

# Role of Cane Cooperatives: Improving Farmer Income

Palak Jhunjunwala  
*La Martiniere Girls' College*  
Lucknow, India  
[palakjhunjunwala2005@gmail.com](mailto:palakjhunjunwala2005@gmail.com)

**Abstract**– Sugar is the second largest agro-based industry in India. This paper sheds light on the origins and various developments that have taken place in Cane Cooperative Societies (CCS), over the years, in the Ayodhya district of Uttar Pradesh, India. These Cane Cooperatives function as an integral part of the sugar industry while also simultaneously providing various benefits to cane growers. These societies act as a link between sugarcane farmers and sugar mills, ensuring the smooth running of mills and a continuous, hassle free supply of sugarcane as per the requirements of the factories. Additionally, CCS helps sugarcane growers by providing them with good quality seeds, fertilizers, pesticides etc. For this paper, various farmers, industry officials and Cane Cooperative officials have been interviewed to assess the role, understand the challenges and suggest methods for future improvements for these Cane societies.

**Index Terms:** Cooperative society, Agribased, sugarcane, welfare of rural population, Ayodhya.

## I. INTRODUCTION

Cane Cooperative Societies are non-profit entities which often aim to help with marketing of products produced by agricultural and other labour-intensive businesses.

Based on the recommendations of the Mirada committee and the model cooperative society act, The Government of India passed the Multi-State Cooperative Society act in 2002, thereby providing for the democratic and autonomous working of the cooperatives, a Cooperative Society may be governed by the respective state's Cooperative Societies Act or by the multi state Cooperative Society Act 2002. The National Cooperative union of India (NCUI) and the National Cooperative development corporation (NCDC) are agencies playing an integral role in working for the promotion of the Cooperative movement of India.

A co-operative society is often formed by a voluntary association of individuals who come together with the intention of working to promote their economic interest. It is an association of people who voluntarily share their resources for the mutual welfare of its members itself. Any sugarcane growing farmer of the sugarcane society area who has land in his own name can become a permanent member of the sugarcane committee but those who

have a leased land of forest, railways, dam etc have to become a supply member and get the facility of sugarcane supply only. The permanent membership fee is Rs. 21 membership and Rs. 200 share amount is charged. These societies work on the principle of self-help and mutual help. Their primary goal is to provide support to the members. A co-operative society is usually formed for the promotion of thrift, self-help and mutual assistance of the members.

A delegate is elected from a protected area of the sugarcane committee of the village (maximum hundred members). These delegates elect the directors, who further choose the chairmen from amongst themselves. The secretary of the sugarcane society is the member secretary of the board and is responsible for all the activities of the cane committee. The number of directors in each cooperative society is as per the number prescribed in its bylaws.

At present, a total of 169 Cane Cooperative Development Societies and 28 Sugar Mill Cooperative Societies are registered and functional under the Cane Development Department. Cane Cooperative Development Societies are registered by the Commissioner, Cane & Sugar/Registrar, Cooperative cane/sugar mill societies in Uttar Pradesh under Section 7 of the Cooperative Societies Act, 1965. Currently, 48.84 lakh sugarcane farmers are registered in the Cane Cooperative societies of the state, out of which about 33 lakh cane farmers are regularly supplying sugarcane to sugar mills through the same societies.

Cane Societies maintain easy coordination between sugarcane farmers and sugar mills, by helping cane growers through supplying their sugarcane in a stipulated time period and making cane payments on the rates declared by the Government on one end while also helping in the uninterrupted running of 119 sugar mills through hassle free full feed supply of sugarcane as per their requirements on the other end.

Following are the primary functions of Cane Development Societies:

- To create interest in scientific cane farming among cane growers and to make them members of Cane Cooperative Societies.

