

Practice of Good Governance in Irrigation System Management: A Case Study of Bijayapur Irrigation System in Nepal

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ABSTRACT: This article, in nutshell, describes the good governance practice implemented in irrigation system management in Bijayapur Irrigation System. The overall objective of this article is to describe the good governance practice in irrigation system management. Specifically, this article analyzes the different key elements required for good governance practice in irrigation management. Study findings, in relevance to the characteristics of the study area, found to be positively supportive to the required elements to be good governance in any irrigation system management. In short, it can be concluded that the practices of good governance in Bijayapur Irrigation System Management are satisfactory but still need to be improved to achieve completely.

INTRODUCTION

The term governance, in any organization, is directly or indirectly related with the development practices prevailed. But, in sociological studies, the term development is more used to distinguish the status of the local communities, based in the practices and tradition for governance of the organization. As water being considered as common property, the governance of water was based on the same reflection. The term development was widely used in 20th century and was considered as the apt tool for bringing the transformation in that time societies, which were considered as traditional and or underdeveloped societies. The word development was used a technique to bargain with international or western communities for gaining foreign aid or assistance from so-called modern societies. The development was a main agenda for more than half of the century, in social

science literature. This effect might be due to the changes in concept brought by Second World War. The so-called development activists coined this word for making the strategic plan in traditional and indigenous societies and gradually their tradition and practices for water management lost importance and value.

Cambridge dictionary (2016) defines governance as “the way that organizations are managed at the highest level and the system for doing this”. Literally, governance reflects the art or the system of managing any organization, based on its objectives and or mandate, at optimum performance. David Korten ('90) stated “development is the process by which the members of a society increase their personal and institutional capacities to mobilize and manage resources to produce sustainable and justly distributed improvements in their quality of life consistent with their aspirations” (Korten,'90:67). The concept of “governance” an old concept but it differs from person to person and actual meaning depends on the level of

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governance of concern, the goals to be achieved and the approach being followed.

The word “good governance” in recent times has been widely pronounced all over the world although what it actually is has not been defined. In another word, a world widely accepted definition about good governance has not come into existence as the definition is being different according to the condition and assumptions. Good Governance word was first time coined in 1989 by World Bank in its report on “Sub-Saharan Africa: from Crisis to Sustainable Development” (World Bank, ’89) as “Accountability is at the heart of good governance and the effective voice of local people could best be increased by permitting greater freedom of associations in various NGOs”.

Similarly, there are different dimensions of good governance. These dimensions can be categorized as Political, Managerial, Moral, Social and International aspects. The political dimension of good governance is mainly concentrated in the mobilization of the public. This insures the interest of diversity or inclusion, ensured fundamental human right, rule of law, independent judiciary, independent journalism, public accountability etc (Khadka, 2006).

United Nations in first Water Development Report (United Nations, 2003) stated that the “water crisis is essentially a crisis of governance and societies are facing a number of social, economic and political challenges on how to govern water more effectively”. Water problems, in reality, are very complex and cannot be solved easily. A drastic reform in policy and development and inclusion of interdependent stakeholders in policy formation may bring achievable solution of the common ground.

NEPAL: SOCIOLOGICAL ASPECT OF DEVELOPMENT AND GOOD GOVERNANCE PRACTICES

Before 1950, Nepal was isolated with rest of the world and has relation with India and United Kingdom only, that we can find in its sociological history in between the unification (1769) time to the end of the Rana regime. After 1950, and end of Rana regime, Nepal got exposure to the outer world and got familiar with the changed concept, thinking and practices

which were brought up indirectly due to Second World War. When Nepal was in transition stage from one regime to another regime, the world was dominated by the concept of modernization. The end of Rana Regime opened the access of foreigner in Nepal. They came in our country and carried out different ethnographic study of different cultural and ethnic group. This helped them and us, of present generation, to know about our history and condition of ethnicity and ethnological development or any succession, if present. This helps to study the culture of our past history. Despite of such ethnological study, no significant sociological study was carried out. The lack of proper vision of the rulers or the prospective to view the sociological development or any development activities through the eye of donor or in simple word imported vision of development always neglected the sociological study of multicultural society of Nepal. The formulation and implementation of five-years development plans also failed to consider the importance of sociological study. Similarly, while conducting the unified development activities, the sociological study of the place used to be carried out through the view and involvement of the economist not through sociologist. Because of such conceptual error and scarcity of the micro vision, such studies always analyzed and reported the sociological problems in economic view. Only economic development, as a trend and tradition, was considered as the solution and right tool of development. But the major factor which helps to study, analyze and suggest the remedy of the problem, a sociological study, was always under sighted. This, as we know now, is not the appropriate solution but is an approximate solution only. Because of this, many development activities carried out do not produce the fruitful result leading those successful development approaches in other countries to be failed in context of Nepal.

