



## Perception of Farmers towards Custom Hiring Service Centres in Tumakuru District of Karnataka

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### ABSTRACT

The study was carried out in Tumakuru district of Karnataka state during the year 2019-20. Eight taluks and 130 farmers were selected where the Custom Hiring Service Centres were working effectively. The majority of the farmers strongly agreed with helps in overcoming the problem of labour through custom hiring service centre, for visiting farmers field after completion of the work, farmers pays only for the number of acres or number of hours used. The overall perception of farmers indicated that 43.8 % were categorized under favourable level of perception towards CHSC. The small and medium-sized farmers could not possess the modern machinery, due to high hiring charges with private vendors they were unable to take the farm machinery for the rent and some of the large farmers also were in great need of the modern machinery thus they require modern machinery through custom hiring. Hence, extension efforts need to be more strengthened to create awareness among the farming community about the services available in CHSCs.

### INTRODUCTION

Agricultural labour scarcity is one of the main problems faced by the farmers in rural India. Farm mechanization, therefore, plays an important role in timely taking up of agricultural operations. The cost of cultivation data shows that labour accounts for more than 40 per cent of the total variable cost of production for most of the crops (Anonymous, 2011 & Laxmi et al., 2014). Proper utilization of farm machinery saves 20-30 per cent time, 15-20 per cent seeds, 20-25 per cent fertilizers, 10-20 per cent labour, and an increase in cropping intensity to about 10 per cent (Singh, 2005). Small and marginal farmers can use the heavy machinery by developing a rental market of farm implements, so large numbers of farmers can be benefited without investment in farm machinery and implements. As Indian farming community is dominated by

small and marginal farmers, they may not afford all the equipments and implements necessary for various agricultural operations. Mechanization in agricultural operation is found to be less in rural areas, and the need for farm mechanization is more important for getting higher yield and productivity. Hence farmers in the rural areas require modern machinery and equipment which are capital intensive and difficult in procurement and maintenance for the small and marginal farmers. Hence availing the equipments on hire basis is the best option. The government is also promoting the concept.

Custom hiring of farm machinery was first introduced in Indian agriculture in the 19<sup>th</sup> century (Srinivasarao et al., 2013). Agro Industries Corporation (AIC) began an organized custom hiring unit to promote farm mechanization. With the launching of a scheme to set up agro-service centers across the country in 1971 by Government of India, custom hiring services gained further

momentum. In 2014, the Department of Agriculture, Government of Karnataka proposed the establishment of 186 Custom Hiring Service Centers (CHSCs). Government of Karnataka identified two private entities to operate 178 custom hiring service centres in the state. Shri Kshetra Dharmasthala Rural Development Project (SKDRDP 161 CHCs), a charitable trust established by the Dharmasthala temple administrator in Dakshina Kannada and the Indian Society of Agri-business Professionals (17 CHCs) New Delhi. Government of Karnataka initiated the programme called “Krishi Yantradhare” to solve problems through custom hiring service centres to provide access to small and marginal farmers to use costly farm machinery for farm operations and also facilitate timeliness in farm operations and efficient use of resources. It helped to reduce the cost of cultivation and also provide work opportunities for skilled labour and small artisans. Hence studying their perceptions is a matter of research interest.

### METHODOLOGY

Tumakuru district of Karnataka comprises of ten taluks viz., Kunigal, Tumkur, Koratagere, Turuvekere, Gubbi, Tiptur, Madhugiri, Sira among which eight taluks were purposively selected where the CHSC was effectively functioning. From each CHSC ten respondents were selected by using a simple random sampling method without replacement. A total of 13CHSCs from eight taluks of Tumakuru district were selected to form a sample of 130 respondents. A semi-structured interview schedule was used to collect the data from the respondents by personal interview method. The Semi-structured Schedule consisting of items related to Custom Hiring Service Centres (CHSC) was prepared with the help of available literature and in consultation with the officials/scientists of the concerned departments. A total of 23 items indicating the perception of farmers on customs hiring centres were designed. These 23 items were administered to 130 respondents to assess their perception about the custom hiring service centre. The responses of each respondent against each item were recorded on a five-point continuum viz., strongly agree, agree, undecided, disagree, and strongly disagree with the scores 5, 4, 3, 2, 1, respectively. Based on the response obtained, the Respondents were divided into three categories using mean (X) and standard deviation (SD).

