CULTURE OF COOPERATION SHAPING THE COOPERATIVE NETWORKS AMONG THE FARMING BIRADERI MEMBERS IN RURAL PUNJAB

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ABSTRACT

Biraderi is the basic unit of social organization of the village. In one village, Biraderi is living like one family. Social relations among the Biraderi members determine the strength of social structure and social organization of Biraderi. Within the social organization of the village, Biraderi members perform their social, cultural and economic activities. The industrial, capital, contract, paid labor and commercial farming has disengaged the Biraderi members from the social occasions that leads to encourage the Biraderi members to adopt new occupations. The distance among the Biraderi members increased. That distance affects the social relations, social skills of dealings among the Biraderi members. In rural Punjab, modern farming is promoting the industrial agriculture that does not suit to the Biraderi (family) farming in the Punjabi villages. This paper has been extracted form Doctoral Dissertation of the researcher

Keywords: Farming, Biraderi Cooperative Network, Culture of Cooperation, Socio-Cultural Capital.

1. INTRODUCTION

Farming is a socio-economic activity as well as way of life of the people living in rural community (Strange, 2008). Socio-economic activities are performed through the particular social institution of kinship that is central to the ways in which political as well as social life in Pakistani rural community is organized. The central institution of kinship in rural Punjab is Biraderi² (Alavi, 1972). To understand the social organization of a Punjabi village, it is important to understand the division of the people into kin groups, of which, the basic unit is Biraderi. Biraderi may also be formed on the basis of common locality. So all the Zamindars³ and all the Kammis⁴

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² Biraderi is patrilineage. All the people who trace their descent through a common male ancestor, form a biraderi. The word biraderi is also used with reference to its members. People who belong to same locality are considered as one biraderi including zamindar and kammi in one village.

³ There are two main classes in the village. Zamindars and kammis. Zamindars are the landowners. Chaudhary is also of the zamindar class.

⁴ Kammis are the village craftsmen who donot own land. Kammis include castes such as barber, baker, potter and carpenter.

of a village join together as a single Biraderi/family in one village (Eglar, 2010). The industrial agriculture technology is altering the occupations of Biraderi members who are moving to the towns and big cities. The new occupations are weakening the social relations among the members of Biraderi. The weak social relations disturb social, cultural and economic motives of the people living in the rural community because farming is a socio-cultural practice rather than just a technical activity (Vanclay, 2009).

In the village, socio-economic life is based on strong relationship among land, cattle and the people. Economic and social life of the people revolves around land and cattle. Cattle are not just an economic asset. Events like birth and death provide social occasions for the villagers (Eglar, 2010). Social Occasions indicate that traditional knowledge has been transferred by the farmers to their next generation through legends, folklores, rituals, songs, art and laws (Kumhar, 2010). Industrial agriculture technology is affecting cattle human relationship and social occasions as well. Modern farming is taking Biraderi away from Indigenous knowledge and cultural ecology of farming that stress the significance of interdependency of cultural patterns and organism-environmental relationship within the natural setting with reference of their functionalities (Geertz, 1963). Cultural ecology, traditional farming and sociocultural occasions determine the social skills of dealing of villagers. Modern farming system disturbs the social dealing behavior by not attending and participating in the various ceremonial occasions (Eglar, 2010).

Pakistan is an agrarian country of family farming and its 63% population is living in the rural areas. Punjab is the biggest provinces and its 68% population lives in the rural areas. In Punjabi villages, farming Biraderi and socio-cultural activities suit to the agriculture subsistence economy as well as informal moral laws of social organization of Biraderi system. Informal laws of social organization create informal understanding of contracts regarding the obligations entailed in relationships among the members of the community (England, 1986). In the olden days, in Punjabi village, a seyp was a matter of honor and dignity for both Zamindar and Kammi to maintain the long-standing relationship (Eglar, 2010). But the modern agriculture technology is encouraging capital intensive based contract, paid labor and commercial farming. The capital-intensive farming adversely impacts on the growth of agriculture which is central to economic growth and development in Pakistan. Agriculture being a dominant sector contributes 21.4 percent to GDP (Economic Survey of Pakistan-GOP, 2019).

