

Irrigation Water Crises as Causes of Conflict among the Farmers of Tehsil Kabirwala

Irfan Ahmed ^{1*}, Muhammad Sajjad², Irfan Ghafoor³, Imran Qaisar⁴

^{1,3}Department of Rural Sociology, Faculty of Social Sciences, University of Agriculture, Faisalabad-38040, Pakistan.

^{2,4}Department of Sociology, Bahauddin Zakariya University Multan, Pakistan.

*Corresponding author: email: irfansahu92@gmail.com

Abstract

Lack of water for farming has turned into a significant issue in Pakistan and has not been determined acceptably. It has created much sharpness among the areas and between the central government and territories. The water issue has brought about making awesome doubt among the deficiency areas. Therefore, this study was planned to assess tenacity of the canal water issues. The population of the study were farmers of four different Union Councils of Tehsil Kabirwala. The quantitative research methodology was used to collect the data. First of all four Union Council (Jasso Kanwain, Choprrhatta, Baqar Pur and Kotgohar Muhammad) were selected through simple random sampling. Eight villages (two from each UC) were selected through simple random sampling technique. 200 respondents (25 from each village) were selected using simple random sampling. At the last stage a sample size of. Information

was gathered through a well-structured interviewing schedule. Most of respondents who had approved irrigation canal water from the department and 19.0 per cent of the respondent had not facility of irrigation canal water. Most of respondents who got their canal water in time occasionally. Most of respondents were satisfied with the role of irrigation department to at some extent because there is some mismanagement, lack of monitoring and corruption causes problem. There was also seems conflict among the respondents and department. So there is a need to enhance awareness rising programs among Farmers, Irrigation water facilities and equally distribution of irrigation water for the farmers to control crimes and conflicts among the farmers. NGOs can launch some awareness rising programs that will help to decrease the problems related to irrigation water and conflict among farmers.

Keywords: Cana Water Distribution, Canal Water Crises, Social mismanagement, Conflict in Farming Community, Rural Sociology.

Introduction

Water shortage and clashes are side effects of a developing hole in middle of interest and supply of water. These side effects , which are as of now obvious in a few districts in India are prepared to take a national area and can turn into a changeless piece of the water division in the nation , unless you rapidly take proper arrangement measures to oversee request and supply water at distinctive levels. Interest for water is becoming quickly because of the fast development of populace and monetary movement, yet the water supply is not developing at the same rate as after effect of the genuine budgetary and physical cut-off points to expanding supply. Created water assets as of now add up to around 680 km³, which speaks to 61 % of the usable capability of 1122 km³. Be that as it may, it is hard to offer past this level to the high cost and natural concerns interstate water clashes (Saleth, 2011).

Most master and open talk on Middle Eastern water governmental issues holds that water shortcomings are of awesome, if frequently under-perceived, geopolitical significance.

Cynics and self-assured people alike have a tendency to accept that water has, or soon will have, significant geopolitical ramifications. In this paper I contend actually. In particular, I battle that water issues ought to nor be comprehended in naturalistic nor in liberal-specialized terms, yet rather as inquiries of political economy; that water is basically irrelevant inside the political economy of the present day Middle East; that in outcome water is by and large immaterial as a wellspring of between state strife and co-operation; and that, despite this, water supplies are a vital site and reason for nearby clashes in numerous parts of the locale. I submit additionally that given the declining condition of financial advancement inside the Middle East, these neighborhood struggle elements are liable to encourage break down (Selby 2005).

Universal stream bowls have ended up reproducing justification for clashes among riparian states. The major customarily talked about components of contention around universal waters have been the riparian structure related advantages and detriments, sway notions, upstream-downstream wandering interests and provincial force chain of command. In any case, these elements are genuinely steady for a drawn out

stretch of time in a given bowl. These geopolitical or "space" driven clarifications allot an excess of accentuation on areas, consequently draw uniplanar and almost permanent conclusions. The bowl states, rather than being aloof beneficiaries, continue collaborating over assets as greedy political units for maximizing their net advantages. This paper examinations these collaborations through the case of Ganga water question between the two co-riparian countries - India and Bangladesh (Rakesh Tiwary 2006).