- Providing essential agro-inputs in the form of fertilizers, pesticides and machinery etc to member cane farmers.
- Providing loans to member cane farmers for agricultural inputs under the NABARD scheme.
- Providing agricultural inputs to the member cane growers.
- To ensure cane supply to sugar mills by making arrangements for sugarcane survey, basic 'satta' calculations (Satta is the quantity of sugarcane a farmer can supply to a mill based on the cane supplied last year and the area of the sugarcane farm in the current year) and issuing of 'parchi' (Parchi is the sugarcane requisition slip given to farmers to schedule which farmer will supply cane when so that the required cane is supplied daily to the mill).
- Ensuring that the sugarcane price is paid by sugar mills to member sugarcane farmers for their supplied cane.
- Providing resources for the advancement of economic, educational, social and health related conditions of cane grower members.
- To help make a better livelihood for the cane growers and increase their income through assistance and by providing them with various facilities.

## II. MATERIALS AND METHODS

This research paper is based on the cane Cooperative Societies in Ayodhya District of Uttar Pradesh, India. The study has been undertaken with the following specific objectives:

- To study the performance and problems faced by Cane Cooperative Societies in 3 districts namely Ayodhya, Basti and Gonda of Uttar Pradesh.
- To suggest remedies for improving performance of the cane co-operative.

The present investigation uses both primary and secondary data. The primary data has been collected through interviews and questionnaires from farmers, officials of cane cooperative society and sugar mills, while the secondary data has been collected through CCS records, books and websites. The collected data is represented by using various Statistical and graphic techniques. A comparative study has been done amongst the various CCS and farmers who are members of these societies. The present study is based on a descriptive survey and stratified random sampling methodology. This survey is based on the input provided by farmers and officials of CCS and sugar mills. The collected data is based on several parameters like problems and remedies of CCS, farmer's satisfaction and feedback taken from farmers, cane officials etc.

## III. DATA ANALYSIS

Duration- One month data collection + 15 days (Data analysis and report submission)

Simple size- 20 farmers rated the usefulness of societies for Farmers on a Scale of 1-10(1 is least useful and 10 is most useful). Data was collected from five Cane Cooperative Societies, namely: Basti, Masaudha, Nawabganj, Ayodhya and Vikramjot. 4 Farmers were interviewed thoroughly from each society. Apart from this Secretary from societies and DGM Cane of a Sugar mill were also interviewed.

In addition to the primary roles mentioned above, cane co-operative societies also actively coordinate with sugarcane farmers to ensure the availability of high-quality agricultural inputs and help in implementing various schemes issued by the government for development of cane to fulfil the following objectives:

- Promotion of modern and scientific methods of sugarcane farming among the society's members, through pamphlets, exhibitions, agricultural fairs and seminars.
- Distribution of quality cane seeds, fertilizers and pesticides from to members and ensuring the delivery of quality equipment/machinery by installing personal warehouses or rental warehouses. Lastly, providing financial assistance in the form of loans to cane grower members.
- Protecting the interests of member sugarcane farmers.
- Arranging for capital for agricultural inputs which are necessary to increase sugarcane production and productivity.
- To enhance the tendency of self-reliance, mutual cooperation, advancement of business skills and to promote ethics among cane growers and to achieve other objectives of a cooperative movement.
- In accordance with the policies laid down by the government, cane co-operative societies have to make arrangements for sugarcane surveys, basic quota/satta calculation and calendaring and issuing sugarcane supply slips to the member cane farmers for their supply of sugarcane.
- To promote member farmers to produce other crops and make arrangements for quality seeds for the same.