### RESULTS AND DISCUSSION

#### Perception of farmers on the usefulness of custom hiring service centres

The results in Table 1 pertaining to perception towards the objective of custom hiring service centres showed that the majority of the farmers ‘strongly agree’ with custom hiring service centre help to overcome the problem of labour in carrying out an agricultural operation (agreement score 611) followed by custom hiring service centre help to maintain timeliness in agricultural operation (agreement score 591), helps to carry out sowing on time with minimum labour (agreement score 560), helps to carry out the intercultural operations on time (agreement score 558), farm machinery are available at a reasonable cost for small and marginal farmers (agreement score 534) and some of the farmers ‘strongly agree’ with harvesting with machines will help to reduce the wastage

in production (agreement score 505), timely use of sprayers for IPM practice will help in the control of pest and diseases (agreement score 453). Some of the farmers ‘agree’ with farm machinery at custom hiring service centre attracts rural youth towards agriculture (agreement score 424). The findings indicate the relevance of agreement between extension service providers and extension educators (Singh et al., 2019; Kirti et al., 2015). Such agreement can bring in changes in the domains of stakeholders. The Custom Hiring Service Centre allows a farmer to gain control over farm machinery on a short-term basis without spending much money. Mechanization of agriculture helps to perform farm operations, to solve labour problems, to increase production, quality, and profitability by reducing unit production costs. Because these farm machinery and equipment are costly and not affordable to farmers and maintenance costs are higher and even private vendor hiring charges are high, most of the farmers need farm machinery and equipment by custom hiring. This could be the reason why most of the farmers agree with all objectives of CHSC. Findings were in line with the study of Chandrashekar (2016) & Sindhu (2017).

Further perception towards service delivery in custom hiring service centre clearly shows that majority of the farmers ‘strongly disagree’ for visiting farmers field after completion of the work (agreement score 157) and the majority of the farmers ‘strongly agree’ for repairs of the machinery are done in custom hiring service centre (agreement score 614), followed by modern machinery were available at custom hiring service centre (agreement score 579), pre-booking service facility was available (agreement score 565). The interventions reveal the role of visionary managers in ensuring the essential services (Singh et al., 2014). Nearly half (agreement score 503) of the farmers ‘agree’ for quality service was available and some (agreement score 504) of the farmers ‘strongly agree’ for expert drivers and operators were available. The findings indicate towards the importance of participation of stakeholders in delivery as well as adoption of services offered by the extension agencies (Jirli & Kumar, 2010). Small farmers and medium-sized farmers lack innovative and advanced machinery and they couldn’t afford such machinery because of the higher rates and some of the modern machinery wasn’t available with private vendors. Hence they availed the needed farm machinery and equipment through custom hiring service centres. Even the large farmers who lack the modern and advanced equipment which are needed for the farm operation also depend on custom hiring centres. As per the findings of the study majority of the farmers strongly disagreed that the functionaries of CHC visit farmers field after completion of the work. The reason might be lack of technical staff available in the custom hiring service centres and the unavailability of field supervisors in majority of the CHSCs. The study of Singh et al., (2017) indicated the quality of service delivered by private sector is better than public sector agencies. The study also reveals that services like pre-booking facility, modern machinery, quality service, expert drivers, and repairs of machinery are available in CHSC. The results were supported by the findings of Srinivasasa et al., (2013) & Chandrashekar (2016).

Perception towards benefits of custom hiring service centre shows that the majority of farmers ‘strongly agree’ with the fact that farmers pays only for the number of acres or number of hours

used (agreement score 619). The reason behind satisfaction lies in the fact that small and marginal farmers have access to the desired machinery without any involvement and on payment of nominal fees. There is no need for the long term capital investment in the machine (agreement score 581), provision of using machines as per the requirement of (less or more time) booking based on payment (agreement score 584) also add to the value of service and future implications on production. The contrasting findings were observed by Jiyawan et al., (2010) where majority of the respondents (90%) had expressed that inadequate credit facility was the main constraint for purchasing improved agricultural implements. More than half of farmers (agreement score 533) 'agreed' with improvement in the quality of work, as the machinery was being hired in good working condition (agreement score 528), whereas nearly fifty per cent of farmers 'strongly agreed' that farmers had no responsibility for operating the machine (agreement score 575) and maintenance of timeliness of agricultural operation (agreement score 514). Farmers strongly agreed with the timely availability of farm machinery and implements (agreement score 529). Farmers were happy with custom hiring of farm machinery and implements because it reduced the cost of cultivation (agreement score 527). The results are supported by the findings of Srinivasrao et al., (2013) & Chandrashekar (2016).