Evidently, in the industrialized world, dominant modern farming system could not play a significant role for sustainable agriculture, that is why, 2014 has been declared by UN as the year of family farming across globe (CWFS, 2013). Developed nations are thinking to reformulate the natural and biological mechanism of family farming system within the social organizations in rural areas while in Pakistan, modern farming system is being promoted by the industrialists and fertilizers companies breaking the Biraderi (Family) farming and social organization as well. With the application of new techniques of production and communication and with expansion of the area of social interaction, there is increased specialization of tasks which leads

to a breakdown of kinship, vicinal and other traditional solidarities. It also increases the cultural diversity within the community (Kuppuswamy, 1975). Capital intensive farming contradicts the definition of family of George Murdock who defines family as s social group characterized by common residence, economic, co-operation and reproduction (Andy Barnad, 2004).

2. REVIEW OF THE LITERATURE

Within the broader context, this study explores the relationship between social organizations and Biraderi farming in the Punjabi Villages. It also explores how industrial agriculture is disturbing the relationships of Biraderi farming and social organization. The distinction between the social relations, social structure and social organization has been the subject matter of discussion by the sociologists, anthropologists and other social scientists. Sarana (2008) in his article writes that in the opinion of Levi-Straus, social relations serve as raw material for social structure. Social relations include person-to person and person to group relations within the society. Social structure is the network of social relations.

Through that network, social activities are performed. Social organization is either an activity or process. These activities and process of activities are performed with reference social relations and the network of social relations in a village. More specifically, farming activities, particular socio-cultural occasions, ceremonies, social dealing skills of Biraderi members represent the social organization. Industrial agriculture has altered all the activities and process of activities and has led to the emergence of new social organization which is not consistent with the Biraderi (family) farming in the Punjabi villages.

Social relations provides the basis for social structure of Biraderi system which facilitates to perform the farming activities within the social organization. Industrial agriculture affects the social relations among the members of the Biraderi which are serving as raw material to social structure within the village. So, the weak social relations lead to fragile social structure. All this disturbs the social organization through which farming activities are performed. In this way, the emergence of industrial based social relations is considered as material, capital oriented and immoral which are not consistent with the Biraderi farming. The theoretical perspective of Chayanov (1925) evidenced that peasant family farming system normally violates the profit-making business because survival strategies of the peasant family farming is systematically different from those of capitalistic enterprise. In other words, Vanclay (2009) argues that profit is not the main driving force contrary to the expectation of many economists, extensionists and agriculture scientist, maximizing profit is not the most important thing in most farmers lives. Family farming carries with it a commitment to certain values; entirely independent of the pettiness of economics (Strange, 2008).

Firth (1969) also talked about the four principles or elements of social organization i.e co-ordination, foresight, responsibility, and basic compensation. Coordination among the Biraderi members was well known in agricultural activities and other

ceremonial occasions held in the village. Having foresight, the villagers arranged their agricultural practices, ceremonial occasions and rituals during the versatile climatic conditions. Each and every one knew one's own duties and responsibilities either in agricultural activities or on ceremonial occasions. Compensation mechanism was based on moral grounds in the form of Vartan Bhanji, Seyp system etc. Zamindar compensated the loss of Kammis and Kammis reciprocated that with rendering the extra services for Zamindar in harvesting and plowing days.

Social organization encompassed the entire cultural variations as Sarana (2008) says that "social structure is not one aspect of culture, but the entire culture of a given people handled in a special frame of theory. The form of social structure has therefore to be described by the patterns of behavior to which individuals and groups confirm their dealings to another. The sociological paradigm of organic analogy given by the Social Darwanist, Herbert Spencer (1820-1903) and that analogy was looked among the people of Punjab villages. The production, consumption and stability mechanisms of food were connected with the patterns of social life of the people in the community. That analogy can be linked with Durkheimian theory of mechanical solidarity-based society.

