

Impact Factor: 3.1 (UIF) DRJI Value: 5.9 (B+)

Impacts of Irrigational Reforms on Social Structure in Southern Punjab

ABDUL SAMAD Department of Anthropology, Quaid-i-Azam University Islamabad, Pakistan ANWAAR MOHYUDDIN¹ Department of Anthropology, Quaid-i-Azam University Islamabad, Pakistan

Abstract:

This paper deals with the reformation of irrigation system in particular societies, how it is being a cause of change in the social structure of the society. Reformation of irrigation system from controlled tube well irrigation to the canal irrigation has also brought changes in the social structure of the society. Through reformation in the irrigation system, canal irrigation has changed the family structure of the society as well brought changes in social structure through internal migration, transfer of social power and caste mobility, etc. The research conducted in a village of South Punjab district D.G.Khan. This article emphasizes on how the reformation of irrigation system changed the social structure of the society particularly in the dimensions mentioned above. Social structure of society changed through reformation in irrigation system is the crux of this article which is explained in the article in detail. Qualitative Anthropological techniques were used for data collection.

Key words: Muzirgery, Zakat, warabandi, due-e- khair, Patta, Kami, distributary, winger, chota Darya

¹ Corresponding author: unwaar@gmail.com

Introduction

The present study 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 the village on the right bank of River Indus with Indus highway Peshwar to Karachi. The village Banbhan is situated 21km away from the tehsil Tunisia at Indus highway. The soil of the village is very fruitful for the agriculture because Indus River flow only 3km away from the village, but after the reformation of 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 irrigates 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 farmers as well as for agriculture because this type of irrigation was costly that has reduced the crop intensification in the village. But one benefit of this irrigation system was that it was controlled irrigation system. Another reformation of 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 farmers that it will be helpful for them because it was a 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 of the irrigation system has completely changed the social structure of the society.

Methodology

A qualitative anthropological methodology which includes methods like socioeconomic survey, participant observation, key informant 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 snowball sampling. By using these sampling techniques 100 households out of 300 households have selected as sample of the 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 been used during research. The research conducted in four months from February 2012 to June 2012.

Results and Discussions

Reformation of the irrigation system from tube well irrigation to Canal irrigation had not only changed economic patterns of the village, but also reshaped the social structure of the society. Before the existence of the Canal, people used tube-well irrigation at small scale. Tube well irrigation supported the controlled irrigation system. They irrigated their crops with the Canal water by following the set criteria, for example, if someone has to irrigate his crop he has to fallow/wait for his turn as determined by the local farmer's body or the irrigation department. To solve the issue, people started migration to the Canal Zone areas, thus the family structure was changed. The concept of joint family system broke up concept of nuclear family emerged. People migrated to the Canal Zone after sometime felt the problem while travelling back to their households on a daily basis after completing their work in the fields that was a problematic activity for them. To overcome the problem they have taken their families with them and thus the family structure was changed from joint to nuclear one. Almost 50 families migrated to the Canal Zone, leaving half of their family members in the village.

Another aspect related to the change in the family structure after the Canal was the division of property among brothers, because before the Canal, the lands were barren, but after the Canal when land became fertile, the concept emerges among people that they could earn more if they cultivated alone. When land division started, it was not limited to, land division, but it also divided many households.

Another trait related to changes in family structure was that people who were landless their family structure was also changed because with the Canal irrigation they switched over to agriculture by leaving their old occupations. With the change in occupation, their family structure was also affected because of their shifting to the land area, thus their family structure changed from joint to nuclear. That was the biggest change in the family structure because the joint family system of such families was very strong. With Canal irrigation many disputes were started due to the division of land, water distribution and control of lands has created many problems because of the alterations in the family structure.

According to respondent Mosa Khan, family structure has changed after the Canal irrigation, while before the Canal due to hunger people lived together and worked together, but after Canal when availability of labor work increased, people were scattered due to availability of work in many different places in the Canal Zone, thus the concept of joint or extended family was broken. The nuclear family system increased after the Canal to the tune of 40 percent in the village *Banbhan*. According to Mosa Khan another concept that broke the joint family system was the concept of winger (concept about people who work together without taking any wages) that joins the family. After the Canal formation the concept diminished due to intensification of agrarian activities in the village that also played its role in the breaking of the family system. According to a survey conducted by the researcher, the concept of joint family system declined from 83% to 57% after the Canal functioning and the concept of nuclear family increased from 18% to 43%.

