CDC members from all studied villages has learned on design of project from site engineer on how to implement the design map in the ground, it was learnt by them due to their responsibility to control the construction process and oversee the labors.

4.4.2. Management of community contribution (cost sharing)

It learnt that 10% costs of projects have borne by communities, which CDCs' have managed the collection and deployment of the community contribution in the projects.

It found out, two CDCs (Qala Zargaran and Qala Mosli) have made a plan for the labor base contribution. Most of the families live in Qala Zargaran and Qala Mosli have been voted in a meeting of CDC to work in the project by their own selves, so the CDCs in both villages have made a community agreement for providing one labor per family to work for two up to three weeks (three weeks only for poor families) in their village water supply projects, and as community contribution the CDC will cut the labor cost of one day/week from each labor to cover the 10% contribution cost. CDCs in both villages have divided the families in groups of 20-25 per each term of working, in view of the fact that the project activity was planned to be completed in 6 months. In each round of labor work they have been covered 20-25 families to work in project as each family should work for two up to three weeks. It is notable to mention those families did not worked in project as labor they were requested by CDC to provide local material for construction or pay cash according to number of days for project as their contribution.

In Qala Karim, the CDC has managed the community contribution in Afghani traditional way of collective working for common proposes (*Ashar*) for one Item of project work (excavation and filling of land for water pips) against 10% of community contribution. In this CDC also all

⁷ DDA: As CDCs are elected through election process at the village level which supports DDA establishment process. According to the defined criteria and procedures the CDCs are clustered. Then, each clustered CDCs elect one male and one female representative to the DDA forum. (NABDP, 2008)

activities of project has been performed by community, as per their interest for working as labor in the project.

From interview it found out that CDCs have been rigid for equally collection of the community contribution in the projects. It understood, in construction process all CDCs have had activity plan for implementation of project, and a plan for organizing of the community contribution.

4.4.3. Control of construction activity and support of monitoring

It found out that all three studied CDCs members' - specifically key members (chairperson, voice chairperson) were controlling the construction process through daily oversee of the activities of labors according to work plan. The treasurers and one or sometime two members of CDCs were purchasing the construction materials.

In two cases (Qala Karim and Qala Zargaran) for procurement of materials the community elders were also invited by CDCs to join the CDC members for further ensuring of transparency and accountability in community, remain CDC members who were not involved in controlling or procurement of material working in project as labor as other members of community.

From interviews it observed that chairpersons were accompany the site engineers in every periodic monitoring of project which usually took place after 30-45 days for measuring the project progress for releasing of the project installments. The chairpersons were also following up their project installments in the related offices. Moreover, CDCs were responsible for protecting the construction materials during construction of project.

4.4.4. Financial accountability to community

As per the interview it observed that none of the three studied CDCs have presented their financial expenditures to community to gain the trust of community on their financial expenditure during the construction of project. It has also understood that majority of respondents from non-CDC members were eager to have detail financial information from their village project. From interview it find out that CDCs did not have clear financial record of their expenditure from the construction stage of project in a sheet, only they were collecting the bills of their purchases.

As per the interview with key-informants it come out that the signature of CDC chairperson, voice chairperson and treasurer including certified letter from the respective Provincial Rural

Rehabilitation Department (PRRD) is required for releasing of cash from bank account of CDC to CDC members. It somehow contributes in transparency of process.

4.4.5. Inauguration and closure of project

According to interview, it has been understood that all of studied CDCs have inauguration and/or closure ceremony at begin and/or end of their project construction. The ceremonies were proposed to provide information on project and to persuade community for contributing in project for proper operation and maintenance of water project. For instance, mostly the inauguration ceremonies were organized to provide information to community regarding the objective of project and to attract the contribution of community to the projects.

4.5. CDC participation in post-construction stage

Here the results about institutional arrangements for scheme management have been narrated. According to Ru-WATSIP WASH Policy (2010), community is responsible for 100% operation and maintenance (O&M) of water project. (Ru-WATSIP, 2010) The result of research presents the CDC contribution in post-construction stage of water projects in indicator wise. As water supply pipe scheme project of Qala Mosli is dysfunctional; therefore, this section only talks about CDCs of Qala Karim and Qala Zargaran.