In Nepal, governance of Ram Shah, King of Gorakha, is stated many times in different literature as a standard for evaluating the government in present time. King Pratap Malla, a historical king of Kathmandu Valley, is also credited for his good governance system in history of Nepal. Nepal is primarily an agrarian country and she is one of the least developed countries among the South Eastern Nations of Asia and also among the group of SAARC

countries. Agriculture plays a vital role in generating more than one half of the household income and it provides employment to over 80% of the population. Water is one of the primary resources of Nepal. People have been utilizing the water resources in agriculture through the construction of irrigation system for centuries. Nepalese farmers have recognized the importance of water resources for centuries and have been constructing irrigation systems at their own initiative to intensify their agricultural production. Irrigation development in the country remained in the hands of the people for many years.

It is estimated that there are over 17000 surface irrigation systems covering 6111,000 ha while there were over 16000 farmer-owned shallow tube wells commanding 64000 ha. As compared to 275,000 ha being operated and managed by the government through Department of Irrigation, Nepal. It is also estimated that about 45% of cereal crop requirements of the nation is met by the increased production from farmer-managed systems. This is attributed to Nepal's peasant community efforts to prevent the influence of droughts and meeting water requirements for increased cropping intensities (Ansari and Pradhan, '91).

Water governance is a complex and challenging aspect as it has several characteristics. Water has an emotional and often spiritual attachment for many users. Rivers, lakes, ponds, aquifers etc. are often considered as common property and when one member of a group uses it, it is not available for others and it is possible by any member to stop others getting access to it. There is no certainty of same amount and quality of water will be available every year. Because of these all, governance, especially, good governance is a present demand in water resource management. Good governance is an essential aspect of the irrigation water management. Good governance in irrigation system requires different aspects like transparent system, participation in decision making, social inclusion, broader participation among the diverse stakeholders, consideration of multiple dimension of water use, clear vision of what is needed and what is the goal of the system.

METHODS OF STUDY

Out of 749 total households in study area, 75 (10%) of households were selected using probability

sampling method under social science research. Furthermore, the sampling was carried out in stratified random sampling method as both canals are divided in to three strata head, middle and tail. Total 5 landless household were also included purposively to make the study more inclusive. The sample households contains 10% of the total households in the study area. While selecting the sample households from each strata of the each branch, 1 women and 1 marginalized group was selected after due consultation with key informants in order to make it more socially inclusive.

FINDINGS AND DISCUSSION

Rule of the Law

The rule of the law in irrigation management is not the self establishing procedure. It should be established by each members of the WUA (Water User's Association). For this each member should identify whether the required legal provision exists or not in the constitution and bylaws and should act for its proper implementation if exists. While carrying out the perception analysis of respondents about the rule of law followed and practiced by WUA of BIS (Bijayapur Irrigation System, it is functioning in Pokhara valley of Kaski district of Nepal). It has been found that majority of them respond saying yes. It is also fact that their perception gradually being negative from head part towards the tail part. This might be due to the allocation and distribution difference of water from head to tail region of the canal.

In irrigation management, the 'rule of law' written on paper, i.e. the articles of the Constitution of Water User's Association (WUA), may look practicable and easily self establishing procedure. But in reality it is not so. These rules and regulations need to be observed and owned by each members of the community. If it is accepted and observed by the community then only the rule of law according to WUA Constitution becomes successful. Hence in irrigation management strict observation of the WUA Constitution is required for smooth functioning of the system.

Participation

Participation should be in the process of the formulation of the constitution, rules and bylaw of

WUA, for the preparation of annual program and plan, canal maintenance, decision making process, resources collection and mobilization, conflict resolution, formation of WUA, monitoring and evaluation of the program. The participation WUA should be inclusive of different gender, poor, marginalized, dominated, class and ethnicity, government and non-government organizations, supporting organizations and different committee members and water users. This analysis of respondents' perception about participation also reveals that WUA of BIS has participatory principle in decision making process and other activities. The increase of positive response gradually from head to tail region has been influenced by their role and participation in *jhara* (local terminology used to indicate compulsory labour to be provided for repairing and maintenance of all canal structures in proportion to land holding) where head region people show less interest than middle and tail.

