The Pharma Innovation Journal 2022; SP-11(5): 1259-1261

www.ThePharmaJournal.com

The Pharma Innovation

ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; SP-11(5): 1259-1261

www.thepharmajournal.com
Received: 05-03-2022
Accepted: 20-04-2022

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Study on marketing on adoption of modern farm machinery tools in Prayagraj district of Uttar Pradesh

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Abstract
A Study on marketing on adoption of modern farm machinery tools in Prayagraj district of U.P both primary and secondary data were used. This study was conducted during the 2021-2022 agriculture year. Out of 100 percent, 10 percent of respondent were selected for the study. This study surveys the advancement of horticultural automation, especially farm haulers, in India. In doing as such, it gives a few harsh marks of the degree of motorization (especially the spread of farm truck use) at various recorded stages, accentuating that India's encounters up to 1990 are essentially as significant as the illustrations from that point forward. The paper features the development of assorted examples of custom-employing administration arrangement, as well as heterogeneity in the speed of automation development across locales and agro natural zones. It additionally sums up the advancement of key related approaches in India that are probably going to have impacted farm hauler imports, supply, funding, producing, and related information sources like fuel and power.

Keywords: To identify constraints in the marketing of farm mechanization tools

Introduction
Agriculture is the backbone of Indian economy as it provides direct employment to about 70% of the working people and a source of livelihood for them. Indian agriculture is now becoming more and more mechanized. Modern farm mechanization enhances the agricultural production besides assuring better quality of work. The adoption of modern farm machinery/ tools like tractors, power tillers, combine harvester, irrigation pumps, drip irrigation etc. has brought a drastic change in Indian agriculture, resulting in replacement of traditional means and methods used by the farmers for different operations. It was generally believed that the benefit of modern farm technology have been restricted only to the farmers with large land holdings, depriving the small and marginal farmers of its benefits.
As per the 4th Advance Estimates of Production of Food grains for 2019-2020, total food grain production was estimated 264.77 million tones. Being the largest source of employment and income and income to millions of people, it also provides a vast market for our industrial products. Despite the focus on industrialization, agriculture remains a dominant sector of Indian economy both in terms of contribution of gross domestic products as well as source of employment to millions across the country.

Materials & Method
Selection of District
Prayagraj district of U.P is selected purposively for the study and also the researcher belong to the area is conversant with language, geography area, agriculture and other aspect of the area.

Selection of Blocks
There are 20 blocks out of that Chaka block was randomly selected for present study. Chakais a block in the Prayagraj district of U.P.

Selection of village
A list of villages was obtained from the block office on the basic of population 5% villages was selected randomly

Selection of Respondent
A list of respondents was taken from the village Pradhan/CDO of the respective village/ block. The respondent was selected 5% randomly of their population.

The selected respondent was arranged in according orders and category was divided on the basis of their land holding.

Analytical tool

The data were collected through checked consistency and accuracy and then the same data was transferred on master sheet for having a clear view and subjecting them to further classification and analysis

Marketing margin

a) Percentage

A percentage is a fraction of an amount expressed as a particular number of hundredth of that amount.

The formula used for percentage method is:

$$P \frac{X}{Y} \times 100$$

Where X= Number of respondents falling in specific category to be measured.

Y= Total number of respondents.

Statistical Method

Statistical methods involved in carrying out a study include planning, designing, collecting data, analyzing, drawing meaningful interpretation and reporting of the research findings.

The statistical analysis was carried out for each observed character using MS-Excel and SPSS. The following statistical analysis was used to analyses the data.

a.) Arithmetic Mean

The arithmetic mean has been applied to study the opinion of the sample respondents on 5-point scale for different statements. The arithmetic mean has been calculated by assigning numerical values to the qualitative statements. These values has been assigned for these qualitative responses as one for strongly disagree, two for disagree, three for neutral, four for agree and five for strongly agree. This tool help researcher to draw appropriate inferences from the responses collected from the respondents.

The formula used for Arithmetic Mean is:

$$X = \frac{\sum X}{N}$$

Where X= Arithmetic Mean

$\sum X$= Sum of the values of the variables

N= Number of Observation

Garret Ranking formulae

Garrett's Ranking Technique was applied to study the preference, change of orders of constraints and advantages into numerical scores. The prime advantage of this technique over simple frequency distribution is that the constraints are arranged based on their severity from the point of view of respondents. The orders of merit given by the respondents were converted in to rank by suing the formula. To find out the most significant factor which influences the respondent, Garrett's ranking technique was used. This tool will use to identify the constraints. As per this method, respondents have been asked to assign the rank for all factors and the outcomes of such ranking have been converted into score value with the help of the following formula:

Percent position = 100 (Rij – 0.5)/ Nj

Where,

Rij = Rank given for the ith variable by jth respondents

Nj = Number of variable ranked by jth respondents

Result and Discussion

To identify constraints in the marketing of farm mechanization tools.