It is clear from the activities of India and Pakistan that global law and worldwide legitimate foundations have assumed an insignificant part in managing their conduct. One is compelled to accommodate to the way that no global lawful arrangement is conceivable to the Kashmir issue, and endeavors at a military solution have just brought about overpowering death toll and deplete on assets. In this manner, the main way ahead is by all accounts a coordinated political exertion requiring thoughtful arrangements between the authorities of the two states. Overseeing profound established clashes requires far-located authority. Transaction turns out to be especially troublesome when the pioneers arranging the

contention are the individuals who have incited or kept up the contention. It obliges pioneers to forego transient increases for the long haul advantages of their nation. This may include one-sided concessions with respect to India which may affect Pakistan to relinquish its irredentist claims on Kashmir and assemble trust.¹³⁴ Such a change must be realized by a purposeful exertion of the administration of India, Pakistan, and Kashmir, who need to approach the arranging table with "adaptability" and apply an "integrative methodology" to transactions (Vaish 2011).

It is stated that the water assets of the republics of the previous USSR, and particularly those in Central Asia, audits the ebb and flow condition of the Aral Sea Basin water asset concerning supply, utilization, and the lawful/institutional structure administering its utilization. All the more particularly, he inspects water assets and administration in the Aral Sea Basin with the end goal of surveying the potential for either interstate clash or participation among the bowl states (counting Afghanistan and Iran). The creator investigates moves that could be made to upgrade water accessibility in the bowl and the status of flow structures for

interstate administration of key shared water assets (Micklin, 2002).

It is defined that China has been confronting progressively serious water lack, particularly in the northern part of the nation. China's water shortage is portrayed by inadequate neighborhood water assets and additionally lessened water quality because of expanding contamination, both of which have brought on genuine effects on society and the earth. Three elements add to China's water lack: uneven spatial circulation of water assets; fast monetary improvement and urbanization with a substantial and developing populace; and poor water asset administration. While it is about difficult to conform the initial two components, enhancing water asset administration speaks to a financially savvy choice that can reduce China's helplessness to the issue. Enhancing water asset administration is a long haul errand requiring an all-encompassing methodology with consistent exertion. Water right foundations, market-based methodologies, and limit building ought to be the administration's top need to address the water lack issue (Jiang, 2009).

It is stated that the principle differences might be the consequence of contentions between vast scale and little scale irrigators, upstream

and downstream clients, local water use and different uses (horticultural, mechanical, domesticated animals and civil). In addition, there are clashes amongst modern and maintainable ecological administration (i.e. contamination and ecological security and biological community administration) and rural and modern uses such as power era (Mbonile, 2005).

Objective

The main objectives of the research are;

- To study the nature and extent of the canal water crisis.
- To study the nature of conflicts among the farming community due to water crisis.
- To suggest measures in light of findings to dissolve water crisis and conflict among the farming community.

MATERIALS AND METHODS

Study Area

The study site selected for this research was Kabirwala tehsil of district Khanewal through simple random sampling. Four union councils were selected using simple random sampling technique. Then eight villages (two

from each UC) were selected through simple random sampling technique.

Sample Size

Sample can be defined as accurate envoy of the population, which has all the characteristics of preferred population. 200 respondents (25 from each village) were selected using random sampling technique from the study area.

Data collection:

Construction of data collection tool

Social science deals with human nature, Feelings, emotions and minds of human being. To study all these factors it was compulsory that data collection tool was very accurate and reliable. Interview schedule was prepared with open and close ended questions to collect the data from

respondents. It was structured to get all the required information from the respondents.

Interviewing the respondents:

Interview was conducted from respondents to collect facts. The investigator himself interviewed each respondent to make sure unbiased response and then rechecked each questionnaire for accuracy and uniformity because it was very difficult to approach the same respondent at any subsequent stage.