4.5.1. Tasks for operation and maintenance

During interview it has reported that based on term of condition of water supply projects, which have informed by contract, all CDCs are responsible to introduce an individual as valve-man for their water supply project to Ru-WATSIP to get practical trainings regarding repair of water pipe scheme as a technician. Valve-man is responsible for regular supervision and reparation of project and should be selected from community. In-addition, CDC is responsibility to collect money or cereals against the task of valve-man in yearly bases from each family in village. But, through interview it has unrevealed that in all three studied CDCs except CDC members none of beneficiaries were aware of having a valve-man for project and no one has paid for this propose. It shows that none of the CDCs/communities had valve-men for caretaking and repair of water schemes, and the issue has only written in paper.

From interview it understood that sometimes CDCs' members are visiting from the project reservoir and water taps. It has found out that on yearly base the CDCs are cleaning the water reservoir through community. In addition, CDCs have informed community that in case of some

problem each family is responsible for repair of the water taps near his house, and if some part needs to be repaired and it is for all, then CDCs collect cash from all users. Still the community in both CDCs has not faces with any major problem regarding maintenance of their water project. In short, it understood that water users do not pay for water use in both villages.

According to narration, at the beginning CDC of Qala Karim has made a methods of payment on marriage base, that each marriage should pay 30 Afghani (equal to 0.65\$) per month for the usage of water for propose of valve-man salary and any repair required, but this method has not been practiced.

All respondents answered that women do have any direct contribution in maintenance of project. But, the head of families have persuaded their family members for proper use of water taps during fetching of water. Women mostly fetch water in rural areas, so proper use of water point may consider as their contribution to maintenance.

4.5.2. Requirements for operation and maintenance

This topic presents the result of interview on role of CDC in provision of requirements (material, equipments, training and contribution/fund box) for better utilization and maintenance of water scheme project.

According to respondents, the minor repair such as broken taps that relates to few families is providing spare part by user families. Both CDCs argued that one person has been trained regard the operation and maintenance of projects, and they have not received any training about water treatment, hygiene education ...etc.

It understood the quality and quantity of water in both CDCs (Qala Zargaran and Qala Karim) pipe scheme have not changed and people are satisfied. As cleaning of reservoir and chlorination is a requirement for treatment, but none of the villages have used any type of material for cleaning of water. Cleaning of reservoir done once per year, and none of CDCs has money contribution box for repair of their scheme and payment for valve-man

4.6. Results of interview with staff

This section provides the data which has gathered from informants except those with has included in above dimension-wise topics with regard to the participation of CDCs in rural water supply projects.

It understood that according to WASH policy 2010 CDCs are the legally authorized and elected bodies at the community level that select development projects including water projects. CDCs are the representative of communities and CDC participation means as community participation. CDC has the responsibility to solve the problems of their communities. The problems of communities/CDCs are reflecting to Ru-WATSIP through Provincial Rural Rehabilitation Departments (PRRD). After the initial verification of problem by PRRD, Ru-WATSIP survey and design the project based on priority, and the designed projects are contracting to CDC as per the fund allocated for regions.

In pre-construction stage of project CDCs participate in understanding of the priority of community, site selection, design, know-how of implementation, attracting of people participation for cost sharing in project, and presenting different solution to the community problem. In addition CDCs are organizing the communities and people of the villages. CDC members are the influential bodies of community which people of the village accept their views and follow them. Ru-WATSIP starts communication with CDCs before implementation of project or after problem identification by CDCs. In addition Ru-WATSIP is in communication with CDCs during survey of project, contracting of project and monitoring and evaluation of project.

According to informants the high participative CDC is the one which has high contribution in planning, implementation, monitoring and operation and maintenance of project. Based on the experience on the informants the CDCs which have truly come based on the vote of people and are more educated provide good services in their community and participate well in the projects.

From informants it has also understood that different between the performance of construction companies and CDC are that construction companies look to their benefit and CDCs look at the values of project to community and well-being of community. But some of respondents argued that through CDC modality of implementation only the people at villages will find short time job, while CDCs do not have technical body to work well and technically, moreover, there is not any regulation to punish a CDC which performed with poor quality and did not observe design of project, while companies provide bank grantee and have technical staff and if they perform against the contract, from their bank grantee will deduct the cost or they pushed to repair.

According to informants, participation of CDCs during planning, design, implementation and monitoring of pipe scheme project leads to sustainability of project. In addition, understanding of reliable water source, skill person in community like valve man and availability of spare parts also leads to the sustainability of water supply services in community.

Accordingly, participatory approach of implementation creates the ownership sense in community. Community mobilization and training of mechanics and valve-men and having involved CDCs as post project institutions at the community level are among the practical tools which use for maintenance of the water projects.