In other words, Firth (2004) writes that human community is a body of the people sharing common activities and bounded by, multiple relationships in such a way that the aims of the individual can be achieved only by participation in actions with other. So, the moral, reciprocal and generosity based social relations among the Biraderi members, their social organization and socio-economic structure in rural Punjab was organically interdependent. The modern farming system disintegrated the Biraderi that affected mechanical solidarity-based villages of Punjab. Geertz (1963) writes in his book, the term cultural ecology coined by Julian Steward, argues that functionally, all aspects of socio-cultural and economic activities are interrelated, but the degree of interrelationship varies from society to society. All aspects of cultures are found in the "Culture Core" in which social, political, and religious patterns are empirically determined to be closely connected with the subsistence activities and economic arrangements. Moreover, there was the strong relationship among land, cattle and Biraderi members in Punjabi villages because socio-economic life was revolving around land and cattle (Eglar, 2010). Modern farming has replaced cattle to agriculture technology that affected land human relationship.

The dominant model of agriculture includes astonishing levels of production, intense concentration of ownership, mechanization of the relationship among humans, animals, and the products of the soil, and alienation of the food producers that generate great wealth from the countryside but often returns poverty to the farmers and workers, harm to nature and population and disintegration to its communities, churches and civic organizations. It is industrial agriculture (Charter for Shared Farming Ethics, 1997) by, definition, the domestic unit is also a unit of agriculture production and family relationships imply work relationships. One major and consequential concern of all family farmers, therefore, is to define and order household relationships simultaneous in kin and in productive terms. The individual is an inalienable part of multiple groups which completely overshadow his

individuality. He is not master of his own will and architect of his own fate. The various decisions in different fields of life are made by groups for him and he rarely feels the need to challenge them (Inayatullah, 1959).

3. METHODOLOGY

The information was collected directly from the stakeholders including practicing farmers from the various villages. The local representatives from informal farmer's agencies were be included in the source of information. The information was collected through semi-structured interviews. There are various types of research interviews viz., structured, semi-structured, unstructured and Focused Group Discussion. The farmers were interviewed because they were the people have much better understanding their farming practices. Therefore, interviewing farmers on farming and its prospects was the most appropriate choice. Farmers were interviewed from the following districts.

Table: 1 Distribution of Districts with respect to Mauzas

Sr.No	Name of the District	Total Mauzas	Large Mauzas	Medium Mauzas	Small Mauzas	Smallest	Un- inhabited
1	Toba Tek Singh	538	23	314	108	90	3
2	Sahiwal	529	62	283	90	904	
3	Bahawalpur	1216	71	2265	232	389	259
4	Narowal	1308	7	96	277	819	109
5	Jehlum	573	13	79	140	322	19
6	Dera Ghazi Khan	826	91	105	105	462	63
7	Chakwal	453	40	124	113	153	23
8	Gujranwala	803	67	184	239	294	19
9	Vehari	774	52	338	198	182	4
10	Rawalpindi	1164	34	161	300	568	101
11	Faisalabad	820	148	527	94	45	6
12	Layyah	720	26	96	203	383	12
13	Attock	446	46	255	98	23	
14	Multan	527	124	152	110	137	4
15	Sheikhupura	1073	112	261	243	402	55

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(Continued) Table: 1 Distribution of Districts with respect to Mauzas

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Sr.No	Name of the District	Total Mauzas	Large Mauzas	Medium Mauzas	Small Mauzas	Smallest	Un- inhabited
16	Lahore	261	61	61	64	74	1
17	Khanewal	670	67	294	167	133	9
18	Lodhran	438	41	133	142	118	4
19	Sargodha	832	72	311	193	247	9
20	Mianwali	225	56	49	48	81	21
21	Jhang	1069	94	306	268	388	17
22	Khushab	314	39	56	58	142	19
23	Mandi Bahaudin	429	49	105	114	147	14
24	Kasur	637	103	210	110	201	13
25	Okara	915	53	285	220	246	11
26	Rajanpur	532	47	116	94	52	23
27	Sialkot	1543	55	206	405	805	72
28	Gujrat	1065	37	181	318	475	54
29	Muzaffargarh	975	143	209	176	404	43
30	Bahawalnager	1098	26	240	420	392	20
31	Raheem Yar Khan	1504	93	381	292	489	249
32	Bhakker	580	32	108	133	299	8
33	Hafizabad	415	18	69	115	200	13
34	Pakpattan	573	21	206	155	186	2
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Source: Pakistan Bureau of Statistics, District Census Report (2019)

