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AN EMPIRICAL STUDY ON THE MEMBERS' PERSPECTIVES REGARDING AGRICULTURAL COOPERATIVE SOCIETIES IN THE PUNJAB, PAKISTAN

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ABSTRACT

Cooperatives are recognized as symbol of social, cultural, and economic development in many developed and developing countries. This study was conducted to explore the satisfaction of the members regarding services provided by the agricultural cooperative societies. Total 384 members of the societies and 50 key informants, who were the employee of the agricultural cooperatives participated in the study. Study used mix-method research technique, i.e., both quantitative and qualitative methods of research were used to collect data. The descriptive statistics indicated that the majority of the respondents (64.4%) was an ordinary member of the societies. There were no standard criteria of the societies for acquiring their membership. However, agricultural land holding size (\bar{x} =3.67), social networking (\bar{x} =3.39) and financial status (\bar{x} =3.16) were regarded as the criteria to become the member of cooperative society. Regarding provision of services and satisfaction of the recipients, guidance regarding farm management and information about the commodity marketing were had statistically significant mean difference ($P < 0.05$). Though, farmers were more satisfied with the loan scheme (\bar{x} =2.69) and access to inputs (\bar{x} =2.67). the regression analysis showed that, age, education, status of membership and land size had statistically significant impact ($P < 0.05$) on satisfaction of the farmers. This study urges, involvement of educated people in agricultural cooperatives, democracy in decision, strengthening the loan schemes and supporting cooperative farming among farming communities.

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INTRODUCTION

Smallholder farmers in Pakistan suffer a mirage of challenges such as low yield, lack of credit, inadequate market facilities, limited access to modern farming information, lack of access to modern farming inputs and limited availability of agricultural advisory services (Manzoor, 2017). Agricultural cooperatives are advocated as a source to overcome the challenges being faced by the small farmers in particular (Adedayo and Yusuf, 2012). Agricultural cooperatives promote the

concept of mutual working among the farmers through joint farming, input purchasing, input delivery and provision of farm services at relatively cheaper rates. The agricultural cooperatives try to sell their produce at good prices in the market by accessing proper market information (Poulton *et al.*, 2006). For this reason, the farmers are encouraged to pool their resources to get collective benefit in the form of higher production and farm income (Emelianoff, 1995). The agricultural cooperatives are also recognized as a strategy to

overcome the challenges faced by small farmers who suffer from many problems such as non-accessibility to modern inputs, lack of credit facilities, improper or lack of infrastructure and less availability of extension services. As a result of these issues, governments and donor agencies have promoted agricultural cooperatives by linking them with national and international markets and emphasized proper working and delivery of services through collective efforts for strengthening small farmers (Veerankumaran, 2007).

The history of cooperatives in Pakistan goes back to the formation of the European cooperative movement in the late 19th century. In Punjab there is a provincial department namely the Cooperative Department organize, which manage, and regulates the working of cooperative societies by supervising them through several enactments. There is system to inspect and audit these cooperative societies in order to protect the interest of members. In Punjab different types of cooperative societies exist. These cooperative societies are categorized on the basis of the nature of their activities. These are Resource Societies, Producer Societies, Consumer Societies, Housing Societies and General societies. In Punjab, it is required for a cooperative society to have at least 30 members even for agricultural cooperative society, but it is different in case of Housing society where 50 members are the required minimum level of members for registration. This limitation has been written in the Cooperative Societies Act, 2006 but it is rarely followed practically particularly in case of agricultural cooperative societies. During the data collection the researcher has observed that most of agricultural societies were often consisted of 15-20 members (Punjab Cooperative Department, 2011).

A significant amount (1,360.909 million PKR) of public money is spent yearly on cooperatives, which is now 638.8% more than the amount specified in 2014 (184.206 million PKR). Every year there is an increase in the budget allocated by the government for cooperatives. According to the statistics of the Punjab Cooperative Department (2019) in 2015, 2016 and 2017 the amounts granted to the cooperative department were 185.143, 225.061 and 1239.463 (million PKR) respectively. All over the world the cooperative societies are evaluated in order to bring improvement to the structure of the cooperative. Considerable amount of research has been published on cooperatives in different Asian countries, such as China (Zhang *et al.*, 2009), Korea

(Jivani and Murray., 2006), Japan (Kurimoto, 2004) and India (Krishna, 2013), but no scientific research is found on the factors of success or failure of cooperatives in Pakistan. This paper fills this gap in literature and investigates the working and satisfaction of its members about the cooperative society services. Therefore, this study aimed at exploring the satisfaction of members of the cooperatives about the services of the cooperatives. The specific objectives of the study were;

- To determine the socio-economic attributes of the respondents.
- To assess membership criteria and access of different social groups in agricultural cooperatives.
- To investigate the level of satisfaction of members in the agricultural cooperatives.