According to informants, Ru-WATSIP and its partner NGOs provide training for the CDCs on hygiene promotion and technical trainings for hand pump mechanics and valve-men as well as training for CDC heads on management aspects of project like collection of fees for repairing of breakages.

The reasons raised by staff for the failure of water projects were consisting of top-down and/or supply-driven approach and lack of participatory and demand-led practice in water supply projects. Moreover, it understood that the failure of the projects are related to several issues such as climate changes and poor technical design and less participation of community in operation and maintenance, also in some cases the CDCs do not have the capacity to implement the project according to contract and due to security problem the technical staff (monitoring staff) cannot regularly monitor the project during construction as well, which it cause for failing of project.

5. Discussion

This chapter aims to analyze the results of empirical study and discuss about the findings in line with the research conceptual framework. The discussion of findings has done with the literatures and observation of researcher from field.

5.1. General information

The results demonstrate that 50% of the CDC members and 12% of non-CDC members are able to read and write. It shows that CDCs members are elected from those which have the ability of read and write. The data provided from three CDCs demonstrate a relation between level of literacy of the CDCs members and their success of water supply project and ability of CDC / community for achieving the goals. According to interview with informants, the high participatory CDC has contribution in planning, designing, implementation, controlling and operation and maintenance of project, and they also argued that level of their education has affect on their quality of participation. As SAIEA (2005) asserted that: *“there is a very high level of illiteracy in the region. Many people who choose to participate in environmental assessment processes do not have the ability to read most basic documents produced. Most technical reports, which are typical of these processes, are well beyond their capacities. This is a major challenge.”* It also indicates that a factor for decreasing participation of CDC is their low literacy level. From results it come out that in CDC of Qala Mosli the water scheme project has failed and the interest of community for participation in meetings held by CDC was also low. It has also understood that the chairperson of CDC of Qala Mosli is illiterate in contrast with other two CDCs, which as per above argument of SAIEA (2005) it also undermine the CDC participation due to low understanding of the chairperson to water projects.

5.2. CDC participation in pre-construction stage

The results shows CDCs has made the initial plan about identifying community problem, pronouncement of community based solution for problem and prioritizing of project. Afghanistan WASH policy 2010 has asserted as *“ensuring of community participation in decision making for women and men in planning, design, and service delivery, ensure the ownership and sustainability of water project”*, and Leeuwis (2004) has argued that influence of community as stakeholder in decision making and sharing control over development initiatives, decisions and resources is identified participation. Based on results of research, CDCs are community based body or institutions that makes decision and have control over the process of decision making at

community level, which according to Leeuwis it considered as CDCs active participation in decision-making process for water supply project implementation.

The results show that interest of people in participation at decision making is high. Out of 31 only 4 has not shown interest for participation in the decision making process which were all from Qala Mosli village, the reason is lack of trust, disputes in CDC and poor reflection from CDC in community that according to interviews it was due to manipulating of decision making process by chairperson and his group in CDC decisions. A respondent argued that *“the CDC chairperson manipulate the decision makings as still he is the commander.... the government officers coming and hearing him instead of seeing the reality”* (a community member in Qala Mosli village of Farza district, 03.08.2011) Chambers (1983) has emphasized in Putting the Last First that *“The poor are often inconspicuous, inarticulate and unorganized. Their voices may not be heard at public meetings in communities where it is customary for only the big men to put their views. It is rare to find a body or institution that adequately represents the poor in a certain community or area. Outsiders and government officials invariably find it more profitable and congenial to converse with local influential that with the uncommunicative poor”* (Chambers, 1983 p.18) Manipulation of decision-making process consider as a factor which negatively affect on both CDCs and communities active participation in decision making process, Sanoff (2000) has also argues that participation happen by empowering of people to have control of decisions and he has also supported the idea that decision making process should be transparent for an effective participation to respond the demand of users. The failure of Qala Mosli project can be reasoned due to manipulation of community voice at design of project and it also relates to survey of engineers which has not performed in-depth and accurate to assure the sustainability of project as Chambers (1983) has argued in above.

WASH policy 2010 has indicated for ensuring of the women participation in decision making process. (Ru-WATSIP, 2010a) According to report of World Bank water sector board 2009 women should have a superior role in decision makings, because they know best the local realities and are the primary beneficiary of water project. But at the community level 2 out of 3 villages did not have women council or women do not have participation in CDC, but they have a paper base registration due to sensitivity of community, which they are not functional in reality. In Qala Zargaran women had separate CDC that was relatively active at decision-making process of water projects, and they just contributed in decision for location and number of water

taps. Sanoff (2000) argued that participation encourage people to free express their view which it contribute to better meeting of social needs, while women in the studied villages have not been encouraged to express their views for better meeting of their social needs.