Dealers/Distributers engaged in marketing of **farm** mechanization tools due to increasing market of local companies, unawareness of farmer about good quality produce were presented in table.

Table 1: Constraint encountered to dealers of VNR seeds During Covid Pandemic (n=12)

S. No	Constraints Perceived	No. of dealers	Percent (%)
1.	High Competition	9	75
2.	Men Power	6	50
3.	Risk Investment	8	66.66
4.	Transportation Problem	6	50
5.	Demand of Credit	12	100

The result indicated that the Demand of Credit was first (100 percent), followed by high competition (75 percent), Risk investment (66.66 percent), Men Power (50 percent), Transportation Problem (50percent).

Table 2: Constraint encountered to Farm offarm mechanization tools (n=12)

S. No	Constraints Perceived	No. of Farmer	Percent (%)	Ranking
1.	Credit Problem	8	66.66	4
2.	Knowledge of machinery	9	75	3
3.	Market reached	10	83.33	2
4.	Communication Gape	6	50	5
5.	Lack of Brand awareness	5	41.66	6
6.	Rate of product	12	95.08	1

The result indicated that the Rate of product (95.08 percent), followed by Market reached (83.33 percent), Knowledge of machinery (75 percent), Credit Problem (66.66 percent), Communication Gape (50 percent), lack of Brand awareness (41.66 percent).

Conclusion

The research study was largely taken the sample of male gender 55.19 percent and female respondents' 44.81 percent.

Table 4.2 and figure 4.2 reflects the age wise classification of the respondents. It was found from the data that majority of the respondents i.e.76.78 percent belong to the category of 15-59 years, whereas 18.58 percent were from the age group of Below 14 years while 4.37 percent were under the age group of 60 and Above years. Thus, it can be inferred that maximum number of respondents were from age group 15-59 years taking care of the farming business.

It is clearly indicated from the table 4.3 and figure 4.3 that largely sample respondents were study primary level 18.21 percent followed by up primary level 19.54 percent, 44.70 percent Intermediate level, graduate comprised of 17.22 per cent whereas Post graduate and above were 0 percent the majority of farmer in primary occupation (41.67%) and secondary occupation (26.67%) per cent and tertiary occupation were (31.67%) per cent respondents

It is clear from the data that a majority of the data (92% and more were using Modern Agricultural Implements and Techniques like Poly- Houses, Power Tillers Power Sprayers

and Check Basin and most frequently, however all the were rarely found to use Threshers. Similarly, Tractors and other Implements like Secateurs, Pruning Saw and Seed Drillers etc. were rarely used by a substantial percentage of them.