Theoretical framework

The analysis of cooperative performance has always been a topic of interest in agricultural extension, primarily because of the significance of the cooperative form of organization in agriculture in both developed and developing countries. Governments in both developed and developing countries actively promote and assist agricultural cooperatives. Justification of continued public support of the cooperative form of organization requires evaluation and monitoring of cooperative performance. For this study the principles of cooperatives advocated by ICA were used as a theoretical framework. These seven principles consisted of (1) Free and voluntary membership (open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination); (2) Democratic control by the members (who actively participate in setting their policies and making decisions); (3) Equitable contribution to the capital of the cooperatives by members (members contribute equitably to, and democratically control, the capital of their cooperative); (4) Autonomy and independence (cooperatives are autonomous, self-help organizations controlled by their members); (5) Provision of education and training (provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to the development of their cooperatives); (6) Cooperation between cooperatives (serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures); (7) Concern with the

community (work for the sustainable development of their communities through policies approved by their members).

METHODOLOGY

Study area

The Punjab province is the largest among five provinces of Pakistan, with the population of 110 million which is 52.95% of the total population of Pakistan. There are 9 administrative divisions of Punjab namely Rawalpindi, Sargodha, Faisalabad, Gujranwala, Lahore, Sahiwal, Multan, Dera Ghazi Khan, and Bahawalpur division (Government of Pakistan, 2017). These divisions are further divided into 36 districts. This study was conducted in three divisions (Faisalabad, Multan and Gujranwala) of the Punjab province because of the largest number of agricultural cooperative societies.

Sample selection

All the members of agricultural cooperatives in the Punjab comprised the population of the study. The target population was the members of agricultural cooperative societies. An up-to-date list of agricultural cooperative societies was obtained from the Punjab Cooperative Department. The lists which were provided by the Punjab cooperative department had statistics of agricultural cooperative societies at divisional level. From the provided list three divisions which had the highest number of agricultural cooperative societies were selected purposely as Multan, Faisalabad and Gujranwala divisions with 4425, 3740 and 3473 agricultural cooperatives societies, respectively. The estimated population of the members were 232760. Hence a sample size of 384 (128 members from each division) was calculated by using an online available software (www.surveysystem.com) with 95%, confidence level and with the confidence interval of 5. Additionally, 50 key informants were also selected through purposeful sampling procedure for in-depth interviews. Key informants, the members of the agricultural cooperative societies were selected by snowball sampling technique because of the non-availability of accurate record about members at district and tehsil levels because of the ban on the registration of new agricultural cooperative societies since from 2008-09.

Instrumentation and data collection

The structured interview schedule was used as the

quantitative data collection tool. The interview schedule was prepared keeping in view the objectives of study and discussion with different stakeholders and senior researchers of the Institute of Agri. Extension and Rural Development, University of Agriculture, Faisalabad, Pakistan. Data were collected through face-to-face interview techniques. The key informants were interviewed through face-to-face interview technique as well on a prescribed interview guide. The qualitative discussion was also recorded for the further analysis.

Data analysis

The collected quantitative data were analyzed through Statistical Package for the Social Sciences (SPSS). Descriptive techniques such as frequency, percentage, mean and standard deviation were used. Whereas, inferential technique, linear regression analysis was used in order to examine the impact of demographic profile on the satisfaction of the members about the services provided by the cooperatives. Qualitative data were analyzed through content analysis techniques. The contents were generated and used to validate the quantitative findings.

RESULTS AND DISCUSSION

Socio-economic attributes of the respondents

Table 1 indicates that more than one fourth (27.9%) of respondents (members of agricultural cooperatives) were aged under 40 years followed by the slightly greater than one fourth (26.6%) of respondents were aged between 41-50 years. Of the total respondents, 45.6% of respondents were aged more than 50 years. This implies that major chunk of the sampled farmers was in their old age.

Regarding educational level, 12.8% of the farmers were illiterate followed by 87.2% literate farmers. Of the total respondents, more than half (56%) of respondents had education of less than primary level. One fifth (20.3%) of respondents were educated between middle and matric. Almost one in ten respondents (10.9%) had educational level of more than matric. This group among the total farmers was most qualified as they had more than ten years of schooling.

Of the total farmers, majority (65.6%) had small land size of under 12.5 acres. Greater than one fourth (28.1%) of farmers had land size between 12.5-25 acres. Of the total farmers only 6.3% had considerably large land size (more than 25a acres). However, majority of

the farmers (69%) was owner of their lands. One fourth (25%) of respondents were owner-cum-tenants and 6% were tenants.