According to Sanoff (2000) each problem has a number of solutions, which selection of the favorite is based on the data collected on the empirical stage, that the data should be the fact and the right approach for judgment of the fact. As per the Bakelien and Wakeman (2009), *“the rational for involving households in the choice of technology is to ensure that engineering designs are responsive to local needs and realities”*. From results it understood that in design stage of projects all CDCs have contributed through provision of information on social aspects of community for selection of project site, water sources, consultation with community members for provision of land for reservoirs and pipes and understanding the community view on selection of location of water taps and facilitating of community contribution. It has also been asserted by informants that full participation of CDCs in design stage of project provides the real and accurate data which contribute to sustainability and success of project. According to Chamber (1983) community should be involved in a system inception and community should accept the responsibility for the ownership in a life cycle of a system. Contribution of CDC has also been considered as involvement of community in inception of project to make sure the responsibility for ownership of project. The informants argued that the reason for success of a project is to be demand drive instead of supply drive, which CDC participation in design of projects portrays the demand of community for a project. A per World Water Voice report (2003) the problem at community will not solve until community members have not changed their behavior. The participation of community in decision making and design of project indicated to changes in behavior of community and it encourage their contribution in project management and develop their skills.

In line with definition of CDC and according to informants, CDC members represent from group of people in community and they have been elected by community vote and all CDC members are equal; but from interview it understood that chairperson of Qala Mosli CDC has manipulated the community and CDC members. A villager said *“The CDC chairperson manipulates the decision makings as still he is the commander....”* (A community member in Qala Mosli village, 03.08.2011) From general profile provided from studied CDCs in previous section it understood that chairperson of Qala Mosli CDC was also not able to read and write and 4 out of 11

members in Qala Mosli did not had interest to attend the meeting of CDC, the findings about level of literacy and behavior of CDC member-specifically a chairperson is directly affecting on the CDC work quality and movement toward success or failure, so, these could be consider as a reason for the failure of Qala Mosli project. This argument has also supported by World Water Voice report (2003) and SAIEA (2009) as narrated above.

The results indicated, 2 out of 3 CDCs did not have regular meeting with both members and community, but their meetings were held on event based, when a problem become crucial to them or as per the Afghan's proverb when "*Water is past the head*", while one CDC had regular meeting with its members and community elders at every two weeks and maximum of one months. According to Bélanger (2008) involvement of community in the community affair have a major benefit at both community and individual levels. Exchange of experience of members and community increase self confidence, achievement of new skills such as chairing of meeting, organizing of meetings and improve the knowledge of decision-making process which it contributes for becoming a resourceful community. Through meetings an individual learn on how to interact with insider and outsider culture and it improve the self confidence and pride on their own community. From above argument it directly comes out that having regular meetings directly improve the quality of participation in development and improve the general information of community and decrease the accumulation of problems.

5.3. CDC participation in construction stage

Community participation in the context of the provision of infrastructure can range from taking part in meetings to decide upon which services are required or where a service needs to be constructed, to becoming actually involved in the construction of such a service. (Watermayer, 1995)

From argument above it understood that for participation of a CDC in construction process of infrastructure the CDC requires to be involve in decision making upon a services, which Ru-WATSIP in line with WASH policy 2010 has ensured involvement of community through CDCs in the decision making process for construction of their own village water point. (Ru-WATSIP, 2010a)

The results demonstrate that construction of all three water supply schemes has been implemented by CDC to create ownership feeling in community. Watermayer (1995) asserted *“Community-based construction used to sustain development and create jobs in communities.”* The results show that water projects have provided short time job opportunities and according to interviews with both respondents and informants it contributes to improvement of their skills regard village base activities. Watermayer (1995) refer to Ymker (1991) has also asserted that *“Community participation is based on the premise that in a community there is knowledge, skills, attitudes and resources on which people can build.”* From results it understood that communities have gathered information about cost of each item of activities and they organized meeting among their members, it indicate their active participation in the construction process and development of their skill in administrative, managerial, technical and commercial fields at rural project, which it builds upon the resources of rural community and promote the skills of community and sustainability in development and it encourage the process of participation. (Watermayer, 1995; refer to Davis, 1992)

Construction of project through CDCs have provided job for local people and money transfer to CDCs account have persuaded the utilization of local materials, it supports the potential of entrepreneurship in community, and it considered a cost effective method of construction. if money remained in account of CDC it also goes for the propose of community development projects, which also contributes to economical empowerment of a community. The modality of implementation by CDCs has also encouraged the team approach and social cohesion. (Watermayer, 1995) *Ashar* system of working in community which has been organized by CDCs efforts is an example of team approach and cohesion in community / CDC.