References

1. Acharya SS, Agarwal NL. 2016. Agricultural Marketing in India. Oxford and IBH Publishing Corporation Private
2. Limited New Delhi. 607p.
3. Al-Rimawi AS, Karablieh EK, Al-Qadi AS, Al-Qudah HF. Farmers' Attitudes and Skills of Farm Business
4. Management in Jordan. The Journal of Agricultural Education and Extension. 2006;12:165-177.
5. Anonymous. Horticulture at a glance 2017, National Horticultural Board (Government of India). www.nhb.gov.in (11:00 AM. 29th September 2017), 2017.
6. Anonymous. Statistical Abstract of Himachal Pradesh 2016-17, Department of Economics and Statistics (Government of Himachal Pradesh). www.admis.hp.nic.in (12:20 PM. 15 th February 2018), 2018.
7. Atkociuniene V, Zemeckis R. Characteristics of Modern Farm. Research for Rural Developent. 2015;2:230-236.
8. Bihari B, Singh U. Adoption of Improved Agriculture Technology among Tribal Farmers Meghalaya's. Indian Journal of Extension Education. 2015;41:76-69.
9. CA *et. al*. Agricultural Mechanisation: A Strategy for Food Sufficiency. Scholarly Journal of Agricultural Science. 2014;4(3):152-156.
10. Devi PI. Dynamics of Farm Labour Use-An Empirical Analysis. Agricultural Economics Research Review. 2012;25:317-326.
11. DiaoX, Silver J, Takeshima H (eds.). Agricultural Mechanization and Agricultural Transformation. African
12. Transformation Report 2016: Transforming Africa's Agriculture, 2016, 58p.
13. Economic Development for Small Scale Farms in Adamawa State. The International Journal of Engineering and Science. 2(1):91-96
14. Ghosh M. Agricultural Policy Reforms and Spatial Integration of Food Grain Market in India. Journal of Economic Development. 2011;36:15-35.
15. Gibbon P, Riisgaard L. A New System of Labour Management in African Large- Scale Agriculture. Journal of Agrarian Change. 2014;14:94-128.
16. Gray DI, Parker WJ, Kemp E. Farm Management Research: A Discussion of Some of the important issues. Journal of International Farm Management. 2009;5:1-24.
17. Hamra CF (ed.). An Assessment of the Potential Profitability of Poultry Farms: A Broiler Farm Feasibility Case Study. University of Tennessee at Martin, 2010, 43p.
18. Johal SS, Kapur TR. Fundamentals of Farm Business Management. Kalyani Publications New Delhi, 2017, 415p.
19. Kahan D (ed.). Market-Oriented Farming: An overview. Food and Agriculture Organization, Rome, 2013, 104p.
20. Kumar GA, Mehta R, Pullabhotla H, Prasad SK, Ganguly K,Gulati A (eds.). Demand and Supply of Cereals in India 2010-2025. IFPRI Discussion Paper, International Food Policy Research Institute, 2012, 64p.
21. Kumar P. Indian Vegetable Seeds Industry: Status and Challenges. International Journal of Plant, Animal and Environmental Sciences. 2014;4:62-69.
22. Mada DA, Mahai S. The Role of Agricultural Mechanization in the Economic Development for Small Scale Farms in Adamawa State. The International Journal of Engineering and Science. 2013;2:91-96.
23. Mehta CR *et al*. Labour Scarcity in Agriculture And Mechanisation in India. Indian Journal of Agriculture Economics. 2014;69(3):320-335
24. Mahajan SS and Bobade AH. Growth of NAIS: A Study of Crop Insurance in India. Bauddhik. 2012;3:1-14.
25. Meena MS, Kumar A, Singh KM. Farmers' Attitude Towards Post-Harvest Issues of Horticultural Crops. Indian Research Journal of Extension Education. 2009;9:15-19.
26. Patel P, Singh S, Chadva JC and Patel KA. Effect of grading and packaging with transportation on fruit quality and shelf life of mango fruits. The Asian Journal of Horticulture. 2013;8:234-237.
27. RasouliF *et. al*. Factor affecting Agriculture Mechanisation – A case study on sunflower Seed Farms in Iran, Journal of Agriculture Science and Technology. 2009;11(1):39-48.
28. Rais M, Sheoran A. Scope of Supply Chain Management in Fruits and Vegetables in India. Journal of Food Processing & Technology. 2015;6:1-7.
29. Raju Y, Kang PS, Moroz A, Clement R, Hopwell A, Duffy A. Investigating the Demand for Short-shelf Life Food Products for SME Wholesalers. International Journal of Economics and Management Engineering. 2015;9:2051-2055.
30. Singh B, Tomar BS. Vegetable seed production under protected and open field conditions in India: A review. Indian Journal of Agricultural Sciences, 2015, 85.
31. Swain M. Crop Insurance for Adaptation to Climate Change in India. Asia Research Centre Working Paper. 2014;61:2-25.
32. Sultana A. Rice marketing in Bangladesh: From the perspective of village study at Cox's Bazar district. African Journal of Agricultural Research. 2012;7:5995-6004.
33. Tata PI, Sefa VA, Ntsefong GN, Ngome AF, Okolle NJ, Billa SF. Policy and Institutional Frameworks Impacting on Vegetable Seed Production and Distribution Systems in Cameroon. Journal of Crop Improvement. 2016;30:196-216.
34. Thakur P, Mehta P, Gupta N. An Impact Study of Food Product Packaging on Consumer Buying Behaviour: A Study Premise to Himachal Pradesh (India). International Journal of Bio-resource and Stress Management. 2017;8:882-886.
35. Vasta Dk. Mechanizing Agriculture in Hills of Himanchal Pradesh, India: A Review. Agriculture for Sustainable Development. 2013;1(1):89-93.