Less than one third of respondents (31.3%) unveiled that they had a membership of the cooperative from more or less 12 years whereas slightly more than one third (34.4%) of respondents were member of cooperative from 12-20 years. Of the total respondents, 34.4% were the member of cooperative from the two decades almost (20 years). This indicates that respondents had a wide experience of being associated with the cooperative society and might have a believe on the objectives of cooperatives. Esther and Ifeoma (2017)

endorsed that, being associated with the cooperative for a long year reflects the cooperative spirit of the members who always favor their cooperatives objectives. This long association would have increased the knowledge of the farmers with special reference to working of cooperative society (Cechin *et al.*, 2013).

Among the members of cooperatives, 64.6% were ordinary members followed by one fifth respondents (22.1%) who were members of the management committees of the cooperatives. Of the total members, 7.8% were members of loan committee and 5.5% reported being associated in various sub-committees of the cooperatives.

Table 1. Demographic profile of respondents.

Demographic attributes	Frequency	Percentage
Age (in years)		
Up to 40	107	27.9
41-50	102	26.6
>50	175	45.6
Education		
Illiterate	49	12.8
Up to Primary	215	56.0
Middle- Matric	78	20.3
Above Matric	42	10.9
Size of land holding (acre)		
Small (<12.5)	252	65.6
Medium (12.5-25)	108	28.1
Large (>25)	24	6.3
Tenancy status		
Owner	265	69.0
Owner-cum-tenant	96	25.0
Tenant	23	6.0
Membership of cooperative since (year)		
Up to 12	120	31.3
12-20	132	34.4
>20	132	34.4
Status of membership		
An ordinary member	248	64.6
Member management Committee	85	22.1
Member loan committee	30	7.8
Member of various sub-committees	21	5.5

The membership of any agricultural cooperative society is a basic unit of cooperative ex. The people of common interests unite together and pool their resources in certain areas of activity (ICA, 2015).

Criterion of becoming the member of agricultural cooperative society

By considering the ICA cooperatives principles framework, the sampled farmers were asked to inform

about the criteria of becoming a member of cooperative society under 5-point Likert scale (1 = not at all important, 2 = slightly important, 3 = neither 4 = fairly important, 5 = Very important). (Table 2).

Table 2. Criterion of becoming the member of agricultural cooperative society.

Criterion of membership	Mean \pm Std. deviation
Agricultural land holding	3.67 \pm 1.307
Social networking	3.39 \pm 1.412
Financial status	3.16 \pm 1.681
Common shared problem	2.64 \pm 1.192
Education	2.31 \pm 0.999
Social background (caste)	2.22 \pm 1.126

Respondents were asked to explore the criteria that they had to meet with while becoming the members of the cooperatives. Farmers perceived it differently, as for the most of respondents' size of land holding was the criteria, they were given membership for (\bar{x} =3.67). The mean values heading towards four indicates it was perceived fairly important by the farmers to have agricultural land holding in order to become members of cooperative. Social networking was another aspect considered as the criteria (\bar{x} =3.39) followed by financial status (\bar{x} =3.16) as many of the farmers linked financial status of the farmers with the membership. Common shared problem (\bar{x} =2.64), education (\bar{x} =2.31) and social background (\bar{x} =2.22) were also perceived as slightly important by the farmers to become members. From the farmers' perceptions, it can be deduced that there was not a hard and fast criterion to become a member. This flexibility in the criteria, might have allowed each farmer to become the members of the cooperative at any stage. Perhaps, specific criteria and merit if followed would have attracted knowledgeable and active members for the cooperatives. One of the members of the cooperative argued;

In the best of my knowledge, our cooperative society (the sugarcane cooperative society) does not have any specific criteria of the membership. However, few certain factors can increase the chance of becoming a member for any farmer, especially, if he is cultivating sugarcane crop, has large land size, and had a good repute in the society.

A key informant explained his view regarding the membership criteria;

we [cooperative society] do not put any criteria

for membership. However, the person willing to become a member should be mentally, physically, and socially good in his repute.

This was the criteria that cooperative societies were following. Indeed, the criteria set was weak and narrow in its justification.

The following table summarizes the respondent's views regarding fifth, sixth and seventh ICA principle of cooperatives (Education, Training, and Information, Cooperation Among Cooperatives and Concern for Community) respectively. A co-operative's current members are its current stakeholders who are the users of its services (ICA, 2015). Therefore, the respondents were asked about the services provided by the agricultural cooperatives in the light of the ICA principles framework. Their responses were recorded using the 5-point Likert scale (1= Never, 2= rarely, 3=sometimes, 4= very often, 5= always).

