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How Administrative Role Leads to Illegal Withdrawal of Irrigation Water. An Anthropological Study of Irrigation Systems in Southern, Punjab, Pakistan

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Abstract:

This paper deals with that how the canal administration is producing the ways to get illegal water from the canal, which is proving a cause of social conflict as well as other social immoralities like illegal withdrawal of canal water at the particular area. The role of the Government departments related to canal is very important. How canal authorities are putting pressure on the people to get illegal water. Different type of government departments and their role is discussed in this paper. Another interesting aspect of this paper is that it also deals with that how canal authorities are manipulating the land owners for illegal withdrawal of canal water through the water distribution system controlled through the involvement of the farmers. Through different tactics used by the farmers to get illegal canal water and the moral and authoritative support by the government authorities are important aspects of this paper. The data presented in this paper

has been collected by using qualitative anthropological research techniques.

Key words: Moga, Bailda, talaqdars, Warabandi, Patwari, Khaal Punchait, Pakka Khalla Jatt

Introduction:

The present study was conducted in the village Banbhan Tehsil Taunsa Sharif District D.G.Khan. District D.G.Khan is unique in its feature that it has linked boundaries with other three provinces than that of Punjab like linked Balochistan at Rukni, KP at Ramak D.I.Khan and Sindh at Kasmoor. The village Banbhan also has very important geographical setting in the area because it linked dozen of village at the right bank of River Indus with Indus highway Peshwar to Karachi. The village Banbhan is situated 21km away from the tehsil taunsa at Indus highway. The soil of village is very fruitful for the agriculture because Indus River flow only 3km away from the village, but after the reformation in the irrigation system from tube well irrigation to Canal irrigation, the construction of the Canal has created the a boundary mark in the village geographically as well as socially.

The economy of the village depends upon the agriculture. The lands of the village irrigated through the *chota Darya* (Small River) branch of Indus River. The irrigation water extracted from the Small River through the Nala Masowah, it irrigate the only Kharif crop. In 1992 Nala Masowah blocked due to low water level in the Small River. The period from the 1992 to 2002 was very difficult for the agriculture as well as for the villagers.

After the blockage of the small River first reform came in the irrigation through tube well irrigation. This reformation was not more helpful for the formers as well as for agriculture

because this type of irrigation was costly that has reduced the crops intensification in the village. But one benefit of this irrigation system was that it was controlled irrigation system. Another reformation in the irrigation system at village through the formation of CRB Canal phase three in 2002.

The construction of the CRB Canal has created a hope for formers that it will be helpful for them because it was cheap irrigation system and also irrigated the 90% barren lands. But the other side of the coin was quite unfamiliar for the natives of the village. This reformation in the irrigation system has completely changed the social structure of the society.

Methodology:

Qualitative anthropological methodology which includes methods like Socio-economic survey, participant observation, key informants interviews and in-depth interviews were used to collect the empirical data. Different sampling techniques were used during the research like purposive sampling, random sampling and snow ball sampling. By using these sampling techniques 100 households out of 300 households have selected as sample of study. Beside this structured and unstructured questionnaire and in-depth interviews have been used during the study. Modern methodology like photography and recording have also used during research. The research conducted in four month from February 2012 to June 2012.

Role of Government in management of water distribution

Here management includes all activities related to farmers and other institutions that distribute the Canal water. The management process of water distribution was divided into two phases. The first phase was the management of the distributary

primary canals, barrages and dams looked after by the government institutions especially federal and provincial irrigation department. The institutions were responsible for the successful flow of water in primary and secondary canals. They regulate the water distribution and repair and maintenance of the canals, they were also regulating the water of every *Moga* according to its share.

Second phase was concerned below the *Moga*, where regulation of water flow was made combined by the irrigation department and farmers. Irrigation department has specific map of every water distributary (water outlet) and list of farmers who were getting water from the distributary. At the head of distributary there was a person called *Baildar* responsible for the discharge of water who had a specified list of quota of water allowed to farmers from the distributary. There are mate *Mistries* and *Muzdors* who were responsible for maintenance, construction and source of information about any negligence and irregularity in the process of irrigation to the overseer. They also report the theft case, cut in the distributary, its blockage *Moga* tampering and condition of water flow at the head, middle and the tail.

The practice was different from the prescribed criteria, *Bailder* usually remained absent from his duty, in his absence a common man could change the size of gauge to enhance or decrease the quantity of water. Sometime he gets money from farmer to change the size of water gauge to increase the water. The *Bailder* was also influenced by the landlords and powerful persons for their personal gains from the particular distributary. He also changes the site of gauge according to the will of landlords and political influential people.

During the fieldwork, researcher observed his presence only once during numerous visits, while the distributary which irrigate the fields of *talaqdars* (influential people) were operating in a good condition, water was flowing not only

according to the prescribed quota but more than that, on the other hand the distributaries which irrigate the fields of uninfluential people and small land owners, political opponents of the ruling class were not functioning according to the prescribed criteria

The control of main canal was under the authority of WAPDA that control the water level as well as the maintenance of the main Canal, but the research focus was water distribution into distributary, *Mogas* and outlet and there were three institutions to manage the water distribution:

- Punjab irrigation department;
- PIDA (Punjab irrigation and drainage authority);
- Water Management department.