Case study

Shamla Khan a 62 years man was a peasant by profession, having small land in the village; he was the father of seven sons. He told the researcher that before the Canal irrigation, his family lived together. His two sons were employed in Pakistan Army, while five sons worked together in the fields. They took additional land at *Muzirgery* and cultivate the land along with their own land. But after the Canal irrigation, his two sons migrated to Canal Zone with their families and started cultivation there and soon they upgraded their economic status. To gain more, his other three sons also migrated to the Canal Zone with their families and started cultivation, while he was alone living with his wife in the village. His family system was broken completely and changed from joint family to nuclear family after the Canal irrigation.

Outcome

- Internal migration also became the cause of change in family structure;
- Canal irrigation changed the family structure;
- Canal irrigation also eliminated the cultural values.

Transfer of social power

Social power has boundless importance in any society that move from one to another with the passage of time and due to other factors. Here with the formation of Canal irrigation, social power transferred. Before the canal irrigation, the landlord, small landowner and landless were equal in social status because the lands of landlords and small landowners were barren.

Thus the social power was in the hands of government job holders of different department especially the police department. The SHO in the police department has social power and control over the village and solved the problems of local people, but the scenario has changed after the reformation in the irrigation system. With the Canal irrigation when people started cultivation on their lands the economic status of the landlords improved. Thus, with the progress in economic status, social power has transferred from the government job holder to the landlords who were enabled for the decision making. Their control has increased over the village and the people because most of the people cultivated their lands. Another aspect of the transfer of power from government job holders to landlords was the wage labor that was also controlled by the landlords because of working in their fields.

Another key characteristic related to transfer of power from government employ to the landlord was the dependency of poor people on the landlords because of getting paid labor in their fields, getting of *Zakat* and *Usher* from them, while most of the poor people lived in the houses owned by the landlords in the Canal Zone areas. The poor people of the village were getting benefits from the landlords in two ways:

- They were utilizing their shelters without spending any penny;
- They were getting economic benefits through the cultivation of crops and grazing their animals.

Due to the factors, economic and social control of landlords have augmented after the Canal irrigation system and their vote bank was also increased. The Canal irrigation has also increased the social power of landlords because the *warabandi* (water distribution) was arranged by them. There was a committee for each water distributary and Chairman of each distributary was belonging to the landlord class, for this their control over the water management also increased with control over small landowner and landless people thus the whole of the social power was in the hands of landlords.

De-Urbanization

Before the existence of the canal, there was a lack of irrigation water in the village for which the people were migrating to different mega cities and industrial cities to earn their livelihood. This migration was consisted of three purposes. The first major group that started migration to cities was labors, because there was no work for them. Due to lack of resources the development work was little, thus they migrated in cities and acquired wage labor in different industries special in Textiles Mills and garment factories.

That type of migration started in 1993 to 94 and again from 2002 to 03. It varied during the period, the worker groups' work there and came back home after 6 months or one year. The worker groups were mostly consisted of young men. The important centers of them were Karachi, Lahore, Faisalabad and Gujranwala.

The further migrated group was a government employees group who took their families with them in their work or job places. There were two purposes of their migration, first was the lack facilities related to health, education and other economic activities. The second purpose of their migration was to give education to their children because there was no facility of schools. But after the Canal, the lands became fertile and young worker moved back to the village, thus started deurbanization after Canal. People started moving back to the village because their own lands were uncultivated and they started cultivation there. After the Canal, economic development started in the village from the micro level to macro level. Thus, health and educational facilities increased in the village. Other migrated group started moving back to the village because facilities and work were available for their wives. Animal husbandry increased and their women started animal husbandry, thus their economic status improved. M. Sharif said:

> "I went to Karachi in 1994. I work there 9 years in a Textile Mill. My salary was 14,000/month. But in 2003 when come into village my father calls me back to the home. I came back here and start cultivation. I earn much there. I am happy because I am earning at home and my land becomes fertile. Thus, after Canal de-urbanization start.

