

Sh Paramjit Singh:

A torch bearer of entrepreneurship in agricultural custom hiring

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Farmers having less than 2 hectares (5.0 acres) of farm land are referred as small and marginal farmers. They comprise about 86.2% of the country's total farmers. In the era of intensive and mechanized crop production systems, timely and cost effective availability of agricultural implements to the small and marginal farmers plays a pivotal role in their decision making process. Due to small land holding and high market price of implements, small and marginal farmers cannot purchase all the machinery. So, establishment of custom hiring centers/machinery banks in the villages is need of the hour. Custom Hiring Centre (CHC) are basically a unit comprising a set of farm machinery, implements and equipment meant for custom hiring by farmers. The main objective of Custom Hiring Centre is to supply farm implements to small, marginal and poor farmers at subsidized rates on hire.

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Average operational land holding size in the country is estimated at 1.16 hectares (ha). About 80% of the land holdings are operated by small and marginal farmers owning <1 and 1–2 ha holdings, respectively. These farmers cannot invest in costly farm machinery and depend on hiring of implements to carryout day to day agricultural operations in their fields. In rainfed areas, the window for taking up of timely land preparation, sowing and inter-culture operations is narrow especially in the low rainfall zones. Failing to exploit this limited window often leads to a compromise on productivity and efficiency in crop production since moisture availability is the main limitation in these areas. In high rainfall areas dominated by heavy soils, drainage is more crucial to prevent damage to crop from excess soil moisture in the root zone especially in pulses, oilseeds and cotton. Labour shortage at peak times of demand is a serious problem faced by farmers. Adoption of climate resilient practices such as soil incorporation of legume

catch crops and crop residues to improve soil health and resource conservation technologies are linked to timely access to appropriate farm machinery at reasonable cost. Several options are now available to increase the efficiency and timeliness of agricultural operations even on small farms by using farm machinery on hire basis.

Farm mechanization is the process of developing machines and substituting this machine power for human and animal power in agriculture and allied production practices. According to FAO (2002), Agricultural mechanization is the process of improving farm labour productivity through the use of agricultural machinery, implements and tools. Custom Hiring Centre (CHC) are basically a unit comprising a set of farm machinery, implements and equipment meant for custom hiring by farmers. The main objective of CHC is to supply farm implements to small, marginal and poor farmers at subsidized rates on hire. This enables the small and marginal farmers to take up farm

operation on time. Ideally, the CHCs should be located within a radius of 5–7 km of land holdings. This will reduce the transport cost and time of transport of agricultural machinery. There are now more than 38,000 CHCs across the country, which rent out 2.5 lakh pieces of farm equipment every year.

Therefore, in order to bring farm machinery available within the reach of small/marginal holdings, collective ownership or Custom Hiring Centres are being promoted



View of nursery plot



Visit of Dr. Rajesh K Rana, ICAR-ATARI, Zone-I, PAU, Ludhiana and Team, KVK, Moga, Punjab to CHC

in a big way. If you build a private Custom Hiring Center, then the government will provide 40% of the money. A project worth up to ₹60 lakhs can be passed, i.e. according to the need of the farmers of their area, they can buy such amount of machines. In this project, government assistance of ₹24 lakhs will be available. Whereas, if you prepare machine bank by forming a cooperative group then there should be 6–8 farmers in the group. In this project up to ₹10 lakhs will be passed. That is, you will get government assistance of up to 8 lakh rupees. To avail the subsidy, the farmer can contact the Engineering Division of the Agriculture Department of their respective states.

Over the years, agriculture mechanization has helped to increase production and profitability, improve the use of inputs, reduce the costs of production, and assist in income-building and employment opportunities. Punjab, characterized by smallholder farmers, is a highly mechanized state. Custom Hiring Services (CHS), an important mechanism through which most small holders can access services of agricultural machinery. CHS in the state not only helps to generate non-farm income but also enable farmers to produce a second or multiple crops in a year, thus limiting the turnaround time and increasing productivity.

Sh. Paramjit Singh, himself is a small farmer, belonging to village Bughipura, Distt. Moga, Punjab.

He started his tractor workshop in 1989 in Moga city which was shifted back to his native village Bughipura in 1999. While operating tractor workshop, he started an agricultural machinery bank under the name '*Simar Simar Agriculture Service*' by purchasing second hand disc harrows worth ₹13,000 in 2006. He developed a good liaison with various agricultural machinery manufacturing firms which helped him in a big way. For example, he started purchasing new and advanced machinery from the firms on installments to provide it to farmers on rent basis. He provides the machinery not only in his village but also in surrounding areas like village Dala, Bahona, Mehme Wala etc. As per Paramjit Singh, providing the implements on rent basis not only increases availability of machinery to farmers but also makes it cost effective by omitting the need to purchase new machinery. For instance, he provides disc harrows to about 100 farmers per year at a rental cost of ₹250 per hour which is very much nominal if we compare it with market price (approx. ₹60,000) of new disc harrows to purchase. Being a mechanic, Paramjit Singh also saves capital and time as he can repair all kind of machinery in his workshop. With time, he has collected a number implements and machines in his Custom Hiring Center (CHC) (Table 1).