Community ownership is at the heart of the philosophy of rural water supply programs that for success of a project community must be involved in every stages of project, starting from planning of project up to post-construction management of project to fortify the sense of community ownership in project. (water.org, 2011) On that base, according to the Afghanistan WASH policy 2010, 10% cost of the water supply projects have been born on community as their in-kind contribution. This may conclude types of contributions, such as financial or providing of local materials and/or putting in “sweat equity” with physical labor. It shows the participation of community through process of community contribution, which has channeled by CDC. It has also argued that charge of partial capital of a water project on community before

installation is to make a demand filter, and to prevent the construction of water supply projects with low demand priority in the community. (Bakelien and Wakeman, 2009)

The results show that CDCs had control over the construction of water supply project in community and they guide the labor for working as per the design of projects. According to Watermayer (1995) the implementation of project through community contribute to improving the skills of community, and according to definition of participation is show control of CDCs as a main stakeholder over development initiatives and/or water supply projects. (Leeuwis, 2004)

Procurement of equipments and materials for construction of infrastructure and the process of contracting with the suppliers such as raw material provider ...etc are often plagued and graft with corruption. (Malena and Holloway, n.d) According to interviews, it understood that materials and equipments for the water scheme projects were procuring by CDC members and community elders, and the results show that none of CDCs have presented their expenditures to community for having a transparent process and understanding of budget balance by community; Thus, financial accountability is very crucial in the community based projects- specifically it will make sure community on clearness of process. it assumed by community that the CDC-led procurement process may hijacked by the elites from the CDCs, who well get benefit for his own self by closed deal with the raw material provider. Therefore, contributing of the community elders with the responsible person from CDC for purchasing of raw material and providing of detail information in regard to procurement and financial expenditure will make CDCs more responsive to community and it support the CDC-led activities in community, since in Qala Mosli the issue of corruption was a kind of anxiety with the community which it has made a gap between CDC and community.

According to results either a closing and/or inauguration ceremonies which have been organized through CDCs at the beginning or end of project has contributed into enhancement of community understanding regarding the objective and operation and maintenance of project.

5.4. CDC participation in post-construction stage

“.....the necessary components of a demand-driven process differ somewhat depending on whom one asks, but most observers would agree that project

planning should involve households in the choice of technology and of institutional and governance arrangements; give women a larger role in decision making than has been the norm; and require households to pay all of the operation and maintenance costs of providing water services and at least some of the capital costs.....” (Bakelien and Wakeman, 2009; refer to Sara, Gross, and van den Berg 1996; Sara and Katz 1997; Whittington, Davis, and McClelland 1998)

According to WASH policy 2010, partial cost-sharing of the construction and 100% the project operation and maintenance cost has specified as the community responsibilities. (Ru-WATSIP, 2010a) Bases on Ru-WATSIP (2010b) operational manual, every water project constructing in community should have a mechanic/valve-man for repairing of the project and the mechanic/valve-men should be trained from community. The results demonstrate that none of villages had valve-men or mechanics for supervision and repairing of the village scheme project. Bakelien and Wakeman (2009) argued that in community adequate technical, financial and administrative capacity is required to manage the water supply system or to employ with operation and maintenance of the external part of system on behalf of community, which it consider as a factor for sustainability of project. The argument further indicated on the financial capacities in community, while as per the results it found out that none of the CDC has practiced payment for water use in regular bases for covering the maintenance cost of project and payment for valve-man, and empowering the community for being self mobilized. Bakelien and Wakeman (2009) asserted that *“tariff collection and cost recovery to routine operation and maintenance of water supply projects infrastructure is a main factor for sustainability of project.”* as per the informants it understood that during contract of project with CDCs it has officially communicated with CDCs to select a valve-man for water scheme project from community, the technical staff of Ru-WATSIP has trained them regarding operation and maintenance of project, and it has also communicated with CDCs to collect money from water users. But CDCs has not implemented the advice of Ru-WATSIP about valve-men and water use payment after completion of projects, which consider as low participation of CDCs in post-construction stage of project. Burn et. al. (2004) has argued that participation creates social network and social inclusion, and finally leads toward community ownership and makes the community responsible to contribute to the sustainability of services in community.

