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Assessment of employment skills acquired by trainees under Pradhan Mantri Kaushal Vikas Yojana in agriculture engineering sector in Gwalior division of Madhya Pradesh

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Abstract

The present research on assessment of employment skills acquired by trainees under PMKVY, was conducted in Gwalior division of Madhya Pradesh. All five district of Gwalior division viz. Gwalior, Ashoknagar, Shivpuri, Datia and Guna were selected for the study, as training in agricultural engineering sector under Pradhan Mantri Kaushal Vikas Yojana is running in all these districts. Total 300 respondents were selected purposively, among which 150 respondents were one's who completed tractor operator training and the remaining 150 respondents were the one's who completed combine harvester training under PMKVY. A well-structured schedule was prepared including different skills like electrical skills, routine maintenance, troubleshoot mechanic, part inventories, engine mechanic, post operation maintenance, oiling and cleaning of auto parts, and many other to know the specific skills that are learned by the trainees during the training program. The result of the study revealed that, most of the tractor operator and combine harvester operator trainees had acquired high level of employment skill.

Keywords: Employment skill, tractor operator and combine harvester operator trainees, Pradhan Mantri Kaushal Vikas Yojana

Introduction

The Ministry of Skill Development and Entrepreneurship implemented the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), launched on 16th July 2015. Through National Skill Development Corporation, with a target of covering 24 lakh youth in the country, the scheme's goal is to enable a large number of Indian youths to pursue industry-relevant skill training that will help them secure a better ability to earn a living.

The goal of India's largest Skill Certification Scheme is to enable a large number of Indian youths to take up industry-relevant skill training, allowing and mobilizing a large number of Indian youths to take up skills training based on results, becoming employable and securing a better livelihood. During the pilot process in 2015-16, nearly 19.85 lakh candidates were trained. (Source-<https://msde.gov.in>). PMKVY 2016-20 was launched following the successful implementation of the pilot PMKVY (2015-16) by scaling up in terms of sector and geography, as well as by greater alignment with other Government of India missions such as Make in India, Digital India, Swachh Bharat, and so on. The scheme has a total budget of Rs. 12000 crores. (Source: <https://www.india.gov.in/focus/skilling-india>).

Employment skills are abilities, expertise, or technical competence related to the workers' field, whether engineering or technical. It is more easily known and understood, as can be seen with the naked eye, combination of specific knowledge and skills of the work done using the body to achieve the goal (Damooei, Maxey, and Watkins, 2008) ^[2].

The aim of such trainings is to provide insights into the operation, maintenance and basic repair of tractor and combine harvester. It provides an overview of the main concepts of equipment that can facilitate sustainable agriculture as well as commercial practices with examples and guidelines on the topic. Through this training youth will have necessary knowledge, information and skills and gain technical expertise in the field of these two machineries. There is a mix of theory and practice in this training and participants must have the time to individually perform the different tasks described in the module of training under close supervision. The present study is based on knowing and assessing the different skills obtained by the trainees from the training under PMKVY and how it is helping them to get employment.

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Methodology

The present investigation was carried out in Gwalior division of Madhya Pradesh. Districts Gwalior, Ashoknagar, Shivpuri, Datia, and Guna districts of the Gwalior division were chosen for the study as agricultural engineering training is available in all of these districts. The study employed a survey research design and multi-stage sampling procedure. A sample of 300 respondents from 5 districts were chosen for the study using simple random sampling. As per the trainees list provided by the Department of Agriculture Engineering, Gwalior, out of these 300 respondents 150 were one's who had completed tractor operator training and other 50 percent (150 respondents) were the one's who had completed combine harvester operator training. A well-structured schedule was prepared for data collection including questions related to different skills like electrical skills, routine maintenance, troubleshoot mechanic, part inventories, engine mechanic, post operation maintenance, oiling and cleaning of parts and many other to know the specific skills that are learned by the trainees during the training program. The collected data were

classified, tabulated and analyzed by using statistical methods like frequency, mean and percentage.

Result and Discussion

Employment skills are the abilities, practice and knowledge along with technical understanding and set of skills needed by employees to perform specific task. They are practical and often relate to mechanical, information technology, mathematical, or scientific tasks. Some examples include knowledge of programming languages, design programs, mechanical equipment, or tools.

The present investigation studies the employment skills acquired by the tractor operator and combine harvester operator trainees under PMKVY. For assessment of employment skills acquired by the trainees, set of statements were formulated including questions related to different skills covered under PMKVY and these were computed by calculating the mean score of their response for individual statement.

Table 1: Distribution of tractor operator trainees according to their tractor skills acquired by them during the training.

