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Knowledge Level of Groundnut Farmers in Jaipur District, Rajasthan

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ABSTRACT

Despite of the facts, the groundnut contributes about two-fifth of the total area and production of oilseeds in country. India is facing acute shortage of vegetable oils. This is mainly due to the low productivity of these crops. This may be attributed to a number of factors and constraints, which hinders the adoption of the innovations. These factors and constraints should be identified and remove by developing an effective strategy for farmers.The study was conducted in Govindgarh panchayat samiti of Jaipur district, which was selected purposively. Eight villages namely Ghinoi, Bailabas, Jheera, Samod, Nindola, Khejroli, Hathnoda and Nangal Bharda from four selected gram panchayat were selected with the help of simple random sampling technique. Majority of the groundnut growers had medium knowledge level about the recommended cultivation practices of groundnut. Among the various aspects of different cultivation practices, majority of the farmers had knowledge about 'Sowing time', 'Seed rate' 'Irrigation management', 'Spacing', 'Seed treatment', 'Weed management' and 'Plant protection measures'.

Indian Economy depends upon Indian agriculture. About 72.20 per cent population lives in rural areas. The main occupation of rural people is agriculture. About 30 per cent of the national income originate from the agriculture sector. About 75 per cent of its population and 66.67 per cent of labour force directly or indirectly is dependent on agriculture for livelihood. Large number of important industries like jute, textiles, edible oils, tobacco, sugar etc. receive the raw materials produced by agriculture sector. All type of crops representing cereals, pulses, oilseeds, fibers, species and condiments and many other are gown in our country.

Groundnut oil is used in manufacturing of soap, hair oil, vanaspathi, lubricants, textile, auxiliaries etc. The oil find extensive use as a cooking medium both in its refined form and as vanaspati ghee. The oil cakes obtained after the extraction of oil from the groundnut are valuable organic manure and used as animal feed.

Groundnut is used for edible and non-edible purposes. About 81.6 per cent of the total production is crushed and used for edible purpose. The remaining production goes for seed (12 per cent), feed (5.3 per cent) and exports (1.1 per cent). (Anonymous, 2006-07)

METHODOLOGY

The study was conducted in Govindgarh panchayat samiti of Jaipur district, which was selected purposively. Eight villages namely Ghinoi, Bailabas, Jheera, Samod, Nindola, Khejroli, Hathnoda and Nangal Bharda from four selected gram panchayat were selected with the help of simple random sampling technique. From each selected village, a list of all groundnut growers was prepared and 20 per cent groundnut growers were selected from each selected village by using proportionate random sampling technique. In total, a sample of 124 farmers were drawn for the study purpose. The adoption level of farmers about recommended cultivation practices of groundnut is directly or indirectly related to knowledge level of farmers. Hence, it was considered necessary to assess the knowledge level of farmers about groundnut cultivation. The knowledge about the technology had influence on the decision making about its adoption. Keeping this view in mind, the study "Knowledge level of farmers about recommended cultivation practices of groundnut in panchayat samiti Govindgarh of district Jaipur (Rajasthan)" was undertaken with the specific objective : To measure the knowledge level of farmers about recommended cultivation practices of groundnut.

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RESULTS AND DISCUSSION

To test the knowledge level of the respondents a knowledge schedule was developed by preparing a questionary. All, questions were included in the schedule. Equal weightage was given to each items, assuming that all the items included were equal in difficulty to understand, apply and recall. One mark was given to every right answer and zero for wrong answer. The following formula was used to work out the knowledge index.

Knowledge index = $x^1 + x^2 + x^3 + \ldots\ldots\ldots\ldots x$

Where $x_1, x_2, x_3 \ldots\ldots\ldots\ldots x_n$ are correct answer for first, second, third $\ldots\ldots\ldots\ldots x_n$ questions and n is the maximum score possible to secure or the number of question i.e. 12 and the minimum was zero.

Based on mean and standard deviation of scores secured by all the respondents they were categorized in to three groups i.e. Low knowledge level : ,Medium knowledge level and High knowledge level . Interview schedule consisting of face data of the respondents measuring device of knowledge level was prepared for the investigation in light of the suggestions of the experts. The researcher himself personally interviewed the respondent and the statistical data regarding the knowledge of respondents about recommended cultivation practices of groundnut have been given in Table 1.