3.1. Sampling Plan

Keeping in view the standard of sample size, variability in population, available budget, time frame; it is decided to take a sample size of 450 practicing farmer as respondents for the present study. This sample is selected by using multistage sampling technique. Geographically, Punjab has been divided into three zones i.e. Northern, Central and Southern. In stage one, for the appropriate representation, one district from each zone has been taken through simple random sampling method. Three districts (Jhelum from Northern Punjab, Sargodha from Central Punjab and DG Khan from Southern Punjab) have been selected out of 36 districts of Punjab. In the second stage, through simple random technique, 2 Tehsils from Jhelum, 3 from Dera Ghazi Khan District and 4 from Sargodha district were selected. In the third stage,

again through the simple random sampling, 11 union councils have been selected from the already sampled three districts. In the fourth stage, keeping in view the population, through proportional sampling: 75 respondents from Jhelum District, 165 from Dera Ghazi Khan District, and 210 from Sargodha District were selected. Table 2 elaborates sampling plan.

Table :2 Sampling Plan of the Present Study

Punjab Zones	Northern	Southern	Central	Sampled	Stages	
Sampled Districts	Jhelum	DG Khan	Sargodha	3	C40 1	
Rural Population	677419	1414724	1916838	4008981	Stage 1	
Sampled Tehsils	2	3	4	9	Stage 2	
Sampled Union Councils	2	4	5	11	Stage 3	
Respondents	75	165	210	450	Stage 4	

4. DISCUSSION AND ANALYSIS

Carrying animals was considered the major component of farming in the rural areas. Dairy was also used as entity of family cooperation among *Biraderi* in the village. Exchange of dairy products among *Biraderi* and family was also culture of cooperation in rural Punjab. The family and *Biraderi* members gave milk, *Makhan and Dessi* Oil to their relatives and *Biraderi* members who did not have animals. Modern agriculture technology reduced the role of animals that affected the culture of cooperation in terms of dairy.

Table: 3 Responses of the Sampled Individuals

Sr.	Questions	Yes	No	Not Applicable
1	Do you give milk to your family/relatives?	45 (10%)	361 (80.2%)	44 (9.8 %)
2	Do you give milk to your <i>Biraderi?</i>	21 (4.7%)	385 (85.6%)	44 (9.8%)
3	Do you give <i>Makhan</i> to your family relatives?	53 (11.8 %)	354 (78.7%)	44 (9.8%)
4	Do you give Makhan to your Biraderi?	26 (5.8%)	381 (84.7%)	44 (9.8%)
5	Do you give <i>Dassi</i> Oil to your family or relatives?	12 (2.7%)	395 (87.8%)	44 (9.8%)
6	Do you give <i>Dasi</i> oil to your <i>Biraderi?</i>	8 (1.8%)	398 (88.1%)	44 (9.8%)

Source: Own Estimates, based on Survey Data

Local and indigenous agriculture technology had always been used for farming activities. This technology is also source of cooperation within the farming families in the village. About such kind of technology, one farmer responded in the following words.

We cut the fodder and other crops from the fields by *Dranati* (the indigenous device of cutting fodder) and then fodder was brought to the home where it was cut into pieces with the machine known as *Tokka* Machine. The *Tokka* machine is used to cut the fodder into pieces. According to the respondent farmer, there are two types of *Tokka* machines. One is used manually and the other one is electric machine. There is also used a *Tokka* which was an indigenous machine. The indigenous machine is always used for cooperation among the farming families in our village. *Tokka* and *Dranti* are sort of mobile devices which were used still for cooperation. Now we are using electric machines that cut the fodder into pieces. It is fixed in the corner of the home. So, the electric machine is never used for cooperation among the farming families and *Biraderi* in the village. The farmer said that due to the electricity short fall in Pakistan, supply of the electricity to rural areas has been minimized. So, some of the farmer are still using manual *Tokka* Machine.