(N=150)									
Tractor operator trainees' skills									
S.NO.	Tractor skills	Fully skilled		Semi-skilled		Unskilled		Mean score	Rank
		F	%	F	%	F	%		
1	Electrical system expert	99	(66%)	33	(22%)	18	(12%)	2.54	VII
2	Routine maintenance	111	(74%)	27	(18%)	12	(8%)	2.66	III
3	Hand tools	116	(77.33%)	19	(12.67%)	15	(10%)	2.67	II (a)
4	Troubleshoot mechanic	102	(68%)	28	(18.67%)	20	(13.33%)	2.55	VI
5	Engine mechanic	107	(71.33%)	33	(22%)	10	(6.67%)	2.65	IV
6	Parts room management	98	(65.33%)	39	(26%)	13	(8.67%)	2.57	V
7	Parts inventory	91	(60.67%)	50	(33.33%)	9	(6%)	2.55	VI
8	Air lines mechanic	115	(76.67%)	20	(13.33%)	15	(10%)	2.67	II(b)
9	Driving skill	122	(81.33%)	28	(18.67%)	00	(00%)	2.81	I
10	Dot repair	103	(68.67%)	15	(10%)	32	(21.33%)	2.47	VIII
Overall mean score = 2.61									

(A). Tractor operator trainees according to their tractor skills acquired by them during the training

Perusal of the data from table 1, depicted the employment skill acquired by tractor operator trainees during the training. The mean score of skills acquired by tractor operator trainees ranged from 2.47 to 2.81 and the overall mean score was 2.61. It was concluded from the result that, majority of tractor trainees acquired skills in driving and thus, driving skills secured 1st position among all the skills, with mean score of 2.81. Further it was found that, technical skills of air lines mechanic of tractor and hand tools maintenance, received rank second with 2.67 mean score. A total mean score of 2.66 with rank third was given to the skills of routine maintenance and skill related to engine mechanic of tractor, received rank fourth with 2.65 mean score. Along with this, it was found that, employment skill with mean score less than the overall mean score were skills related to parts room management, part inventory, electrical system expert and dot repair secure

rank with mean score and rank, 2.57 (v), 2.55 (VI), 2.54 (VII) and 2.47 (VIII), respectively.

It can be depicted from the table 2 that, majority of the respondents (46.00%) acquired high level of employment skill followed by 31.33 per cent and 22.67 per cent of tractor operator trainees acquiring medium and low level of employment skill after tractor operator training. Another study conducted by Mini Agrawal and K.S. Thakur on "Impact of Pradhan Mantri Kaushal Vikas Yojana on the Productivity of Youth in Gwalior Region, India" concluded in their study that trainings are organized under PMKVY as a key measure to impart skill-based training to youth, allowing them to earn and support the nation's anti-poverty efforts. Following that, over the last two decades, the Indian government has implemented a slew of large-scale national programmes for vocational education, training, and skill development in order to improve youth employment and earnings prospects.

Table 2: Distribution of tractor operator trainees according to their overall employment skill acquired by them during the training-

S. No.	Category	Frequency	Percentage
1	Low employment skill	34	22.67
2	Medium employment skill	47	31.33
3	High employment skill	69	46.00
Total		150	100

Table 3: Distribution of combine harvester operator trainees according their harvester skills acquired by them during the training.

(N=150)

Combine harvester operator trainees skills									
S. No.	Tractor skills	Fully skilled		Semi-skilled		Unskilled		Mean score	Rank
		F	%	F	%	F	%		
1	Cutter repair	102	(68%)	28	(18.67%)	20	(13.33%)	2.54	X
2	Blade repair	117	(78%)	24	(16%)	9	(6%)	2.72	V
3	Post operation maintenance	97	(64.67%)	36	(24%)	17	(11.33%)	2.53	XI
4	Oiling and cleaning parts	127	(84.67%)	13	(9.33%)	10	(6.66%)	2.78	II
5	Checking and replacing cooling water	142	(94.67%)	8	(5.33%)	00	(0%)	2.94	I
6	Replacing fuel filter	105	(70%)	32	(21.33%)	13	(8.67%)	2.61	VIII
7	Replacing and cleaning air filter	81	(54%)	39	(26%)	30	(20%)	2.34	XV
8	Checking pipe system	122	(81.33%)	19	(12.67%)	9	(6%)	2.75	III
9	Checking electrical wiring	107	(71.33%)	27	(18%)	16	(10.67%)	2.60	IX(a)
10	Adjusting cutter blade	90	(60%)	37	(24.67%)	20	(13.33%)	2.42	XIV
11	Adjusting the gap between feeding auger and base plate	108	(72%)	36	(24%)	6	(4%)	2.68	VI
12	Adjusting the gap between platform auger and base plate	87	(58%)	44	(29.33%)	19	(12.67%)	2.45	XII(a)
13	Adjusting the position of reel	114	(76%)	23	(15.33%)	13	(8.67%)	2.67	VII
14	Adjusting the crawler	87	(58%)	41	(27.33%)	22	(14.67%)	2.43	XIII
15	Engine section repair	103	(68.67%)	35	(23.33%)	12	(8%)	2.60	IX(b)
16	Harvesting and conveying section	118	(78.67%)	24	(16%)	8	(5.33%)	2.73	IV
17	Threshing section	78	(52%)	40	(26.67%)	32	(21.33%)	2.30	XVI
18	Harvester driver	84	(56%)	50	(33.33%)	16	(10.67%)	2.45	XII(b)
Overall mean score = 2.58									

(B). Combine harvester operator trainees according to their harvester skills acquired by them during the training.