Accountability

WUA should be accountable towards to all water users in all related works carried out by using its fund. Water users hold the right to ask question related to canal maintenance, water distribution, resource collection and mobilization and office management and the respective committee member should answer it. The representative of WUA should be accountable towards farmers. Farmers of command area, even he/she is not the member of WUA, holds right to ask question regarding what and why that particular work is carried out and committee members are accountable to answer it. Accountability is very important as it helps to accomplish responsibility very sincerely. It also makes representatives aware about their work and responsibility. It also helps to complete the work in designated time with active involvement of all concerned. It helps to maintain discipline and good governance.

It is important to mention a lesson learned from a agency managed irrigation System, Bagmati Irrigation Project located at mid terai region in the sense of participation and accountability. According to Sah and Tripathi (2006), the canal systems were damaged by the devastating flood in 2004 where government has not in the position to get the system

repaired and run. The users themselves motivated to undertake this work and became successful. The success story is followed by the unification of members of WUA to provide *shramdan* (free labour to be provided for maintenance works irrespective of land holding size, usually in emergency cases and maintenance works as in flood damage) by active participation of the users and the entire system was successfully repaired and made functional within 3 weeks. This shows how much the accountability and participation is important for good governance in irrigation management. The analysis of respondents' perception about accountability reveals that WUA of BIS is more accountable towards water users. Similarly, it also clears that different committees are respectfully accountable to each others. The variation in perception is according to the services and information obtained by them from WUA committees.

Transparency

The transparency in WUA is required to formulate constitution and policy and rules, prepare annual program and budget. Similarly it is required in income and expenditure, work and responsibilities of executive members, activities carried out from WUA, its decision procedure and property. Transparency is also needed in election procedure of the executive members and their terms and conditions. Transparency helps to make WUA accountable and to implement the policy and rules properly. BIS has another component transparency. Majority of the respondents confirm its existence indicating the good governance practice in irrigation system.

Predictability

Predictability helps to guarantee the policy, rules and procedures of WUA are in users' benefit. It also helps to insure that the organization does not discriminate among the users and treats all in equity and justice. It helps to prove that executive members are clean, transparent and in good moral ethics and also helps to establish the belief that the work carried by the WUA will be effective. The predictability in WUA should be in policy, rules, ethics, procedure of work, behavior, attitude etc. This predictability should be in all main, branch and sub-branch executive members and staffs of WUA. It should be in action

and procedure of the execution of the work. Majority of respondents say yes to the predictability of WUA of BIS. Still many respondents think it does not. It indicates that still there is gap in policy implementation or information dissemination from different committees to water users.

Equity

The equity in the irrigation management helps in the distribution of the available scarce irrigation water based on the condition and requirement of soil, crop, weather and climate and head/middle/tail region of the canal. It also helps to levy the required fee for water users based on their condition of water use and paying capacity. It is also helpful in mobilization of resources, maintenance of the canal and decision making procedure based on the condition and requirement. The analysis of respondents' perception about equity reveals that WUA of BIS has equity in water distribution, as supported by majority. But the increase in negative response from head to tail region indicates the unequal water allocation in between head, middle and tail region of the canal.

Decentralization

WUA is an autonomous organization within the command area ruled by the elected representatives of the farmers. It has the independent right to make policy, rules and implement it within the command area for the operation, management, maintenance and development of the irrigation system. Such right is constitutionally legalized after its registration in concerned authority. So, to carry out its activities, the decentralization of the power and right from higher level (committee) to the lower level (committee) is required. The decentralization should be to provide reliable and effective irrigation service to the water users. It should be to decide in the favour and benefit of the local concerned stakeholders. It is also required for sustainable planning of the system and to mobilize the resources. It is required to solve the conflict in local level that will arise during distribution of the water for irrigation and other related matter. The analysis of respondents' perception about accountability reveals that there is proper decentralization practice in WUA of BIS with further more space of its improvement. Their response helps

to correlate the actual condition in practice which is in compliance with its constitutional provision.

Knowledge About Water Users' School

More than 90 per cent of the participants of BC3 (Branch Canal Number 3) and BC4 (Branch Canal Number 4) were found aware about the water users' schools running in their area. They acknowledged that they know 1 major and 3 minor WUS (Water Users' School) running in each branch canals. But their knowledge about such school was not directly from their own participant. Some agreed that they know it as they participated where as majority said that they know because of their family members or fellow farmers expressed about it. Interestingly, it was found that more than half of the participants of the FGD (Focus Group Discussion) were participated themselves or their at least one member of their family participated in such schools but their knowledge about the awareness towards the activities of WUS was very less. Less than 20 per cent of the participants were only able to know about it. Such aware farmers of both branch canals express the most impressive activities of WUS were about good governance, resources mobilization, control of waste products throwing in canal, irrigation management and its organization, proper use of fertilizers, water distribution on rotation basis etc.