Punjab irrigation department

The department was controlling the water distribution in the distributaries and fixing the quantity of outflow water for each distributary. The maintenance of water distributaries and rates were also handled by the department. The charges fixed were collected by the local Patwari that were ranging from Rs. 85/per acre for Khraif crop and Rs. 50/- per acre for Rabi crop. Cleanliness of water distributaries was also included in the duties of irrigation department, for the maintenance purposes, the main Canal remained blocked for 25 to 30 days in a year, the period of blockage was called as *Bandi* which was crucial for the farmers because they have no alternative water resources in the Canal Zone which was increasing day by day. In early days of Canal formation, the Bandi period was between 25 to 30 days per year that has increased to 55 to 60 days which was not only harmful for the crops but also increasing the psychological and social problems of the people living in the Canal Zone.

Most of the farmers were of the view that the increase in Bandi period was because of irresponsible attitude of the

Irrigation department, they could not managed to clean the distributaries accurately in a proper time, while theft of the water has also increased but the irrigation department was not tackling a very serious issue probably for their own interests.

PIDA- Punjab Irrigation and Drainage Authority

PIDA was introduced in 1997 by the government of Punjab to ensure the participation of the farmers in the irrigation system, it also first time introduced the CRB Canal in the year 2003. Role of PIDA in Canal irrigation was very important concerning with the Canal irrigation through social mobilization, while distribution of Canal water on the basis of equality was the main motto of PIDA.

According to a PIDA officer, the main objectives of PIDA are:

- To collect water charges from CCA (Cultural command area);
- To include farmers in water distribution system through different activities.

There were different methods used by PIDA to ensure the participation of the farmers in the water distribution process and other activities related to water distribution along with the maintenance of the Canal.

Khaal Punchait

Khaal Punchait (local farmer's body) was responsible to include farmers in Canal irrigation system. The *Khaal Punchait* was formulated for each *Moga* to distribute water with the involvement of the landowners and Canal authorities. It was consisting of a Chairman and four members, one member was

for the head of *Moga*, second and third for the middle of the *Moga* and fourth one was for the tail of the *Moga*.

The selection for the Chairman and the members for *Khaal Punchait* were selected through an electoral process called *Show of Hands*, for which a day was fixed by PIDA to show strength on particular *Moga*, candidates gathered the water users of particular *Moga* to show their strength before the election officer of PIDA department. The major conditions for the candidates were are that they must have agricultural land at particular *Moga* and they must not be the defaulters of water charges.

Thus the involvement of farmers in Canal irrigation system was made possible by PIDA. Farmers of particular *Moga* select their representatives from among the community for fair water distribution. The *Khaal Punchait* fixed *Warabandi* at particular *Moga* according to the agricultural land at particular *Moga*. The copies of *Warabandi* were distributed among all the members; one copy was handed over to PIDA department and one copy to the selected body of the *Khaal Punchait*.

Farmer's organization

Farmer's organization was another activity of PIDA to involve the farmers in water distribution system; it was consisted of nine members in the following hierarchy:

- President;
- Vice President;
- Finance Sectary;
- Information Sectary;
- Five Executive members

For the Farmers Organization, selection of members and president was made through the ballet in the election conducted under the authority of PIDA officers. Farmer's

organization controls the water at water distributary; separate bodies of the Farmers Organization were elected for each water distributary.

Irrigation Management Transfer (IMT)

To replace the old irrigation system from particular arid Zone was another major responsibility of PIDA. There were six IMT units in CRB Canal phase three which was consisted of thirty water distributaries, five water distributaries were in a single IMT unit, the president was selected to control four distributaries. IMT units get finance from PIDA; while 50% finance was retained by PIDA that was collected in form of water charges, whereas 50% of finance was transferred to the accounts of FOs for different purposes, 40% finance was used for salaries of employees and 60% for the maintenance of water distributaries.

Through the plate form of IMT units, different new methods were used to improve the irrigation system. IMT units arrange meeting each month in which farmers participate and discuss different problems in irrigation system, PIDA authorities were responsible to manage the meetings.

Area Water Board (AWB)

It was another plate form that helps the formers to participate in irrigation system. It was consisted of 11 members.

- One executive member might be sectary irrigation or M D of PIDA;
- Six Political leaders;
- Four IMT unit members;

Dera Jatt Canal Circle

It was consisted of three main Canals in a particular Zone named CRB Canal, DG Canal and Rajan pur Canal. The forum was to explain the problems through their representatives.

Role of Water Management Department

The role of Water Management Department was also important in Canal water distribution. According to water management officer Malik Abdul Aziz the main objectives of the Board were:

- To provide maximum water to the fields;
- To control the wastage of Canal water;
- To control the water logging and salinity in the Canal Zone

According to the objectives of Water Management Department was very useful to meet the socio-economic needs of the Canal and farmers because it was to control the leakage of Canal water and to maximize the Canal water for the fulfillment of irrigational needs. The department was also helping to increase the crop production that improves the economic conditions of the farmers.