Analyzing of data:

Collected data was analyzed using the Statistical Package for Social Sciences. Descriptive statistics, including frequencies, percentages, means and standard deviations, were used to summarize different variables. Data was interpreted with the help of a computer software i.e. statistical package for social sciences.

Results and Discussions

Table 1

Percentage distribution of the respondents with regarding to means of irrigation water

Categories	Frequency	Percent
Canal water	40	20.0
Tube well	46	23.0
Both	114	57.0
Total	200	100.0

Table No. 1 showed the means of irrigation water by which famers irrigated their agricultural land. It showed 20.0 percent of the respondents irrigated their land through canal water, 23.0 percent of the respondents irrigated their land through Tube well water,

while 57.0 per cent of the respondents irrigated their land through both means of Tube well and as well as canal water. The majority of the respondents were used both means of irrigation water to irrigate their land.

Table 2

Percentage distribution of the respondents regarding to Category of canal

Categories	Frequency	Percent
6 Month	68	34.0
Annual Canal	70	35.0
Any other	62	31.0
Total	200	100.0

Table No. 2 showed the percent distribution of the respondents to category of canal by which they used irrigation water and irrigate their land. It showed 34.0 percent of the respondents belonged to 6 month category of canal water, 35.0 percent of the respondents belonged to annual category of canal water, while 31.0 percent of the respondents belonged any other category to used

irrigation water system. There was not equal percentage of 6month and annual category of irrigation water which showed discrimination among the farmers lived same District. So, above category causes conflict among the farmers and sometimes among the people and government and also causes a large number of crimes.

Table 3

Percentage distribution of the respondents with regarding to your opinion about water shortage now a day

Categories	Frequency	Percent
To a great extent	90	45.0
To some extent	66	33.0

Not at all	44	22.0
Total	200	100.0

Table No. 3 showed the present condition and opinions of the respondents regarding to water shortage now a day. Above table showed 45.0 percent of the respondents were of the opinion that there is water shortage now a day to a great extent, 33.0 percent of the respondents were of the opinion that there is water shortage now a day to some extent, while 22.0 per cent of the respondents were of the opinion that there is water shortage

now a day to not at all. The opinions of the majority respondents were that there is a great extent of water shortage now a day because, it is a real problem not only in Tehsil Kabirwala but the problem of the whole world and there is shortage of irrigation water at a highly level. It is a big problem of the farmers of the Tehsil Kabirwala because it is an agricultural area and its development is based upon irrigation water.

Table4

Percentage distribution of the respondents with regarding to satisfaction with the role of irrigation department

Categories	Frequency	Percent
To a great extent	46	23.0
To some extent	56	28.0
Not at all	98	49.0
Total	200	100.0

Table No. 4 showed the percentage of the respondents regarding to satisfaction with the role of irrigation department. Table showed 23.0 percent of the respondents who were satisfied with the role of irrigation department to a great extent, 28.0 per cent of the respondents were satisfied with the role

of irrigation department in their area to some extent, while 49.0 percent of the respondents who were not satisfied with the role of irrigation department. According to 49.0 per cent of the respondents that there were not paid their duties well. So, majority of the respondents were not satisfied with the role

of irrigation department because there are some mismanagement, lack of monitoring

and corruption causes problem and conflict among the respondents and department.

Table 5

Percentage distribution of the respondents with regarding to irrigation water as a cause of conflict among farmers

Categories	Frequency	Percent
To a great extent	74	37.0
To some extent	96	48.0
Not at all	30	15.0
Total	200	100.0

Table No. 5 showed percentage of the respondents regarding to irrigation water as a cause of conflict among farmers. Table showed 37.0 per cent of the respondents who were of the view that irrigation water as a cause of conflict among the farmers to a great extent, 48.0 per cent of the respondents who were of the view that irrigation water as a cause of conflict among the farmers to some extent, while 15.0 per cent of the respondents

who were of the view that there irrigation water is not cause of conflict at all. So, according to the majority of the respondent that there is conflict and crimes among the farmers due to irrigation water to some extent. So, as the demand of irrigation water is increasing, the problems and conflict among farmers are also increasing day by day.