Women are the main users of the water projects, but results show that they have not been considered in stages of water scheme project. Bakelien and Wakeman (2009) argues that adequate social cohesion or social capital and motivates contributes to sustainability of project and also it has added involvement of women along the men is required for maintenance of water project. According to informants and researcher observation gender is a sensitive issue in Afghanistan which is difficult to make changes in participation of women.

The results show that studies CDCs have not received any type of training regarding the operation and maintenance of water supply projects, except initial trainings which has been conducted by NSP for formation of CDCs and the training provided for one person valve-man (who is now not available) in each of studied villages by Ru-WATSIP. As per the results all villages are cleaning the water reservoir once a year, while they have not performed chlorination for preventive maintenance of project, which this process of cleaning of water reservoir is organized by the village CDC. Based on Bakelien and Wakeman (2009) argument, sustainability of a rural water supply project is consist of the preventive maintenance, spare part availability, community management capacity, users satisfaction and willing to pay for services, continues training and hygiene education intervention.

By observation it understood that participation of CDC / community at the initial stage of project or pre-construction stage was very high until construction stage of project, but after construction stage of project and achievement of the objective (water supply schemes) the participation of CDCs in post-construction stage has decreased; but, as the projects are new, so there has not been any major problem with the 2 water projects after construction.

Conclusions

This section concludes the overall research findings with regard to the research question expressed in chapter 1. It found out that CDCs are village-based institutions which are involved in all stages of rural water supply project in community as detailed below.

It was found that in pre-construction stage of a water supply project CDCs participation have included decision making to identify community problem, prioritize the community-demand project, contribute in design of project such as site and technology selection, providing of information about area / society, choosing of water taps location, and giving information about water sources to surveyor or engineers. CDC members learn on how to implement the project according to design for controlling of the project activities. CDCs collect material/equipment cost information for processing of project contract as implementer of project from community side and make plan of community contribution like 10% capital share of water project, and facilitate provision of land for reservoir and pipes of scheme project.

In construction stage, study projects have been contracted by CDCs. CDCs have implemented the project construction process as per the design of project, procured materials and equipments for project, controlled over the project construction process, made community-based labor plan during construction, implemented project according to activity plan, collected community contribution, such as physical labor or local material and/or financial contribution, reported the activities progress to Ru-WATSIP, accompanied site engineers during project monitoring, took care of construction material during project implementation, followed up the project installments with Ru-WATSIP and related offices and some of the selected CDCs have organized the inauguration and closing ceremonies for improving awareness of villagers about projects.

In post-construction stage of project CDCs contribution was organizing of the community for operation and maintenance of water project. CDC was divide the task and responsibility for the O&M of project, yearly base organizing community for cleaning of reservoir and collection of cash in case of any repair required for the project from community and supervision of project.

The factors which hindering the participation of CDCs in water supply projects were found out that illiteracy among the CDC members – specifically head of CDCs, manipulation of decision

making process in CDCs by their chairperson or warlord / commanders, low participation of women in decision making processes for water supply projects due sensitivity of community, not having regular meetings in CDCs, not presenting of the expenditure balance during or after implementation of project to community that decrease trust of community upon CDC, not taking action and low interest or capacity to convince community for collecting of water users tariff to cover the valve-men and repairing cost (none of studied CDCs have valve-men) , poor contribution in taking action for preventive maintenance of project, and allocation of a specific water tap for chairperson of CDC as observed in studied villages (while one water tap uses for 20-20 families according to WASH policy 2010), and lack of capacity building training and other water supply sector related trainings are the factors which hinders the CDC participation in rural water supply projects.

The factors that support and/or encourage the CDCs participation in rural water supply projects were involvement of community elders in some of CDCs decision making process, which increases the CDCs support through community. Equal allocation of water tap among community and provision of job opportunity during construction of project – specifically the method CDCs organized (poor is in priority of work with long duration of work in project). Moreover, organizing of meetings with community like in inauguration / closure of project provides information about project and CDC plans to community, which contributes in supporting of CDC-base participatory process.

The CDC modality of implementation contributes in ensuring of community ownership and sustainability of rural water supply projects, provides short time job opportunity for rural poor, increases the community skills (administrative, technical , financial) and promotes the sense of entrepreneurship in communities, and the group / team work increase social cohesion and general awareness of community.