Another factor of de-urbanization after Canal was the need of men to stay in their homes and to work there because social crimes rose after the Canal, so the presence of male members in homes became necessary.

Caste Mobility

The Canal irrigation had changed entirely the socioeconomic forms of the people of the village *Banbhan*. Phenomena of caste hierarchy rose after Canal because before Canal there was no major difference in the economic conditions of different caste groups. There were many caste groups in the village *Banbhan* like, *Sulmani, Lakhvani Duhar, Gunb, Gazar, Zargar, Durkhan, Mochi, Naii, Chandan wale.*

Before the Canal formation, people were working according to their profession, but after it when cultivation started in the village, landlords improved their economic conditions because their thousands of acres agricultural land became fertile and crops production increased due to canal irrigation and HYU (High Yielding Verities) of seeds and use of fertilizers and pesticides. The sudden change in economic conditions of landlords and small landowners formed the concept of caste mobility.

The people who were landless and belonged to castes like *Mochi*, *Durkhan*, *Zargar*, *Gazar* started caste mobility as well as mobility in their occupation. After the Canal, they started cultivation the lands of landlords on *Patta*. *Muzirgery*, 1/8th of them changed their occupations thus the mobility came in their castes. According to respondent Kaleem:

> "Before Canal we did work of Gold but this business was not suitable for us because people did not trust in us. They think that they are landless people so they are Kami, so we cannot trust in them. Thus, our work was very poor, but after canal we move ourselves to agriculture by cultivating land on Patta, our economic condition improved. Now we called Zargar".

Another aspect of caste mobility in the village started after the Canal, 70% business of the village was in the hands of the caste groups (*Mochi, Kumbhar, Sonar* and *Mohana*) but the caste groups were considered a low caste group. But due to business activities, the mobility came in their caste group like, *Parachas, Janjoas, Awan, Bhuttas, Bhatti, Kokhar, Chohan and Malik*.

Conclusion

The reformation of the irrigation system not brings only economic changes for the natives of the village, but also has deep impacts on the social structure of the society. How this reformation o irrigation system has reshaped the social structure? It is not a phenomenon that is detected by the lenses of the native people because changes in social structure are slow compared to economic changes. When research conducted on this issue, then study indicated the social dimensions reshaped through the reformation in irrigation system. The social structure of the village completely changed, but some areas changed partially. The importance of the social structure varies in the village, according to the different age groups as well different castes, classes and ethnic groups.

According to the different views of the different groups indicates that the change in social structure is good because it is the need of the time to accept the social change. While the other group in the society especially primary group of the society considered this reformation as a divine curse that has scattered their family structure as well as social structure and introduce a new form of the culture which completely oppose our social norms of the society.

The construction of the social reality is not an easy task, because the beauty of the social sciences is that it gives space to ideas of every member or class of the society. But after conducting the research in the particular village it is concluded that the reformation in irrigation system from tube well irrigation to canal irrigation, has brought drastic changes in the economic conditions of the natives, as well as also reshaped the social structure of the society in many social dimensions as explained in the article.

REFERENCES

- Firth, R. (1951). Element of Social Organization. London: Watts & Co.
- Hansen, O. W. (1962). Irrigation principles and practices (3rd ed.). New York: Jhon 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.
- K, R. R. (1995). Irrigation and agricultural development 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.
- Misra, K. M. (1990). *Irrigation and economic development*. New Dehli: Ashish Publishing.
- Shams, F. (2006). *Land of Pakistan*. Lahore: Katabistan Publisher.
- Government of Pakistan (2004).*Economic Survey (2003-04)*, Economic Advisor Wing, Ministry of Finance Islamabad.11-26.
- 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.
- 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.
- Naqvi, C. P. (1987). *The Wheat-Marketing Activity in Pakistan*. Islamabad: Crystal Printers.
- Mehenna, L. W. (1986). Village Entrepreneuers: An Egyptian Case. *Ethnology*, 25, 75-88.

Gorter, P. (1989). Canal Irrigation and agrarian transformation: The Case of Kesala. *Economic and Political Weekly*, 24, 94-99.