

## International Journal of Agriculture Extension and Social Development

Volume 7; Issue 6; June 2024; Page No. 106-110

Received: 22-03-2024  
Accepted: 25-04-2024

Indexed Journal  
Peer Reviewed Journal

### Assessment of farmers' attitude towards custom hiring service centers in Vijayapur district of Karnataka

<sup>1</sup>Chitra Das and <sup>2</sup>SB Patil

<sup>1</sup>M.Sc. (Agriculture), Department of Agricultural Extension Education, College of Agriculture, Vijayapur, University of Agricultural Sciences, Dharwad, Karnataka, India

<sup>2</sup>Professor, Department of Agricultural Extension Education, College of Agriculture, Vijayapur, University of Agricultural Sciences, Dharwad, Karnataka, India

DOI: <https://doi.org/10.33545/26180723.2024.v7.i6b.674>

Corresponding Author: Chitra Das

#### Abstract

Farm mechanization is a growing imperative for sustaining agricultural growth. Farm mechanization (the use of high-capacity and energy-efficient farm implements) is important in changing the climate scenario. But the cost of such machines becomes increasingly unaffordable for small farmers in many cases. Custom hiring centers (CHC) are a reliable source for bringing a considerable change in the farming situation across the country by availing hiring services of farm implements at affordable rates to the farmers. CHCs are capable to realize the labor shortage, efficient and timely operations, and increased yields. With respect to the results revealed regarding the attitude of farmers towards the objective of a custom hiring service center along with its post-pandemic scenario observation, 61.43 percent of the farmers belonged to a high attitude level towards a custom hiring service center, while 26.43 percent and 12.14 percent of farmers belonged to a low or medium attitude level towards a custom hiring service center. Later a synoptic study in 2022, of the post pandemic scenario, showed changes in the attitude of farmers towards custom hiring in farm mechanization in Vijayapur district which indicated that after a substantial decline in mechanized agricultural practices during pandemic, which resulted in reduced access to farm implements, and by the end of 2022, there has been an improvement in the availability and use of CHSCs by farmers for increasing their farm productivity.

**Keywords:** Custom hiring service centers, attitude, implements, post-pandemic scenario

#### 1. Introduction

One of the major components in agriculture is realized as farm and crop mechanization. Farm mechanization is a dynamic process, as with the development of agriculture in terms of the stages of agricultural production resource use, yielding level, income of farmer and farm level, shift in power source as well as general development of area are involved. There is a strong and urgent need to go for mechanization of agricultural operation. But due to marginal and small farmer's meager assets, the advantages of mechanization cannot be taken because of high price of machines such as power tiller, seed drill, thresher and other allied equipments. So availability of all such machines could be made to the farmers through the custom hiring services of the equipment. Hence, this calls for the concept of CHSCs i.e. sharing of the cost of implements by innovative institutional arrangements, which would help to promote mechanization of the agricultural operations on small farms. Custom hiring of farm mechanization was first introduced in Indian agriculture in 19<sup>th</sup> century (Srinivasarao *et al.*, 2013)<sup>[14]</sup>. In 1971, Government of India launched a scheme all over the country to set up agro services centers, which gave boost to custom hiring services. Custom hiring was also given important, under National Agriculture Technology Project (NATP) and National Agricultural Innovation

Project (NAIP) schemes, but in a limited preference. During 2014, the Department of Agriculture, Government of Karnataka proposed to establish 186 Custom Hiring Service Centers (CHSCs) and to be run by 2 private entities. Shri Kshethra Dharmasthala Rural Development Project, a charitable trust promoted by the administrator of Dharmasthala temple in Dakshina Kannada and Indian Society of Agribusiness Professionals, New Delhi already running 161 and 17 centers respectively. In Vijayapur district, the custom hiring service is being availed at 7 centers in 5 taluks (Vijayapur, Basavan Bagewadi, Sindagi, Indi and Muddebihal) at hobli level. The custom hiring service in Vijayapur district is being provided by a social and human resource organization Kala Chetana Yuva Samasthe.