Industrial agriculture is promoting mono-cropping patterns in the study area. The researcher observed that the major crops are cash crops like wheat and rice on the land of the village. Most of the farmers preferred to grow wheat, rice and sugar cane on their lands. There is not a single farmer who grew vegetables in the village. Diverse crops are the major source of interactions and cooperation among the farming families in the village. When the researcher asked the respondent farmer about the factors associated with the cash cropping patterns, the farmers told that.

We all cooperated with each other in the village in such a way, but the cooperation and interaction has been minimized by the modern agriculture technology that leads to decrease in cultivation of diverse crops in the village. Agriculture input cost has increased, and I was not ready to grow vegetables. With inception of growing cash crops in the village, I left growing vegetables. I wanted to earn more cash by cultivating cash crops, so, I grew wheat and rice. I wanted to be urbanized and wanted to get more money by crops.

Milk is used to produce yoghurt that is converted into the *Makhan* and *Desi* oil. *Desi* oil, *Desi* Lussi and Desi Makhan has always been source of gift exchange among the farming families in the village. When the researcher asked the respondent about dairy products, its use and its benefits in the village, the farmer said that.

We use milk to make yoghurt which is converted into *Desi* oil and *Makhan*. Such sort of local dairy products are at high prices in the village. When there are more animals in the village, the prices of the dairy Desi oil is very low. We also gave *Makhan* and *Desi* oil to our relatives, neighbor and *Biraderi* members. In olden times, most of the villagers exchanged these dairy products in the village. But now, we have few animals at home, and we do not have sufficient milk.

During the research, it was observed that there was stock of waste of the animals in the village. The local name of the stock of the animals is *Arrurri*. The farmers also

gifted waste of animals to his/her *Biraderi* or family members. It is used in the fields as chemical fertilizers. It is also used for fire now. When the researcher asked the respondent farmer about the use of the animal manure, the farmer said that.

Animal dung is very useful for the fields. I used it in some of the fields of wheat crops particularly but mostly we use the chemical fertilizers. In the past, we had more animals, but we did not use chemical fertilizers in our farming fields. When agriculture was mechanized, we left using animals in the farming fields. My brothers went to Saudi Arabia. I could not look after my animals alone at my home, so we had sold our animals. Animal dung was the source of cooperation and interaction among the farming families in the village. When agriculture and farming was mechanized the role of animals minimized consequently the attached value of cooperation and interaction was minimized.

Education plays a vital a role to enlighten the human. The researcher saw only one middle school in the village. Most of male children are going to the schools. When the researcher asked about the benefits of the formal education in the village, a respondent commented:

My children go to school daily and we make many efforts to educate them now. We are not satisfied with the syllabus of the formal education because there is no information regarding the farming activities. There was a time when most of the farmers were uneducated in the village, but they took interest in the farming activities. Now, we do not see interest of our children in the farming activities. When our children come back home after school, we want to indulge them in the farming activity, but we fail to convince them for farming. We have to force them to go to the farming fields.

Media is another motivating factor which persuades the rural people to the modernization of agriculture. In the rural areas of Punjab, media is playing a key role promoting the modernization of agriculture. Most of the commercial advertisements are about industrial agriculture. The farmers get influenced when they watched television. Moreover, media is promoting cricket which is diverting he attention of the rural people from farming activities. A respondent farmer in the village said that:

I never came across any kind of farming related program on television. most of the people are interested to watch cricket match and political news on the television. I saw cricket phobia in my children. When a cricket match is on air, then, my children do not go to the farming fields. I have to adjust my timing according to the cricket matches. Moreover, most of us are keenly interested in watching political news. Everyone wants to talk on politics and cricket match, a few people take interest in and discuss farming activities in our village. The farming families watch and get more influenced by the television. School going girls and boys also watchIndian movies. Whenever I go to village to see my friend, I see cricket, movies and political news re the central points of discussion there among the farmers. There is no one discussing the farming whereas they belonged to the farming families. To some extent, it is also happening in my village.

