

## **Involvement of social capital in natural resource management to mitigate water unavailability**

### ***Background and Objective:***

Social capital is often claimed to facilitate collective actions regarding the management of natural resources. People are engaged to perform collective action for performing several activities. Such collaboration has been institutionalized in many forms of local association through clan or kin groups, water users' groups, grazing societies, women's self-help groups, youth clubs, community group (Guthi) etc. The effectiveness of such collaborations or groups are important for sustainable environmental and economic outcomes. The aims of this visit was to explore such groups and understand their activities for managing water sources and sustaining the water supply.

### ***Method:***

Site visit and information collection from key informant through short discussion with the help of Nepalese counterpart The Small Earth Nepal (SEN). From Phase II household survey of SATREPS project, seven sites were selected: Bansbari, Boudha, Chapacho, Chugawn, Khumaltaar, Kumaripati, and Sanepa. These places were selected because the households in these areas had provided information that their community have managed water. A short discussion was held with SEN on 17<sup>th</sup> December 2017 and due to unavailability of some interviewers and some other problems, only Boudha, Chugawn, Sanepa, Kritipur and Khumaltaar were selected.

### ***Results:***

#### **Boudha:**

A community well has been managed by Anandapura committee for last 23 years. Deep well has been established and water is pumped daily and stored in overhead tank. Water is dispensed through tap and open for all people 24 hours a day. Water has been transferred to a bit far place called 'Tinchuli' through pipe and distribute water for 45 minutes at 5:00 AM, 12:00 PM, and 5:00 PM every day.

Anandapura committee is a committee (Tole Samiti) created by the community around the water supply point. All the households and shops contribute small amount of money monthly for regular maintenance of the well and the water pump, and for paying electricity bill. The committee has informally hired a care taker whose responsibilities is to clean and organize area, check and fill the water in storage tank, regulate water daily to the nearby area and to report any problem related with water/well/pump and to support solving the problem.



**Figure 1: Public water space managed by Anandapura Committee, Boudha**

Sanepa:

A dug well has been managed by committee of Ram Mandir temple. The well has been protected from being constantly used by the residents. Every day the well is opened for one hour early in the morning.



**Figure 2 Public well managed by Ram Mandir committee, Sanepa**

Kritipur:*Sim:*

A 24 hours open public water spouts is managed by a community group (Guthi) for more than 6 years. Spring is the source of water. Concrete space for washing cloth and bathing has been constructed by the community group with its own fund. The group is also responsible for the management of the water source and cleaning of the public space and its protection. This public water source served the areas which did not have municipal piped water supply or which have insufficient piped water supply. It was a public water source where most of the people come for washing cloth and bathing. The water is also used for drinking.

Dudhpokhari panch dhara jaladhaar area:

Dudhpokhari panch dhara jaladhar area is a public space of five water spout managed by a youth club named “Dudhpokhar janahit samaj” and lies in ward number 4 of Kritipur municipality. The sources has been there for more than 35 years and the youth club funded and managed to construct water spouts and concrete space suitable for bathing and washing cloth . The club raises fund doing charity show and with local residents for regular maintenance and sustainability of the public space. It has hired a person for regular cleaning. Local area does not have municipal piped water supply. So, this water source is the only water source. The water source is open for public also and people as far as Chobhar which is at 5 km distance from the area come for washing cloth and bathing.

The youth club accepts that forming such group and performing collective actions is advantageous compared to other water shortage areas which lack such coordinations. For example, people from Gamcha and Salyantham which are part of Kritipur municipality and are around 3 and 4 km distance, respectively, come to Dudhpokhari panch dhara jaladhara for fetching drinking water and for washing cloth and bathing. On the way back, we happened to meet a woman who was from Gamcha and filling water in more than 20 bottles (Figure 3).



**Figure 3 A woman from Gamcha area (3 km far from Dudhpokhari) filling water bottles**

The biggest challenge the youth club is facing is time and again encroachment of the water sources and sometimes with political involvement. Nevertheless, the youth club is fighting such intrusions with full support from local residents and maintaining the public space. The youth club has formulated and implemented the rules to maintain the cleanliness and avoid antisocial activities of

the visitors (Figure 4).





**Figure 4** List of rules formulated by the youth club

#### Khumaltaar:

Community welfare committee in Khumaltaar has constructed deep well to mitigate water shortage in the community from last three years. For two years now, it has tie up with KUKL in order to make the water supply from the deep well easy. Now, the water from the well is pumped and distributed on regular basis to the community households through pipe line that KUKL uses to supply municipal water. The committee collects annual fund from local people and also collaborates with KUKL and Oxfam which is an international confederation of charitable organizations focused on the alleviation of global poverty. KUKL provides salary for staff who is responsible for regulating water supply, pumping water and maintenance and Oxfam has funded for buying generator and construction of building.

The biggest challenge the committee is facing is the improvement in water quality. It has been looking for the collaboration with some agencies for installing the treatment plant.

#### **Conclusions:**

The water shortage has been chronic in the Kathmandu Valley. And, social capital in the form of groups of different kinds are now active to manage natural water sources and distribute to public in close or open circle in order to lessen the water scarcity. Local residents are also strongly participating and coordinating with the social capital specially for funding which is a basic requirement for the sustainability of the water sources. Although there is an example of agencies such as Oxfam and KUKL to support such social capital such collaboration appeared to be rare in the valley. The main support for social capital is from enthusiastic local residents. We also observed encroachment with political involvement as well as water quality as bigger challenges for the social capital to manage and sustain the water sources. Nevertheless, social capital has managed water resources and served countless water scarce households. This short research work has revealed ample possibilities to lessen water scarcity by using such social capital to manage available water resources.

***Acknowledgement:***

We would like to thank The Small Earth Nepal (SEN), especially Mr. Niranjana Bista for the immense coordination. We are also grateful to Ms. Sushma Shakya and Mr. Akira Nishikori for their help.