This paper examines the offerings of CHCs and the level of adoption by farmers. It also includes a comprehensive survey conducted in 2022, reflecting on the attitude and perception of farmers towards CHC services amidst the post-pandemic situation and beyond that phase and the resulting modifications. The study aims to assess the appropriateness of CHC services for farmers, the significance of mechanization in contemporary farming methods, and the capacity of both governmental and non-governmental entities to enhance CHC accessibility for

farmers.

## 2. Materials and Methods

The present study was conducted in Vijayapur district of Karnataka. Vijayapur district was purposively selected for the study as Custom Hiring Service Centers were implemented in all the five taluks of Vijayapur district i.e. Vijayapur, Indi, Basavana Bagewadi, Muddebihal and Sindagi. *Ex-post facto* research design was employed, since the phenomenon had already occurred and the design was considered appropriate. All these taluks were selected purposively, as in all these taluks custom hiring service centers were started at hobli level. By using proportionate random sampling procedure, numbers of respondents were selected. Thus total sample size constituted for the study was 140 farmers from each hobli (CHSCs). The selected farmers were interviewed and desired information was collected with the help of predesigned and pre-tested schedule. The data collected were scored, tabulated, and analyzed by using statistical tools such as frequency, percentage, mean and standard deviation. Later on a snapshot of the post pandemic scenario in 2022 was taken (secondary data from the NGO, Kala Chetana Yuva Samasthe) regarding the attitude and perception of the farmers towards custom hiring of farm implements in Vijayapura district.

## 3. Results and Discussion

The result in the Table 1 pertaining to attitude towards availability of service in custom hiring service centre clearly shows that majority of the farmers 'strongly agree' that pre booking service facility was available (82.86%) and quality service was available (50.71%). It also indicated that majority of the farmers 'agree' for the statements, expert drivers and operator were available (62.14%), visiting farmers field after completion of the work (57.14%). The results pertaining to attitude towards objective of custom hiring service centre indicated that majority of the farmers 'strongly agree' with custom hiring service centre helps to overcome the problem of labor in carrying out agricultural operation (77.14%), followed by custom hiring service centre helps to maintain timeliness in agricultural operation (73.57%), whereas majority of the farmers 'agree' with helps to carry out the intercultural operations on time (69.29%), timely use of sprayers for IPM practice will help in control of pest and diseases (64.29%). The attitude towards benefits of custom hiring service centre revealed that majority of farmers 'strongly agree' with farmers pays only for the number of acres or number of hours used (81.42%), provision of using machines as per the requirement of (less or more time) booking based on payment (76.42%). The result in the Table 1 also indicated that majority of the farmers 'agree' for the statements,

timely availability of farm machineries and implements (70%), hiring farmers had no responsibility for operating the machine (56.42%). Majority of farmers 'strongly agree' with farmers access the farm machineries and implements from custom hiring service centre whenever required (55%), whereas majority of the farmers 'agree' with farm machineries are available at reasonable rate so that farmers can access it (54.28%). The studies were supported by the findings of Jyoti (2012) <sup>[6]</sup>, Hiremath *et al.*, (2015) <sup>[5]</sup> Sampathkumar (2014) <sup>[13]</sup> and Kisku (2020) <sup>[10]</sup>. The study on farmers' attitudes towards custom hiring of farm machinery in the post-pandemic period reveals a moderate decline in mechanized agricultural practices soon after the pandemic crisis. This decrease is attributed to previously imposed restrictions on transport and freedom of movement, which led to labor shortages. Consequently, there was a significant reduction in hired labor, resulting in an almost complete reliance on family labor. But gradually the situation started returning to normal since 2022 and the usage of farm machineries started to take off, to jump start the cultivation and work on increasing the productivity that has been slacked off since long.