#### IV. RESULTS

S.N.	Farmer's Name	Village/CCS	Society Member	Education level			Awareness level about CCS Benefits			Cane growing area		Rating based on questionnaire	
				Matric	Graduation	Post-graduation	Least Aware	Semi Aware	Most Aware	< 1 acre	1-2 acre	>2 acre	
1.	Rajeev	Lavvaveerpur,Nawa bganj	✓			✓			✓		✓		6
2.	Triloki	Ballaipur, Nawabganj	✓	✓				✓			✓		5
3.	Anil Tiwari	Nawabganj, Gonda	✓		✓				✓		✓		5
4.	Mahendra	Ballipur,Nawabganj	✓	✓			✓				✓		3
5.	Rajendra Tiwari	Ashapur, Ayodhya	✓		✓				✓			✓	5
6.	Suraj Bhan Yadav	Dabhasemar, Ayodhya	✓	✓			✓				✓		3
7.	Ghanshyam Nishad	Manapur, Ayodhya	✓	✓			✓				✓		4
8.	Deendayal	Manapara, Ayodhya	✓	✓				✓		✓			5
9.	Ram Autar Kanaujiya	Bhavnapur, Vikramjot	✓	✓				✓				✓	5
10.	Deenanath	Trilokpur, Vikramjot	✓	✓				✓				✓	5
11.	Prem Prakash	Udaipur Khurd, Vikramjot	✓	✓			✓				✓		4
12.	Uday bhan Singh	Rikhipur,Vikramjot	✓		✓				✓		✓		5
13.	Ram Prakash Verma	Chhatirwa, Masaudha	✓			✓			✓		✓		8
14.	Jai Prakash Verma	Dostpur, Masaudha	✓	✓				✓				✓	6
15.	Ram Krishna Maurya	Betauli ,Masuadha	✓		✓			✓			✓		7.5
16.	Ramdeo Upadhyay	Usuru, Masuadha	✓			✓			✓	✓			7
17.	Narendra Singh	Pendari, Basti	✓		✓			✓			✓		5
18.	Krishna Gopal Tiwari	Marwatiya Tiwari,Basti	✓		✓				✓			✓	5.5
19.	Ram Nihal Singh	Penda, Basti	✓			✓			✓		✓		7.5
20.	Uday Ram	Behra, Nayapurwa, Basti	✓	✓				✓			✓		5

**Table 1:**Farmers Result Tabulation

S.N.	Farmer's Name	Education Level			Rating obtained based on education level (a)	Rating based on questionnaire (b)	Correlation between (a) and (b)
		Matric (1point)	UG (2points)	PG (3 points)			
1.	Rajeev			3	3	6	r= 0.74096
2.	Triloki	1			1	5	
3.	Anil Tiwari		2		2	5	
4.	Mahendra	1			1	3	
5.	Rajendra Tiwari		2		2	5	
6.	Suraj Bhan Yadav	1			1	3	
7.	Ghanshyam Nishad	1			1	4	
8.	Deendayal	1			1	5	
9.	Ram Autar Kanaujiya	1			1	5	
10.	Deenanath	1			1	5	
11.	Prem Prakash	1			1	4	
12.	Uday Bhan Singh		2		2	5	
13.	Ram Prakash Verma			3	3	8	
14.	Jai Prakash Verma	1			1	6	
15.	Ram Krishna Maurya		2		2	7.5	

16.	Ramdeo Upadhyay			3	3	7	
17.	Narendra Singh		2		2	5	
18.	Krishna Gopal Tiwari		2		2	5.5	
19.	Ram Nihal Singh			3	3	7.5	
20.	Uday Ram	1			1	5	

**Table 2:**Correlation between Education level of farmers and Rating of Socie

S.N.	Farmer's Name	Awareness Level			Rating based on awareness level (a)	Rating based on questionnaire (b)	Correlation between (a) and( b)
		Least Aware (1 point)	Semi Aware (2 points)	Most Aware (3 points)			
1	Rajeev			3	3	6	r= 0.685738
2	Triloki		2		2	5	
3	Anil Tiwari			3	3	5	
4	Mahendra	1			1	3	
5	Rajendra Tiwari			3	3	5	
6	Suraj Bhan Yadav	1			1	3	
7	Ghanshyam Nishad	1			1	4	
8	Deendayal		2		2	5	
9	Ram Autar Kanaujiya		2		2	5	
10	Deenanath		2		2	5	
11	Prem Prakash	1			1	4	
12	Uday bhan Singh			3	3	5	
13	Ram Prakash Verma			3	3	8	
14	Jai Prakash Verma		2		2	6	
15	Ram Krishna Maurya		2		2	7.5	
16	Ramdeo Upadhyay			3	3	7	
17	Narendra Singh		2		2	5	
18	Krishna Gopal Tiwari			3	3	5.5	
19	Ram Nihal Singh			3	3	7.5	
20	Uday Ram		2		2	5	