#### Overall perception of farmers about the custom hiring service centre

A perusal of Table 2 indicates that about 44 per cent of the farmers were categorized under elevated perception category regarding the services of CHSC, followed by 31 per cent of the

**Table 2.** Overall perception of farmers towards custom hiring service centre

Category	Frequency	Percentage
Squat perception (score less than 87.62)	40	31
Standard perception (Score between 87.62-99.24)	33	25
Elevated perception (Score more than 99.24)	57	44

Mean score = 93.43, SD = 5.817

farmers belonged to squat perception category, and 25 per cent of the farmers belonged to standard perception category. If the target community face constraints it becomes a hindering factor in acceptance of extension advisory (Srisailam et al., 2021). The CHSC is a step towards minimizing the constraints of end users. The study is supported by the findings of Manjunath (2014); Chandrashekar (2016) & Sindhu (2017). About 70 per cent respondents are classified under medium to elevated category towards the services of CHSC. The efforts of CHSC are helping farmers to overcome shortage of labour and ensuring the timely operations in the field. The section of farming community wherein the operation of machine in the field is difficult intervention due to small size of land are unable to harness the benefits of CHSC. Hence the implications of study lead towards designing the customized machinery which are suitable for operation in small holdings. Such intervention can easily satisfy needs of remaining 30 per cent of respondents.

#### CONCLUSION

Higher levels of education, the wages, living standards of individuals, and other factors have compelled or motivated

**Table 1.** Perception of the usefulness of custom hiring service centres by farmers

S.No.	Items of Perception	Agreement Score
a.	Perception towards objectives of CHSC	
1	Overcome the problem of labour in agricultural operations	611
2	Helps to maintain timeliness in an agricultural operation	591
3	Farm machinery is available at a reasonable cost for small and marginal farmers	534
4	Farm machinery at CHSC attracts rural youth towards agriculture	424
5	Helps to carry out sowing on time with minimum labour	560
6	Helps to carry out the intercultural operations on time	558
7	Harvesting with machines will help to reduce the wastage in production	505
8	Timely use of sprayers for IPM practice will help in the control of pest and disease	453
b.	Perception towards service delivery in CHSC	
1	Modern machinery is available in CHSC	579
2	The pre-booking service facility is available	565
3	Expert drivers and operators are available	504
4	Quality service is available	503
5	Visiting farmers field after completion of the work	157
6	Repairs of the machinery are done in CHSC	614
c.	Perception towards benefits of CHSC	
1	There is no need for the farmers for long term capital investment in the machine.	581
2	Hiring farmer has no responsibility for operating the machine.	575
3	The farmer pays only for the number of acres or the number of hours used.	619
4	Machinery which is given for hiring is mostly in good condition.	528
5	Improves the quality of work.	533
6	Maintain timeliness of agricultural operation.	514
7	Custom hiring of farm machinery and implements will reduce the cost of cultivation.	527
8	Custom hiring makes timely availability of farm machinery and implements.	529
9	There is a provision of using machines as per the requirement of booking	584

Maximum obtainable score: 650 and Minimum obtainable score: 130

individuals to migrate from rural areas to urban centres leading to shortage of labour in the agricultural production cycle, which has necessitated the agricultural mechanization. Overall perception of farmers about the CHSC was found high indicating need for investment in agricultural machinery and equipment would increase the cost of agricultural production. Hence, extension efforts need to be more strengthened to create awareness among the farming community about the services available in CHSCs. Strengthening the public-private partnership/co-operation in operating CHSCs to bring about socio-economic development among the farming community is very much important for customized farm mechanization.

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