Table 3 indicates the services provided by the agricultural cooperatives for their members. Members perceived that provision of agricultural loans to the members (\bar{x} =3.50) as more prominent. However, the mean value indicates that the provision of loan was not so often. Perhaps, the limited provision of the agricultural loans was subject to the availability of funds. Access to farm inputs was another service provided by the cooperative (\bar{x} =2.36). Though the mean value indicates that the provision of access to the farm inputs was rarely happening in the cooperatives. During informal discussion, one of the respondents argued that;

The prices for farm inputs had increased multifold and I do not have adequate financial resources to meet those high prices and eventually I was attracted to different loan schemes. Being a member of cooperative,

getting loan facility from the cooperative helped me a lot to cultivate crops.

The cooperatives had the provision of services related to knowledge sharing among farmers regarding farm management, harvesting and post harvesting measures and plant protection techniques. Providing education and training to the farmers, guiding commodity marketing and storage of produce, farm mechanization and helping farmers in transportation of their produce

were few more services deemed important for the farmers.

The cooperatives aimed at arranging festivals, agricultural tours and health camps for the farmers for the community development. However, the provision of these aforementioned services was perceived rarely by the members. Mean values as emerged between 1.59-2.36 endorsed that provision of services was rarely.

Table 3. Services provided by the agricultural cooperatives.

Provided services	Provision		t-statistics
	Mean± Std. Dev.	Satisfaction Mean± Std. Dev.	
Provision of Agri. loan schemes	3.50±1.527	2.69±0.71	1.404
Access to farm inputs	2.36±1.140	2.67±0.85	-0.874
Guidance regarding farm management	2.31±0.893	2.23±0.76	1.815*
Technical advice about Harvesting/Post harvest technology	2.25±0.847	2.33±0.88	0.547
Information regarding plant protection measures	2.24±0.846	2.39±0.98	0.1693
Provision of education and training	2.22±0.958	2.36±0.87	0.391
Information about commodity marketing	2.21±1.015	2.20±0.89	2.047*
Guidance about Storage techniques	2.19±0.858	2.52±0.91	-1.113
Provision of Farm mechanization	2.18±0.911	2.17±0.99	-0.525
Help in transportation of produce	2.16±0.984	2.36±0.93	0.892
Arrange fair and festivals	1.74±0.876	1.50±1.02	-0.500
Conduct agricultural tours	1.73±0.937	2.10±1.01	-1.789
Organize health camps	1.59±0.880	1.50±1.02	-1.046

Likert scale used (1. never 2. rarely 3. sometimes 4. very often 5. always).

Table 3 further indicates that guidance regarding farm management provided by the agricultural cooperatives was statistically significant and the farmers who had received the guidance were more satisfied with the service rendered ($t=1.815$; $P<0.05$) as compared to those who didn't receive the guidance. Information about the commodity marketing accessed through the cooperative also reflected a statistically significant mean difference between the provision of service and the satisfaction of receivers ($t=2.047$; $P<0.05$). This could be deduced that, farmers satisfaction increased with the increased access to information regarding commodity marketing. The information regarding marketing could help farmers to get better prices of their produce. Findings are consistent with those of Satyasai and Pereira (2019) as they found that with the increase in access to the market information improved the returns of the farmers and farm income. They found that with one point increase in market information the net income increases from 392 Rs. to 764 Rs. Raj *et al.* (2011) concluded that with the

help of information dissemination interventions and enhanced farmers access to information brought 15.2% increase to their net income.

Agricultural loans, access to farm inputs, technical advices, information delivery regarding plant protections, provision of education, guidance over storage techniques, farm mechanization, transportation, arrangement of fairs and festivals, agricultural tours and establishment of health camps were statistically non-significant mean difference ($P>0.05$). This can be deduced that might be the members of the cooperatives were not getting the services rightly thus the satisfaction was not achieved. Cooperative had a successful role in facilitating farmers regarding farm requisites, marketing of commodities and rendering services to store grains and hold their transportation. However, the limited access of the members to these services did not satisfy them (Ortmann and King, 2007). Current findings are also endorsed by one of the participants of study;

I am sure that cooperative is operating but its

performance is decreasing day by day and the reason is poor management inside the cooperative. I witness, one of our committee members hiddenly sold the equipment. This was reported and unfortunately that case is still undecided inside the cooperative society. This kind of sluggishness and biasness is hampering the performance of service

provision”.

Another participant reported that;

I do agree, cooperatives were effective tools against the capitalism and middleman culture, but due poor provision of services for the common man, the cooperatives started losing their credibility.