In summary, by comparing of this analysis with “Pretty’s participation typology”, it found out that CDCs are self-mobilized institutions in rural communities because they are initiating their projects, they seeks for source of funding and technical advice, they have control over their projects and resources, they represent the community / village through vote. Moreover, structure of CDC is not ending by completion of any project or objective, and they are in interaction with both internal community and external institutions such as government, NGOs,

and other agencies. Thus, according to Pretty's typology of participation CDCs have an active participation in process of rural development in community, but as per the result it comes out shows that in two initial stages of water supply project implementation the CDCs were more active rather than post-construction stage of project.

Recommendations

From the above conclusions and in-relation to the study objective the following recommendations are suggested:

- Illiteracy among the head of CDCs hinders the sound participation process and functions of a CDC and faces the development projects with challenge. Therefore, decision makers at MRRD should consider incorporating criteria for head of CDC in its operational manual or CDC formation procedure that priority should be given to those who are able to read and write. For understanding of proper methodology for solution this issue a detailed study is required.
- Poor participation of women in decision making process in community is another challenge for ensuring of CDC participation in rural water supply projects. Thus, Ru-WATSIP should consider taking action for improving awareness of women through organizing of community based trainings to improve women contribution in decision making process for water supply project, which it contributes to sustainability of a project in community.
- Ru-WATSIP should consider providing trainings on operation and maintenance of projects, and providing capacity building training for improving of CDCs competences for better ensuring of their participation in post-construction stage of water supply projects, such as collection of water user tariffs.
- Availability of a specific water tap for chairpersons of CDC face challenges in community and other CDC member's cooperation with CDC, which it affect on their participation: therefore Ru-WATSIP should consider to do not allow one water point for one family and to control the matter at design and construction stages of project.

- CDCs are recommended that for having continued support of community they have to (1) present their expenditure balance to community, (2) the chairpersons have to hear to all members and community instead of manipulation of them with personal decision. It supports CDCs to present successful projects to your community.
- This research recommends for further study on participation of community in each stages of water supply project-specifically on post-construction stage, since, the community participation in this stage is much crucial for sustainability of project.

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Annexes

Annex 1: Topic list for interview CDC and non-CDC members

Date:

1- Introduction

2- Personal information (name, education, village/district, CDC name, CDC member or not, contact)

3- General information

- Interviewee know Ru-WATSIP
- Type of water project & year of construction
- Beneficiaries of water project (family)
- Functional or not (If not, how long – reason & alternatives)
- Name of machine used
- CDC establishment year

Dimension I: CDC participation in pre-construction stage

4- Decision making process

- Project priority for village (If yes, who asked, role of CDC/if no how initiated)
- Decision-making in CDC. (who, how, power relation, participants, quality of participation)
- CDC Election (how, when, functioning period, leadership of CDC)
- CDC meetings (how often, issues of discuss, atmosphere of meeting or interest, hearing to each other, types of meeting, trainings, community contribution)
- Who is Implementer and owner of project. feeling on it!
- External institutions influence on the CDC decisions (NGO/DDA/Govt)

5- Design of project

- Who designed (based on need/interest of community-requirement)
- Community & CDC involvement in design and planning (place of water point, technology)
- Role of CDC in objective formulation
- water distribution to households (who involved, how)
- Factors caused for changes of design or challenges to design- focus to CDC role
- CDC activities plan for implementation (CDC or Ru-WATSIP – following or not)

- Community contribution such as labor, material, cash assessed in survey (how, CDC role)
- proposes for use of scheme water
- security of project and personal for construction

6- Gender in decision making

- CDC members/sex, women involvement in decision-making for access to water and project location, if not involved how their needs reflecting, women access to water, who fetch water,

Dimension II: CDC participation in construction stage

7- Cash, labor and materials, and cost sharing

- labor provision
- budget of project – how it handle
- Responsible person for the procurement/finance, method for accountability
- Community shares - role of CDC in cost sharing

8- Construction process

- Who involved, CDC responsibility
- if sub-contract, who sub-contracted with what conditions and who monitored

9- Control and monitoring of project

- daily control of project construction and financial control (role of CDC and how they do)
- contribution in monitoring

10- Accountability to community

11- Closure and inauguration of project

12- Monitoring and Evaluation of project

- CDC contributed in monitoring (what, who, how, when)
- Recommendations for improvement in future, (focus to CDC role)

13- Gender – women involve in the construction (CDC as facilitation role)

Dimension III: CDC participation in post-construction stage (operation and maintenance)

14- Tasks

- Regular supervision of project, management of time for water distribution
- Preventive maintenance and treatment