**Table 3:**Correlation between Awareness level of farmers and Rating of Society

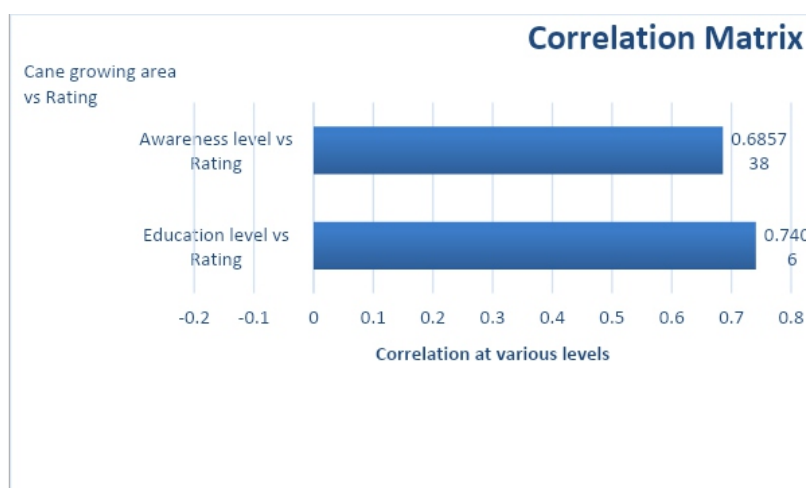
S.N.	Farmer's Name	Cane Growing Area			Rating based on cane growing area (a)	Rating based on questionnaire (b)	Correlation between (a) and( b)
		< 1 acre (1 points)	1-2 acre (2 points)	>2 acre (3 points)			
1	Rajeev		2		2	6	r = -0.09654
2	Triloki		2		2	5	
3	Anil Tiwari		2		2	5	
4	Mahendra		2		2	3	
5	Rajendra Tiwari			3	3	5	
6	Suraj Bhan Yadav		2		2	3	
7	Ghanshyam Nishad		2		2	4	
8	Deendayal	1			1	5	

9	Ram Autar Kanaujiya			3	3	5	
10	Deenanath			3	3	5	
11	Prem Prakash		2		2	4	
12	Uday bhan Singh		2		2	5	
13	Ram Prakash Verma		2		2	8	
14	Jai Prakash Verma			3	3	6	
15	Ram Krishna Maurya		2		2	7.5	
16	Ramdeo Upadhyay	1			1	7	
17	Narendra Singh		2		2	5	
18	Krishna Gopal Tiwari			3	3	5.5	
19	Ram Nihal Singh		2		2	7.5	
20	Uday Ram		2		2	5	

**Table 4:**Correlation between Size of farms and Rating of Society

#### V. CORRELATION ANALYSIS

EDUCATIONAL LEVEL VS RATING	AWARENESS LEVEL VS RATING	SIZE OF FARM VS RATING
<b>R= 0.74096</b>	<b>r= 0.685738</b>	<b>r = -0.09654</b>

