FARMER'S'BEHAVIOURTOWARDS THE PROPAGATION OF OFFSEASON CUCUMBER IN MOKOKCHUNG DISTRICT OFNAGALAND

ABSTRACT

The present study was carried out in Mokokchung district of Nagaland to analyze theknowledge level of the farmers towards the propagation of off season cucumber. Purposiveand random sampling techniques wereas used for the selection of the respondents and a total of120 respondents were selected from 3 villages.A pre-structured interview schedule was usedfor the collection of data. The study revealed that majority of the respondents were middle-aged, literate individuals with nuclear families and small family sizes. Majority of themrespondents had farming experiences of between 10-20 years. It was revealed that most thefarmers were small farmers based on the size of their lands and a large number of therespondents had medium level of income, had medium level of extension contact and massmedia exposure. The level of knowledge regarding the propagation of off season cucumberpractices was medium level. Majority of the respondents had proper knowledge about therecommended varieties of off season cucumber, sowing time, seed treatment, fieldpreparation, method of sowing, spacing, harvesting, and weed management. However, therespondents were found to have partial knowledge in areas such as seed rate, recommendedquantityofFYM, methods of irrigation, diseasecontrol,andpest control.

Keywords:Knowledge,offseason cucumber,socio-economicprofile.

INTRODUCTION

Cucumber (*Cucumissativus L.*) belonging to the family of Cucurbitaceae is one of the oldestvegetable crops grown widely throughout India as well as tropical and sub-tropical parts of theworld.Thecucumberis a nutritiouscropasitsedibleportioncontains 96.3percentwater, 2.7per cent carbohydrates, 0.4 per cent protein, 0.1 per cent fat and 0.4 per cent mineral matters.It is also a good source of Vitamin B and C **(Singh *et al.*, 2004)**.. In Hindi, cucumber ispopularly known as **"Khira".(Gopalakrishnan, 2007).** Cucumber can be grown in the field aswell as in the garden. It is commercially raised for home consumption. The seed of cucumber ishighlynutritiveduetotheirhighoilandproteincontent.sSeedproteinofcucumberiscomparableincomparable in nutritivevaluetothoseoflegumes while.Mmethoninecontentismoreincucumberas comparedtolegumes..AccordingtoHorticulturalStatisticsataglance,Ccucumberisgrowninmoret han

20statesandUnionTerritoriesofIndia.Importantcucumbergrowingstatesare Bihar,Haryana,Orissa,Punjab, RajasthanandUttarPradesh.Nagaland,oneoftheeightstates ofthenorth east region is blessed with agro climatic condition and soil suitable for agriculture. Oneof the important facts of agricultural development in India is the production of vegetablegrowing commercially viz. off-season vegetable, vegetable production, more 50 quality seedproduction of temperate vegetable/varieties. India is the world's second largest vegetable andthird largest fruit producer accounting for 8.4 per cent of the world's food and vegetableproduction. Today, India is considered as the fruit and vegetable basket of the world.Indianfarmers are engaged in cucumber cultivation, but in the earlier decades, cucumber was givenless importance and area under cultivation was also not encouraging but in the later years,sensingthe potential of this crop, nutritionallyaswell as economically, the situation is different.

Nagaland is also one of the states where cucumber is grown in all the districts. Cucumber hasbeen grown by tribals in Nagaland for centuries. It is one of the most important crops of theNorthEasternstatesandNagalandranksfifthinareaundercultivationandthirdinproduction.The districts of Mokokchung, Mon, Wokha, Kohima and Peren produce some of the bestvarieties of cucumber in the world. The total area and production of cucumber in the stateaccounted for 714 ha and 21617 metric tonnes during the 2016-17 season. Many different local varietiesofcucumberwhicharesoft,juicyandhaveasweettastearegrownthroughoutNagaland.Nag acucumbersareakindoffruitsthatdifferintaste,shapeandsizesfrom thoseavailableinotherparts of India. Naga cucumbers are normally15 to 20cm in length and 14-16 cm in diameter.On an average 5-8 numbers of cucumber weigh one kg. Cucumber is grown in all the districtsof the state with Mokokchung district leading in terms of area under cultivation (315 ha) aswellas production (520MT)**(DHO Mokokchung, 2012).**

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RESEARCHMETHODOLOGY

Thise ~~research~~ study wasis ~~to be~~ conducted in Mokokchung district under Nagaland. The district~~It~~ is locatednear the border of Assam along the banks of the Dhansiri River and covers an area of 927 sq.km. Climate is hot and humid in the plains during summer (max. 36˚C with humidity upto93%) while winter months are cool and pleasant. Descriptive research design was followed toconduct the present study. The block Ongpangkong (south) was purposively selected due totheir highest production of off season cucumber. There are nine villages under Ongpangkong(South)Block out of which threevillages i.e., Chungtia, Aliba and Kinunger were selectedbased on their highest production of off season cucumber. A total of 120 respondents wereselected for the ~~present~~ study and the data were collected through pre structured interviewschedule.