The tradition of extracting products from milk has also been influence. Milk is first converted into the yoghurt and then into butter and traditional drink called *Lussi* in the villages by the farming families. With some sort of traditional process, butter is converted into the local oil. This traditional process is still prevailing in the village. So, the local oil, yoghurts, butter and local *Lussi* are still exchanged among the farming families in the village. With the advent of the agriculture technology, the role of animals lowered down in farming. A respondent says:

My wife, daughters and sisters converted milk into yoghurt in the traditional way; yoghurt was then converted into butter and *Lussi* with the electric machine at home. My mother used locally manufactured wooden device to convert yoghurt into butter and *Lussi*. I remember that my mother cooperated with our neighbors giving that device to them which they returned after use. Now, the electric machines were being used by most of the farming families including us. But majority of the farming families have this wooden device at home because it also is still used when there is electricity short fall in the village. With the use of electric machines in the village, the attached cooperation with the locally prepared wooden device among the farming families has disappeared from the village.

During the research, the researcher observed that there are many stocks of *Bhussa* and *Phalati* in fields of *Methay Wala* and it is also found in the *Jitani*. When the researcher asked about those stocks the respondent farmer said that:

We had two kinds of stocks in the corners of farming fields. One is called Bhussa/Bhoo/Bhoon (wheat straw). If we use harvester, then *Bhussa* is wasted by the harvester. We used *Bhussa* in cooperation among the farming families in our village. It had also been a source of bridge among our farming community. *Bhussa* is basically used for multiple purposes by the farmers in the village. It is used in the mud for housing construction and that houses are used for animal herds in the village. The mud mixed with *Bhussa* is used for the construction of walls of the house. Mostly, we use it as fodder for animals. We exchange *Bhussa* within the *Biraderi*. Sometimes, my *Biraderi* members use harvester to harvest their wheat crops and the harvester does not produce *Bhussa*.

The name of second stock is *Phalati/Palali* (local name for rice straw) One of the respondents informed:

When we harvest the rice crops, then *Phalati* (rice straw) is separated. Since, the harvester came into the villages, *Phalti* has disappeared. *Phalati* was sed as fodder for animals. It was also used in the construction of barns for animals in the village. *Phalati* was also the source of cooperation among the farming families in the village. They could not get *Phalati*, so, they exchanged it.leading to co-operation among the farmers. This has disappeared over time. When our relatives had more animals in the Main *Basti Baig*, they did not use harvester because they needed fodder for animals. They wanted to save *Phalati* which is used as fodder for animals in the village.

There is tradition of consultation about the skills of farming among the farming communities in rural Punjab. Farmer seeks opinion from the *Biraderi* members, relatives and other farmers regarding farming. The tradition is such deep rooted that

if a farmer does not consult others he faces condemnation by other farming families. Independent decisions without consultation is not an appreciated behavior. The consultations and interactions led co-operation among farmers. The following verbatim by a respondent illustrates the point:

I never discussed farming related issues with other farmers in the village. When I was young, and my father worked in the farming fields, my uncles, neighbors and others *Biraderi* members visited our farming fields. They extensively discussed farming. I also learnt farming methods through these discussions. Now, there are many pesticide shops over there in the Bazaar. If I face a problem related to farming, I go to this shop and discuss the matter with the shop keeper and get the solution. Moreover, the agriculture officers in the area guide about the farming. I am friends with the agriculture officer. The value of consultation among Biraderi has decreased. Modernization of agriculture has promoted technical knowledge through the agriculture expert. I feel that the local tradition of consultation among farming families on farming issues is non existent now.

Modern agriculture technology has also effected human labour and has reduced dependence on family for labour. Cooperation in farming activities among families has been minimized with this mechanization. Until recent past, the whole biraderi would gather and compensate any loss faced by a farmer due to severe weather conditions, floods and natural calamities. Upon inquiry on the issue by the researcher, one of the interlocutors responded:

Yes, there is a tradition of helping and compensating loss incurred by a farming family. Let me tell you a real story that happened in this village. Five years ago, due to heavy winds, electricity wire broke fell in the pond. 5 buffaloes of a farmer of the village died due electricity shock present in water. The farming families got together and compensated the farmer. It used to be a good tradition in the village. These days such kind of help is not offered. If someone faces loss in farming, either he would have to go to the banks to get loans on interest or he would sell his property.