Table 1. Knowledge level of farmers about recommended cultivation practices of groundnut

N = 124

Knowledge categories	Frequency	Per cent of farmers
Low knowledge (score below 27.49)	22	17.74
Medium knowledge (score from 27.49 to 35.55)	74	59.68
High knowledge (score above 33.55)	28	22.58

$\bar{X}$ = 30.52, a = 3.02 c^2 = 39.16 Expected frequency = 41.33

The data in Table 1 state that on the whole, 59.68 per cent (74) groundnut growers were having medium knowledge level about groundnut cultivation practices and 22.58 per cent (28) respondents were having high knowledge level, whereas 17.74 per cent (22) farmers were having low knowledge level about recommended cultivation practices of groundnut. Hence the null hypothesis (H01.1) 'There is no difference in the level of knowledge of the farmers about recommended cultivation practices of groundnut' was rejected. It means there was a difference in the knowledge level of the farmers growing groundnut.

Further more the percentage of farmers having knowledge about different aspects of recommended cultivation practices of groundnut were analysed separately. The relative importance of the 10 aspects of recommended cultivation practices of groundnut was highlighted by ranking them on the basis of the mean per cent scores of farmers having knowledge about these recommended cultivation practices of groundnut (Table 2).

Table 2. Practice-wise knowledge level of farmers about recommended cultivation practices of groundnut

N = 124

Recommended practices	Knowledge in mean per cent	Rank
Use of high yielding variety	50.02	IX
Seed rate	75.50	II
Seed treatment	68.01	V
Spacing	70.04	IV
Sowing time	80.50	I
Depth of sowing	50.03	VIII
Fertilizer application	40.21	X
Irrigation management	75.00	III
Weed management	65.10	VI
Plant protection measures	50.22	VII
Overall	**62.46**	

The data in table 2 indicate that 80.50 per cent farmers had highest knowledge about 'Sowing time' and hence, it was ranked first. The second highest per cent of farmers (75.50) had knowledge about 'Recommended seed rate' followed by 75.00 per cent farmers who had knowledge about 'Irrigation management' were ranked third whereas, 70 per cent farmers had knowledge about 'Spacing' were ranked fourth, while 68.01 per cent farmers were having knowledge about 'Seed treatment' were ranked fifth. Furthermore, sixth, seventh, eight and ninth ranks were awarded to weed management (65.10 MPS), plant protection measures (50.22 MPS), depth of sowing (50.03 MPS) and use of high yielding variety (50.02 MPS), respectively. The lowest knowledge of farmers was found about fertilizer application with 40.21 MPS, hence it was awarded lowest rank i.e. tenth.

It leads to the conclusion that farmers in general had medium knowledge about the recommended

cultivation practices of groundnut. This low knowledge may be attributed due to low literacy, low exposure to mass media, unavailability of extension literature and less contact with extension personnels.

From the findings, it is also evident that majority of the farmers were having higher knowledge about the 'Sowing time', 'Seed rate', 'Irrigation management', and 'Spacing'. This might be due to the reason that majority of the farmers were regularly growing groundnut for market purpose and these practices are most critical from the point of view of the groundnut production. A slight carelessness in these practices may reduce the production of groundnut drastically, so the farmers remain most careful about these practices. Also for producing good quality groundnut, they mostly remain in contact with the extension agencies, sale agents etc. resulting gain in knowledge about these recommended cultivation practices. Most of the farmers under study were literate hence they might have knowledge about these practices by reading the related literature. The farmers had medium knowledge about 'Seed treatment', 'Weed management', 'Plant protection measures', 'Depth of sowing', 'Use of high yielding varieties' and 'Fertilizer application'. This might be due to the reason that the farmers might not understand the intructions written on the pack of chemical because of its complex language, as the instructions are mostly written in typical Hindi or English language or in the language of the state, where the insecticides, fungicides, weedicides etc. are manufactured.

CONCLUSION

Majority of the groundnut growers had medium knowledge level about the recommended cultivation practices of groundnut. Among the various aspects of different cultivation practices, majority of the farmers had knowledge about 'Sowing time', 'Seed rate' 'Irrigation management', 'Spacing', 'Seed treatment', 'Weed management' and 'Plant protection measures'.

REFERENCES

Agarwal, J.K. (2000). "Knowledge and adoption of improved pea cultivation practices in Jaipur district of Rajasthan". M.Sc. (Ag.) Thesis, R.A.U., Campus-Jobner.

Anonymous (2006-07). Economic Survey. Ministry of Agriculture, Govt. of India.

Kumar, M. (2004). "Adoption of improved cultivation practices of cabbage in Jaipur district of Rajasthan. M.Sc. (Ag.) Thesis, R.A.U, Campus-Jobner.

Subhash, C. (2001). Factors affecting adoption of recommended production technology of groundnut in panchayat samiti Sambhar lake of district Jaipur (Rajasthan). M.Sc. (Ag.) Thesis, R.A.U., Campus-Jobner.

Yadav, B.C. (2006). "A study on knowledge and adoption of improved production technology of mandarin by the farmers in Jharapatan panchayat samiti of Jhalawar district of Rajasthan". M.Sc. (Ag.) Thesis, R.A.U., Campus : Jobner.