RESULTSAND DUSCUSSION

Table1:Socioeconomicprofileof therespondents

S.no	Independent Variables	Category	Frequency	Percentage
1.	**Age**	Young(18-35)	23	19.17
		MiddleAge(36-55)	63	52.5
		Old(Above56)	34	28.33
2.	**Education**	Illiterate	22	18.33
		Primaryschool	46	38.33
		HighSchool	40	33.33
		SecondarySchool	7	5.83
		Graduation	5	4.17
3	**FamilyType**	Nuclear	87	72.5
		Joint	33	27.5
4	**FamilySize**	Upto5 members	85	70.83
		Morethan5 members	35	29.17
5	**TypeOf House**	Hut	37	30.83
		Semi-cemented	60	50
		Cemented	23	19.17
6	**AnnualIncome**	Low(Below60,000)	32	26.67

		Medium(60,000-80,000)		75	62.5
		High(Above80,000)		13	10.83
7	**LandHolding**	MarginalFarmer		42	35
		SmallFarmer		57	47.5
		Mediumfarmer		16	13.33
		BigFarmer		5	4.17
8	**FarmingExperience**	Below10years		15	12.5
		10-20years		732	60.83
		Above20years		32	26.67
9	**ExtensionContact**	Low		39	32.50
		Medium		66	55.00
		High		15	12.50
10	**Mass Media Exposure**	Radio	Daily	0	0
			Sometimes	11	9.17
			Never	109	90.83
		Television	Daily	22	18.33
			Sometimes	59	49.17
			Never	39	32.5
		Newspaper	Daily	68	56.67
			Sometimes	42	35
			Never	10	8.33
		Magazines	Daily	0	0
			Sometimes	14	11.67
			Never	106	88.33

A majority of the respondents (52.5%) ~~of respondents~~ belonged to middle age group of 36-55years **(Sindhura*et al.* 2022).** A majority of the respondents (38.33%) were found to beeducated up~~till~~ primary school **(Ananda Shankar and UpendraNath 2014)**. It was found that(72.5%) of the respondents were having nuclear family. Majority (70.83%) of the respondentsbelonged to family size of upto 5 members. Majority (50%) of the respondents were havingsemi-cementedhouses.Itwasalsofoundthat(62.5%)oftherespondentswerehavingannual

income between 60,000-80,000 rupees. Majority of the respondents (47.5%) were found to besmall farmers. The findings are in line with **Reshma*et al.* (2014).**Majority (60.83%) of therespondentswerehavingfarmingexperience of between10-20 years. Furthermore,itwasfoundthat only (9.17%) of the respondents listen to the radio and majority (55%) of the respondentshadwerehavingmediumlevelofextensioncontact.Itwasalsofoundthat(49.17%)ofrespondentswatch television on a daily basis, (56.67%) of the respondents read the newspaper, (11.67%)sometimesread magazine

Table2:- DistributionoftheknowledgeleveloftherespondentsaboutrecommendedOffSeasonCucumberCultivation Practices.

Sn	Statements	Knowledgelevel		
		Fullycorrect F(%)	**Partially correct**	**Notcorrect**
1	Varietiesrecommended	61 (50.83%)	33 (27.5%)	26 (21.67%)
2	Sowingtime	96 (80%)	15 (12.5%)	9 (7.5%)
3	Seedtreatment	34 (28.33%)	63 (52.5%)	23 (19.17%)
4	Seedrate	25 (20.83%)	54 (45%)	41 (34.17%)
5	Fieldpreparation	94 (78.33%)	16 (13.33%)	10 (8.33%)
6	Methodof sowing	114 (95%)	6 (5%)	0
7	Spacing	67 (55.83%)	45 (37.50%)	8 (6.67%)
8	RecommendedquantityofFYM tobe applied	41 (34.17%)	56 (46.67%)	23 (19.16%)
9	Methodsofirrigation	87	25	8