15- Requirements

- Labor provision for maintenance
- Training for the maintenance

- Fund and equipment for maintenance (for major repair and minor repair)
- Tariff on water use
- Breakdown probability in project, causes, who is responsible for repair, who pay
- How protect infrastructure from stolen or what ever

16- Negotiation for facilitation

- Negotiations for O&M in CDC/village
- Receiving support (such as training, spare part...)from GO/NGO for O&M,
- Quantity of project water
- Ability to manage project as a community independently. If no; kind of support need

17- Gender role –women involvement in O&M

18- Problems

- Experience any problem regarding water project, kind of problems causes of problems
- Problems in participation of the community
- Is community participation in water project leads to the effective and sustainable of services
- Influences of local government, DDA or other institution to affect on CDC work (support/hinder)

19- Contrast between existence of CDC and not existence of CDC and its affect on your village

Concluding

- If there is any questions or comment or something else want to say

Thank you very much!!!

Annex 2: Topic list for interview with staff

Introduction

I. Personal information (name, age, position, organization, education level, contact address)

II. CDC participation in pre-construction stage (planning and design) of water project

- Selection process of a water project by CDC
- Your idea on CDC participation and differentiate with community participation
- Steps for funding a project and ensuring project has understood, accepted and institutionalized by CDC
- Communication methodologies employ during different stages of a water supply project
- Role of CDC in planning stage of a project in a village, how CDC participate in planning
- Resources require for facilitating of participatory planning
- problems associated with CDC participatory planning
- Gender in CDC participation process
- Differ between high and low participative CDC

III. CDC participation in construction stage of water project

- Communities contribution (cost-sharing) in water projects
- Role of CDC in managing of community contribution
- Quality of work done by CDC in contrast to construction companies
- Role of CDCs in controlling, monitoring and evaluation of project
- Channeling of project budget through CDC

IV. CDC Participation in post-construction stage (O&M) of Water Project

- Addressing sustainability of a project during the design stage
- Idea about leading of participatory approach to sustainability
- Evaluation of water project after completion of construction
- Facilities providing by Ru-WATSIP for maintenance of water projects

V. Capacity building

- Institutions provide capacity building trainings for CDC, who, how
- Kind of training provided and for who
- Your idea about CDCs, are they empowered enough to carry on the water project activities
- The reason for failing of development projects.

Concluding

Any questions or is there something else you want to say! Thank you very much!

Annex 3: Photos



Picture 1: Interview with CDC member in Qala Mosli village, Farza



Picture 2: Interview with non-CDC member in Qala Karim village, Farza



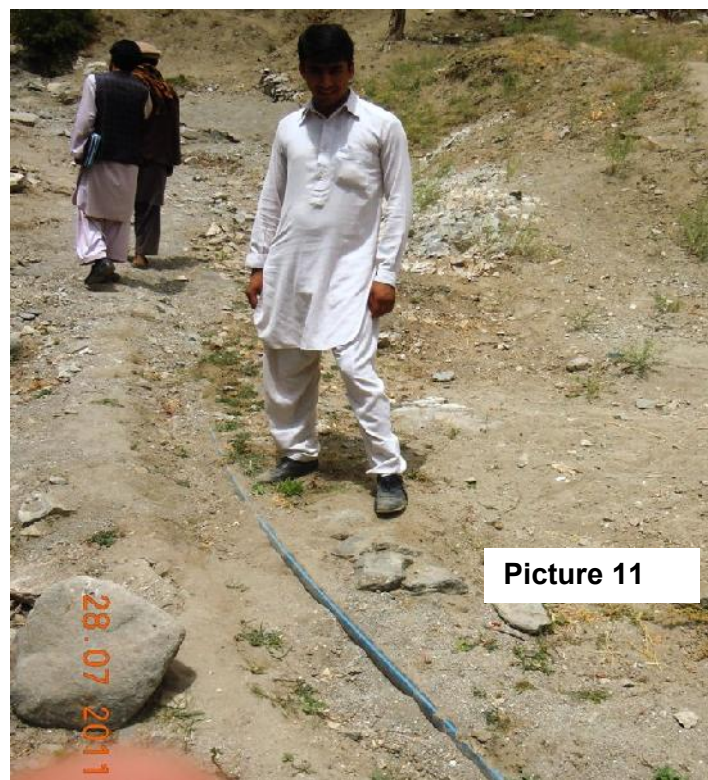
Picture 3: Interview with CDC member in Qala Zargaran village, Farza



Picture 4: Interview with non-CDC member in Qala Karim village, Farza







Picture 9, 10, and 11: Observation from a Kareez system and its connection to reservoir