According to the objective of Water Management Department it controls the water logging in Canal zone through different projects like *Pakka khalla Jatt* (Cemented water channels) that control the water logging to maximize the cultivatable land in the Canal zone to improve the socioeconomic condition of the farmers.

According to water Management officer:

"Their department is playing a vital role to manage the Canal water. He said they are also working to develop the condition of water distributaries as well as water channels. He said we completed 80% Pakka Khalla Jatt from 2004 to 2010 with collaboration of Government of Punjab irrigation department.

He further said they were using two irrigational techniques to mend the form economy:

• Duplication of irrigation techniques;

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• Supplication of irrigation techniques;

To improve the conditions of *Khalla Jatt*, 60% funds were sponsored by the Water Management Department and 40% funds were given by the farmers.

Difference between supply and demand

There was a great difference between the availability of Canal water and famer's needs; the difference between supply and demand of canal irrigation water was due to many reasons. The first reason was the increase in cultivable area; before the Canal water people were cultivating small lands area but after the availability of Canal water they have increased it and they grew two to three crops in a year on their fields. Second reason was the mechanized farming for which they have less physical work to do as they were doing before.

Standard of distributaries and *khallas* was not good and a large quantity of water was wasted before reaching the fields, flow of water was also slow and it takes much time in reaching the farms. The main reason of the problem was the illegal withdrawal of water and it wastage.

Conclusion:

The difference between supply and demand of irrigation water always creates the social immoralities. The present study depicts the true picture of such social immoralities. The difference between supply and demand in irrigation is not always natural but to some extent it is artificially created. The social and administrative role in this regard is very important. The farmers at the locale of present study get illegal water on their own behalf but the role of government is very important. Different government agencies like WAPDA, PIDA and Water Management department are considerable. The water

distribution mechanism introduced by these agencies is inspiring the farmers to get illegal water. The water distribution system introduced by the PIDA supports the land lords to get more water from the canal. Thus it leads to shortage of canal water at the tale areas irrigated through canal, which ultimately enforces the farmers to get illegal water.

To get more canal water from the canal is not just to fulfill their irrigational needs but it is attach with the social prestige to get more water from the canal. So, to get more water from the canal the land lords try to make close and good relationship with canal authorities. The canal authorities not only have good relations with landlords but also collect grain of the year by the landlord. Hence government authorities not manipulate the landlords but also give moral and social justification to others farmers to get illegal water from the canal.

REFERENCES:

- Byerly, D. (1994). Agricultural Productivity in Pakistan. Problems and Potential Prepared for World Bank agriculture Sector Review, 15-21.
- Firth, R. (1951). Element of Social Organization. London: Watts & Co.
- Government of Pakistan (2004).*Economic Survey (2003-04)*, Economic Advisor Wing, Ministry of Finance Islamabad.11-26.
- Government of Pakistan (2007). *Economic Survey (2006-07)*, Economic Advisor Wing, Ministry of Finance, Islamabad.20-21.

- Gorter, P. (1989). Canal Irrigation and agrarian transformation: The Case of Kesala. *Economic and Political Weekly*, 24, 94-99.
- Hansen, O. W. (1962). *Irrigation principles and practices* (3rd ed.). New York: John Willey Sons Inc.
- Haviland. (1974). *Cultural Anthropology*. New York: Harcourt college publishers.
- Hirashima, S. (2008). The land market in development " A case study of Punjab in Pakistan and India". *Economic and Political weekly*, 43, 43-44.
- Hunt, R. C. (1976). Canal irrigation and agrarian transformation "The Case of Kesala". *Current* Anthropology, 3, 97-98.
- Janaiah, A. (2000). "Poverty and income distribution in rainfed and irrigated ecosystem". *Economic and Political weekly*, *35*, 4667-4668.
- Jehangir. (1998). Estimating the Production Potential of Major Crops in Pakistan's irrigated agriculture during the 21 Century. The Pakistan Development Review, 37, 4-5.
- K, R. R. (1995). Irrigation and agricultural dvelopment in India. New Dehli: Ashish Publishing.
- Kumar, P. (1977). *Economic of water management*. New Dehli: Heritage Publisher.
- Mehenna, L. W. (1986). "Unseen Hands: Women's farm work in an Egyptian village". Antheropological Quarterly, 59, 106-109.
- Mehenna, L. W. (1986). Village Entrepreneuers: An Egyptian Case. *Ethnology*, 25, 75-88.
- Misra, K. M. (1990). *Irrigation and economic development*. New Dehli: Ashish Publishing.
- Naqvi, C. P. (1987). *The Wheat-Marketing Activity in Pakistan*. Islamabad: Crystal Printers.
- Rahman, M. (1993). Irrigation and Farm Water Management in Pakistan. *GeoJournal*, 31, 363-371.

Robert C Hunt, G. M. (1976). Canal irrigation and Local Social Organization. *Current Anthropology*, 17, 97-98.

Shams, F. (2006). Land of Pakistan. Lahore: Katabistan Publisher.