Total 3 FGDs each were conducted 1 from each head, middle and tail part of BC3 and BC4. In BC3, about 93% participants were aware about the existence of the WUS in their area. About 80% appraised that the schools discussed about the agriculture and proper and productive use of irrigation water with modern transplantation technique, not to use excessive and unnecessary fertilizers and pesticides in the field. They also revealed that the WUA was inactive before WUS and now being active in different aspects. Similarly in BC4, 91% agreed on that they know about the WUS in their area. All participants agreed that they have got knowledge of agriculture and irrigation water usages either from family members or from fellow farmers. Their expression was similar to the expression of the farmers of BC3 in all respects.

Perception Towards the Impact of WUS in Practice

Regarding the activities of the WUS, 50% of participants from BC3 and 48% from BC4 have

claimed that the activities of the WUS are beneficial for both agriculture practices and proper use of irrigation of water. Rest of the participants claim that it could be more beneficial if the further and detailed information of the future plan and activities of WUS are known. But they allegedly agreed that the awareness level of the farmers has been improved after WUS. Besides, attitude of waste disposal in canal has also been greatly improved and the feeling of the ownership also has been improved. WUS has greatly influenced the participation of women to increase drastically. They also revealed that, the proper and timely maintenance of the canals is also very important for the effective use of the irrigation water.

In operation and management of BIS, overall impact of WUS is successful to raise awareness of WUA and farmers at local level about the importance of maintenance work. But the development of maintenance plan, resources generation and implementation are yet to be practiced in field. In institutional case, rules for rotational water distribution in lower part of each branch canals have been imposed. For maintenance work, general farmers have knowledge of coordination remained with BC (Branch Canal), main WUA and concerning line agencies.

Awareness and Participation Level in Water Users' Organization

In case of the awareness and participation in WUA and BCC (Branch Canal Committee) less than 10% of participants, in both BCs, showed their knowledge regarding the existence of WUA and BCC and their roles, responsibilities and rights. But it is interesting to present that in both of the branch canals (BC), about 40% of the participants have limited knowledge of the members of the WUA which is limited to the Chairman, Vice-chairman, Treasurer and Secretary. It revealed that, the existence and importance of other members were not properly understood. Similarly, they were not aware completely on their own rights, responsibilities and duties and accountability towards the irrigation system being the beneficiary of it.

Contrary to farmers of head parts, farmers of middle and tail part of BC3 and BC4 were aware of their obligations and some basic rules and regulations

for repair and maintenance of the canal. The rules and regulations adopted for maintenance and water distribution are based on the basis of their knowledge and participation.

Knowledge and Participation in Irrigation Management

Farmers of both canals have agreed that WUS has served a lot in imparting the awareness to farmers about the identification and priority ranking of issues related with irrigation water management, irrigation needs of crops, and method of improved cultural practices for rice. However, they have not yet been able to implement completely those learned activities in their field.

The analysis of the data obtained properly revealed that the distribution of the water for irrigation has not been made equitable till now. As absence of rotation, as more privilege, in head part of both BC3 and BC4 whether they need water or not is a biased management system. The rotation of middle part of each branch canal is also not same. Similarly, those farmers of tail part of both of the canals are suffered more from such management as, according to them, it requires 1.5 hours to reach water from control gate to the tail part and they get very less time to irrigate their land. Similarly, during harvesting time, excessive water is drained to the tail part, as water demand in harvesting time is very low, being tail part as discharge to the river, most of their crops are damaged and cannot harvest properly.

The control gate of each branch and sub-branch canals are controlled by the Dhalpas by opening and closing the gates. Dhalpas (a person who operates the opening and closing of different gates that are built in main canal, branch canal and tertiary canals) are appointed by the irrigation office. The necessary repair and greasing of the outlets and control gates is done or provided by them to WUA and farmers. Besides, participation in assembly and committees meeting, farmers have no active and proper role in irrigation water management except in repair and maintenance.

CONCLUSION

The implication of the social structure in Bijayapur Irrigation System (BIS) has been found as

an important aspect for irrigation water management in prospective of good governance. The practice of good governance is being fundamental in BIS as major characters of sustainability is present, even though, it cannot be confirmed that such prevailing practices may lead towards the total sustainability. There exists the less awareness among the water users for its sustainability, organizational functions and development and the roles of the water users, executive members and their responsibility too. The unsolved issue of equity between water users of head, middle and tail regions still exists significantly. This is significantly causing the goal of good governance being still far to be achieved properly and perfectly. Major efforts should be given concerning to solve the problem of equity in the study area in coming time and space.

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