		(72.50%)	(20.83%)	(6.67%)

10	Weedmanagement	72 (60.00%)	39 (32.50%)	9 (7.50%)
11	Diseasecontrol	42 (35.00%)	52 (43.33%)	26 (21.67%)
12	Pestcontrol	33 (27.50%)	40 (33.33%)	47 (39.17%)
13	Harvesting	98 (81.67%)	22 (18.33%)	0

Table3:Overalllevelofknowledgeofrespondentstowardsoffseasoncucumber

Sl.no	Levelofknowledge	Frequency	Percentage
1.	Low(<30)	21	17.5
2	Medium(30-35)	74	61.67
3.	High(>35)	25	20.83
	Total	120	100.00

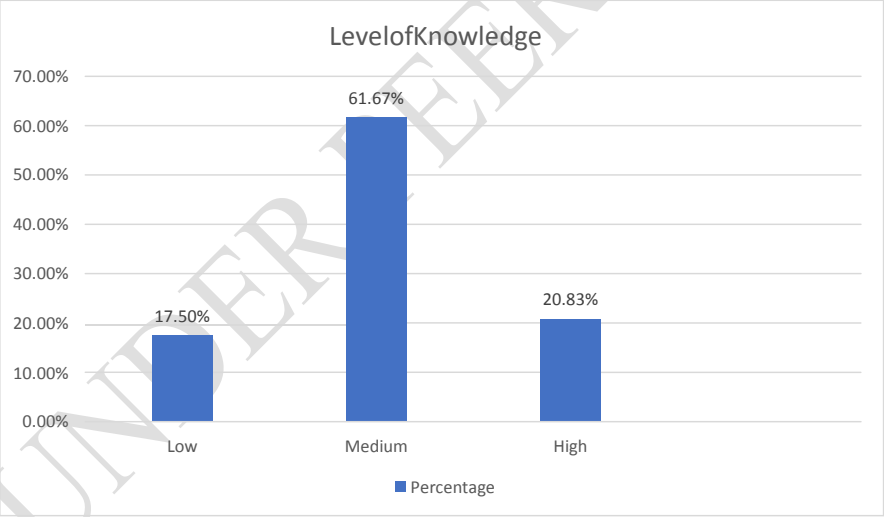

Fig 1: Knowledgeoftherespondentstowards thepropagationof offseasoncucumber

From the above table and figure 1, it is found that the level of knowledge of respondentsof off season cucumber cultivation practices is medium 61.67% followed by high 20.83% andlow17.5%respectively.Similarfindingis alsoreported by **Yadav *etal.*, (2013)**

Table4:Relationshipbetweenpersonalprofileandknowledgelevelof respondents

S/no	Variables	Pearson'scorrelation Coefficient
1	Age	0.979 *
2	Education	0.879 *
3	Typeof family	0.024**NS**
4	Familysize	0.068**NS**
5	Typeofhouse	0.899 *
6	Annualincome	0.931 *
7	Landholding	0.638 *
8	Farmingexperience	0.975 *
9	Extensioncontact	0.848 *
10	Massmediaexposure	0.869 *

*=correlation issignificant at 0.01%of probability

**= correlation is significant at 0.05% of probabilityNS=correlation is Non Significant

Theformulaofcoefficientcorrelationwasappliedtofindouttherelationshipbetweenindependent and dependent variables. Independent variables namely age (0.979), education(0.879),typeofhouse(0.899),annualincome(0.931),landholding(0.638),farmingexperience (0.975), extension contact (0.848) and mass media exposure (0.869) were found tobe positive and significant at 0.01% level of probability with the level of knowledge towardsoff season cucumber cultivation practices. Type of family (0.024) and family size (0.068) hadnon-significantassociationwiththelevelofknowledgetowardsoffseasoncucumberpractices.

CONCLUSION

It is concluded that the majority of respondents were middle-aged, literate individuals withnuclear families and small family sizes. Majority of the respondents had farming experiencesofbetween10-20years.Alargenumberoftherespondentshadmediumlevelofincome.Mostoftherespondentshad mediumlevelofextensioncontact.Amajorityofrespondentspossesseda medium level of knowledge of off-season cucumber cultivation practices. Independentvariables like age, education, type of house, land holding, farming experience, extensioncontact and mass media exposure had positive and significant correlation with knowledgetowardsoff season cucumbercultivation practicesat 0.01% ofprobability.

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