Farming families also co-operated and exchanged fodder for animals. During the research, the researcher observed that there are electric machines used to cut fodder. The owners of the machines purchase fodder, cut it and sell it to the farmers in the village. A former informs on the tradition of exchanging fodder among farming families in the following words:

I used to grow fodder on my land. Sometimes, the fodder takes longer time to grow whereas I need it for animals for interim period. The *Biraderi* members and my relatives provided the fodder. It depends upon the relationship with the other farmers in the village. I admit that most of the farming families purchase fodder. It is a current issue in the village. Fodder supply was not a problem 2-3 years back. Even some of the big landlords have started purchasing fodder from the *Bazaar* which is outside the village. There is a growing trend of purchasing the fodder. In the recent past, farming families domesticated animals for dairy products for personal purpose, but the situation has changed. Now, the farming families sell milk to the industry. Exchange

of fodder worked as bridge of interaction and cooperation among farming families and *Biraderi* in my village. Now, it is fading slowly.

Conversion of milk into yoghurts followed by converting yoghurts into butter and oil has been the traditional way in farming family of the village. The locally manufactured wooden utensil was used for the conversion process. These wooden tools and utensils are still being used in the villages in south Punjab, Pakistan, because most of the villages in the area are deprived of electricity. In these deprived villages, local and traditional method of converting milk into butter and oil is still prevalent. Moreover, it is also evident from the case studies above that due to electricity short fall there is shortage of power supply. A respondent narrated:

When I was young, my mother used the locally wooden prepared machine (*jhagra madhani*) through which yoghurt was converted into oil and butter. Once, I remember, we had no milk, but I do not remember why we had no milk. My uncle's family used to borrow jhagra madhani from my mother. I went to their house and took took milk, butter, *lussi* from the house of my uncle. As far as I think, it is the result of cooperation and interaction between my mother and my uncle's family. My mother was very cooperative and generous towards relatives and neighbours. She would always lent her utensils and tools. I remember that most farming families exchanged such useable items in the village. But now electric machines are being used by everyone. Everyone is independent. The co-operation previously prevalent is no more and no more required.

5. CONCLUSION

In South Punjab, women look after the animals and collect fodder for animals from the farming fields while men spend their time in the small *Bazaars* nearby the village. In the villages of South Punjab, informal cooperative networks among women farmer appear to be strong. Such cooperation is still observed in *Methay Wala and Jitani* Sub-villages of main *Baig* village. The process of converting milk into yoghurt, butter, Lussi (local name of yoghurt drink) and vernacular oil are still handled by the women in the villages. Women exchange dairy products with neighbors, relatives and other women of the *Biraderi*. Mechanization is playing a key role in reducing the interaction and co-opearation prevalent among farming women.

In South Punjab, Pakistan, Tokka and Dranti (cutting device for fodder) are still being used by the farmers in the villages. These devices are mobile These tools are lent and borrowed from each other. Farming families co-operate with each other in this regard. This cooperation related to cutting machines is not observed among the farming families of central Punjab. Harvester is being used by the famers in North Punjab and central Punjab. While in the South Punjab; mostly farmer's families request family labor for agrarian activities. The farming families in South Punjab appear more traditional and cooperative. Milk is being converted into yoghurt in the traditional way and yoghurt is coveted into butter using "Jhangraan Madhanii" is use to prepare dairy products by women in the villages of South Punjab while it is not used by the farming families in the rural areas of central and North Punjab. These areas are more

developed than that of South Punjab. The researcher belongs to South Punjabi village and he is aware of the conflicts between various regions of Punjab. Historically, ruling party had always been from central and North Punjab. The popular perception in South Punjab is that ruling party keeps the region deprived. Basically, it is the political conflict but due to deprivation of economic developmental projects, South Punjab is more traditional and farming communities are less developed. More specifically, the researcher observed that more the villages are economically developed, lesser is the cooperation among the farming families in agriculture activities in the overall Punjab, Pakistan. More the farmers are traditional and uneducated; the more the are cooperative. The traditional and aged farmers use traditional and indigenous farming techniques of farming. They dislike the use of chemical fertilizers and mechanization in agriculture.

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