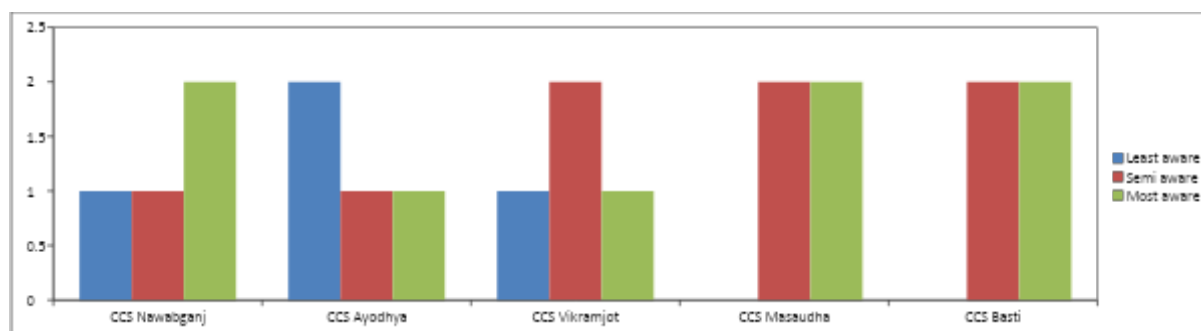
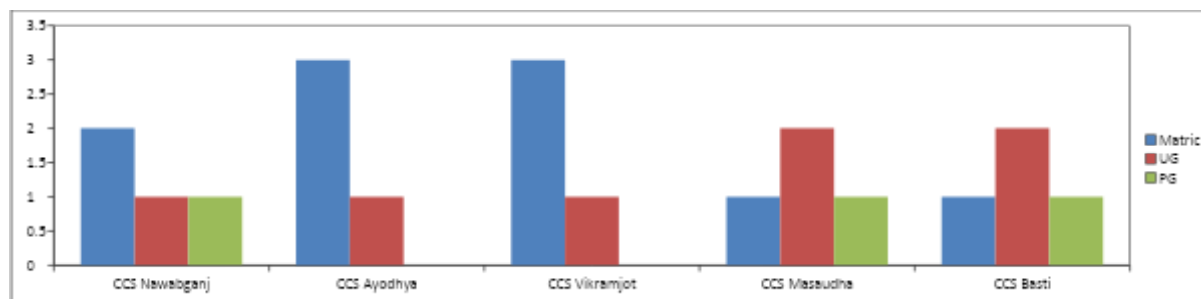
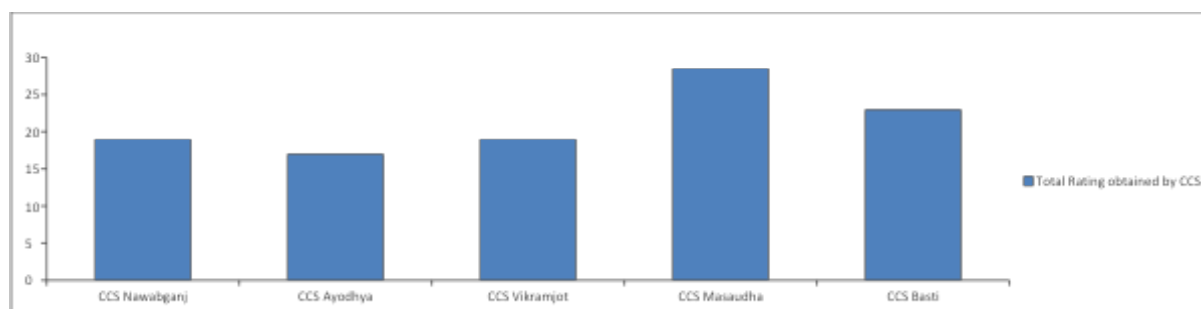


#### Comparative Study between different Societies

The present survey was conducted in five cane cooperative societies of 3 different districts of Uttar Pradesh. A comparative analysis has been done amongst societies on the basis of farmer satisfaction and quality of services provided by CCSs. The analysis was divided into three categories: education level, awareness level and society rating. inputs obtained from questioning the farmers of all societies under consideration. The results are summarized in the table below:

S.N.	CCS NAME	EDUCATION LEVEL (NO. OF FARMER)	AWARENESS LEVEL (NO. OF FARMER)	TOTAL RATING OBTAINED BY CCS
------	----------	---------------------------------	---------------------------------	------------------------------

		Matric	UG	PG	Least aware	Semi aware	Most aware	
1.	<b>CCS Nawabganj</b>	02	1	1	1	1	2	19
2.	<b>CCS Ayodhya</b>	03	1	0	2	1	1	17
3.	<b>CCS Vikramjot</b>	03	1	0	1	2	1	19
4.	<b>CCS Masaudha</b>	1	2	1	0	2	2	28.5
5.	<b>CCS Basti</b>	1	2	1	0	2	2	23



From the above table and graphical representation, it can be concluded on the basis of ratings that CCS Masaudha has been working well to provide the most satisfaction to the farmers and needs of sugar mills followed by all other CCSs. The total rating obtained by CCS Masaudha is 28.5 which is quite impressive in all domains. The tabular analysis has been carried out to analyse the data. CCS Masaudha also shares position with CCS Basti on education level and awareness level of farmers.

Strong correlation was observed between education and Awareness of farmers and the rating given to CCS. However, no significant correlation was found between the size of the Farms and the rating of CCS. When we compare the five societies, we can see the rating of Masaudha and Basti societies are higher than the rating of the others. This is also born by the fact that the farmers in these areas are more educated and aware than the other areas and the working of the society officials of these two societies is better than the other societies.