The result in Table 2 shows the overall attitude of farmers towards CHSCs, 61.43 percent of the farmers belonged to high attitude level towards custom hiring service centre, while 26.43 percent of farmers belonged to low attitude level and remaining 12.14 percent belonged to medium attitude level towards custom hiring service centre. The small and medium farmers did not possess modern and advanced machineries and they were not able to hire through private vendors because of the high hiring rates and some of the modern machineries were not available with the private vendors and hence they were in much need of farm machineries and implements through custom hiring (Kumar *et al.*, 2021) <sup>[11]</sup>. Even the large farmers, who did not possess the modern and advanced implements, were in need of these farm machineries and implements through custom hiring. This might be the reason that most of the farmers had high attitude level about custom hiring service centre. The studies were supported by the findings of Bite (2009) <sup>[16]</sup>, Srinivasrao *et al.* (2013) <sup>[14]</sup>, Chandrashekar (2016) <sup>[3]</sup>, Kisku (2020) <sup>[10]</sup> and Agrawal & Sharma (2020) <sup>[1]</sup>. The table also indicates the overall attitude of farmers towards CHSCs in the post-pandemic phase, which indicates about 12.15%, 38.53% and 49.32% of the farmers, belonged to high, medium and low attitude level towards custom hiring service centre respectively. The reason might be the non-accessibility and non-availability of farm implements due to the previously prevailing restrictions. There were a few cases of farmers hiring machines through large farmers and private vendors during this period. And by 2022, farmers gradually tend towards accessing the desired farm machineries from the CHSCs.

**Table 1:** Attitude of farmers towards Custom Hiring Service Centre

(n=140)

Sl. No.	Statements	SA	A	UD	DA	SDA
		f (%)	f (%)	f (%)	f (%)	f (%)
<b>a. Attitude towards objectives of CHSC</b>						
1	Overcome the problem of labor in agricultural operations	108 (77.14)	27 (19.29)	3 (2.14)	2 (1.43)	-
2	Helps to maintain timeliness in agricultural operation	103 (73.57)	27 (19.28)	6 (4.29)	2 (1.43)	2 (1.43)
3	Farm machineries are available at reasonable cost for small and marginal farmers	50 (35.72)	84 (60.00)	4 (2.86)	1 (0.71)	1 (0.71)
4	Farm machineries at CHSC attracts rural youth towards agriculture	48 (34.29)	84 (60.00)	3 (2.14)	2 (1.43)	3 (2.14)
5	Helps to carryout sowing on time with minimum labor	80 (57.14)	53 (37.86)	3 (2.14)	2 (1.43)	2 (1.43)
6	Helps to carryout the intercultural operations on time	35 (25)	97 (69.29)	1 (0.71)	6 (4.28)	1 (0.71)
7	Harvesting with machines will help to reduce the wastage in production	60 (42.86)	66 (47.14)	8 (5.72)	3 (2.14)	3 (2.14)
8	Timely use of sprayers for IPM practice will help in control of pest and disease	42 (30)	90 (64.29)	3 (2.14)	4 (2.86)	1 (0.71)
<b>b. Attitude towards Availability of services in CHSC</b>						
1	Modern machineries are available in CHSC	56 (40.00)	74 (52.86)	5 (3.57)	4 (2.86)	1 (0.714)
2	Pre booking service facility is available	116 (82.86)	17 (12.14)	4 (2.86)	2 (1.43)	1 (0.71)
3	Expert drivers and operators are available	36 (25.71)	87 (62.14)	12 (8.58)	1 (0.71)	4 (2.86)
4	Quality service is available	71 (50.71)	59 (42.14)	5 (3.58)	3 (2.14)	2 (1.43)
5	Visiting farmers field after completion of the work	34 (24.28)	80 (57.14)	19 (13.57)	5 (3.58)	2 (1.43)
6	Repairs of the machineries are done in CHSC	47 (33.57)	71 (50.71)	14 (10)	4 (2.86)	4 (2.86)