Table 4. Regression analysis regarding the determinants of satisfaction of farmers.

Factors	Coefficients	Sig.
Age of respondents	0.901	.000**
Educational level	0.129	.000**
Duration of membership	0.663	.105 ^{NS}
Land size	0.074	.000**
Tenancy status	0.332	.285 ^{NS}
Status of membership	0.739	.000**

Table 4 indicates that, age had statistically significant relationship with the satisfaction (P<0.05). This implies that with the increase in age, there is likelihood of more satisfaction. It can be due to the fact that young individuals may have more needs and expectations as compared to those who have turned old and achieve maturity. In another study, Esther *et al.* (2018) argued that members in such age range could have high rate of productivity because the members were still vibrant. Education of the respondents had statistically significant relationship with the satisfaction (P<0.05). Educated persons tend to have more understanding and ultimately more satisfaction with the services rendered by cooperative under their resources as compared to those who had limited educational capabilities. One of the participants of study (member of cooperative) endorsed;

I, being a cooperative member observed that cooperative society had lesser number of graduate and post-graduate members, who if joined the society could have deliver more. Contrasting to this, most of the members were illiterate and were as pro-active in cooperative participation and working in line to the objectives of cooperative.

This accentuate that educational level of the farmers was one of the significant determinants of achieving satisfaction. Findings are further supported by those of Ganpat *et al.* (2014), as they found that age, educational level, and size of land of the farmers was significantly

related with the satisfaction of farmers about the services served. Many studies (Ao *et al.*, 2017; Tang *et al.*, 2010; Fan and Luo, 2009) have arbitrated that age, education and land size had little influence on the satisfaction level of the farmers. This study also further confirms that, the land size was highly significant with the satisfaction of the farmers (P<0.05). It implies that large landholders are likely to be more satisfied from the services of cooperative. Generally, the landholding affects the ability of the farmers to take risks and adopt modern farming practices (Hussain *et al.* 2011). One of the key informants argued that;

The members with the large land sizes are given priority and key role in cooperative societies management.

Duration of membership and tenancy status, both had statistically non-significant association with the satisfaction (P>0.05). However, the status of membership was highly significant with the satisfaction (P<0.05). Thus, it can be inferred that senior members are likely to be more satisfied with the services provided by the respondents as compared to the new members. During qualitative interviews, it was revealed that most of the members of the cooperative preferred to stay as an ordinary member as they were likely to not spend more time in cooperatives because of their other commitments. One cooperative official commented:

The large land holders with strong social status easily find their place in the committees

to cherish the executive prestige although all it happens under the shade of democracy, but members select those farmers who are already influential and have their personal interests in the cooperative society. This status quo and a biasness were also one of the reasons for the farmers to become ordinary members. The small farmers and less educated people try to avoid grouping in the cooperative environment which is indispensable part in the cooperative election that is why they prefer to be merely an ordinary member”.

CONCLUSIONS AND RECOMMENDATIONS

This study explored the membership criteria, services, and satisfaction of the members of the agricultural cooperatives. This study found that cooperative societies provide many services for its members including agricultural loans, access to farm inputs, technical advice, information delivery regarding plant protections, provision of education, guidance over storage techniques, farm mechanization, transportation, arrangement of fairs and festivals, agricultural tours and establishment of health camps. Whereas very few cooperatives had officially refused membership to interested individuals, household-level data indicate that nearly 50% of non-members living in *villages* did not join because they could not fulfill membership criteria that were, in most cases, of a financial nature. The entire chunk of services except the Guidance regarding farm management and information about the commodity marketing were statistically non-significantly related with the satisfaction of the members. This deducts that the farmers were poorly satisfied with the provided services. Age, education, land size and status of membership had significant impact on the satisfaction of respondents. Education appeared more critical as the cooperative had more engagement of illiterate members whereas graduate and post graduate members were rare. Thus, inverse to the mandate of the cooperative, less educated members were managing the cooperatives operations. In addition, the members with large land holdings were preferred to occupy elite position in the cooperatives. Pertinent to these weaknesses, the needs of the common men were ignored, and the services provided were inadequate to satisfy their members. This study recommends that the agricultural cooperative has

the potential to benefit the farming communities, however, its functioning needs to be revamped. The need of the hour is to on board educated persons and chalk out the criteria to become the member. The cooperative should specify their services well inline to their resources and strengths. The loan provision scheme needs to be more strengthened for the members in order to facilitate them to cover the production costs. The cooperative societies are also recommended to initiate input provisions to the farmers on mutual interest basis for the farmers.

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