Table 3 inferred the mean score of employment skill acquired by harvester operator trainees. The mean score of employment skill acquired by combine harvester trainees ranged from 2.30 to 2.94 and the overall mean score was 2.58. It was concluded from the result that, majority of the combine harvester trainees acquired skills in checking and replacing cooling water and thus, checking and replacing water, skills secured 1st position among all the skills, with mean score of 2.94. A total mean score of 2.78 with rank second was given to skills of oiling and cleaning part and skills related to checking pipe system received rank third with mean score of 2.75. Further it was found that, skills of harvesting and conveying, blade repair, adjusting the gap between feeding auger and base plate, adjusting position of reel, replacing fuel filter, checking electrical wiring and engine section repair acquired rank with mean score 2.73 (IV), 2.72 (V), 2.68 (VI), 2.67 (VII), 2.61 (VIII) and 2.60 (IX), respectively. Along with this, it was found that, employment skills with mean score less than the overall score were cutter repair, post operation maintenance, adjusting the gap between platform auger and base plate, harvester driver, adjusting the crawler, adjusting cutter plate, replacing and cleaning air filter, threshing section secure rank with mean score 2.54 (X), 2.53 (XI), 2.45 (XII), 2.43 (XIII), 2.42 (XIV), 2.34 (XV) and 2.30 (XVI), respectively.

Table 4: Distribution of combine harvester operator trainees according to their overall employment skill after training

S. No.	Category	Frequency	Percentage
1	Low employment skill	28	18.67
2	Medium employment skill	45	30.00
3	High employment skill	58	51.33
Total		150	100

It can be depicted from the table 4 that, majority of the respondents (51.33%) acquiring high level employment skill from the training followed by 30.00 per cent of the respondents having medium and 18.67 per cent of combine harvester operator trainees acquiring low level of employment skill. The findings of the study were partially in line with the findings of Mini Agrawal and K. S. Thakur (2019) ^[1] and Kamlesh Rani (2021) ^[8].

Conclusion

It could be concluded from the study that, young people are the one's full of desire, potential and ability to learn something new efficiently, as in the present study majority of the tractor operator and combine harvester operator trainees acquired high level of employment skill. Further it was found that, they were actively working in various incidents, were willing to take risk and eager to learn new skills. The majority of the respondents had a high level of achievement motivation and economic motivation, which motivates them to participate in such trainings and after acquiring skills, create employment for themselves.

References

1. Agrawal, Mini, Thakur KS. Impact of Pradhan Mantri Kaushal Vikas Yojana on the Productivity of Youth in Gwalior Region, India. International Journal of Recent Technology and Engineering (IJRTE). 2019;8(4):801-806.
2. Damooei J, Maxey C, Watkins W. A Survey of Skill Gaps and Related Workforce Issues in Selected Manufacturing Sectors: Report and Recommendations. Workforce Investment Board of Ventura County, USA; c2008.
3. Joshi AK, Pandey KN. Awareness, perceptions and youth mobilization towards PMKVY training in Haryana. Ashwani Kumar Joshi and KN Pandey, Awareness, Perceptions and Youth Mobilization towards PMKVY Training in Haryana. International Journal of

- Management. 2020;11(11):2528-2537.
4. Joshi AK, Pandey KN. Effectiveness of Pradhan Mantri Kaushal Vikas Yojna Training. *International Journal of Management (IJM)*. 2020;11(12):2773-2783.
 5. Kathleen C. Developing Employability Skills. *Regional Educational Laboratory. School Improvement Research Series (SIRS)*; c2005.
 6. Md Nasir, Ahmad Nabil, Farzeeha, Dayana, Noordin, Muhammad Khair, Nordin, Mohd. Technical skills and non-technical skills: predefinition concept; c2011. p. 2-18.
 7. Okada, Aya. Skills development for youth in India: Challenges and opportunities. *Journal of International Cooperation in Education*. 2012;15(2):169-193.
 8. Rani, Kamlesh Rani. Role of PMKVY in Promoting Employability Skills in Haryana State. *International Journal of Economics, Business and Human Behaviour*. 2021;2(1):1-16.
 9. Van Loon, Jelle, Lennart Woltering, Timothy Krupnik J, Frédéric Baudron, Maria Boa, *et al.* Scaling agricultural mechanization services in smallholder farming systems: Case studies from sub-Saharan Africa, South Asia, and Latin America. *Agricultural systems*. 2020;180:102792.
 10. Yahya, Buntat, Muhammad Sukri Saud Dan Hairul Anuar Hussain. *Cabaran Politeknik Sultan Ahmad Shah (Polisas) Membangunkan Modal Insan Sejajar Dengan Keperluan Sektor Industri*; c2008.