## VI. DISCUSSION

As shown by the results, the farmers are satisfied with respect to the seeds, pesticides, fertilizers and other equipment they are receiving from the societies. The CCS helps cane growing members in getting the required quantity of sugarcane seeds of good variety.

The CCS provides major help in terms of a good variety of seeds and passing on the benefits of government schemes to the farmers. The government, from time to time, comes out with schemes for the farmers in terms of concessional rate of interest for cheaper loans, subsidised power, agricultural implements at low cost, irrigation schemes etc. However, less aware and uneducated farmers usually miss out on these schemes as they cannot comprehend and fully utilize these schemes. Lack of awareness further complicates the issue.

The major problem listed by the farmers is getting the 'parchi' i.e., indent transportation of sugarcane payment system and delay in payment of sugarcane. These problems can be divided into two parts- (i) the internal working of TCS, including Satta making and 'parchi' distribution system (ii) liaising with the sugar factory by the CCS for accurate and timely payment of sugarcane.

On being asked for what variety of cane the farmers were growing, most of them reported that they are not growing a rejected variety of sugarcane. However 20% farmers (01 from CCS Basti district, 1 from CCS Vikramjot and 2 from CCS Nawabganj) are growing rejected variety (CO 0238) due to high production. No farmer of CCS Masaudha is growing the rejected variety. This shows that there is a significant improvement in the seed quality and variety and shall eventually improve the members' incomes. Society officials also accepted that the matter of timely and accurate payment needs improvement from their side. They need to work closely with the sugar factories to improve this. The sugar factory officials on the other hand were of the view that the payment is absolutely accurate and made within the stipulated time. Hence, there seems to be a difference of opinion between the society and factory officials on this point

The society officials feel that they have contributed a lot in terms of supplying seeds, pesticides, fertilizers and raising awareness about the modern methods of farming. This is accepted by the farmers and they feel that the society has done good work in this respect. However, when it comes to 'Satta' and 'parchi' distribution, there seems to be a difference in opinion between the farmers and CCS officials, where the farmer feels that the 'Satta' is not made properly and the 'Parchi' don't come in timely the society officials on the other hand feel that they do an organised job in both these matters.

An important factor which came out during this research was that the Societies feel that concessional loans are given to farmers who are not deserving and this is mainly due to political interference in the working of the society. The Sugar factories said that they are also giving seeds, pesticides and fertilizers to farmers along with timely and accurate payment. According to the mills, the issue with the CCS was that they didn't give the 'Parchi' on time, leading to either shortage of cane or excess cane coming to the sugar factory.

## VII. CONCLUSION

- Awareness of farmers and their education level are the most important factors for improving the farmer income in cane growing areas.
- The government should take steps and frame schemes for the free education of farmers, at least till the 10th standard so that the farmers can follow modern techniques of agriculture and improve their income.
- The cane cooperative societies should work on creating awareness regarding the government schemes and modern agricultural techniques among farmers which will help them reach greater income levels.
- The cane cooperative societies need to improve their internal working regarding the 'Satta' making and the 'parchi' distribution system. This will help ensure the timely supply of cane to the sugar factories and help the farmers harvest cane at the right time.
- The factories should work on the accurate weighment and timely payment of farmers which will improve the conditions of farmers and their satisfaction.

## VIII. CONFLICT OF INTEREST

This is to state that all authors declare no conflict of interest.

## IX. ACKNOWLEDGEMENT

The author is grateful to Mr Shiv Govind Singh DGM of Sugar mills and Mr. Avdhesh Singh, Secretary of Nawabganj cane Society, Mr. Kamlesh, Secretary of Basti cane Society, Mr. Mukesh, Secretary of Masaudha Cane Society, Mr. Ghanshyam Singh, Secretary of Ayodhya

Cane Society and Mr. Utkarsh Tiwari, Secretary of Vikram Jot Cane Society for providing data and real time Problems and future Improvement Experiences. The author is also grateful to the various farmers for their valuable opinion about cane societies and mills.

#### X. REFERENCES

- <https://upcane.gov.in/StaticPages/SDCSAabout.aspx>
- Cane Cooperative Society records