Sl. No.	Statements	SA	A	UD	DA	SDA
		f (%)	f (%)	f (%)	f (%)	f (%)
<b>c. Attitude towards benefits of CHSC</b>						
1	There is no need for the farmers for long term capital investment in the machine.	91 (65.00)	37 (26.43)	10 (7.14)	2 (1.43)	-
2	Hiring farmer has no responsibility for operating the machine.	55 (39.29)	76 (54.28)	2 (1.43)	6 (4.28)	1 (0.71)
3	The farmer pays only for the number of acres or number of hours used.	114 (81.43)	22 (15.72)	1 (0.71)	2 (1.43)	1 (0.71)
4	Machineries which is given for hiring is mostly in good condition.	76 (54.29)	48 (34.29)	11 (7.86)	3 (2.14)	2 (1.42)
5	Improves the quality of work.	51 (36.43)	68 (48.57)	14 (10)	5 (3.57)	2 (1.43)
6	Maintain timeliness of agricultural operation.	57 (40.71)	64 (44.29)	10 (7.14)	8 (5.72)	3 (2.14)
7	Custom hiring of farm machineries and implements will reduce the cost of cultivation.	28 (20)	79 (56.43)	13 (9.29)	13 (9.29)	7 (5)
8	Custom hiring makes timely availability of farm machineries and implements.	25 (17.86)	98 (70.00)	12 (8.57)	5 (3.57)	-
9	There is a provision of using machines as per the requirement of booking	107 (76.43)	26 (18.57)	7 (5)	-	-
<b>d. Attitude towards access of CHSC</b>						
1	Farmers access the farm machineries or implements from custom hiring service centre whenever required	77 (55.00)	51 (36.43)	8 (5.71)	2 (1.43)	2 (1.43)
2	The location of CHSC is convenient for the farmers to access the farm machineries or implements	57 (40.71)	34 (24.28)	46 (32.85)	2 (1.42)	1 (0.714)
3	Farm machineries are available at reasonable rate so that farmers can access it	39 (27.86)	76 (54.29)	21 (15.00)	1 (0.71)	3 (2.14)

f – Frequency

% - Percentage

SA= Strongly agree

A=Agree

UD= Undecided

DA = Disagree

SDA= Strongly disagree

CHSC= Custom Hiring Service Centre

**Table 2:** Overall attitude of farmers towards custom hiring service centre

(n=140)

Category	2014-2018		Post pandemic scenario
	f	%	%
Low (< 109.90)	37	26.43	49.32
Medium(109.91-113.68)	17	12.14	38.53
High (> 113.68)	86	61.43	12.15
Mean = 111.79	SD= 4.44		

f – Frequency

% - Percentage

#### 4. Summary and Conclusions

Farm mechanization is an important element of modernization of agriculture and is the need of the hour in the present Indian agricultural scenario. Thus, establishment of Custom Hiring Service Centers (CHSCs) and shelving farm machinery required for various farm activities right from land preparation to post harvest would enable small and marginal farmers to mechanize farm activities by way of hiring the farm machinery on nominal hire charges, towards which farmers show their positive attitude and frequently utilize the farm machineries and services provided by the CHSCs. KVKs and extension wings of universities need to play a very key role in sensitizing the farmers on custom hiring adoption. The findings highlight the crucial role of stakeholder participation in both the delivery and adoption of services provided by extension agencies (Kadaraiah & Jirli, 2022) [7]. There is a need to innovate Custom Hiring model by institutionalization for high cost farm machinery such as combine harvesters, sugarcane harvester, Onion transplanter, laser guided land leveler etc. Hence, custom hiring of agricultural machineries and implements becomes important in this context and therefore, Custom Hiring Centers (CHCs) is a boon for farmers especially for the small and marginal farmers (Kisku, 2020 and Agrawal & Sharma, 2020) [10, 1].

The pandemic is a real-life case study of excessive dependency on manual labor. We witnessed how the labour-intensive agricultural sector fumbled to meet the demand side of the economy (TAFE, 2022) [15]. The concise post pandemic scenario study has helped to highlight the importance of scale-appropriate machinery in mitigating labor shortages has significantly increased. It is suggested to facilitate access to such machinery for farmers, enabling them to purchase and utilize the equipment. Additionally, machinery owners must be encouraged to become entrepreneurial service providers. These providers might be helpful in delivering efficient, mechanized services—including land preparation, planting, irrigation, harvesting, and post-harvesting—on an affordable fee-for-service basis to other local farmers and fellow neighbors.