As per Paramjit Singh, he can earn a net income of ₹5.0 lakh/annum after deduction of all the

expenses of about ₹2.0 lakh/annum. By his hard work and dedication, he taught his children from reputed institutions. Paramjit Singh has total land holding of 3.5 acre. Out of which he cultivates only 1.25 acre and lends 2.0 acre on lease basis to other farmer. On 1.25 acre, he follows paddy-wheat rotation. During *kharif* season, he grows nursery for sale purpose and earns good returns. For instance, during *kharif*, 2020, he purchased 4.96 q of basmati seed from Krishi Vigyan Kendra, Budh Singh Wala, Moga and sold the nursery by growing on his farm.

Krishi Vigyan Kendra, Moga also assists this family by providing planting material, training and technical know-how at every level. He has already been invited in two farmer training programs by KVK to deliver lecture on scope and prospects of custom hiring of agricultural machinery. Government of India is also on the forefront in framing policies to promote custom hiring among farming community. For example, government provides crop residue management implements like happy seeder, super seeder, reversible MB plough etc. to the farmer groups at subsidized rates i.e., 80% subsidy. One successful example of this policy is formation of farmers' group named *Ekta Kisan Group* in year 2019–20, consisting of 8 farmers (6 general and 2 SC farmers) in village Nidhan Wala, district. Moga, Punjab under the chairmanship of Sh. Jasbir Singh s/o Jasmel Singh. This group



View of tractor workshop

Table 1. Implements and machines in Paramjit Singh's custom hiring centre

Machines/implements for land preparation			
Machine/implement	type of machine/ implement	Rent (₹)	Number
Disc harrows	14 Discs	700/day	9
	16 Discs	800/day	
	18 Discs	1000/day	
	20 Discs	120/day	
Chisler	One leg	80/hr	1
	Two leg	100/hr	1
Leveler	50/hr	1	
Cultivator	100/hr	2	
Rotavator	250/hr	2	
Ridger (bund maker)	Disc type	50/hr	4
	Tine type	60/hr	6
Machines/implements for sowing and harvesting			
Zero till drill	11 tine	1100/day	1
	13 tine	1300/day	1
Potato planter	800-1000/day	5	
Potato digger	1000/day	4	
Cotton planter	100/hr	1	
Pea planter	2000/day	1	
Carrot sowing drill	2000/day	1	
Maize planter	2000/day	2	
Direct seeded rice drill	300/hr	4	
Trollies for chaff cutting	15000/season	9	
Maize thresher	400/hr	1	
Ridger for earthing-up	3 tine	800/day	1
	5 tine	1000/day	1
Machines/implements for crop residue management			
Roto-drill	7 ft	250/hr	3
	8 ft	300/hr	
Happy seeder	1600/day	1	
MB plough	100/hr	1	
Rake for collection of loose straw	100/hr	1	
Reaper	1000/day	5	
Machines/implements for miscellaneous work			
Chain mounted lift	50/hr	1	
Water tank	200/day	2	
Tractor operated sprayer	800/day	2	
Lift to take out submersible pumps	50/hr	3	
Fan to cover chaff storage bins with soil slurry	300/hr	2	
Total			79

has purchased various implements like happy seeder, mulcher etc. at subsidized rates which are used by the group as well as rented to other farmers at reasonable rates. So, providing implement to farmer groups keeps immense potential in improving availability of implements to small and marginal farmers, enhancing coordination among farmers and creating avenues of better and economically viable

entrepreneurship. In this scenario, where government is keen in assisting innovative farmers, Sh. Paramjit Singh, on his own, has set an example in the area which certainly can act as source of motivation for other struggling farmer families. If a single person can dare to develop and run this type of custom hiring centre, then a group of farmers can certainly succeed in setting more and more successful examples. In

nutshell, we can say that Sh. Paramjit Singh is a torch bearer for small as well as large farmers of the country for entrepreneurship in custom hiring of agricultural machinery.

Advantages of CHC

- Provides access to small and marginal farmers to costly farm machinery;
- Reduces drudgery;
- Reduction in cost of cultivation;
- Work opportunities to skilled labour;
- Increase in cropping intensity wherever feasible;
- Efficiency in use of resources and applied inputs;
- Crop diversification;
- Timely production;
- Provides farm advisories and;
- Revenue generation is plugged back to the society.

SUMMARY

The article highlights the success story of Sh. Paramjit Singh, a small farmer and tractor mechanic, who established a custom hiring center in his village in Punjab. The CHCs provide a range of agricultural machinery and implements to local small and marginal farmers at affordable rates, improving their access to costly equipment. Paramjit Singh's initiative serves as a source of inspiration for other farmers interested in custom hiring. The article emphasizes the importance of Custom Hiring Centers (CHCs) in providing timely and cost-effective access to machinery for smallholders. Government initiatives and support from agricultural institutions further promote custom hiring among farmers. The advantages of CHCs include increased access to machinery, reduced labor, lower cultivation costs, improved resource efficiency, crop diversification, and timely production. Sh. Paramjit Singh's success story exemplifies entrepreneurship in custom hiring of agricultural machinery and encourages others to follow suit.

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