Table 6

Percentage distribution of the respondents regarding to conflict among farmers caused by mismanagement of irrigation system

Categories	Frequency	Percent
To a great extent	82	41.0
To some extent	98	49.0
Not at all	20	10.0

Total	200	100.0
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Table No. 6 showed the percentage of the respondents regarding to conflict among farmers caused by mismanagement of irrigation system. Table showed 41.0 per cent of the respondents argued regarding to conflict among farmers caused by mismanagement of irrigation system to a

great extent, 49.0 per cent of the respondents argued regarding to conflict among farmers caused by mismanagement of irrigation system to some extent, while 10.0 per cent of the respondents argued that there is not conflict among farmers caused by mismanagement of irrigation system.

Table 7

Percentage distribution of the respondents with regarding to irrigation water crisis leads to water theft

Categories	Frequency	Percent
To a great extent	98	49.0
To some extent	72	36.0
Not at all	30	15.0
Total	200	100.0

Table No. 7 showed the percentage of the respondents regarding to irrigation water crisis leads to water theft. Table showed that 49.0 per cent of the respondents were agreed that irrigation water crisis leads to water theft to a great extent, 36.0 per cent of the respondents were agreed that irrigation water

crisis leads to water theft to some extent, while 15.0 per cent of the respondents were not agreed that irrigation water crisis leads to water theft. Majority of the respondents were agreed to great extent because it is a serious problem.

Hypothesis 1: Higher the intensity of water crisis higher will be the impact on economic conditions of the respondents.

Table 8: Association between water crises and economic impact.

Economic impact	Involvement in water crises		Total
	Yes	No	
Not at all	34	35	69

	49.28%	50.72%	100.0%
To some extent	46	32	78
	58.97%	41.03%	100.0%
To a great extent	30	23	53
	56.6%	43.4%	100.0%
Total	110	90	200
	55.0%	45.0%	100.0%

Chi-square = 0.467

d.f. = 2

Significance = .792^{NS}

Gamma = .020

The chi-square value 0.467 shows a non-significant association ($p=.792^{NS}$) between involvement in water crises and economic impact. The gamma value (Gamma = 0.20) shows that there is a positive relationship between variables (While Gamma value shows a positive relationship between the variables). So the hypothesis “Higher the involvement in water crises higher will be the economic impact due to water crises” is rejected.

Conclusions

Most of respondents were facing water shortage now a days because, it is a real problem not only in Tehsil Kabirwala but the problem of the whole world and there is shortage of irrigation water at a highly level. Most of respondents who had approved irrigation canal water from the department and 19.0 percent of the respondent had not facility to irrigation canal water. Most of respondents who got their canal water in time

occasionally. Most of respondents were satisfied with the role of irrigation department to at some extent because there were some mismanagement, lack of monitoring and corruption causes, problems and conflicts among the respondents and department.

Most of respondents were agreed about this conflict and crimes among the farmers due to irrigation water to some extent. Most of the respondents were satisfied to some extent because there were some faults and mismanagement in the irrigation department. Most of respondents were agreed that irrigation water distribution causes crime among the farmers. Most of respondents were agreed that over population causes irrigation water conflict to some extent. Most of respondents agreed that irrigation water crisis cause of conflict among farmers to some extent because it is a serious problem in our society. So there is a need to enhance awareness rising programs among Farmers,

Irrigation water facilities and equally distribution of irrigation water for the farmers to control crimes and conflicts among the farmers. Media can play an effective role in the awareness rising among farmers to decrease corruption and mismanagement of the department. NGOs can launch some awareness rising programs that will help to decrease the problems related to irrigation water and conflict among farmers. Policy should be designed in a way that the Farmers should be provide equal facilities of irrigation water and provide equal distribution of irrigation water while, Corruption, mismanagement of department, and irrigation water theft should be reduce.

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