#### 5. References

1. Agrawal J, Sharma JP, Burman RR, Venkatesh P, Biswas A, Parray RA. Perception of farmers towards custom hiring service centres. *J Community Mob Sustain Dev.* 2020;15(1):145-149
2. Bite RK. Attitude of farmers towards farm mechanization. M. Sc. (Agri.) thesis. Dr. Punjabrao Deshmukh Krishi Vidhyapeeth, Akola, Maharashtra, India; c2009
3. Chandrashekar G. A study on perceived need of custom hiring of farm machineries in Hassan district of Karnataka. M.Sc. (Agri.) Thesis, Univ. Agric. Sci., Bengaluru, Karnataka (India); c2016.
4. Dhere RV. Knowledge and attitude of farmers towards farm mechanization in agriculture. M. Sc. (Agri.) [thesis], Dr. Akola, Maharashtra, India: Punjabrao Deshmukh Krishi Vidhyapeeth; c2012
5. Hiremath GM, Lokesh GB, Maraddi GN and Suresh SP. Accessibility of farm machinery services - CHSCs for small and marginal farmers. *Int. J. Manage. Soc. Sci.* 2015; 3(2):897-907.
6. Jyoti NG. Farm mechanization expectations of cotton growers. M.Sc. (Agri.) Thesis, Univ. Agric. Sci., Dharwad, Karnataka (India); c2012
7. Kadaraiah A, Jirli B, Yarazari SP, Nandini HM, Chaubey PN. Perception of farmers towards Custom hiring service centres in Tumakuru District of Karnataka. *Indian J Extension Educ.* 2022;58(2):209-212.
8. Kalagi S. A study on problems and prospects of mechanized paddy cultivation through custom hiring centres in Udupi district. M. Sc. (Agri.) Thesis submitted to University of Agricultural and Horticultural Sciences. Shivamogga, Karnataka, India; c2018
9. Kisku, Singh. A Review on Custom Hiring Services under Indian Conditions: Farmer's Perception, Associated Factors, Constraints, and Suggestions. *Asian J of Agricultural Extension, Economics & Sociology.* 2022;40(11):8-27
10. Kisku U. Perception of farmers regarding Custom hiring services in Jabalpur District of Madhya Pradesh. M.Sc (Agri.) [thesis] submitted to Jawaharlal Nehru Krishi Vishwa Vidhyalay. Jabalpur, Madhya Pradesh, India; c2020
11. Kumar K, Meena HR, Kadian KS, Meena BS, Bhandari G, Kaur J. Farmers' attitude towards Custom hiring centers: an exploratory study in Punjab. *Curr J Appl Sci Technol.* 2021;40(21):70-78.
12. Naik SA. Attitude of farmers towards agricultural mechanization in Konkan region of Maharashtra. M.Sc (Agri.) [thesis] submitted to Dr. Dapoli, Maharashtra, India: Balasaheb Sawant Konkan Krishi Vidyapeeth; c2019
13. Sampathkumar M. A study on agricultural mechanization in Karimnagar district of Andhra Pradesh. M.Sc. (Agri.) Thesis, Acharya N. G Ranga Agricultural University, Hyderabad (India); c2014
14. Srinivasarao C, Dixit S, Srinivas I, Reddy BS, Adake RV, Borkar S, Operationalization of custom hiring centers on farm implements in hundred villages in

- India. Central Research Institute for Dryland Agriculture, Hyderabad, Andhra Pradesh. 2013;2(2):88-91.
15. TAFE Corporate. Farm Mechanization for Food Security; c2022
  16. Thakur P, Sharma DD. Farmer's attitude towards modern farm mechanization. Int J Appl Pure Sci Agric. 2016;2(8):158-164.